

8363

Diag. Cht. No. 1255-2.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 80-2356 Office No. H-8363

LOCALITY

State Florida

General locality West Coast

Locality West of Sanibel Island

1956-61

CHIEF OF PARTY

F. J. Tucker, Jr.

LIBRARY & ARCHIVES

DATE January 22, 1962

USCOMM-DC 5087

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-8363

Field No. SO-2356

State FLORIDA

General locality WEST COAST ~~OF FLORIDA~~

Locality WEST OF
SANIBEL ISLAND

Scale 1:20,000 Date of survey 1956, 1960, & 1961

Instructions dated 18 December 1952, 8 September 1958

Vessel Ship SOSBEE

Chief of party Floyd J. Tucker, Jr.

Surveyed by G.W. Moore, W.D. Barbee, R. C. Munson, F.J. Tucker,
W.M. Tidwell, E.L. Talbot, D.F.S. Galloway, E.D. Schwantes, F.D.
Soundings taken by ~~echo-sounder~~ graphic recorder, hand lead, ~~and~~ sounding pole Moran

Fathograms scaled by Ship SOSBEE Personnel

Fathograms checked by Ship SOSBEE Personnel

Protracted by Fred Bean (Norfolk Processing Office)

Soundings penciled by Fred Bean " " "

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~ and are true depths.

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

63

DESCRIPTIVE REPORT
 TO ACCOMPANY
 HYDROGRAPHIC SURVEY
 H-8363 (SO-2356)

West Coast of Florida	Sanibel Island
1956 Chief of Party	Glenn W. Moore
1960 - 1961 " " "	Robert C. Munson
1961 " " "	Floyd J. Tucker, Jr.
Scale 1:20,000	USC&GS Ship SOSBEE

A. PROJECT

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

B. AREA SURVEYED

This is a survey of the coast of the Gulf of Mexico from the southeast point of Captiva Island south and eastward to the southwest point of Sanibel Island.

The limits are:

North - Latitude	26°-28' N.
West - Longitude	82°-21' W.
South - Latitude	26°-22' N.
East - Captiva and Sanibel Islands.	

Junctions were made with contemporary surveys as follows:

<u>Direction</u>	<u>Registry No.</u>	<u>Field No.</u>	<u>Date</u>	<u>Scale</u>
North -	H-8598	SO-10-2-60-	1960	- 1:10,000
-	H-8362	- SO-2256	- 1956	- 1:20,000
West -	H-7935	- HY-8351	- 1951	- 1:80,000
South -	H-8328	- HY-8156	- 1956	- 1:80,000
East -	H-8571	- SO-20-1-60	- 1960-61	- 1:20,000
Blind				
Pass-	H-8632	- SO-10-1-61	- 1961	- 1:10,000

B. AREA SURVEYED - Cont'd.

Hydrography was run between 13 November 1956 and 29 Nov. 1958 and from 12 April 1960 to 28 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, 1400, 1000 r.p.m. The speed was reduced to 1000 r.p.m. in the shoal water near the beach.

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

			Model	No.		
14	-	50 feet	EDO portable	EDO 255	209	820 fm./sec.
3	-	31 "	808	"	57-35	820 fm./sec.
3	-	31 "	808	"	150	820 fm./sec.
0	-	3 "	Pole Soundings			

All ship soundings were obtained with echo-sounding instruments. A EDO portable, serial number 209, was used in depths of 14 feet to 50 feet. Two 808J type portables, numbers 57-35 and 150 were used in depths of 12 to 30 feet.

The skiff used a 808J type portable number 57-35 in depths of 3 to 15 feet. All soundings under 3 feet were made with a sounding pole.

All soundings by the ship were corrected for velocity determined from serial temperature and salinity observations. When underway all ship soundings were corrected for settlement and squat. *NO! Bar checks were used.*

No corrections for velocity were applied to soundings obtained by the skiff.

E. SMOOTH SHEET

Norfolk Processing Office.

F. CONTROL

Most offshore ship hydrography was controlled by shoran. Stations RED and VEE were used with the ship running arcs on station VEE.

Station RED was on Captiva Island and had a 100 foot EPI insulated tower. The station was located by a steel tape and transit traverse from a U. S. Geological Survey Traverse Station.

F. CONTROL - Cont'd.

Station VEE was on Sanibel Island and had a 50 foot tower. VEE was located by a steel tape theodolite traverse from GLASS 1955. All computations for both traverses were attached to the original shoran report forwarded in 1957.

Geographic Positions of Shoran Stations:

<u>Station</u>	<u>Latitude</u>	<u>Longitude</u>
RED	26° 32' 51.840"	82° 11' 51.573" <i>Not on sheet.</i>
VEE	26° 25' 51.782" (1593.59m)	82° 06' 46.784" (1296.48m)

A portion of the eastern offshore survey by the ship was controlled by Microwave Position-Fixing System (MPFS). The transmitters were set up at SAN, Sanibel Island Lighthouse 1955, and at LASS 1960. LASS 1960 was a traverse station from GLASS 1955. Computations for LASS 1960 are attached to the Descriptive Report for [SO-20-1-60] *A transmitter also located at BOOB 2, RM 3, 1960 and called BOO. (located on ESTERD Is.)*
H-8571 (1961)

Geographic Position of LASS 1960:

Latitude 26° 26' 08.077" (248.57m)
Longitude 82° 07' 27.428" (759.98m)

Inshore ship hydrography and all of the skiff hydrography was controlled by visual fixes. The signal locations were obtained from Advance Manuscripts T-11413 and T-11417.

