

8155

Diag. Cht. Nos. 1255-2 and 1256.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. SO-1155 Office No. H-8155

LOCALITY

State Florida

General locality Lemon Bay

Locality Englewood to Alligator Creek

19 55

CHIEF OF PARTY

Roswell C. Bolstad

LIBRARY & ARCHIVES

DATE June 12, 1957

B-1870-1 (1)

8155

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-8155

Field No. So-1155

State FLORIDA

General locality Lemon Bay
~~WEST COAST OF FLORIDA~~

Locality Englewood to Alligator Creek
~~PUNTA GORDA BEACH TO ALLIGATOR CREEK~~

Scale 1:10,000 Date of survey 25 Apr. to 28 Oct. 1955

Instructions dated 18 Dec. 1952

Vessel SOSBEE

Chief of party ROSWELL C. BOLSTAD

Surveyed by W.V. WARNER

Soundings taken by ~~XXXXXXXX~~ graphic recorder, hand lead, ~~xxx~~ POLE

Fathograms scaled by SHIP PERSONNEL

Fathograms checked by SHIP PERSONNEL

Protracted by W.L. JONNS

Soundings penciled by W.L. JONNS


Soundings in ~~XXXXX~~ feet at MLW ~~XXXXX~~ are true depths

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

OTC 782
HNB

Approval Sheet

The survey of the area covered by SO-1155 (H-8155) 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.



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

17 November 1955

TIDE NOTE

H-8155 (80-1155)

A portable automatic tide gage was maintained at Englewood, Florida, Lat. $26^{\circ} 55.98'$ N., Long. $82^{\circ} 21.25'$ W., from which the tidal curve was used without correction to reduce all sounding.

The plane of reference (mean low water) was established on the staff to be 2.0 feet according to the acting directors letter, 36-79-982, dated 19 August 1955.

PROCESSING OFFICE
LIST OF SIGNALS
To Accompany

HYDROGRAPHIC SURVEY H-8155 (Field No. So-1155)

TRIANGULATION STATIONS

MAX LBV (USE), 1938-55 ✓
TANK PUNTA GORDA BEACH, TANK, 1955 ✓

TOPOGRAPHIC STATIONS

SOURCE T-11384

Ave ✓	Bus ✓	Cat ✓	*Cut ✓	Dog ✓	Dot ✓	Era ✓	Fox ✓	Gin ✓	*Hoe ✓
Hub ✓	Its ✓	*Jay ✓	Joe ✓	Ked ✓	*Key ✓	*Leo ✓	Lug ✓	Mop ✓	Mum ✓
Nig ✓	Nor ✓	*Nul ✓	Obi ✓	Odd ✓	Owl ✓	*Pin ✓	Pup ✓	Quo ✓	Roy ✓
Sue ✓	Tax ✓	*Who ✓							

SOURCE T-11385

*Amy ✓	*Cry ✓	Dud ✓	Fry ✓	Got ✓	Hat ✓	Ion ✓	Jut ✓	Lip ✓	Pug ✓
Rum ✓	*Sis ✓	Sol ✓	*Tom ✓	Toy ✓	*Via ✓	Vim ✓	Wed ✓	Wit ✓	Zag ✓

*8510 ✓
*Used to locate hydro station Ado

SOURCE T-11386

Axe ✓	*Box ✓	Duo ✓	Emo ✓	Fat ✓	Gus ✓	*Hex ✓	Ice ✓	Kid ✓	Mid ✓
Neo ✓	Nut ✓	Oak ✓	Ora ✓	Rio ✓					

SOURCE T-11389

Ann ✓	Bag ✓	Pow ✓	Rip ✓	Sad ✓	Sax ✓	Tan ✓	*Vex ✓	Wag ✓	Yak ✓
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HYDROGRAPHIC STATIONS

Ado Vol. 1, pg. 3 ✓

* These signals were at C. & E.
triangulation stations --- see
T-sheets and/or smooth sheet
for Δ designations.

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens

25 June 1957

Plane of reference approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 8155

Locality Lemon Bay, Florida

Chief of Party: R. C. Bolstad in 1955

Plane of reference is mean low water, reading

2.0 ft. on tide staff at Englewood

2.4 ft. below B.M. 1 (1955)

Height of mean high water above plane of reference is

1.0 feet.

