

8100

Diag. Cht. Nos. 1256 and 1257-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. S0-1354 Office No. H-8100

LOCALITY

State Florida

General locality Manatee River

Locality Manatee to Fort Hamer

194 54

CHIEF OF PARTY

Roswell C. Bolstad

LIBRARY & ARCHIVES

DATE August 20, 1956

8100

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-8100

Field No. So-1354

State FLORIDA

General locality ~~FLORIDA WEST COAST~~ MANATEE RIVER

Locality ~~MANATEE RIVER~~ MANATEE TO FORT HAMER

Scale 1:10,000 Date of survey 4 Nov. to 20 Dec. 1954

Instructions dated 18 Dec. 1952

Vessel SOSBEE

Chief of party R.C. BOLSTAD

Surveyed by A.L. WARDWELL & W.V. WARNER

Soundings taken by ~~XXXXXX~~ graphic recorder, ~~XXXXXX~~ POLE

Fathograms scaled by SHIP PERSONNEL

Fathograms checked by SHIP PERSONNEL

Protracted by W.L. JONNS

Soundings penciled by W.L. JONNS

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

REMARKS: This survey was smooth plotted by the Hydrographic
Section of the Norfolk District Office

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DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-8100 (Field No. SO-1354)
West Coast of Florida 4 November to 20 December 1954
Manatee River, Manatee to Fort Hamer Scale 1:10,000
U.S.C. & G.S.S. SOSBEE R. C. Bolstad, Chief of Party

A. PROJECT:

Project CS-353, original instructions dated 18 December, 1952.

B. SURVEY LIMITS & DATES:

The survey covers the Manatee River from Long. $82^{\circ}-32'.8$ eastward to $82^{\circ}-25'.4$. Also surveyed was the Braden River from Lat. $27^{\circ}-28'.25$ northward to the Manatee River. Hydrography was extended up the Manatee River to Long. $82^{\circ}-23'.05$ by plotting on earlier T-sheet, T-5846, which is attached to the boat sheet as a sub plan.

Field work was begun on 4 Nov. 1954 and was ended on 20 Dec. 1954.

An index of sheets is included in applicable data to show junctions with contemporary surveys. The only junction is with SO-1254 (H-8099) on the westerly end of SO-1354 (H-8100). Review, #4 (1954)

C. VESSELS AND EQUIPMENT:

All sounding was done from a 25-foot skiff, No. 735, powered by two ten-horsepower outboard motors. Maximum speed is about 6 knots and the turning radius is about 20 meters.

The skiff worked from the Ship SOSBEE which was based at the Bradenton Memorial Pier, Bradenton, Florida for the entire survey.

Model 808J Portable Depth Recorders, calibrated at 820 fathoms per second, were used for sounding where the depth and character permitted. Number 115-S was used for all days but one day when number 140-SP was used.

A wooden pole, graduated in feet, was used in shoal water and when fathometer soundings were indefinite.

D. TIDE AND CURRENT STATIONS:

The heights from the Redfish Point, Fla., portable automatic tide gage were used directly in reducing soundings. This gage was located on a dock at Lat. $27^{\circ}-31'.67$, Long. $82^{\circ}-29'.07$. ✓

No current stations were occupied within the limits of the survey.

E. SMOOTH SHEET:

Not within scope of this report. ✓

F. CONTROL STATIONS:

Triangulation Stations used:

MAN -△MAN, 1925, (Manatee Silver Municipal Water Tank, elev., 1934)

RIP - △ Ellenton Black Municipal Water Tank, 1934

Topographic stations were located by photogrammetric radial plot, sheets T-11080, T-11082, and T-9632. A list of stations used is included in applicable data of this report. The hydrographer found no photo-hydro station numbers assigned to signals Eon, Fog, and Gem in the Rocky Bluff area. ✓

G. SHORELINE AND TOPOGRAPHY:

Shoreline and topography are from photogrammetric sheets T-11080, T-11082, and T-9632, photos of 1952 and 1953. (field-inspected, 1954) ✓

H. SOUNDINGS:

A model 808-J portable depth recorder was used to measure depths except in areas too shoal for the machine where a wooden pole graduated in feet was used. ✓

I. CONTROL OF HYDROGRAPHY:

Hydrography was controlled by sextant three-point fixes and by estimation from shore line detail where sextant control was unfeasible or impossible. ✓

Positions by estimation from shore line detail were marked by "SBS" (See Boat Sheet) in the sounding record space for control data.