G. SHORELINE

All shoreline and topographic detail were transferred to the boat sheet from 1:20,000 blue-line manuscripts that were produced by the reduction of the manuscripts listed in Section F. All changes in the shoreline due to Hurricane DONNA are shown in red on the manuscripts. All ^{other} shoreline and topographic details were found to be accurate.

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.

H. CROSSLINES

There is 50 nautical miles or 7% of the hydrography in crosslines. There are no notable discrepancies at the crossings.

I. JUNCTIONS

There is a difference of 5 to 6 feet between this survey and H-7935 at the western junction. Additional overlapping lines were not run as they would fall too close to the edge of the boat sheet. With this exception junctions with adjoining surveys are satisfactory with no holidays and depth curves can be
→ Discrepancy of 1-2 feet after verification. Junction considered adequate.

I. JUNCTIONS -Cont'd.

adequately drawn.

J. COMPARISON

Preliminary Review Item No. 21, a wreck off of Captiva Island, was located and a least depth of 11.8 feet below MLW was obtained by Scuba Divers. ✓ HR

The agreement is generally good with prior survey H-1478a, 1879 - 80, 1:40,000. ✓

K. COMPARISON WITH CHART

A comparison with Chart 1255, 6th. Edition, 11 April 1960 is as follows:

Charted Depth Feet	New Depth Feet	Latitude		Longitude	
		North	West	West	West
31	33	26° 10.82'	82° 22.40'	26° 82°	22.40'
39	35	26° 12.92'	82° 22.91'	82°	22.91'
36	40	26° 15.86'	82° 22.96'	82°	22.96'
34	46	26° 19.77'	82° 23.04'	82°	23.04'
51	48	26° 20.68'	82° 23.94'	82°	23.94'
51	47	26° 19.92'	82° 23.98'	82°	23.98'
30	28	26° 10.34'	82° 23.98'	82°	23.98'
40	42	26° 19.00'	82° 24.80'	82°	24.80'
40	38	26° 18.18'	82° 24.85'	82°	24.85'
36	33	26° 13.35'	82° 24.89'	82°	24.89'
40	38	26° 18.64'	82° 25.99'	82°	25.99'
39	36	26° 17.68'	82° 25.97'	82°	25.97'
43	39	26° 18.78'	82° 26.47'	82°	26.47'
42	46	26° 20.64'	82° 27.31'	82°	27.31'
30	34	26° 20.25'	82° 27.37'	82°	27.37'
40	42	26° 18.89'	82° 27.32'	82°	27.32'
31	36	26° 17.68'	82° 27.32'	26° 82°	27.32'

31 nearby
32 nearby

All other soundings agree within two feet.

The wreck ^{previously} charted at Latitude 26° 30.0' N. and Longitude 82° 12.05' W. was located at Latitude 26° 29.00' N. and Longitude 82° 12.13' W. with a least depth of 11.8 feet.

Subsequently
charted from
advance
information,
as 12 Wk.

L. ADEQUACY OF SURVEY

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

See
Par. 6
Review ✓

M. AIDS TO NAVIGATION

There are no fixed or floating aids to navigation within the limits of this survey. There are no landmarks for charts within this survey. ✓ HR

N. STATISTICS

Day Letter	Date	<u>Ship SOSBEE</u>					Nautical Miles of Soundings
		No. of Positions	No. of Handline Soundings	No. of Pole Sdgs.	No. of Bottom Samples	No. of	
A	11/13/56-	76	0	0	0	0	31.6
B	11/14/56-	127	0	0	15	0	53.0
C	11/15/56-	240	0	0	14	0	95.8
D	11/16/56-	66	0	0	0	0	26.3
E	11/19/56-	210	0	0	6	0	81.0
F	11/20/56-	199	0	0	29	0	87.6
G	11/28/56-	125	0	0	6	0	48.5
H	11/29/56-	164	0	0	1	0	68.2
J	4/12/60-	130	0	0	5	0	37.8
K	4/13/60-	65	0	0	1	0	18.7
L	2/9/61-	196	0	0	4	0	52.2
M	2/14/61-	179	0	0	11	0	46.8
N	3/23/61-	3	0	0	0	0	0
Total		1,780	0	0	92	0	647.5

<u>Skiff 735</u>							
a	2/13/61-	23	0	84	0	0	4.9
b	2/15/61-	42	0	8	0	0	8.7
c	2/16/61-	46	0	81	0	0	9.1
d	2/20/61-	28	0	4	2	0	5.4
e	2/21/61-	28	0	2	0	0	6.4
f	3/3/61-	21	0	1	0	0	3.8
g	3/24/61-	1	1	0	0	0	0
h	4/28/61-	1	1	0	0	0	0
Skiff Total		190	2	180	2	0	38.3
Ship Total		1,780	0	0	92	0	647.5
GRAND TOTAL		1,969	2	180	94	0	685.8

Total area of survey = 92 square nautical miles.

There was one magnetic station within the limits of the survey.

O. RECOMMENDATIONS

This survey is complete and adequate to supercede prior surveys for Charting.

See
Par. 6
Review

Q. REFERENCES TO REPORTS

Shoran Report forwarded 3 January 1957.

