8195

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-1459 *Office No.* H-8195

LOCALITY

State Florida

General locality West Coast

Locality North Pine Island Sound

1959-60

CHIEF OF PARTY

R. C. Munson

LIBRARY & ARCHIVES

DATE May 22, 1961

USCOMM-DC 5087

8195

Form 537
(Ed. June 1946)

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-8195

Field No. SO-1459

State FLORIDA

General locality West Coast

Locality North Pine Island Sound

Scale 1:10,000 Date of survey 1959 and 1960

Instructions dated 12/18/52, Supplemental Instructions 3/2/56, Revised Instructions 9/8/58, Additional Item 11/10/58.

Vessel USC&GS Ship SOSBEE

Chief of party Robert C. Munson

Surveyed by Bobby S. Woodruff, Gordon N. Orr, Edward L. Talbot, Robert M. Davidson and David F. S. Galloway, III.

Soundings taken by ~~echo sounder~~, graphic recorder, ~~hand lead~~ and Sounding Pole

Fathograms scaled by Personnel Ship SOSBEE

Fathograms checked by Personnel Ship SOSBEE

Protracted by Fred Bean (Norfolk Processing Office)

Soundings penciled by Fred Bean " " "

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

REMARKS: All corrections have been entered and checked in the sounding volumes and the soundings reduced by the Personnel of the Ship SOSBEE.

U. S. GOVERNMENT PRINTING OFFICE 777032

Form 537
(Ed. June 1946)

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U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8195

(Field Number SO-1459)

West Coast of Florida — North Pine Island Sound

Scale 1:10,000 — USC&GS Ship SOSBEE

9/30/59 - 6/7/60 — Robert C. Munson, Chief of Party

A. PROJECT

This sheet is part of project CS-353 (originally CS-13530) with original instructions dated 18 December 1952.

Revised instructions dated 8 September 1958.

Additional Item Preliminary Review dated 10 November 1958.

B. SURVEY LIMITS AND DATES

This survey covers the northern portion of Pine Island Sound.

The limits are:

North - Latitude - 26° 42.01' N.
East - West shore of Pine Island
South - Latitude - 26° 37.93' N.
West - East shore of LaCosta Island.

The area is indicated on the Index of Hydrographic Sheets which is Attachment No. 5 of this report.

Hydrography was begun on 30 Sept. 1959 and suspended on 11 December 1959. Work resumed on 22 April and the sheet was completed 7 June 1960.

Prior surveys in the area are H-797A, 1863, 1:20,000 (H-747b(1867)); H-4644, 1927, 1:40,000; and H-1480a, 1878-80, 1:20,000.

Junctions were made with contemporary surveys as follows:

Direction	Registry No.	Field No.	Date	Scale
North	H-8194	SO-1256	1956	1:10,000
South	~~None~~ H-8555		1960	1:10,000
East	None			
West	None			

See PJ Review

B. SURVEY LIMITS AND DATES - Cont.

Generally the work progressed smoothly while hydrography was being executed, although at times it was necessary to regulate the work schedule to the available high tides for work in the large shoal areas. The period from 11 December to 22 April during which no work was done was due to (1) Christmas leave, (2) Shipyard Repairs and (3) Ship personnel working on Boat Sheet SO-20-1-60. H-8571

C. VESSEL AND EQUIPMENT

All hydrography on this sheet was done with Hydrographic Skiff No. 735.

Skiff 735 is a 25 foot, wooden hull, flat-bottom skiff powered by two 10 horsepower outboard motors. When driven by both motors it has a maximum speed of about 6 knots and a turning radius of 25 meters. Only one motor was used when running shoreline and shoal areas. A fluctuating sounding speed, with no change in motor RPM, was often experienced due to the effect of changing depth in areas of approximately 3 feet or less. An attempt was made to offset this by fixing positions at the transition depth but this was not always possible or practical.

Soundings were obtained with 808-J type portable echo sounding recorders nos. 140-SP, 150 and 57-35 in depths of 3 feet or greater. Shoaler depths were measured with a graduated sounding pole.

The skiff based at Frank's Fish Camp near Back Bay at Bokeelia, Florida on Pine Island.

D. TIDE AND CURRENT STATIONS

The Pineland tide gage (Latitude 26° 39!50 N., Longitude 82° 09!25 W.) was used with no time or height correction applied.

Current Station 10 on the east side of Patricio Island was occupied for a 100 hour series of observations.

E. SMOOTH SHEET

The smooth sheet ~~will be~~ W45 plotted by the Norfolk Processing Office.

F. CONTROL STATIONS

TRIANGULATION STATION	Source	Chief of Party	Year
JUG POINT	C&GS	W.B.F.	1909
BROWN	C&GS	W.R.T.	(1860)1909

F. CONTROL STATIONS - Cont.

TRIANGULATION STATION	Source	Chief of Party	Year
PINE ISLAND GRAHAM WILSON			
ESTATE WHITE TANK	C&GS	G.L.A.	(1934)1955
FISH HOUSE	C&GS	I.R.R.	1955
PALMETTO ISLAND.			
WATER TANK	C&GS	I.R.R.	1955
SPANISH	C&GS	G.L.A.	(1934)1954
BOKEELIA	C&GS	G.L.A.	1934

Topographic Station	Method	T-Sheet	Chief of Party	Year
PIT	Air-Photo	11399	K.G.C.	(1943)1955
ONE	"	11403	"	" "
OUT	"	11403	"	" "
ROT	"	11403	"	" "
SAL	"	11403	"	" "
EDNA	"	11399	A.L.W.	"
Pine Is. Sd. Dybn. 35X	"	11403	"	"
" " " " 33X	"	11403	"	"
" " " " 33	"	11403	"	"
" " " " 38X	"	11399	"	"
" " " " 29	"	11403	"	"
" " " " 34	"	11399	"	"
" " " " 37X	"	11399	"	"
" " " " 32	"	11403	"	"
" " " Light 31	"	11403	"	"

Triangulation stations BOKEELIA, BROWN, FISH HOUSE and SPANISH were not used in hydrography.

The line of power poles extending from signal ROB on the north tip of Punta Blanca Island to signal ~~KED~~ PIT (1943) 1955) on La Costa Island have been completely removed and are indicated so on the Manuscript T-11399. KED is X out on blackline - but it was used as a signal -

Signal THY (0381, T-11403) and signal WAX (0314, T-11403) were found to be incorrectly located on the manuscript and were located by sextant fixes after being built. These locations are indicated on Attachment 1 - List of Signals.