J. ADEQUACY OF SURVEY:

The survey is considered complete and adequate to supersede prior surveys for charting. Junctions with adjoining surveys are satisfactory and depth curves are continuous at these junctions. A more complete survey of the area east of Long. $82^{\circ}-32'.8$ covered by the sub-plan on this survey, was made by the U. S. Engineers Survey in Aug. 1940; Manatee River, Fla.; 13 foot; ✓

J. ADEQUACY OF SURVEY: Cont.

9 foot, and 4 foot. Projects; Sheets 3, 4, 5, and 6; File No. 43-12,845.*Prints of this survey will be forwarded with Boat-sheet SO-1354 (H-8100). ** Not with B. Sheet; not shown on standards (1954)*

K. CROSSLINES:

Crosslines make up 8% of the sounding lines run. Soundings at crossings checked within one foot, the unit for inking soundings; actual crossings are considerably closer.

L. COMPARISON WITH PRIOR SURVEYS:

Comparison was made with H-4579-a, 1926, scale 1:20,000:

General agreement was good. ✓

No trace of the pier and pilings shown south of Manavista, Long. 82°-32'.7 were found during the new survey. *Review, #5* ✓

No trace of the two rows of piling shown on the old survey at Lat. 27°-30'.9, Long. 82°-31'.7 were found during the new survey. *Review, #5* ✓

The submerged wreck shown on H-4579-a at Lat. 27°-31'.28, Long. 82°-29'.07, and mentioned as item 7 on the preliminary review of project CS-353, was searched for but no trace was found. *Review, #5* ✓

M. COMPARISON WITH CHART:

A comparison was made with Chart 586; Tampa Bay, Southern Part; 1:40,000; print date 12/14/53; and corrected to 5 Apr. 1954: ✓

The piles shown north of Ayres Point, Long. 82°-32'.1 were not found during this survey. It is recommended they be deleted from the chart. *(Deleted from Cht. 586, Drwg. #16, Dec. 1956)* ✓

The line of piling shown crossing the Braden River at Lat. 27°-29'.3 no longer exists. It is recommended they be deleted from chart. *(Deleted from Cht. 586, Drwg. #16, Dec. 1956)* ✓

The beacons on the chart in the Rocky Bluff area now differ in character and location. See item P, Aids to Navigation, this report. *See Review, #68*

N. DANGERS AND SHOALS:

An important newly developed shoal extends out from Branches Hammock to Lat. 27°-31'.56, Long. 82°-30'.35 with a least depth of 2 ft. No immediate attention or report is considered necessary. *(2 ft. presently charted)* ✓

N. DANGERS AND SHOALS: Cont.

The old survey gave a two foot sounding just east of the Manatee River Daybeacon 24, Lat. 27°-30'.770, Long. 82°-31'.50. Although a three foot sounding was the shoalest obtained during the present survey it is recommended the previous depth be retained as the shoaler depth possibly still exists. The water is too dark, and the area unimportant, to spend addition effort to economically search for this shoaler depth. (2-ft. carried fwd from H-4579a (1926)) ✓

All dangers, shoals, and bare rocks were found as charted except as previously noted in this report. ✓

O. COAST PILOT INFORMATION:

Information for this area is included in a Coast Pilot report for the northern part of project CS-353, submitted 7 Jan. 1955. ✓

P. AIDS TO NAVIGATION:

The positions of fixed aids to navigation were submitted by the Tampa Photogrammetric Office on form 567 under project PH-100(52) Florida, mailed to the Director on 27 July 1954. *C.L. 695(54)*

No floating aids to navigation were located. ✓

The Red Bn. shown on Chart 586 at Lat. 27°-31'.55, Long. 82°-30'.36 now exists as a black daybeacon. The black Bn. shown at Lat. 27°-31'.61, Long. 82°-30'.03 no longer exists. ✓