Condition of records satisfactory except as noted below:


Signature

Chief, Tides Branch

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-8155

(Field No. SO-1155)

~~West Coast of Florida~~

25 April to 28 October 1955

Lemon Bay

~~Punta Gorda Beach to Alligator Creek~~

Scale 1:10,000

Englewood to Alligator Creek

U.S.C. & G.S.S. SOSBEE

Roswell C. Bolstad, Chief of Party

A. PROJECT:

Part of Project CS-1353 (originally CS-353), original instructions dated 18 Dec. 1952. ✓

B. SURVEY LIMITS AND DATES:

The survey includes all of Lemon Bay north of the line of bridges to Punta Gorda Beach. ~~The extreme limits of latitude 26° 55.45'~~ north. Field work was begun on 25 Apr. 1955 and was completed on 28 Oct. 1955 with work being assigned only intermittantly to ✓
SO-1155.

An index of sheets is included to show junctions with contemporary surveys, the only junction of SO-1155 being with SO-1255 (H-8192) *(55)*

C. VESSELS AND EQUIPMENT:

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

The skiff operated from a private slip at lat. 26° 56.7' N., long. 82° - 21.2' W. for part of the survey and from a private slip at lat. 26° 55.6' N., long. 82° 21.6' W. for the remainder.

Portable fathometer model 808J, number 115-S, was used for all sounding where depth and character of the bottom allowed. A wooden pole, graduated in feet, was used for all other sounding (usually under 5 feet).

D. TIDE AND CURRENT STATIONS:

The tide curve from the Englewood, Fla. portable automatic tide gage was used without correction ~~for~~ reduction of all soundings ✓ on SO-1155 (H-8155). This gage is located at lat. 26° 55.98' N., long. 82° 21.25' W. on the bridge across Lemon Bay to Punta Gorda Beach.

D. TIDE AND CURRENT STATIONS: Con't.

No current stations were occupied within the area of the survey. ✓

E. SMOOTH SHEET:

Not in scope of this report.

F. CONTROL STATIONS:

Some 18 triangulation stations located in 1938 by U.S.E.D. were used in the control of hydrography. Also used was Δ TANK, 1955 located by this party from Δ TT 43JA, U.S.G.S., 1952. ✓

Topographic stations were located from photogrammetric methods and are shown on shoreline manuscripts T-11384, T-11385, T-11386, and T-11389; photos of 1953 (field inspection 1954) ✓

A copy of the list of stations used and their origin is part of the applicable data of this report. Photo-hydro signals are identified by number and T-sheet.

G. SHORELINE AND TOPOGRAPHY:

Shoreline and topography are from shoreline manuscripts T-11384, T-11385, T-11386, and T-11389; photos of 1953. No changes or corrections were made by the hydrographer. field inspection 1954. ✓

The low range of tide and the proximity to the shoreline prevented field development of the low water line. The low water line coincides with most of the mangrove high water line in the area of this survey. ✓

H. SOUNDINGS:

Model 808J portable depth recorder No. 115-S was used for all sounding except in shoal water (under five feet) and uncertain bottom where a wooden pole graduated in feet was used. ✓

I. CONTROL OF HYDROGRAPHY:

Hydrography was controlled by sextant three-point fixes when possible. Other positions were carefully estimated from shoreline detail or signal location. Estimated positions were marked "SBS" (See Boat Sheet) in the sounding record space for control data. ✓

J. ADEQUACY OF SURVEY:

The survey is complete and adequate to supersede prior surveys. The junction yet to be completed with SO-1255 on the southern edge of this survey will leave no holidays and no questionability as to depth curves. ✓

H-8192(55) H-8192(1955)

K. CROSSLINES:

Crosslines were more than 12% of the sounding lines run. Crossings were in good agreement, any discrepancies being in the magnitude of one foot. ✓

L. COMPARISON WITH PRIOR SURVEYS:

Comparison was made with H-1595b, 1884, 1:20,000 scale. General agreement was excellent. The old survey was very sketchy and development by the new survey is much more intensive. The general comparison made showed no appreciable discrepancy. ✓

Comparison was also made with sounding done by the Corps. of Engineers, U. S. Army in their 1938 Intracoastal Waterway survey, Calossahatchee River to Wothlacooche River, Florida; Scale 1:5,000; file no. 41-12, 208; sheets 31 through 37. The general agreement was good. They are being forwarded with the boatsheet to the processing office.