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

Respectfully submitted,

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

TIDE NOTE

for

H-8363 (80-2356)

The portable tide gage at Port Boca Grande, Florida on the Pilot's Dock was used to control the survey for the 1956 work. No corrections were applied to the observed tides. The gage was located at Latitude $26^{\circ} 43.23'N$, Longitude $82^{\circ} 15.55'W$. Mean Low Water was 1.6 feet on the staff.

1
*tide gages
fall outside
of survey*

The portable tide gage at Punta Rasa^s, Florida was used to control the 1960 and 1961 work. No corrections were applied to the observed tides. The gage was located at Latitude $26^{\circ} 29.3'N$, Longitude $82^{\circ} 00.8'W$. Mean Low Water on the staff was 1.9 feet until 10 September 1960 when the installation was damaged by Hurricane DONNA. On the new staff Mean Low Water was 2.1 feet.

The 75th time meridian was used for both stations.

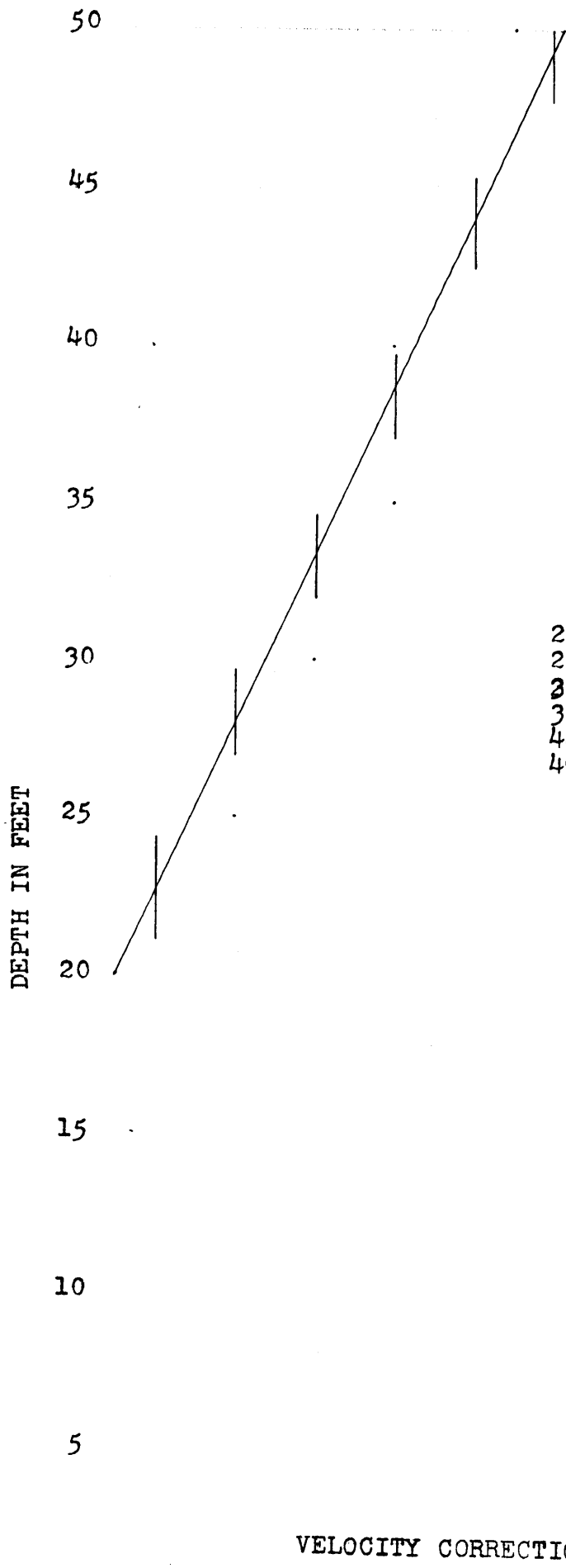
ABSTRACT OF BAR CHECKS FOR VELOCITY CORRECTIONS

SHIP SOSBEE H-8363 (SO-2356)

DATE	DAY	DEPTH IN FEET										INITIAL	VOLUME	PAGE	FATHOMETER NUMBER		
		10	25	20	25	30	35	40	45	50							
11/13/56	A	0.0		0.0	+0.4	+0.6	+1.0	+1.0				3.8	1	5	EDO 209		
11/14/56	B	+0.2		+0.2	+1.2	+0.4	+1.2					4.0	1	31	EDO 209		
11/15/56	C	-0.2		0.0	+0.4	+0.6	+0.6	+0.8				3.6	2	44	EDO 209		
11/16/56	D				REJECTED								3	18	EDO 209		
11/19/56	E	0.0		0.0	0.0	0.0	0.0					3.8	3	39	EDO 209		
11/20/56	F	0.0		0.0	0.0							3.8	4	60	EDO 209		
11/28/56	G	+0.2		0.0	+0.2	+0.2	+0.4					3.8	5	19	EDO 209		
11/29/56	H	0.0		+0.2	-0.4	0.0	+0.2	+0.4	+0.4	+0.4	+1.0	+1.0	5	39	EDO 209		
				NO BAR CHECK													
MEAN		0.0		0.0	0.0	+0.3	+0.5	+0.7	+0.7	+1.0	+1.0						
4/12/60	J	0.0		0.0	-0.4	-0.6						4.0	6	70	808 57-35		
4/13/60	K			NO BAR CHECK													
3/ 9/61	L			TOO ROUGH													
3/14/61	M	0.0		0.0								4.0	7	61	808 150		
	M	0.0		0.0								4.0	8	13	808 150		
4/28/61	N			NO BAR CHECK													
MEAN		0.0		0.0	-0.1	-0.1											