There are numerous privately maintained markers, without numbers, east of Long. 82°-30'.30 up the Manatee River. Time of establishment is unknown. These were all located on T-11080 and T-9632(1954) during the contemporary photographic survey, photos of 1952 and 1953. See these T-sheets for their locations. ✓

A privately maintained marker was located by the hydrographer at Lat. 27°-31'.62, Long. 82°-29'.01 by position 32d Vol. 2, *Hydro. 8 ACE* SO-1354. This was the outermost piling of numerous piling marking the deeper water into the dock where a tide gage was established. Other piling were not located. *but noted on smooth sheet.* ✓

Data regarding bridge and overhead cable clearances was obtained during the photo field inspection, and was included in the field inspection report for Terra Ceia Bay - Manatee River, by William H. Shearouse. The data applicable to this survey is repeated here: ✓

Vertical clearances for overhead cables as follows:

At Bridge over Braden River - - - - - 34.2 ft. ✓
 1/2 mile south of Braden River Bridge (West Channel) - 34.9 ft. above MHW
 (East Channel) - 34.7 ft. above MHW

P. AIDS TO NAVIGATION: Cont.

Vertical^a clearances for overhead cables as follows:

Manatee River Crossing (approx. Long. 82°-29'.9)
 Upper Manatee River Crossing ϕ 27°31.3' - 46.2 ft. above MHW
 λ 82°23.8' - 43.0 " " "

Bridge data is as follows:

Bridge	Type	Horiz. Bridge Book	C&GS	Ver. k Bridge Book	C&GS
Braden River (West Bridge)	Fixed	38 ft.	36 ft.*	10.0 ft.	9.9
Braden River (Middle Bridge)	"	Not Listed	30 ft.	Not Listed	5.4 ✓
Braden River (East Bridge)	"	" "	17 ft.	" "	3.5

*Difference explained by pile driven at NW corner of span.

Q. LANDMARKS FOR CHARTS:

Landmarks for charts, form 567, is being submitted for the northern part of project CS-353.

Recommended landmarks with-in the survey are: ✓

- O MAN - Δ Manatee Silver Municipal Water Tank, 1934
- O RIP - Δ Ellenton Black Municipal Water Tank, 1934

R. GEOGRAPHIC NAMES:

No discrepancies were noted during hydrographic operations. ✓

S. SILTED AREAS:

No silting noted. ✓

T. BY-PRODUCT INFORMATION:

None.

Z. TABULATION OF APPLICABLE DATA:

1. Statistics
2. Tide Note
3. Approval Sheet
4. Index of Sheets
5. List of Stations

Submitted by,

Wilfred V. Warner

Wilfred V. Warner,
 Ensign, USC&GS

STATISTICS

For Hydrographic Survey H-8100

Field Number SO-1354

Volume No.	Day Letter	Date 1954	Pole Sdgs.	No. of Positions	Stat. Miles Sounding
1	a	16 Nov.	536	190	24.5
1 & 2	b	17 "	589	195	26.0
2	c	18 "	633	188	22.2
2 & 3	d	19 "	401	109	11.8
3	e	22 "	505	130	15.3
3	f	23 "	632	110	11.8
4	g	24 "	684	97	13.3
4	h	29 "	139	32	3.7
4	j	30 "	133	18	5.7
4	k	17 Dec.	390	88	8.5
5	l	20 "	350	99	8.6
Totals			5019	1256	151.4

Square Statute Miles = 4.1

Statistics for sub-plan are not included.

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TIDE NOTE


The tide station for this survey was located on a private dock, Redfish Point, Lat. $27^{\circ}-31'.67$, Long. $82^{\circ}-29'.07$. All soundings on SO-1354 (H-8100) were reduced from the portable automatic gage at this station with no corrections. Mean Low Water corresponds to reading of 2.0 feet on the tide staff as stated in the Director's letter dated 9 December 1954 (36-114-982).

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APPROVAL SHEET

The survey of the area covered by H-8100 (SO-1354) is adequate for charting purposes. The sounding records and boat sheet have been inspected and are approved this date. Additional field work is not necessary.

The Director's letter, dated 4 January 1955, ref. 22-SRO, S-1-SO, states that sheet SO-1354 has been examined and is considered adequate for charting purposes.