M. COMPARISON WITH CHART:

Comparison was made with chart No. 1256, print date Jan. 3/55. Major improvements in the charted soundings in Lemon Bay can be made with the new survey's information. A three-foot depth curve is of paramount importance if the navigable water is to be shown to the best advantage. ✓

The clearances of the Bascule Bridge (not motorized or tended) between Englewood and Punta Gorda Beach are not in exact agreement. The photogrammetric field inspector obtained the following clearances: horiz. 28 ft., vertical 8 ft., overhead power cable 63.3 ft. The chart gave horiz. 26 ft., vertical clearance 8½ ft., overhead power cable 65 ft. authorized. *C&G-S values shown on smooth sheet.*

Shoreline and alongshore features merit revision on the chart from the information of the new survey. ✓

N. DANGERS AND SHOALS:

There are no important newly found dangers and shoals. While numerous shoals and shoaler depths were found on the new survey their addition to the chart would do little to aid navigation without a general revision of the chart. All charted shoals are accounted for on the new survey. ✓

O. COAST PILOT INFORMATION:

A special coast pilot report is to be made by this party at a later date which will cover the area of this survey.

Navigation of the area is extremely difficult. Numerous shoals, narrow channels, and the lack of any fixed or floating aids are serious deterrents to the navigating of any boat of over 3 foot draft.

P. AIDS TO NAVIGATION:

There are no fixed or floating aids to navigation in the area of the survey.

(OGUS)

A lone unmarked piling, at lat. $26^{\circ} 57.51' N.$, long. $82^{\circ} 22.10' W.$, is on the northeastern edge of a shoal that proceeds in a southeasterly direction from the piling. The shoal lies along the southwest edge of the channel through the area. *Signal GUS*

Bridge and powerline clearances were determined by the photogrammetric field inspector. The following are his values as they were shown on the boat sheet forwarded by the Tampa Photogrammetric Office.

	Vert. @ MHW	Horiz.
Bascule Bridge (unattended, un-motorized)		
Southern Lemon Bay - - - - -	8.0 ft.	28.0 ft.
(Overhead Power Cable) - - -	63.3 ft.	
Fixed Wooden, Forked Creek, Long. $82^{\circ} 23.32' W.$ - - - -	13.0 ft.	5.2 ft.
Fixed Wooden Bridge, Lemon Bay, Lat. $27^{\circ} 00.7' N.$ - - - -	27.0 ft.	6.6 ft.
(Overhead Power Cable) - - -	98.2 ft.	
East and West Fixed Foot Bridge, Lemon Bay, Lat. $27^{\circ} 02.25' N.$ -	8.0 ft.	15.0 ft.
Fixed Bridge, Alligator Creek, Long. $82^{\circ} 25.17' W.$ -	8.5 ft.	13.7 ft.
Fixed Foot Bridge, Lemon Bay, Lat. $27^{\circ} 02.68' N.$ -	8.5 ft.	15.0 ft.

Q. LANDMARKS FOR CHARTS:

A list of landmarks for charts is to be submitted on an area basis that will cover the area of this survey. The only recommended landmark is:

PUNTA GORDA BEACH,

also TANK - Δ TANK, 1955; R. C. Bolstad, Chief of Party } CL 651 (1956)
SPIRE - \wedge T-11386

R. GEOGRAPHIC NAMES:

The hydrographer was not required to make a special report on geographical names.

No discrepancies were noted during hydrographic operations.

S. SILTED AREAS:

None noted.

T. BOTTOM SAMPLES:

Bottom samples were obtained with a handlead armed with a soap filled hollow bottom and also were noted visually. ✓

UVWXY -----

Z. TABULATION OF APPLICABLE DATA:

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

18 November 1955

Submitted by,

Wilfred V. Warner

Wilfred V. Warner,
Ensign, USC&GS

STATISTICS SHEET

HYDROGRAPHIC SURVEY H-8155 (80-1155)

U.S.C. & G.S.S. SOSBEE

Roswell C. Bolstad, Chief of Party

Project CS-353

Scale 1:10,000

Skiff No. 735

Punta Gorda Beach to Alligator Creek

Day Letter	Date 1955	Volume Number	Number of Positions	Statute Miles	Pole Soundings
a	26 Sept.	1	145 ✓	17.5	393
b	27 "	1	105 ✓	14.1	192
c	28 "	2	123 ✓	15.4	308
d	29 "	2	130 ✓	17.7	465
e	30 "	3	132 ✓	19.5	454
f	14 Oct.	3	111 ✓	9.8	552
g	17 "	3 & 4	177 ✓	20.7	829
h	18 "	4	173 ✓	18.6	497
j	28 "	5	47 ✓	4.5	89
Totals - - - - -			1143	137.8	3779