VELOCITY CORRECTIONS FOR J THRU N DAYS SAME AS H-8571 (SO-20-1-60)

EDO 209



VELOCITY CORRECTION CURVE

for

H - 8363 (80-2356)

Ship SOSBEE

A thru H Days

VELOCITY CORRECTIONS

Depth	Correction
0-22.4	+ 0.0
22.6-28.0	+ 0.2
28.2-33.4	+ 0.4
33.6-38.4	+ 0.6
38.6-44.0	+ 0.8
44.2-49.0	+ 1.0
49.2-	+ 1.2

VELOCITY CORRECTION (+) IN FEET

0.4 0.8 1.2 1.6 2.0

VELOCITY CORRECTION CURVE

for

H-8363 (SO-2356)

Ship SOSBEE

J thru N days

35

30

25

20

15

10

VELOCITY CORRECTIONS

Depth

Correction

0-13.2

-0.0

13.4-18.4

-0.2

5

18.6-23.4

-0.4

23.6-28.6

-0.6

28.8-33.4

-0.8

0

0

-0.2

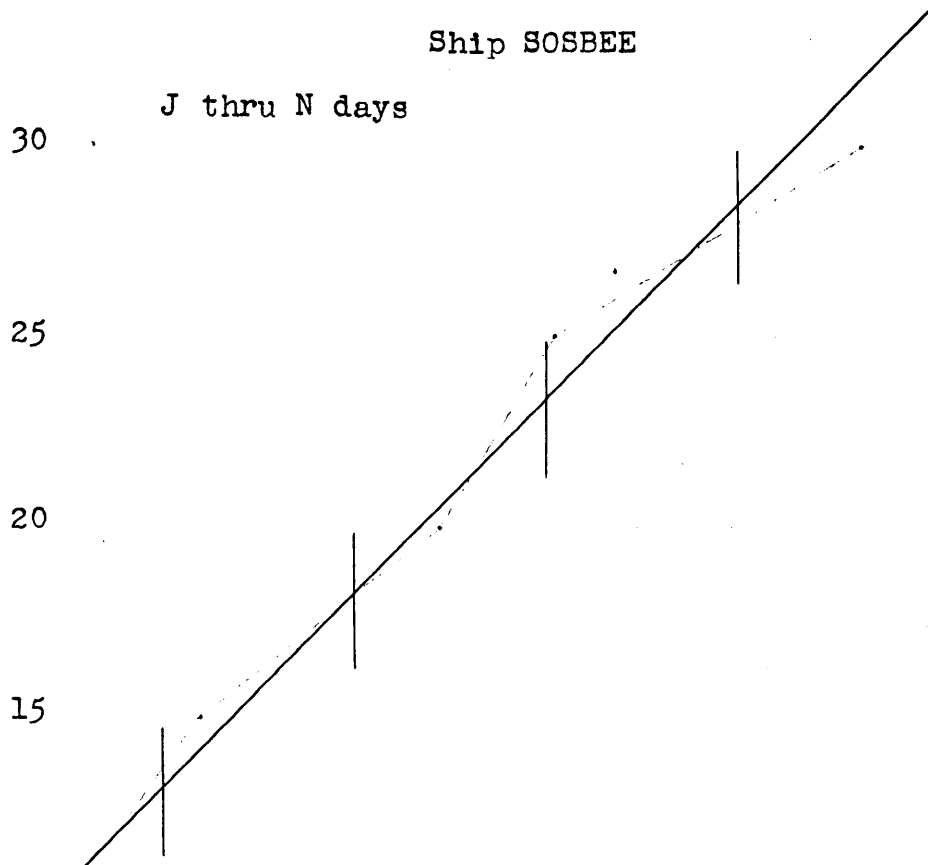
-0.4

-0.6

-0.8

-1.0

VELOCITY CORRECTION (-) IN FEET



ABSTRACT OF SHORANCORRECTIONSSHIP SOSBEE 1956

X = Shoran Reading in Statute Miles.

Y = Plus Correction in hundredths of statute miles.