G. SHORELINE AND TOPOGRAPHY

Shoreline and topography were obtained from advance photogrammetric manuscripts T-11399 and T-11403, compiled by the TAMPA DISTRICT OFFICE.

Shoreline was accurate but man-made changes were noted as follows: P-2 Review

G. SHORELINE AND TOPOGRAHPY - Cont.

At Lat. 26° 41!62 N, Long. 82° 09!71 W a dredged channel now exists where the manuscript shows solid mangroves.

At Lat. 26° 41!67N, Long. 82° 09!64 W and Lat. 26° 41!84 N, Long. 82° 09!58 W man-made levees block what is shown as clear channel on the manuscript.
Φ 26°-41.84' λ 82°-09.60'- Passage is now filled-in to join Island to shore-

At. Lat. 26° 41!80 N, Long. 82° 08.52 W a small boat basin has been dredged extending the shoreline south 40 meters.

In the area of Lat. 26° 41!75 N, Long. 82° 08!88 W extensive changes have been made which include:

a. two new boat channels which run parallel to and of the same length as the channel shown
b. the complete removal of one small island and the addition of a man-made levee

Φ 26°-42,18' λ 82°-08.85'- Shoreline change transferred from blackline T-11399

All the changes are indicated in red on the manuscript and were sketched by the hydrographer using the existing shoreline features as a guide. These minor changes are located accurate enough for charting. Shoreline changes shown in red on smooth sheet

H. SOUNDINGS

Depths were measured with 808-J type portable echo sounding recorders, Nos. 140-SP, 150 and 57-35. In depths of three feet and under, a graduated sounding pole was used. There were no unusual corrections applied.

I. CONTROL OF HYDROGRAPHY

The hydrography was controlled principally by three-point fixes. The fixes along the shoreline and in narrow inshore channels were plotted by distances from signals or prominent shoreline relief. Also on infrequent occasions when three signals were not available for a fix, mangrove tangents were used and described in the Sounding Volume.

In the inside channels from Little Bokeelia Bay to Frank's Fish Camp un-numbered channel markers were given numbers for the hydrographer's convenience. These numbers are shown on the boat sheet.

J. ADEQUACY OF SURVEY

The survey is complete and adequate to supersede prior surveys for charting. PG Review

Junction with the adjoining survey is satisfactory, no holidays or excessive differences exist and the depth curves can be accurately drawn. PS Review

K. CROSSLINES

Fifty-six and three tenths statute miles or 8.2% crosslines were run with no notable discrepancies.

L. COMPARISON WITH PRIOR SURVEYS

All soundings from H-1480a, 1879-80, 1:20,000 are plotted on the boat sheet in yellow ink and soundings from H-4644, 1927, 1:20,000 are shown in green ink. Comparison with these surveys was made as the soundings were inked on the sheet and the agreement was very good. P-6 Review

Comparison was made with sheet H-797a, 1863, 1:40,000 and the following difference was noted: H-797a shows the area in the vicinity of Latitude 26° 41!90 N, Longitude 82° 12!25 W to be all good water over 6 feet deep. This survey proves that this is not the case and that an extensive shoal reaching a depth of zero feet covers the area. P6A Review

M. COMPARISON WITH CHART

A comparison was made with Chart 474, 1:40,000, 15th Edition, Revised 3/10/58. The comparison was generally favorable with the following exceptions: P7A Review

1. The chart shows the part of the six-foot curve near Latitude 26° 41!90 N, Longitude 82° 12!25 W as a continuous arm of the main channel up between the two oyster bars shown. This survey shows that this curve actually ends at Latitude 26° 41!83 N, Longitude 82° 12!05 W and resumes later as an isolated deep between the two oyster bars.

2. The chart shows a continuous channel of six feet or greater extending up from the south on the East side of Useppa Island and westward between Useppa Island and Mondongo Island. The six-foot curve on this sheet is drawn through the area of six foot depths south of Pine Island Light 31 to join the two shoal areas and therefore cuts off the indicated channel.

3. This survey discloses an isolated six foot area at Latitude 26° 40!27N, Longitude 82° 13.35' W which is in the main channel where the chart shows no shoal. 6ft shoal shown on Chart 474 (10-30-61)

4. The chart shows a continuous channel inside the six foot curve which runs continuously from the east side of Useppa Island northward and past the east side of Mondongo Island. This survey ~~shows that the area east of Mondongo Island is an isolated deep which is cut off from the main channel by an extensive six foot area~~ less than 6ft

M. COMPARISON WITH CHART - Cont.

5. The chart indicates a piling at Latitude 26° 38!6 N, Longitude 82° 13!2 W. In compliance with Item 16, Additional Item Preliminary Review; dated 10 November 1958, a twenty-five minute search was made and no indications were found of the charted piling. It is recommended that the piling be deleted from the chart. *Deleted from Chart 474(10-30-61)*

6. The line of three piling charted at Latitude 26° 39!78 N, Longitude 82° 10!30 W no longer exist. *Deleted from Cht 474(10-30-61)*

7. The pile charted at Latitude 26° 39!70 N, Longitude 82° 10!22 W no longer exists. *Deleted from Cht 474(10-30-61)*

8. The pile charted at Latitude 26° 39!66 N, Longitude 82° 10!18 W no longer exists. This pile is the southern one of two and is signal BLO (0346, T-11403) that was destroyed during hydrography. *Delete pile*

9. The overhead power line extending from the north end of Punta Blanca Island to Lacosta Island no longer exists. This was reported under Section F. CONTROL STATIONS. *Deleted from Chart 474(10-31-61).*

N. DANGERS AND SHOALS

No reportable dangers or shoals.

O. COAST PILOT INFORMATION

A Special Coast Pilot Report will be submitted on an area basis.

P. AIDS TO NAVIGATION

Fixed aids to navigation are listed under topographic stations in Section F. CONTROL STATIONS with the following exceptions:

1. Pine Island Sound Daybeacon 34X 1960 was erected while hydrography was in progress and was located by sextant fix and used as signal JOY. The location is recorded in Volume 14 on Page 66.

2. On 6 June 1960, Pine Island Sound Daybeacon 35X (signal BIG) was found knocked over and awash. It is not known if the beacon has been restored.

Q. LANDMARKS FOR CHARTS

No new landmarks located. Landmarks on this sheet were reported on Form 567 by H.C. Applequist on 14 December 1955.

R. GEOGRAPHIC NAMES

The photogrammetrist is conducting an extensive geographic name survey and the report will be more complete in every detail than one that could be written by the hydrographer.

S. SILTED AREAS

None.

T. BY PRODUCT INFORMATION

None.