+ 17 DP's. - WER

Square Statute Miles = 4.0

PROCESSING OFFICE
ADDENDUM
To Accompany

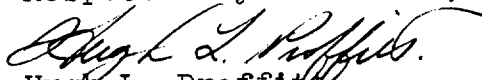
HYDROGRAPHIC SURVEY H-8155 (Field No. So-1155)

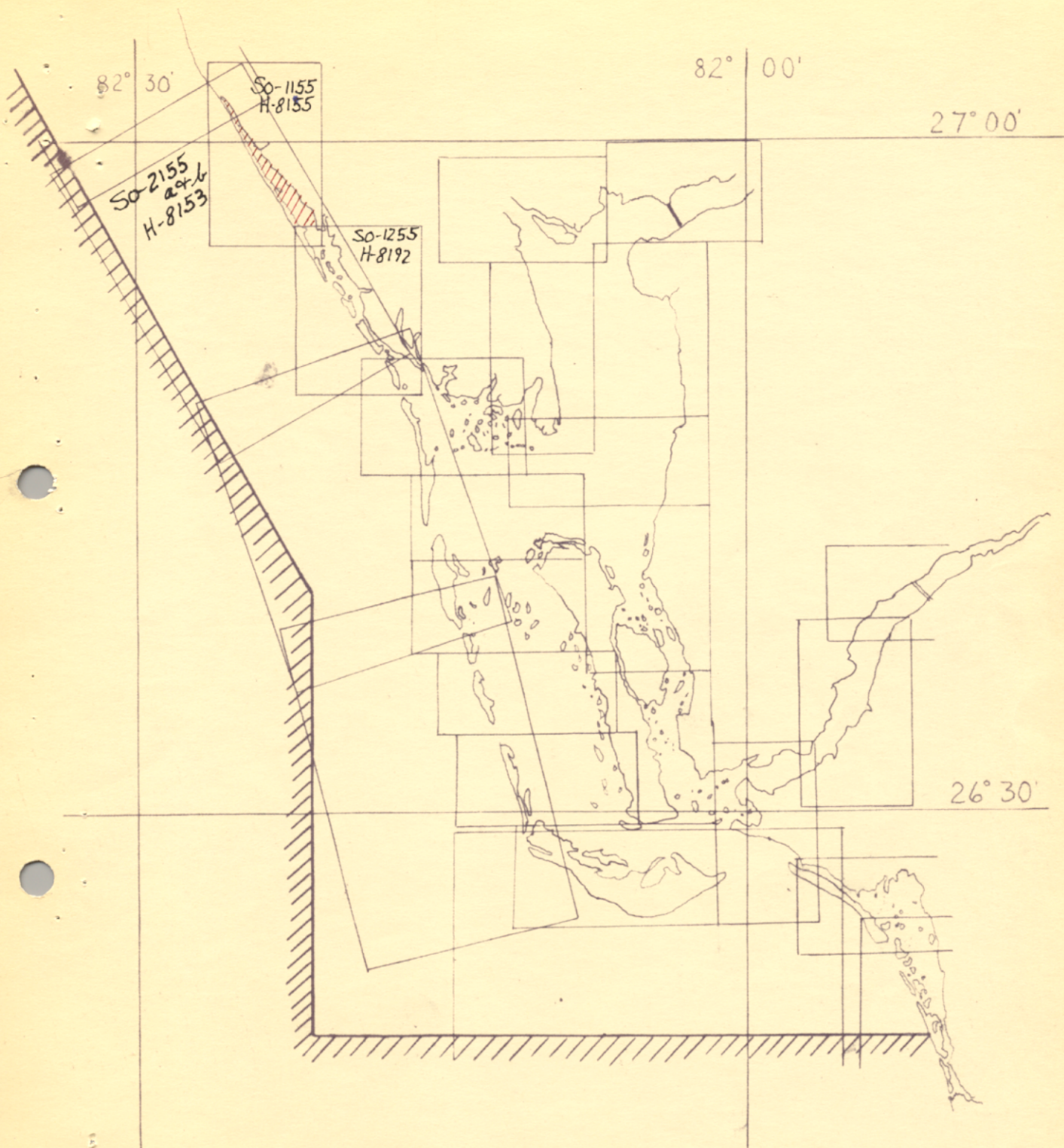
GENERAL

This appears to be an excellent basic survey and no unusual conditions were encountered during the smooth plot. Agreement of soundings at crossings was very good.

Norfolk, Va.
6 June 1957

Respectfully submitted,


Hugh L. Proffitt
Cartographer.