X = 24.7 - 2.94 Y

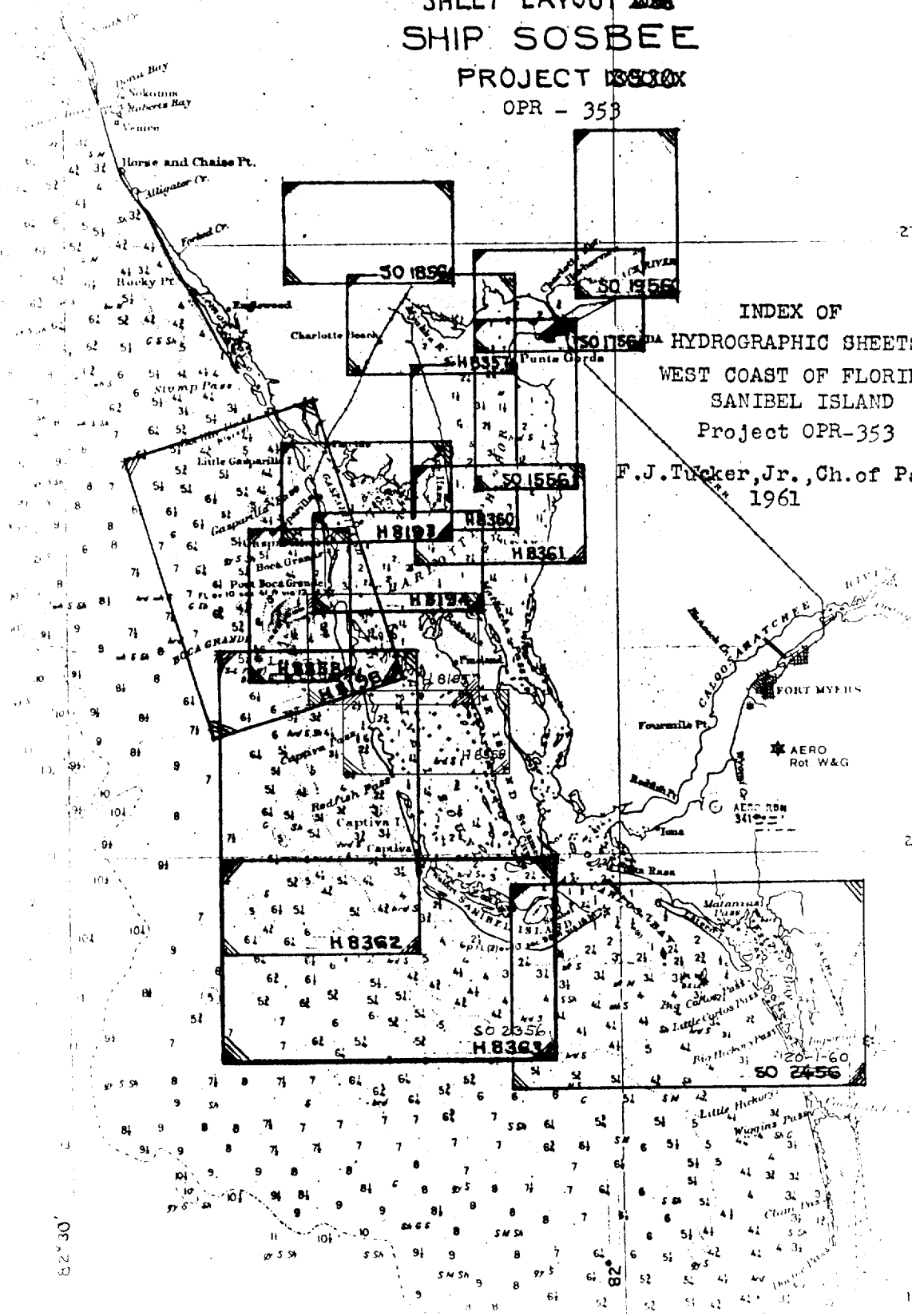
<u>Y</u>		<u>X</u>
8.5	to	0.8
8.0	to	2.2
7.5	to	3.7
7.0	to	5.1
6.5	to	6.6
6.0	to	8.0
5.5	to	9.5
5.0	to	10.9
4.5	to	12.4
4.0	to	13.8
3.5	to	15.3
3.0	to	16.7
2.5	to	18.2

Shoran Report forwarded 3 January 1957.

List of Stations on H-8363 (SO-2356)

Name used in Hydrographic Survey	Number	Origin of Station
ADD	13108	T-11413
ASK	17112	T-11417
BAT	13109	T-11413
CON	13110	T-11413
DAY	13111	T-11413
EAR	13112	T-11413
FAR	17100	T-11417
GET		GENE 1956
HER	17101	T-11417
JAW	17102	T-11417
KED	17103	T-11417
KEN	1301	T-11413
LAD	1706	T-11417
LAM	1366	T-11413
LASS		GLASS 1955, traverse
MOO	1303	T-11413
MUG	17104	T-11417
NAT	13101	T-11413
NOW	17105	T-11417
OLD	13100	T-11413
OUT	17106	T-11417
PAD	13113	T-11413
PEG	1708	T-11417
POLE		POLE 1956
QUO	13114	T-11413
RAG	17107	T-11417
RED		RED 1956, traverse
RIG	13115	T-11413
SAD	13116	T-11413
SAN	<i>Used as transmitter station for AIDS.</i>	Sanibel Island Light, 1955
SOP	17108	T-11417
TAN	13117	T-11413
TOY	17109	T-11417
USE	13103	T-11413
VAL	13104	T-11413
VEE		GLASS 1955, traverse
VET	17110	T-11417
WAG	13105	T-11413
WAS	17111	T-11417
YAK	13106	T-11413
ZIG	13107	T-11413

1961
SHEET LAYOUT ~~1958~~
SHIP SOSBEE
PROJECT ~~1958~~
OPR - 353



INDEX OF
HYDROGRAPHIC SHEETS
WEST COAST OF FLORIDA
SANIBEL ISLAND
Project OPR-353

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

27°

26° 30'

82° 30'

1115


APPROVAL SHEET

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

The Chief of Party in 1956 inspected the hydrographic operation and the results during each watch. The Chief of Party in 1960 - 61 was in charge or working with the hydrographic unit for approximately 70% of the work and inspected the boat sheet and records daily during the remainder of the work.

The boat sheet and processed records are approved.