U. VELOCITY CORRECTION

A Velocity Correction Abstract is appended.

VNXY.

Non applicable.

Z. TABULATION OF APPLICABLE DATA

1. Boat Sheet H-8195 (SO-1459).*
2. Manuscripts T-11399 and T-11403.*
3. List of Control Stations.
4. Statistics
5. Tide Note
6. Descriptions of Photo-hydro Stations.*
7. Recovery Notes of marked stations.**
8. Tide Records (marigrams).*
9. Fathograms.*
10. Velocity Correction Abstract.
11. Index of Hydrographic Sheets.
12. Approval Sheet.
13. Record of Temperatures, Salinities, and Theroretical Velocities, Form 717.

* submitted under separate cover.
** submitted by Tampa District Office.

Approved & Forwarded by:
Robert C. Munson
Robert C. Munson,
C. O. Ship SOSBEE.

Submitted by,
Edward L. Talbot
Edward L. Talbot,
Ensign, C & G S.

Attachment No. 1

LIST OF SIGNALS

H-8195 SO-1459

North Pine Island Sound

NAME	NUMBER	T-SHEET	Triang. & Topo. Station
ACE	03137	11403	
AMY	03109	11403	
ANK	03195	11403	
ANN	9978	11399	
ANT	9993	11399	
ARK	03157	11403	
ASM		11403	- ONE (1943) 1955
AXE	0341	11403	
AZO	0351	11403	
BAG	9927	11399	
BAN	03177	11403	
BAY	9940	11399	
BEN	0331	11403	
BET	0352	11403	
BIG	03127	11403	- Pine Isd. Sd. Dybn. 35X 1955
BIT	03126	11403	- " " " " 33X 1955
BLO	0346	11403	
BOB	9966	11399	
BOX	03121	11403	
BOY	03185	11403	
BUG	0368	11403	
BUS	0330	11403	
BUT	03132	11403	
BUZ	0338	11403	
CAN	0398	11403	
CAR	0328	11403	
CAT	0315	11403	
COD	9971	11399	
CON	9974	11399	
COT	03114	11403	
COW	0309	11403	
COX	0382	11403	
CRY	9931	11399	
CUX	03155	11403	
DAD	03162	11403	
DAN	03108	11403	
DAR	03180	11403	
DAY	03105	11403	- " " " " 33 1955
DIP	9965	11399	
DIX	9953	11399	
DOC	9934	11399	
DOG	03193	11403	

LIST OF SIGNALS

H-8195 · SO-1459

North Pine Island Sound

NAME	NUMBER	T-SHEET	Triang. & Topo. Station
DON	03187	11403	
DOX	9985	11399	
DUO	03184	11403	
EAR	0395	11403	
EAT	9979	11399	
EGG	0373	11403	
EGO	03170	11403	
ELF	03176	11403	
ELK	0326	11403	
EMP	03143	11403	
ERN	03173	11403	
EVA	0362	11403	
FAG	0342	11403	
FEW	-power pole-	11399	- pricked direct
FISH	0387	11403	
FIZ	9905	11399	
FLY	0356	11403	
FOX	0322	11403	
GAD	9996	11399	
GAL	9981	11399	
GAM	03191	11403	
GAZ	9991	11399	
GEM	03136	11403	
GET	03117	11403	
GOO	0349	11403	
GOT	0325	11403	
GUS	03128	11403	
GUY	03134	11403	
HAG	0329	11403	
HAM	0391	11403	
HAT	03102	11403	
HER	0378	11403	
HEX	9928	11399	
HID	0321	11403	
HIS	9973	11399	
HOE	03182	11403	
HUG	03142	11403	
HUL	03111	11403	
ICE	9963	11399	- Pine Isd. Sd. Dybn. 38X 1955
IDA	9986	11399	
ILL	03113	11403	
INN	03164	11403	

LIST OF SIGNALS

H-8195 SO-1459

North Pine Island Sound

NAME	NUMBER	T-SHEET	Triang. & Topo. Station
IRK	0377	11403	
ISM	03158	11403	
ISY		11403	- Pine Island Sound Dybn. 29 1955
IVY	9904	11399	
JAP	03129	11403	
JAY	pile	11403	- pricked direct
JIB	9968	11399	
JIM	9967	11399	
JOE	9933	11399	- ((sextant fix Vol. 14, page 66)
JOY JUG	sextant	11403	- {Pine Island Sound Dybn 34X 1960 JUG POINT, 1909-43
KAY	03140	11403	
KED	9921	11399	- Pit (1943) 1955
KEL	0339	11403	
KEN	0360	11403	
KIM	03116	11403	
KIP	pile	11399	- pricked direct
LAD	0323	11403	
LAN	9946	11399	- Pine Island Sound Dybn 34 1955
LAX	9977	11399	
LEE	0337	11403	
LEG	03110	11403	
LES	0374	11403	
LEW	0345	11403	
LIM	0390	11403	
LIT	0332	11403	
LOK	03190	11403	
LOT	03156	11403	
LOX	9922	11399	
LUG	0357	11403	
MAG	03169	11399	
MAP	telephone pole	11399	- pricked direct
MAR	9984	11399	
MAS	9970	11399	
MEL	9956	11399	
MET	0333	11403	
MOM	03161	11403	
MOP	9951	11399	
MUG	9976	11399	
MUN	03186	11403	
MUR	03139	11403	
NAG	03163	11403	
NAP	03106	11403	
NAT	0310	11403	

LIST OF SIGNALS

H-8195 SO-1459

North Pine Island Sound

NAME	NUMBER	T-SHEET	Triang. & Topo. Station
NAV	0365	11403	
NAY	9930	11399	
NED	03198	11403	
NEW	9994	11399	
NIG	0358	11403	
NIX	9906	11399	
NOB	0343	11403	
NOR	0397	11403	
NOX	03144	11403	
NUL	9902	11399	
NUT	9938	11399	
OAK	9955	11399	
OBI	03194	11403	
OHM	0396	11403	
OIL	9932	11399	
OLD	9941	11399	
OOT	03165	11403	
ORA	03135	11403	
OSM	03146	11403	
OUT	0355	11403	- OUT (1943) 1955
OWL	0370	11403	
PAD	03123	11403	
PAM	0327	11403	
PAR	03141	11403	
PAT	0335	11403	
PEE	0393	11403	
PEG	9995	11399	
PET	03197	11403	
PIG	03120	11403	
PIL	0324	11403	
PIN	pile	11403	- pricked direct
PIR	03115	11403	
PIX	03133	11403	
PIZ	9992	11399	
POL	9983	11399	
PUD	03145	11403	
PUM	03188	11403	
QUE	03119	11403	
QUO	0318	11403	
RAH	0350	11403	
RAM	9959	11399	
RAP	0394	11403	
RAY	0389	11403	