INDEX OF SHEETS

PROJECT CS-353

(Southern Part)

GEOGRAPHIC NAMES

Survey No. H-8155

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)							1
<u>West Coast</u>			" "							2
<u>Punta Gorda Beach</u>										3
<u>Englewood</u>			(tide station)							4
<u>Blind Pass</u>										5
<u>Lemon Bay</u>										6
<u>Forked Creek</u>										7
<u>Manasota Bridge</u>										8
<u>Alligator Creek</u>										9
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										26
										27

Names approved 7-8-57

L. Heck.

L.H.

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8155....

Records accompanying survey:

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

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

Number of positions on sheet	.....	<u>1143</u>
Number of positions checked	.....	<u>113</u>
Number of positions revised	.....	<u>—</u>
Number of soundings revised (refers to depth only)	.....	<u>33</u>
Number of soundings erroneously spaced	.....	<u>5</u>
Number of signals erroneously plotted or transferred	.....	<u>0</u>
Topographic details	Time	<u>4 hrs.</u>
Junctions	Time	<u>—</u>
Verification of soundings from graphic record	Time	<u>1 hr.</u>

Verification by W. E. Roig..... Total time 104 hrs. Date 12/18/58

Reviewed by [Signature]..... Time 17 Date 6/22/59

✓ DRE

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH
REVIEW OF HYDROGRAPHIC SURVEY

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8155

Florida, Lemon Bay, Englewood to
Alligator Creek

Field No. SO-1155

Surveyed - April-Oct. 1955

Scale: 1:10,000

Project No. CS-353

Soundings: 808 graphic recorder
pole

Control: Sextant angles
on shore signals

Chief of Party - R. C. Bolstad
Surveyed by - W. V. Warner
Protracted by - W. L. Jonns (Norfolk P.O.)
Soundings plotted by - W. L. Jonns
Verified and inked by - W. E. Roig
Reviewed by - L. V. Evans III
Inspected by - R. H. Carstens

6/22/59

1. Shoreline and Control

The shoreline originates with advance manuscripts of photogrammetric surveys T-11384, 11385, 11386, and 11389 of 1953-54.

The sources of control are given in the Descriptive Report.

2. Sounding Line Crossings

Depths are in adequate agreement at crossings.

3. Depth Curves and Bottom Configuration

The depth curves are adequately defined. The 3-ft. curve is used throughout this survey to show the configuration more completely.

The area of this survey is entirely a shallow bay having flat or gently sloping sand or mud bottom, inside an unbroken barrier beach.

4. Junctions with Contemporary Surveys

An adequate junction was effected to the south with H-8192 (1955), the only adjoining contemporary survey.

5. Comparison with Prior Surveys

H-1595a (1884) 1:20,000

H-1595b(1884)1:20,000

These are the only previous C&GS surveys in the present area. A comparison between the present and prior surveys shows essentially no evidence of change in the bottom except for minor, localized, artificial changes such as in the vicinity of the Punta Gorda Beach Bridge. The present survey, however, reveals the bottom in much greater detail and is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 1256 (print of 3/9/59)

A. Hydrography

Charted hydrography originates principally with the prior surveys, discussed in the preceding section, supplemented by a few soundings from Corps of Engineers surveys of 1938 (Bp 33313-18) and the present survey before verification and review.

The present survey covers the area in greater detail and is adequate to supersede the charted hydrography within its limits.

B. Aids to Navigation

There are no aids to navigation charted in the area of this survey.

7. Condition of Survey

A. The field records are complete.

B. The smooth plotting was generally well done with the exception noted below.

C. Sixteen triangulation stations (third order) established by the Corps of Engineers were shown on the smooth sheet as topographic stations. This confusion apparently stemmed from the inclusion of the C. of E. triangulation in the list of photo-hydro stations prepared for the hydrographer by the photogrammetric office. The station symbols have been corrected on the smooth sheet, but the nomenclature has not been changed since by the addition of this explanation the nature of the control is sufficiently clear and further changes are not warranted.

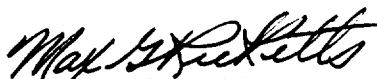
8. Compliance with Project Instructions

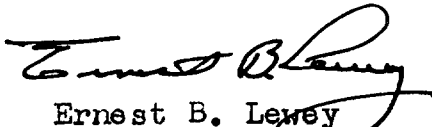
This survey adequately complies with the project instructions.