Approved by,


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

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany


HYDROGRAPHIC SURVEY H-8363 (So-2356)

GENERAL

This appears to be an excellent basic survey. Soundings are in generally good agreement at crossings as discrepancies amount to one foot or less. In this area of irregular bottom depth curves delineate the bottom contours adequately, except along the 24' curve from Long. 82-08' to the eastern limits of hydrography where minor depth discrepancies cause unnatural configurations. This condition is particularly noticeable on cross-line 128 thru 130J and on line 134 thru 136M. Some of these discrepancies may possibly be attributed to actual changes in depths as the soundings on this survey were obtained over a period extending from 1956 to 1961.

Small discrepancies insignificant.

Respectfully submitted,


Hugh L. Proffitt
Cartographer

Norfolk, Va.
17 Jan. 1962

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TIDE NOTE FOR HYDROGRAPHIC SHEET

~~EXCLUDED FROM COASTAL SURVEYS~~

March 30, 1962

Division of Charts: R. H. Carstens

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8363

Locality West Coast of Florida

Chief of Party: F. J. Tucker, Jr. (1956-61)

Plane of reference is mean low water reading

1.6 ft. on tide staff at Port Boca Grande (1956)

6.8 ft. below B. M. 1 (1927)

1.9 ft. on tide staff at Punta Rassa until September 10, 1960

2.1 ft. on tide staff at Punta Rassa after September 10, 1960

5.6 ft. below B.M. 5 (1927)

Height of mean high water above plane of reference is:

Port Boca Grande 1.0 ft.

Punta Rassa 1.7 ft.

Condition of records satisfactory except as noted below:

J. M. Symons
Chief, Tides and Currents Branch

~~EXCLUDED FROM COASTAL SURVEYS~~

GEOGRAPHIC NAMES
Survey No. H-8363

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
Gulf of Mexico	✓										1
Sanibel Island	✓										2
											3
Captiva I.	} from T-11413										4
Blind Pass											5
	DEW										6
											7
											8
											9
											10
											11
											12
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											24
											25
											26
											27

George W. Baker
Geographic Names
21 Feb 1962

INFORMATION FOR FUTURE PRE-SURVEY REVIEWS

The offshore area appears quite stable. The shoreline in the vicinity of Blind Pass entrance, however, is very changeable and future changes can be expected here.

A future survey should verify or disprove the 35-foot sounding carried forward from H-1478a (1879-80) in Lat. $26^{\circ}23.01'$, Long. $82^{\circ}19.74'$. In addition, development for least depth should be made in the areas, enumerated in Par. 3 (c) of the Review, where the present survey's sounding lines are too widely spaced to be certain the least depth has been found.

D. E. Westbrook

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8363.....

Records accompanying survey: Smooth sheets .1...;
 boat sheets ...1.; sounding vols. .9...; wire drag vols.;
 Descriptive Reports .1...; graphic recorder envelopes .9...;
 special reports, etc.

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

Number of positions on sheet	.....	1964
Number of positions checked	.....	470
Number of positions revised	.....	4
Number of soundings revised (refers to depth only)	.....	44
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	16 hrs
Junctions	Time	18 hrs
Verification of soundings from graphic record	Time	27 hrs
Special adjustments	Time	0

Verification by *H. Headon Radden* Total time 321 hrs. Date 8-16-63

Reviewed by *Dale E. Westbrook* Time ⁵³ 51 hrs. Date 6/4/64

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8363

FIELD NO. SO-2356

Florida, West Coast, West of Sanibel Island

SURVEYED: Nov. 1956-April 1961

SCALE: 1:20,000

PROJECT NO. OPR-353

SOUNDINGS: EDO and 808 Depth
Recorders
Sounding Pole

CONTROL: Shoran,
Microwave Position -
Fixing System, and
Sextant Fixes on Shore
Signals

Chief of Party-----G. W. Moore
R. C. Munson
F. J. Tucker, Jr.
Surveyed by-----G. W. Moore
W. D. Barbee
R. C. Munson
F. J. Tucker, Jr.
N. M. Tidwell
E. L. Talbot
D. F. S. Galloway
E. D. Schwantes
F. D. Moran
Protracted by-----F. Bean
Soundings Plotted by-----F. Bean
Verified and Inked by-----H. Radden
Reviewed by-----D. E. Westbrook
Inspected by-----R. H. Carstens

Date: June 4, 1964

1. Description of the Area

The area covered by this survey lies on the west coast of Florida, in the Gulf of Mexico, to the west and southwest of Sanibel Island.

In general, this is an area of gently sloping, smooth sandy bottom with a few scattered underwater sand ridges. Near Lat. $26^{\circ}26.7'$, Long. $82^{\circ}08.8'$, however, the 12-ft. depth curve shows an irregular bottom of alternating ridges and troughs, and is the only place on the survey where the bottom is as irregular.

Several detached shoal areas exist, the most important of which is located in the northwest portion of the survey in Lat. $26^{\circ}26.82'$, Long. $82^{\circ}20.00'$. This extensive shoal area has a least depth of 27 feet and rises from general depths of 40-45 feet.

The entrance to Blind Pass and the immediate shoreline area has unstable characteristics. In 1879-80, the entrance was about 2 miles northwestward of its present position. Hurricane DONNA, in September 1960, substantially changed the shoreline near the entrance, and since that time, other changes may have taken place.

2. Control and Shoreline

The origin of the control is adequately covered in the Descriptive Report. Angle arcs for the Microwave Position Fixing System were obtained from overlays used in plotting H-8571 (1961) which joins the present survey on the east.