LIST OF SIGNALS

H-8195 SO-1459

North Pine Island Sound

NAME	NUMBER	T-SHEET	Triang. & Topo. Station
RIC	0336	11403	
RIP	03124	11403	
ROB		11399	- telephone pole - pricked direct
ROC	9937	11399	
ROT		11403	- ROT (1943) 1955
ROY	9972	11399	
RUE	03154	11403	
RUM	9987	11399	
SAL	0340	11403	
SET	9988	11399	
SEX	0379	11403	
SIN	03107	11403	
SIP	0311	11403	
SIR	03125	11403	
SKY	0348	11403	
SNO	9964	11399	
SOL	0364	11403	- SAL (1943) 1955
SON	03118	11403	
SOP	03167	11403	
SOS	03189	11403	
SOT	pile	11399	- pricked direct
SOW	0363	11403	
SOX	9952	11399	
SOY	0369	11403	
STY	03192	11403	
SUE	9962	11399	- Pine Island Sound Dybn. 37X 1955
TAL	03196	11403	
TAN	0312	11403	
TANK	Tank	11399	- Pine Island Graham Wilson Estate White Tank 1934
TAP	03172	11403	
TAT	0354	11403	
TED	0359	11403	
TEP	9915	11399	- EDNA 1955
TEX	03183	11403	
THY	sextant	11403	- sextant Fix Vol. 10, page 46.
TIN	0399	11403	
TIP	0320	11403	
TIX	03159	11403	
TOE	0347	11403	
TOM	9942	11399	
TOT	03104	11403	- Pine Island Sound Dybn. 32 1955
TOY	-9926(03175)-	11399	
TRI	0334	11403	

LIST OF SIGNALS

H-8195 SO-1459

North Pine Island Sound

NAME	NUMBER	T-SHEET	Triang. & Topo. Station
TRY	0308	11403	
TWO	03112	11403	
UGH	9944	11399	
UNO	03179	11403	
USE	9950	11399	
UTE	9975	11399	
VAL	9969	11399	
VAN	9980	11399	
VEE	03171	11403	
VIA	0388	11403	
WAD	0371	11403	
WAR	9990	11399	
WAT	03130	11403	- Palmetto Island White Tank 1955
WAX	sextant	11403	- Sextant Fix Vol. 12, page 19.
WHO	03166	11403	
WID	0375	11403	
WIL	03178	11403	
WIN	9958	11399	
WOO	03160	11403	
XIT	03103	11403	- Pine Island Sound Light 31 1955.
YAK	9943	11399	
YAM	9954	11399	
ZAG	03174	11403	
ZAP	03100	11403	
ZIG	9903	11399	
ZOO	9982	11399	
Piling No.	1	11399	- pricked direct
" "	2	11399	- " "
" "	5	11399	- " "
" "	13	11399	- " "
" "	14	11399	- " "
" "	15	11399	- " "
" "	16	11399	- " "
" "	20	11399	- " "
" "	21	11399	- " "
" "	22	11399	- " "
" "	25	11399	- " "
" "	12	11399	- " "

Attachment No. 2.

STATISTICS
for
HYDROGRAPHIC SURVEY H-8195 (SO-1459)

Project CS-353 North Pine Island Sound

Skiff No. 735

DATE	DAY LETTER	VOLUME NUMBER	NUMBER OF POSITIONS	STATUTE MILE OF SOUNDINGS
9/30/59	a	1	123	28.17
10/14/59	b	1	160	32.20
10/22/59	c	2	102	16.44
10/27/59	d	2	35	4.5
11/5/59	e	2	87	16.21
11/10/59	f	3	86	13.8
11/11/59	g	3	119	22.54
11/12/59	h	3 & 4	139	21.0
11/16/59	j	4	100	15.5
11/17/59	k	4	54	9.7
11/23/59	,l	4 & 5	105	18.86
11/24/59	m	5	112	18.51
12/11/59	n	5	90	12.42
4/22/60	p	6	143	24.84
4/25/60	q	6	56	18.17
4/26/60	r	6 & 7	124	23.46
4/27/60	s	7	132	27.25
4/28/60	t	7	111	13.6
5/2/60	u	8	150	23.57
5/3/60	v	8	121	16.1
5/4/60	w	9	132	15.18
5/5/60	x	9	123	23.23
5/9/60	y	10	115	24.03
5/10/60	z	10	122	21.73
5/11/60	aa	10 & 11	128	24.84
5/12/60	ba	11	44	8.74
5/13/60	ca	11	138	26.4
5/16/60	da	12	85	11.84
5/17/60	ea	12	100	14.14
5/18/60	fa	12	114	17.5
5/19/60	ga	13	82	9.66
5/20/60	ha	13	88	11.96
5/23/60	ja	13	87	12.65
5/25/60	ka	13 & 14	115	15.64
5/26/60	la	14	95	14.14
5/31/60	ma	14	59	8.05
6/1/60	na	14 & 15	86	10.81
6/2/60	pa	15	130	12.3
6/3/60	qa	15	108	9.9
6/6/60	ra	15	46	2.99
6/7/60	sa	15	33	3.45
Grand Total			4179	675.70

Area = 21.61 square statute miles.

Attachment No. 3.

TIDE NOTE

for

H-8195 SO-1459

The portable tide gage on the boat dock at Pineland Fish Camp, Pine Island, Florida was used to control the survey. No time or height correction was applied to observed tides.

The gage is located at Latitude 26° 39.50' N., Longitude 82° 09.25' W. and 3.0 feet on the staff was used as Mean Low Water.