Roswell C. Bolstad
Commander, USC&GS
Comdg. Ship SOSBEE

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PROCESSING OFFICE
LIST OF SIGNALS
H-8100

TRIANGULATION STATIONS

RIP ELLENTON, BLACK MUNICIPAL WATER TANK, 1934
MAN MANATEE, SILVER MUNICIPAL WATER TANK, (MAN, 1925), 1934

MARKED TOPOGRAPHIC STATIONS

FAG, 1941-54 T-9632
KEY, 1941-54 T-11080
LOG, 1941-54 T-11080
JIG, 1941-54 T-11080
MIL, 1941-54 T-11082

TOPOGRAPHIC STATIONS

SOURCE T-9632

Adz	Aim	Ant	Ape	Arm	Ask	Azo	Bat	Bed	Bib
Big	Boa	Box	Bum	Car	Cow	Cut	Dix	Doc	Eat
Eel	Emo	Few	Fin	Gal	Gam	Gem	Gig	Gus	Hex
His	Hop	Ida	Ion	Jap	Jar	Joe	Ked	Lax	Lay
Led	Lip	Lug	Mar	Mug	Oak	Oil	Pal	Pep	Quo
Rag	Rat	Rig	Rim	Roy	Sam	Sal	Sis	Sol	Sox
Sue	Tan	Tax	Toy	Tub	Val	Vet	Vex	Wag	Why
Wit	Yak	Yam	Zig						

SOURCE T-11080

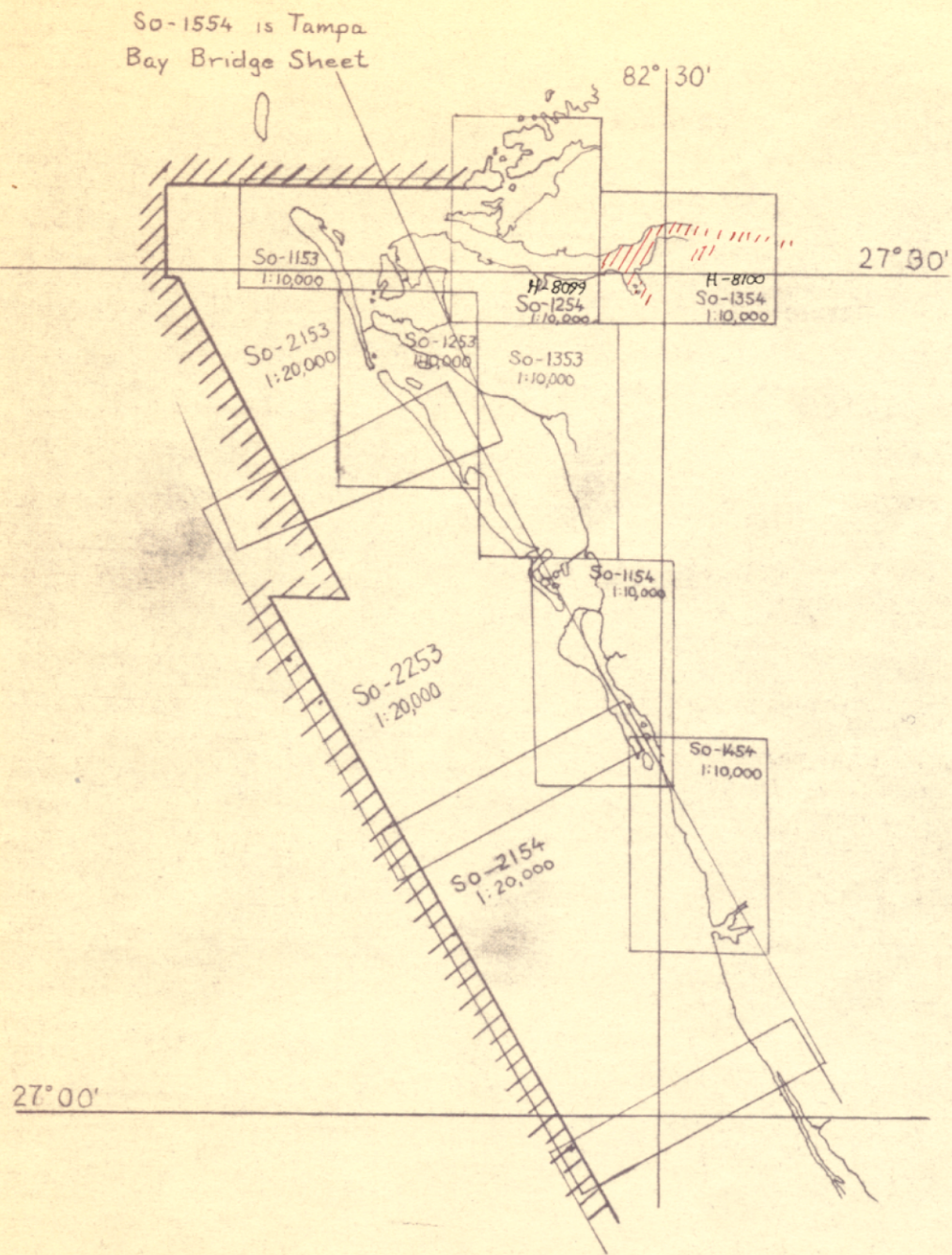
Alp	Art	Bag	Bob	Cat	Cod	Cry	Daf	Don	Duo
Egg	Eon	Fog	Gag	Hat	Hem	Ice	Ivy	Jay	Joy
Kid	Lad	Log	Max	Neo	Nor	Ora	Pot	Tom	Via
Yea									