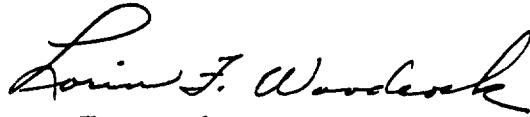
9. Additional Field Work Recommended


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

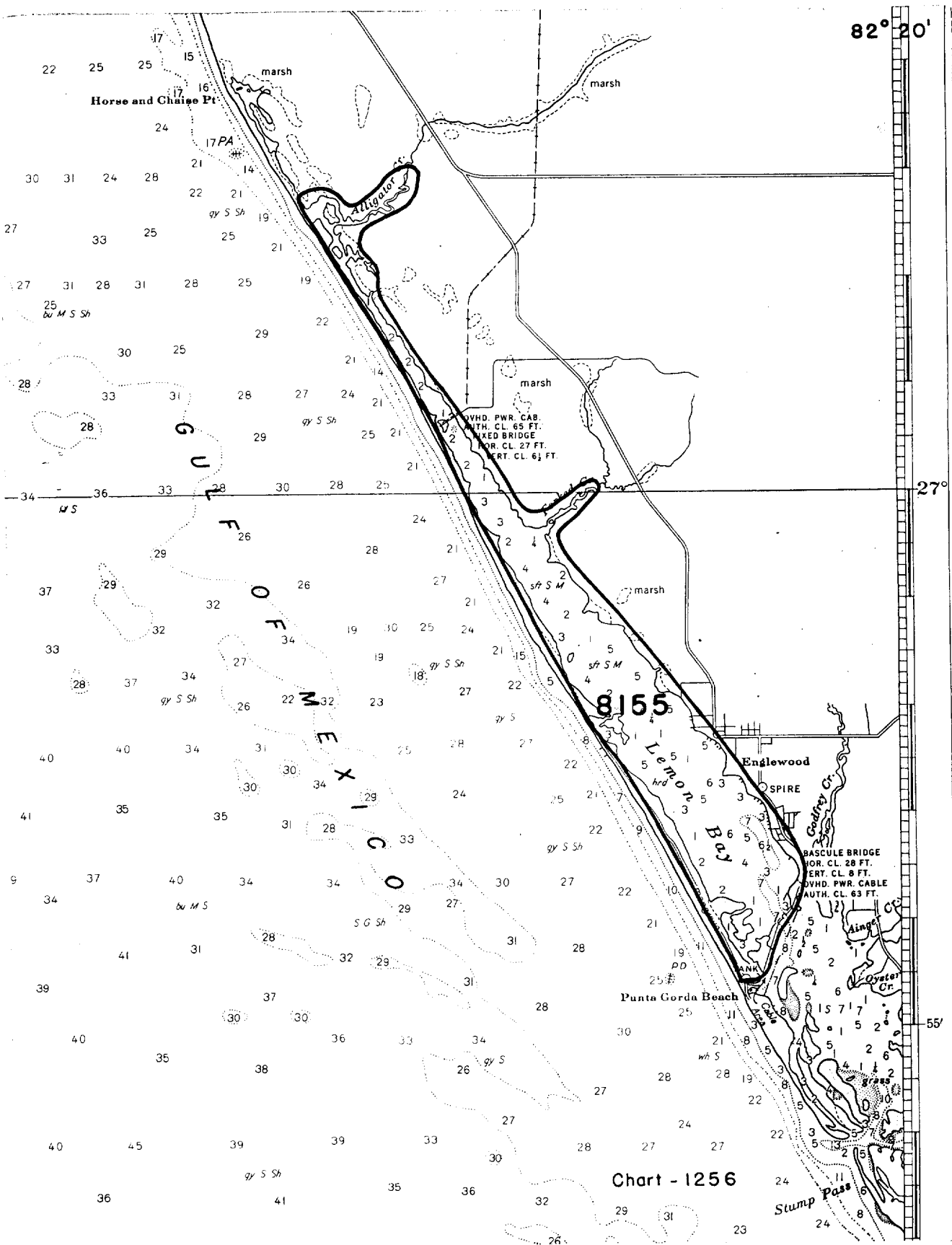
EXAMINED AND APPROVED:


Max G. Ricketts
Chief, Nautical Chart Branch


Ernest B. Lewey
Chief, Chart Division


Lorin F. Woodcock
Chief, Hydrography Branch


Samuel B. Grenell
Chief, Coastal Surveys Division



SURVEY NO. H-8155
Reviewed 6-22-1959
Record of Application to Charts

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.