ABSTRACT OF BAR CHECKS

Skiff No. 735

H-8195 80-1459

Depths in feet		4	5	6	8	10	11	12	Gain	Inital Set	Vol.	Page	Remarks
Dates	Day Letter	Velocity Correction in Feet											
9/30/59	a				None				7	0.6	1		Fath.
10/14/59	b		0.0	0.0	0.0	0.0			7	0.6	1	36	No.
10/22/59	c		0.0	0.0	0.0	0.0			7	0.6	2	29	140-SP
10/27/59	d		0.0	0.0	0.0	0.0		0.0	7	0.6	2	31	used
11/5/59	e		0.0	0.0	0.0	0.0			7	0.6	2	62	thru
11/10/59	f		0.0	0.0	0.0				7	0.6	3	5	b-day;
	f		0.0	0.0	0.0				7	0.6	3	25	
11/11/59	g		0.0	0.0	0.0				7	0.6	3	26	15035
11/12/59	h				None				7	0.6	3 & 4		thru
11/16/59	j		0.0	0.0	0.0	0.0			7	0.6	4	24	n-day;
	j		0.0	0.0	0.0	0.0			7	0.6	4	47	other.
11/17/59	k				None				7	0.6	4		57-35
11/23/59	l		0.0	0.0	0.0	0.0			7	0.8	4	65	thru
	l		0.0	0.0	0.0	0.0			7	0.6	4	70	sa-day.
11/24/59	m		0.0	0.0	0.0	0.0		0.0	7	0.6	5	23	
12/11/59	n				None				7	0.6	5		
4/22/60	p			0.0	0.0				7	0.4	6	20	
4/25/60	q				None				7	0.4	6		
4/26/60	r		0.0	0.0	0.0	0.0			7	0.4	7	13	
4/27/60	s	0.0	0.0	0.0	0.0	0.0			7	0.4	7	26	
4/28/60	t				None				7	0.6	7		
5/2/60	u				None				7	0.6	8		
5/3/60	v				None				7	0.6	8		
5/4/60	w				None				7	0.6	8 & 9		
5/5/60	x	+0.2		0.0	-0.2	±0.2			5	0.6	9	62	Poor
5/9/60	y				None					0.6	10		
5/10/60	z		0.0	0.0	0.0	0.0		0.0	6	0.6	10	59	

Attachment No. 4.

ABSTRACT OF BAR CHECKS

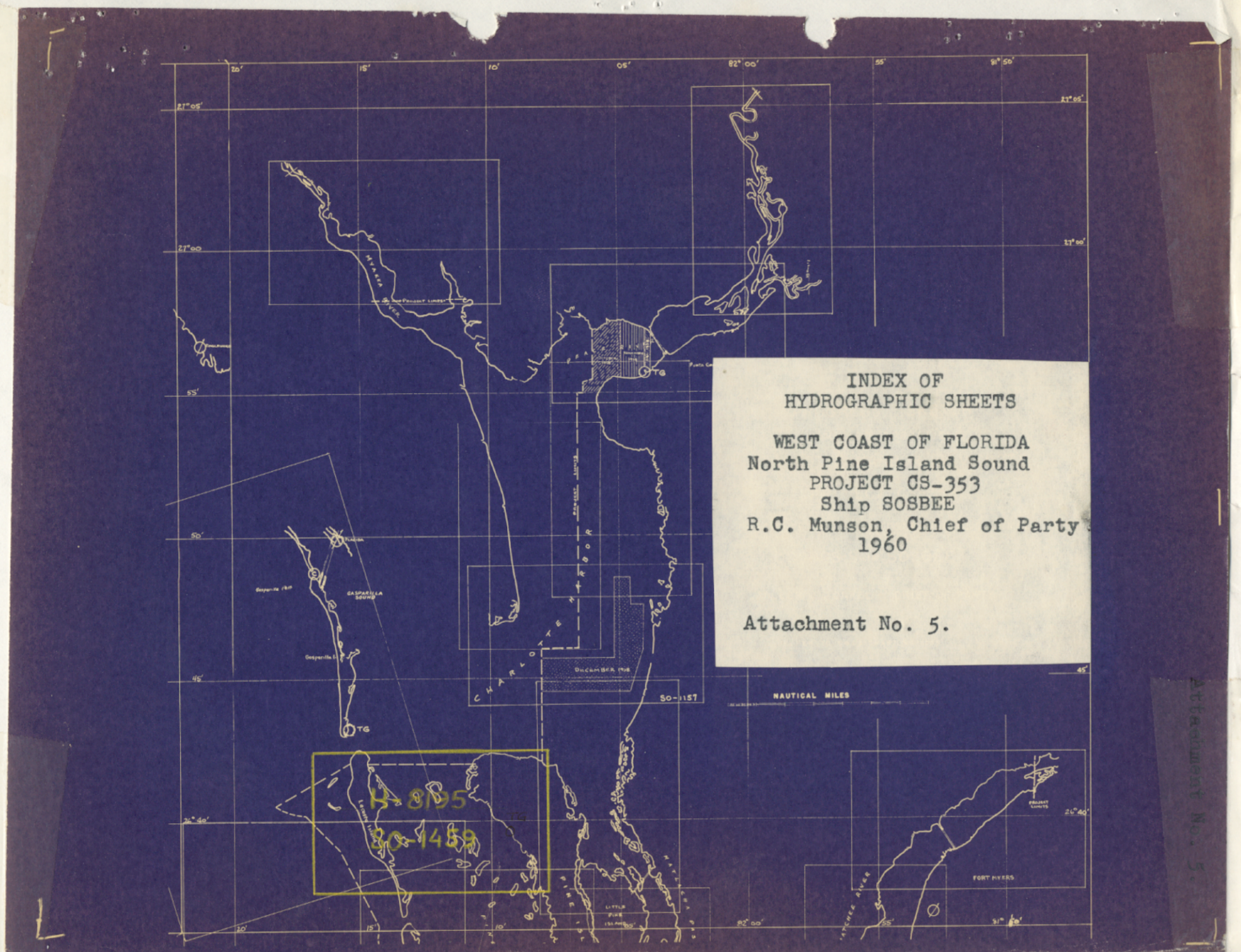
Skiff No. 735

H-8195 SO-1459

Depths in Feet		4	5	6	8	10	11	12	Gain	Inital Set	Vol.	Page	Remarks
Dates	Day Letter	Velocity Correction in Feet											
5/11/60	aa	0.0	0.0	0.0	0.0	0.0			6	0.6	11	20	
5/12/60	ba	0.0	0.0	0.0	0.0	0.0		0.0	6	0.6	11	25	
5/13/60	ca		0.0	0.0	0.0	0.0	0.0	0.0*	6	0.6	11	35	*L.L.-Comp.
5/16/60	da	0.0	0.0	0.0	0.0	0.0			6	0.6	12	23	
5/17/60	ea	0.0	0.0	0.0	0.0	0.0	0.0*		6	0.6	12	24	*L.L.Comp.
5/18/60	fa	0.0	0.0	0.0	0.0	0.0	0.0*		6	0.6	12	48	*L.L.Comp.
5/19/60	ga	0.0	0.0	0.0	0.0	0.0	0.0*		6	0.6	13	3	*L.L.Comp.
5/20/60	ha	0.0	0.0	0.0	0.0	0.0		0.0	6	0.6	13	25	
5/23/60	ja	0.0	0.0	0.0	0.0	0.0			6	0.6	13	62	
5/25/60	ka	0.0	0.0	0.0	0.0	0.0			6	0.6	13	64	
5/26/60	la	0.0	0.0	0.0	0.0	0.0		0.0	6	0.6	14	22	
5/31/60	ma	0.0	0.0	0.0	0.0	0.0		0.0	6	0.6	14	43	
6/1/60	na	0.0	0.0	0.0	0.0	0.0		0.0	6	0.6	14	58	
6/2/60	pa	0.0	0.0	0.0	0.0				6	0.6	15	31	
6/3/60	qa				None						15		
6/6/60	ra				None						15		
6/7/60	sa				None						15		
Mean		0.0	0.0	0.0	0.0	0.0	0.0	0.0					

Velocity Correction is 0.0 feet for the entire sheet.