SOURCE T-11082

Abe	Ado	Bah	Cam	Cop	Dim	Dot	Ego	Elf	Eva
Fez	Fig	Fly	Hoe	Nix	Odd	Peg	Pup	Use	Wax
Wee	Zag								

HYDROGRAPHIC STATIONS

Ace Vol. 2, pg. 61 ✓
Pin Vol. 3, pg. 9 ✓



INDEX OF SHEETS

PROJECT CS-353

(Northern Part)

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8100 (Field No. So-1354)

GENERAL

This appears to be an excellent basic field survey and no unusual conditions were encountered during the smooth plot. ✓

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

Norfolk, Va.
15 August 1956

GEOGRAPHIC NAMES

Survey No. H-8100

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	
<u>Florida</u>			(for title)						BAY	1
<u>Manatee River</u> ✓										2
<u>Manatee</u> ✓										3
<u>Ayres Point</u> ✓										4
<u>Braden River</u> ✓									BAY	5
<u>Branches Hammock</u> ✓										6
<u>Rocky Bluff</u> ✓										7
<u>Redfish Point</u> ✓				(tide station)						8
<u>Fort Hamer</u> ✓										9
<u>LONG BAR SHOAL</u> ✓										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved
9-5-56. L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. .8100...

Records accompanying survey:

Boat sheets ..1...; sounding vols. ..5...; wire drag vols.;
bomb vols.; graphic recorder rolls .7-Envelopes
special reports, etc. .1-Descriptive report and .1-Smooth sheet..
.....

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

Number of positions on sheet

11.88

Number of positions checked
includes estimated positions

...79...

Number of positions revised

...10...

Number of soundings revised
(refers to depth only)

36

*numerous soundings
through-out survey*

Number of soundings erroneously spaced

.....

Number of signals erroneously plotted
or transferred

none

Topographic details
aids and review revisions

Time ..24 hrs

Junctions

Time ..2 hrs

Verification of soundings from
graphic record

Time ...8 hrs

Verification by *D. J. KENNON* Total time *134 hrs* Date *12/13/56*

Reviewed by *J. A. Dimmock* Time *20* Date *17 Jan. 1956*

RH C
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TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Coastal Surveys:

11 September 1956

Division of Charts: R. H. Carstens

Plane of reference approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 8100

Locality Manatee River, Florida

Chief of Party: R. C. Bolstad
Plane of reference is mean low water, reading
2.0 ft. on tide staff at Redfish Point
5.1 ft. below B. M. 1 (1954)

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

Condition of records satisfactory except as noted below:



Branch
Chief, Division of Tides and Currents

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DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8100