The shoreline originates with Advance Photogrammetric Shoreline Manuscripts T-11413 (1953-58), and T-11417 (1953-61).

Shoreline changes in the Blind Pass entrance area are shown in red violet on the present survey from the junction with H-8632 (1961). These changes have occurred subsequent to the date of T-11413 (1953-58), on which the entrance is shown, and are, primarily, the result of Hurricane DONNA in September 1960.

3. Hydrography

- A. Depths at crossings are in good agreement.
- B. The usual depth curves were adequately delineated except for several areas where closer line spacing would have more clearly defined the limits of shoals, as enumerated below.

The 3-ft. depth curve was added to more adequately define the bottom configuration. Several soundings were emphasized by the addition of dashed curves or brown curves in accordance with Par. 6-64 of the Hydrographic Manual.

The zero depth curve could not be defined without undue risk to the survey vessel and personnel and in general falls close inshore.

- C. The development of the bottom configuration and the investigation of least depths is considered adequate except for several important shoals not developed sufficiently for least depth, as follows:

1. 36-ft. in Lat. $26^{\circ}25.35'$, Long. $82^{\circ}20.94'$
2. 30-ft. in Lat. $26^{\circ}26.51'$, Long. $82^{\circ}19.40'$
3. 32-ft. in Lat. $26^{\circ}27.35'$, Long. $82^{\circ}17.90'$
4. 33-ft. in Lat. $26^{\circ}25.30'$, Long. $82^{\circ}18.80'$
5. 32-ft. in Lat. $26^{\circ}27.08'$, Long. $82^{\circ}16.40'$
6. 35-ft. in Lat. $26^{\circ}27.79'$, Long. $82^{\circ}18.94'$
7. 35-ft. in Lat. $26^{\circ}27.79'$, Long. $82^{\circ}18.48'$
8. 39-ft. in Lat. $26^{\circ}23.25'$, Long. $82^{\circ}19.91'$
9. 38-ft. in Lat. $26^{\circ}23.88'$, Long. $82^{\circ}19.31'$
10. 31-ft. in Lat. $26^{\circ}22.4'$, Long. $82^{\circ}13.2'$

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.

5. Junctions

Adequate junctions were effected with H-8362 (1956, 59-60) and H-8598 (1961) on the north; H-7935 (1951) on the west; and H-8571 (1960-61) on the east. An adequate junction was also made with H-8632 (1961) at Blind Pass.

The junction with H-8328 (1956) on the south will be discussed in the review of that survey.

6. Comparison with Prior Surveys

- A. H-1478a (1:40,000) 1879-80
H-1479a, b (1:20,000) 1879-80

These surveys afford the only basic prior survey coverage in the area of the present survey. Although sounding lines on these prior surveys are widely spaced, the general agreement with the present survey is good, indicating little overall change in bottom depths and configuration.

Two major changes have taken place, inshore, however.

The first change is in approximate Lat. $26^{\circ}29'$, Long. $82^{\circ}11'$, where the prior survey H-1479b (1879-80) shows both an entrance to Blind Pass, and a shoal making out from the entrance. The present survey shows this entrance to be blocked, and shows that the shoal has practically disappeared. A depth of 6 feet near the end of the shoal on the prior survey in Lat. $26^{\circ}28.75'$, Long. $82^{\circ}11.30'$, falls in general depths of about 15 feet on the present survey. The present entrance to Blind Pass is located about 2 miles southeastward.

The second major change is in approximate Lat. $26^{\circ}28'$, Long. $82^{\circ}10'$, where the shoreline of Sanibel and Captiva Islands has accreted about 0.5 mile since the prior surveys. In other areas, however, the shoreline has remained relatively stable.

A 5 3/4 fm. sounding shown on H-1478a (1879-80) in Lat. 26°23.01', Long. 82°19.74' was not verified or disproved by the hydrographic party and has been carried forward as 35 ft. (from the hydrographic records) to the present survey.

With the addition of the above item, the present survey is adequate to supersede the prior surveys within the common area.

B. H-4823 (1:10,000) 1928

This survey is a reconnaissance of Blind Pass. Due to the lack of a projection on this prior survey and the extensive changes in the Blind Pass area, no direct comparison can be made between it and the present survey.

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

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

Hydrography

Most of the charted hydrography originates with the previously discussed prior surveys which require no further consideration. This hydrography has been supplemented by the application of critical depths from the boat sheet and smooth sheet of the present survey before verification and review.

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

Chart 856-SC, 2nd Ed., corr. thru N.M. No. 33, 8/15/64

Most of the charted hydrography originates with the present survey before verification and review.

Several depths have been revised slightly during verification and review and the chart should be corrected accordingly.

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

8. Compliance with Instructions

The survey adequately complies with the Project Instructions except that line spacing was not reduced as necessary to develop shoals.