Page 2 of Attachment 4.


INDEX OF
HYDROGRAPHIC SHEETS
WEST COAST OF FLORIDA
North Pine Island Sound
PROJECT CS-353
Ship SOSBEE
R.C. Munson, Chief of Party
1960
Attachment No. 5.
H-8195
80-1459
NAUTICAL MILES
CHARLOTTE HARBOR
GASPARILLA SOUND
PINE ISLAND SOUND
FORT MYERS
TG

Attachment No. 6

Approval Sheet

This survey is complete and adequate and no further field work is recommended. The Chief of Party consulted with the hydrographers and inspected the boat sheet and records daily during the execution of the survey.

The records are approved and have been forwarded to the Norfolk Processing Office.

The boat sheet is approved and will be forwarded to the Washington Office.

Approved By,

Robert C. Munson

Robert C. Munson
Chief of Party

Attachment No. 7

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

Form 717
(1-12-54)

SHEET No. 4

RECORD OF TEMPERATURES, SALINITIES, AND THEORETICAL VELOCITIES

Ship ~~or party~~ SOSBEE, Robert C. Munson, Chief of party. ~~Feb~~ 12 May, 1960
Locality North Pine Island Sound, Florida Project CS-353 Survey No. 50-1459

Date 1960	Time 75° Mer.	Latitude and longitude	* Depth	Temp. at Depth Obs.	Temp. at Depth Cor.	Specific Gravity Obs.	Specific Gravity Cor.	At Temp. Obs.	At Temp. Cor.	† Salinity	Velocity at temp.	Corrections Sal.	Corrections Pres.	Velocity (theoretical)	Therm. No.	Hydro. No.	Remarks (weather, bottom, etc.)
	h. m.		~~Fathoms~~ FEET	°C	°C			°C	°C		M/Sec.	M/Sec.	M/Sec.	M/Sec.			
5/12	10 39	φ 26° 39.30 λ 82° 12.07	13 B	24.8	24.8	1.X0225 ~~1.022~~	1.0248	—	24.8	33.4	1531.2	-1.8	0	1529.4	84950	1127	W. - bc wind - SW - 3 Bottom - fn. gy. S. brk. Sh.
	10 45		surface	25.2	25.2	1.X0226	1.0250	—	25.2	33.7	1532.2	-1.4	0	1530.8	84950	1127	
5/20	11 17	26° 39.30	12.8 B	28.0	28.0	1.X0210	1.0242	—	28.0	32.7	1538.7	-2.4	0	1536.3	84950	1127	calm - clear - hazy Bottom: fn wh S
	11 04	82° 13.07	surface	28.3	28.3	1.X0206	1.0238	—	28.3	32.1	1539.4	-3.0	0	1536.4	84950	1127	
6/1	10 05	26° 40.88	14.0 B	26.4	26.4	1.0211	1.0238	—	26.4	32.1	1535.0	-3.1	0	1531.9	84950	1127	calm - clear
	10 14	82 11.83	surface	26.4	26.4	1.0210	1.0237	—	26.4	32.0	1535.0	-3.2	0	1531.8	84950	1127	Bottom: fn gy S

No. 40
Observed by: E.L. Talbot
Verified by: D.F.S. Galloway
Computed by: R.C. Munson
Checked by:

* If depth recorded is bottom indicate thus: 965 B
† Express in parts/1000. If by titration indicate thus: 34.15 T

Comm-DC 57760

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8195 (So-1459)

GENERAL

The bottom in the area of this survey, particularly in the shoaler depths, is extremely irregular. Soundings at crossings are in generally good agreement but there are a great many areas of sandwaves, lumps, potholes, and grass so dense the true bottom is blanked out on the fathogram, causing some question as to the reliability of the fathometer readings. Where these grassy conditions occurred, the hydrographer obtained a great many pole soundings, how-ever, the numbers was not extensive enough in some instances to give coverage without relying on fathometer soundings.

There are also a great many narrow sloughs and channels whose limits and continuity could not be followed because of a lack of soundings, or because of minor displacement due to the erratic times and courses usually associated with skiff work in shoal water. Limits of sloughs and channels transferred to smooth sheet from photographs where hydrographic information inadequate.

It is believed that air-photographs will prove useful during verification for delineating the limits of channels, out-lining shoal areas, and as a guide for smoothing depth curves. It is also believed that pole soundings should be inked first in grassy areas so they may be used as a guide for correcting, or possibly rejecting questionable fathometer soundings.

STATION DESCRIPTIONS

Descriptions for some of the photo-hydro stations were omitted on the smooth sheet as they were not furnished this Office. Station Descriptions added from Desc. Cards where available.

Norfolk, Va.
16 May 1961

Respectfully submitted,

Hugh L. Proffitt
Cartographer

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No.

Name on Survey	A On Chart No.	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 BGN	
Narrows Cove	not to be applied to Hydro Sheet									1
Murdock Bayou	474									2
Primo Bay	474									3
Useppa Oyster Bar	not to be applied to Hydro Sheet									4
Mondonqa Rocks	"	"	"	"	"	"	"	"		5
THE Narrows	"	"	"	"	"	"	"	"		6
Platt Pt.	474									7
Water Turkey Bayou	not to be applied to Hydro Sheet									8
Buzzard Roost	not to be applied to Hydro Sheet									9
Wood key	"	"	"	"	"	"	"	"		10
The White Stop	"	"	"	"	"	"	"	"		11
Big Jim Creek	✓									12
Foster Bayou	✓									13
Cat key	not to be applied to Hydro Sheet									14
Cove key	"	"	"	"	"	"	"	"		15
Black Key	"	"	"	"	"	"	"	"		16
Coon Key	"	"	"	"	"	"	"	"		17
Little Bokeelia Bay	474								✓	18
Back Bay	474									19
Jug Creek	474									20
Shell Cut	474									21
Allen Creek	✓									22
Tom Bay	✓									23
Pelican Pass	474									24
Jug Creek Shoal	474				GMB					25
Wilson Cut	✓				16 May 62					26
Rocky Channel	~~1955~~				see attached note					27