FIELD NO. SO-1354

Florida, Manatee River, Manatee to Fort Hamer

Project No. CS-353

Surveyed - Nov.- December 1954

Scale 1:10,000

Soundings:

Control:

808 Fathometer
Pole

Sextant fixes on
shore signals

Chief of Party - R. C. Bolstad
Surveyed by - A. L. Wardwell and W. V. Warner
Protracted by - W. L. Jonns
Soundings plotted by - W. L. Jonns
Verified and inked by - D. J. Kennon
Reviewed by - T. A. Dinsmore 17 January 1957
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline and signals originate with reviewed air-photographic surveys T-9632, T-11080 and T-11082 of 1952-54.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated. The low-water curve was determined where practicable.

The bottom is generally undulating. No unusual bottom features are noted. The channels and shoal areas are generally well-delineated and apparent on the smooth sheet. Depths along the axis of the natural channel of the Manatee River range from 2 to 28 ft.

4. Adjoining Survey

The junction with contemporary survey H-8099 (1954) on the west will be considered in the review of that survey.

5. Comparison with Prior SurveysH-1272 (1874-75) 1:20,000H-4579a (1926) 1:20,000

These prior surveys cover that portion of the present survey which lies westward of long. $82^{\circ}28'$. In comparing the prior and present depths no important differences are noted. However, the widely spaced sounding lines on the smaller-scale prior surveys fail to delineate the channels and shoals as completely as the closer development on the present survey.

(1) The following charted features originating with H-4579a were searched for on the present survey and no remains found:

<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>
group of piling ✓	$27^{\circ}30.41'$	$82^{\circ}32.67'$
Two rows of piling ✓	$27^{\circ}30.9'$	$82^{\circ}31.65'$
sunken wreck ✓	$27^{\circ}31.28'$	$82^{\circ}29.06'$

*deleted from
Chart 586
12-19-59*

It is recommended that the above items be removed from the chart.

A least depth of 2 ft. has been carried forward in lat. $27^{\circ}30.7'$, long. $82^{\circ}31.48'$, from H-4579a to supplement the undeveloped 3-ft. shoal at the edge of the channel on the present survey. The 2-ft. sounding should be retained on the chart.

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

6. Comparison with Chart 586 (Drawing No. 16 of Dec. 18, 1956)
Chart 1256 (Drawing No. 14 of Oct. 29, 1956)A. Hydrography

Charted hydrography originates principally with the previously discussed surveys supplemented by partial application of the present survey prior to verification and review.

The present survey entirely supersedes the charted information.

B. Aids to Navigation

No floating aids to navigation are charted in this area. The fixed aids to navigation appearing on the present survey and the charts originate with the contemporary air-photographic surveys of this area and are listed in Chart letter 695 (1954).

7. Condition of Survey

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

b. The smooth plotting was generally accurate.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is a very good basic survey and no additional field work is recommended.

Examined and Approved:

Max G. Ricketts

Max G. Ricketts
Chief, Nautical Chart Branch

Charles A. Schanck

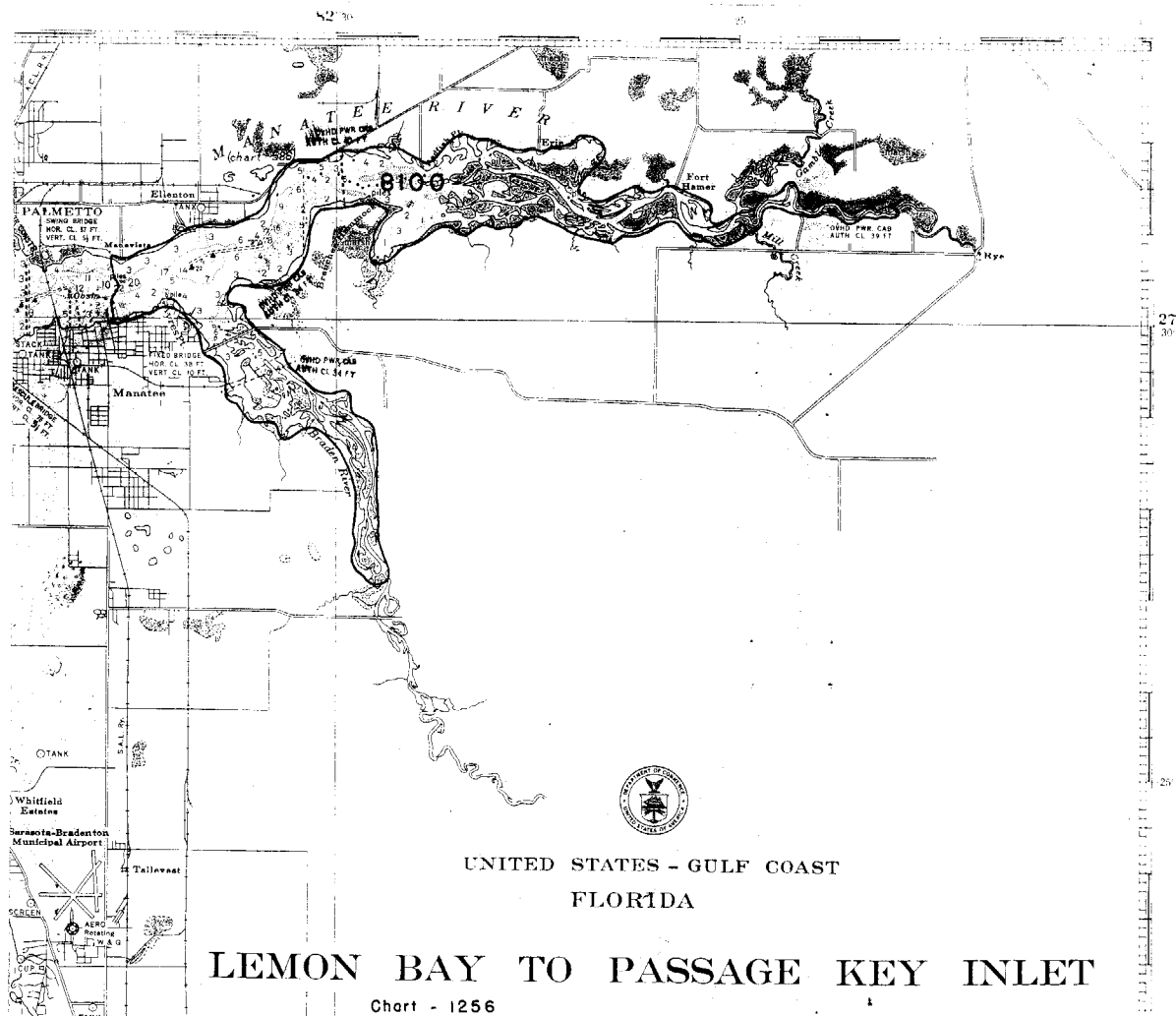
Charles A. Schanck
Chief, Division of Charts

Karl B. Jeffers

Karl B. Jeffers
Chief, Hydrography Branch

Samuel B. Grenell

Samuel B. Grenell
Chief, Division of Coastal Surveys



LEMON BAY TO PASSAGE KEY INLET

Chart - 1256

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SURVEY NO. H-8100

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
9/14/56	1257	J. Walker	Before After Verification and Review <i>Examined - not applied</i>
10/12/56	1256	H. W. Burgoyne	Before After Verification and Review <i>Critical Corrections only</i>
10-29-56	586	J. Albert	Before After Verification and Review <i>Partial</i>
2-20-59	586	T. A. Dismore	Before After Verification and Review
26 May 60	1257	Nichols	<i>completely applied</i> Before After Verification and Review
Aug 60	1256	<i>Acromatization ET</i> Nichols	<i>Thru Dwg Chart 586 & direct</i> Before After Verification and Review
9/29/60	1256	E. F. Thomas	<i>Thru Dwg 28. Chart 1257</i> Before After Verification and Review
			<i>Applied thru chart 1257 in common</i> Before After Verification and Review <i>and direct in</i>
28 March	557	Nichols	Before After Verification and Review <i>In part</i> <i>thru Dwg Chart 586</i>
9 Nov 61	586		Before After Verification and Review <i>Added 3-ft Depth contour.</i>

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.