9. Additional Field Work

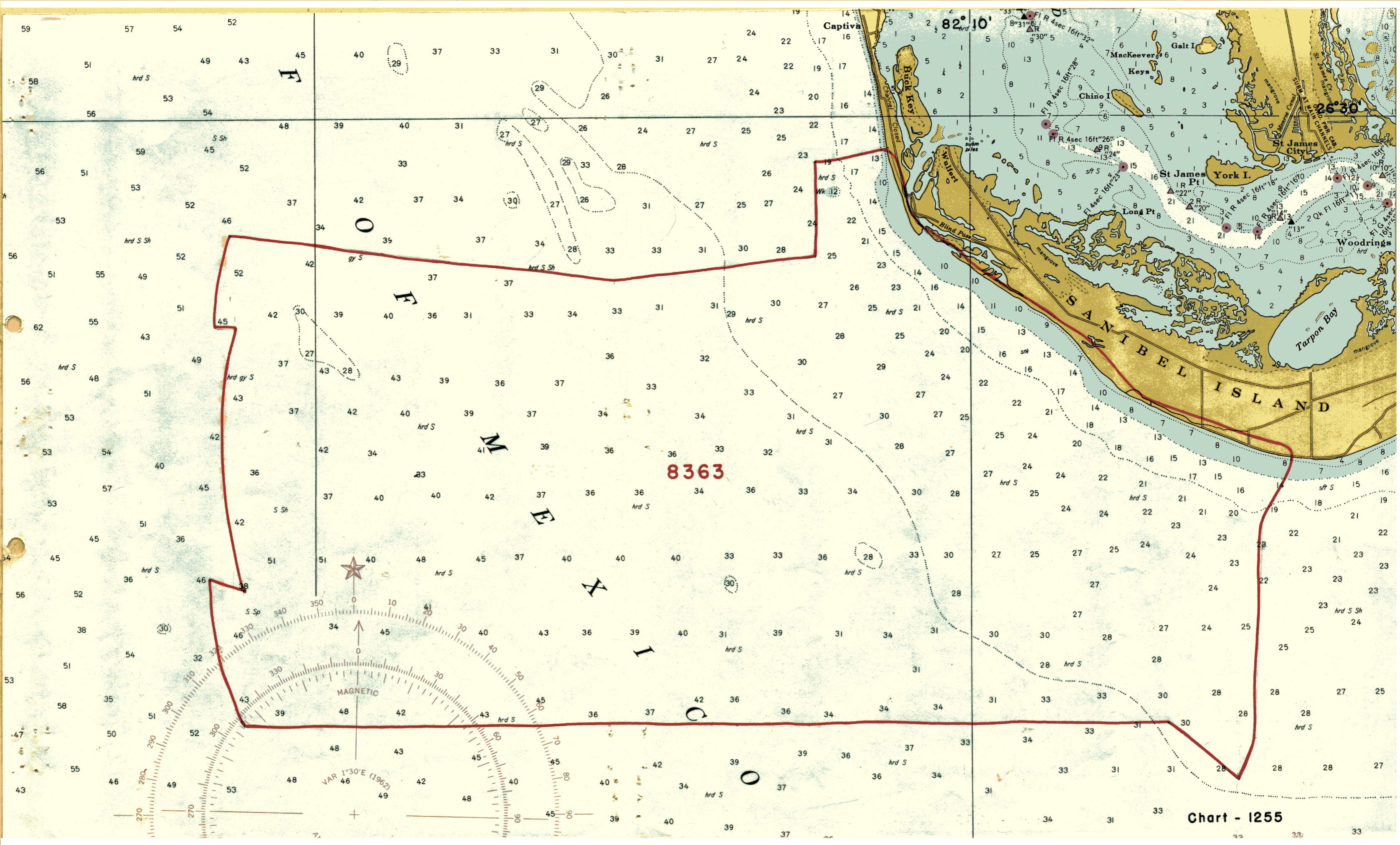
This survey is considered an adequate basic survey, and no additional field work is recommended. However, any future survey in this area should include development for least depth of the shoal indications noted in Part 3 (c) of this review. The 35-ft. sounding carried forward from H-1478a (1879-80) in Lat. $26^{\circ}23.01'$, Long. $82^{\circ}19.74'$ should be verified or disproved.


Louis G. Taylor
Chief, Marine Chart
Division

Examined and Approved:


Raymond M. Stone
Acting

Associate Director, Office of
Hydrography and Oceanography



8363

Chart - 1255

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8363

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
25 Apr 62	1255	Nichols	Before After Verification and Review Critical Corrections only
5-2-62	1007	G.R. Johnson	Before After Verification and Review Examined - No Corr.
10 July 62	856 B	Nichols	Before After Verification and Review Complete application - new chart
7/27/62	1002	O. Sreudsen	Before After Verification and Review Exam. Part Applied
Oct 62	856 A	Nichols	Before After Verification and Review complete on part Here 856 B.
1/7/63	1113	H. Quimby	Before After Verification and Review Added Shoaler Soundings only.
1/15/63	1003	H. Quimby	Before After Verification and Review Exam. ^{Added 1964} revised
3-8-66	1007	M. Rogers	Before ^{Fully app'd} After Verification and Review - hydro removed from chart in area common with this survey.
5/3/66	1255	H.A. Hall	Before After Verification and Review Partly applied Exam. Reviewer's Report only
5-9-67	856 "A" 856 "B"	B.J. Sunday	Before After Verification and Review Fully app'd
6-1-67	1255	H. Rodden	part app'd after V&R and Inspection (Added and revised a few sdgs and curves directly from sheet and part thru Chit. 856 SC
8-12-67	1002	D.J. Remsburg	Fully App'd after V&R - hydro removed from chart in area common with this survey
7/3/68	1255	H.A. Hall	Fully app'd after V&R and Inspect., Partly app'd thru Chit 856 SC

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.