FORM 1547
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8195

Name on Survey	A On Chart No.	B On previous survey No. 1255	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 BGN	
Cabbage Key	x								x	1
Lacosta Island	x								x	2
Mondongo Island	x									3
Patricio Island	x									4
Pelican Bay	x									5
Pine Island	x									6
Pine Island Sound	x									7
Pineland	x									8
Point Blanco	x	(abond. town name not physical feature)							x	9
Useppa Island	x									10
										11
										12
Punta Blanca I.	✓									13
Middle Key		(not to be used for charting)								14
Bird Key		(not to be used for charting)								15
Primo Pt.	✓									16
Part Island	✓									17
Broken Islands	✓	(~~incorrect on Sheet~~)								18
Little Bokeelia I.	✓								✓	19
Bokeelia I	✓								✓	20
BOKEELIA	✓									21
Josslyn I.	✓	~~incorrectly names on Sheet~~								22
Rat Key		(not to be used for charting)								23
Orange Pass	✓									24
										25
	474									26
										27

George M Case
Geographic Names Section
30 October 1961

George M Case
26 March 1962

BGN

Form 946

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8195

Records accompanying survey: Smooth sheets 1; boat sheets 1; sounding vols. 15; wire drag vols. ; Descriptive Reports 1; graphic recorder envelopes 20; special reports, etc. 1-Blackline Impression T-11399
1-Boat Sheet Overlay

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

Number of positions on sheet		4176
Number of positions checked		73
Number of positions revised		2
Number of soundings revised (refers to depth only)		163
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	2 hr
Junctions	Time	3 hr
Verification of soundings from graphic record	Time	4 hr
Special adjustments	Time	0

Verification by George F. Merrill Total time 364 Date 1-21-62

Reviewed by [signature] Time 52 Date 3/7/62

US COMM C&GS DC

17 May 1962

Due to the disagreement between our Sept. 1961 field investigation report, the USGS quad "Bokeelia", 1958, and previous T sheets; hence a great number of names listed on Form 197 should not be applied to this Hydro Sheet. Theses discrepancies are now pending action by the U.S. Board on Geographic Names.

George D. Ball
Geographic Names Section

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~: 9 August 1961

Division of Charts: R. H. Carstens

Plane of reference approved in
15 volumes of sounding records for

HYDROGRAPHIC SHEET 8195

Locality North Pine Island Sound, Florida

Chief of Party: R. C. Munson (1959 & 1960)
Plane of reference is mean low water, reading
3.0 ft. on tide staff at Pineland Fish Camp, Pine Island, Florida
3.9 ft. below B. M. 1 (1959)

Height of mean high water above plane of reference is: 1.0 ft.

Condition of records satisfactory except as noted below:

Bert W. Wilson

Chief, Tides and Currents Branch

~~Chief, Division of Tides and Currents.~~

U. S. GOVERNMENT PRINTING OFFICE 877033

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8195 FIELD NO. SO-1459

Florida, West Coast, North Pine Island Sound

SURVEYED: September 1959 - June 1960 SCALE: 1:10,000

PROJECT NO. CS-353

SOUNDINGS: 808 Depth Recorder
Sounding Pole

CONTROL: Sextant fixes on shore signals

Chief of Party	R. C. Munson
Surveyed by	B. S. Woodruff, G. N. Orr, E. L. Talbot, R. M. Davidson, and D. F. S. Galloway, III
Protracted by	F. Bean
Soundings plotted by	F. Bean
Verified and inked by	G. F. Merrill
Reviewed by	I. M Zeskind DATE 3-7-62
Inspected by	R. H. Carstens

1. Description of the Area

This is a survey of the northern part of Pine Island. The bottom is fairly irregular with shoals, flats, deeps, oyster bars, and ridges contributing to the bottom irregularity. Several natural channels indent the bottom. A number of small islands, the majority of which are covered by mangrove, fall within the area of the present survey.

2. Control and Shoreline

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

The shoreline originates with unreviewed photogrammetric survey T-11399 and T-11403 of 1953-55, supplemented by corrections to the shoreline transferred in red to the smooth sheet from the boat sheet of the present survey.

3. Hydrography

Depths at crossings are in good agreement. The usual depth curves are adequately delineated. The 3-foot curve was drawn to better delineate the bottom configuration. Photographs used in compiling the photogrammetric surveys covering the area of the present survey were used as an aid in drawing some of the curves. In general the development of the bottom configuration and least depths was adequate.

4. Condition of Survey

A. The sounding records and Descriptive Report are complete and comprehensive.

B. The smooth plotting was accurately done.

5. Junctions

Adequate junctions were effected with H-8194 (1956-57) on the north and H-8555 (1960) on the south.

6. Comparison with Prior Surveys

A. H-797a (1863), 1:40,000
H-797b (1867), 1:20,000
H-1480a (1879-80), 1:20,000

These early reconnaissance surveys cover the area of the present survey. A comparison between the prior and present surveys reveals changes in shoreline and bottom configuration which are attributed to natural and artificial causes, such as the action of the current on the bottom, the accreting or eroding of the shoreline, and dredging operations. In general only 1-2 foot differences in depths are noted, except in several areas where differences of as much as 4 feet are found. An example of this latter difference in depths accurs in latitude 26° 41.52', longitude 82° 13.08', where a prior depth of 1 foot falls in present depths of 5 feet. Accretion and erosion of the shorelines of some of the islands falling within the area of the present survey are noted. An example of this occurs on Punta Blanca Island whose shoreline has eroded about 1/2 mile at its northwest end and has accreted about 80 meters at its southwest end. A former island in the vicinity of latitude 26° 41.0', longitude 82° 10.5' now forms part of the mainland.

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

B. H-4644 (1927), 1:20,000

This survey covers the portion of the present survey which extends about 1/2 mile east of Punta Blanca Island and the area between this island and the eastern shore of La Costa Island. A comparison between the prior and present surveys reveals only minor differences of 1-2 feet in depths.

The present survey is adequate to supersede the prior survey.

7. Comparison with Chart 474 (Latest print date 10-30-61)

A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys which need no further consideration, with the U. S. Corps of Engineers' surveys (Bps 33299-301) of 1938 supplemented by a few soundings from the present survey prior to verification and review. The charted spoil areas originate with the U. S. Corps of Engineers' survey (Bp 60713-14) of 1961, which were accomplished subsequent to the present survey.

The pile located on photogrammetric survey T-11403 (1953-55) in latitude 26° 39.75', longitude 82° 10.26', is not shown on the present survey. No reference to this pile is made in the sounding volumes and it is not shown on the boat sheet. The pile is believed to be the one referred to by the hydrographer (Item M-7 of the Descriptive report) who states that it no longer exists.

Except for the spoil areas and the controlling depth through the intracoastal waterway channel mentioned in paragraph B below, the present survey is adequate to supersede the charted hydrography.

B. Controlling Depths

The charted controlling depth of 8 feet in the intracoastal waterway channel in Pine Island Sound between Light "52" and day beacon "74", originates with the U. S. Corps of Engineers' survey (Bp 60713-14) of 1961. These

surveys were accomplished subsequent to the present survey after dredging of the channels.

C. Aids to Navigation

The locations and nomenclature of the charted aids to navigation originate with chart letters 687 and 929 of 1961. The aids were applied to the chart subsequent to the present survey. In their charted positions, the aids adequately mark the features intended and supersede the aids shown on the present survey.

8. Compliance with Project Instructions

The survey adequately complies with the project Instructions.

9. Field Work Recommended

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

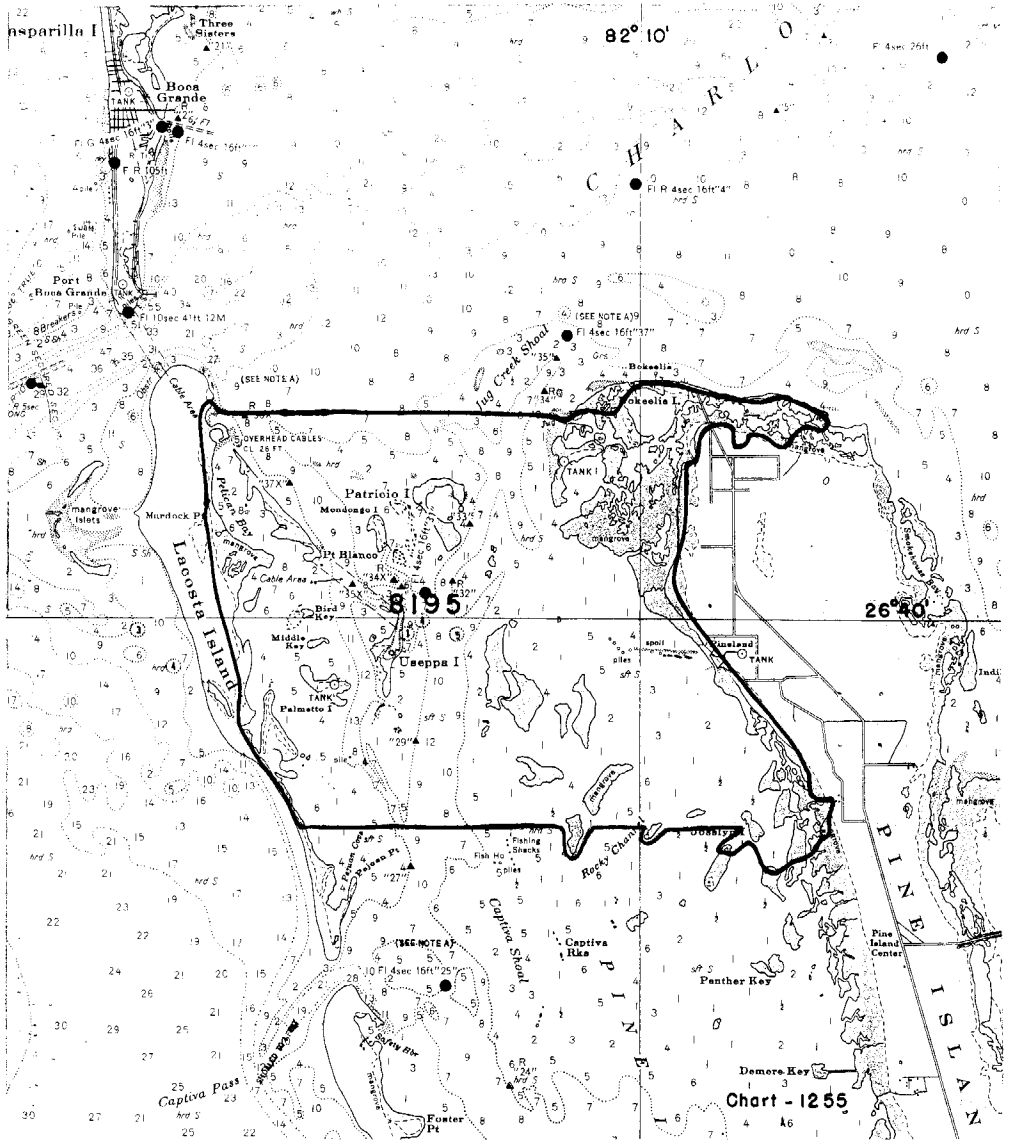
Examined and Approved:

Marvin T. Pankow
Chief,
Nautical Chart Division

J. T. Parmen
Assistant Director,
Office of Cartography

Charles W. Clark
Projects Officer,
Operations Division

Mary S. Ricketts
Assistant Director,
Office of Oceanography


82° 10'
26° 40'
8195
Chart - 1255
Three Sisters
Boca Grande
Port Boca Grande
Jug Creek Shoal
Bokeelia
Bokeelia L.
Patricio I
Mondongo I
Pt Blanco
Lacosta Island
Useppa I
Palmetto I
Middle Key
Bird Key
Pelican Pod
Rocky Channel
Captiva Shoal
Captiva Pass
Captiva Rks
Penther Key
Demore Key
Foster Pt
Pine Island Center
PINE ISLAND
CHARLOTTE

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8195

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
16 June 61	1255	Nichols	Before ~~After~~ Verification and Review
			Critical exam. only.
20 June 61	857A ~~[illegible]~~	"	Before ~~After~~ Verification and Review
			Complete application
6 July 61	474	"	Before ~~After~~ Verification and Review ✓ [illegible]
			Critical exam. only.
26 Mar 62	856A 856B	"	~~Before~~ After Verification and Review Complete.
20 Apr 62	1255	"	~~Before~~ After Verification and Review
			Thru 856 A & B, above.
1-6-64	857-A	G.R. Johnson	Before After Verification and Review thru 856-B
2-24-69	857-A	R. A. Lillis	Fully appl'd ~~Before~~ After Verification and Review thru 856-B
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.