

8154

Diag. Cht. No. 1256.

Form 504	
U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey <u>Hydrographic</u>	
Field No. <u>SO-1154</u> Office No. <u>H-8154</u>	
LOCALITY	
State <u>Florida West Coast</u>	
General locality <u>Little Sarasota and Blackburn Bays.</u>	
Locality <u>Venice Inlet to Midnight Pass.</u>	
<u>194 55</u>	
CHIEF OF PARTY	
<u>R. C. Bolstad</u>	
LIBRARY & ARCHIVES	
DATE <u>August 30, 1956</u>	

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-8154

Field No. So-1454

State FLORIDA West Coast
General locality Little Sarasota and Blackburn Bays
WEST COAST OF FLORIDA
Locality VENICE INLET TO MIDNIGHT PASS
Scale 1:10,000 Date of survey 21 Feb. to 2 May 1955
Instructions dated 18 December 1952
Vessel SOSBEE
Chief of party R.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.W. FEAZEL & A.K. SCHUGELD
Soundings penciled by A.K. SCHUGELD
Soundings in ~~XXXX~~ feet at MLW ~~XXXX~~ and are true depths
REMARKS: This survey was smooth plotted in the Hydrographic
Section of the Norfolk District Office.

DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-8154 (Field No. SO-1454)
West Coast of Florida 21 Feb. 1955 to 2 May 1955
Venice Inlet to Midnight Pass 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 Dec. 1952.

B. SURVEY LIMITS AND DATES:

The survey includes the inland water from Lat. 27° 06'.0 N. northward to Lat. 27° 13'.1 N. The bays covered were Roberts, Dona, Lyons, Blackburn, Dryman, and Little Sarasota Bay (southern part). It also includes the development of Venice Inlet and Midnight Pass. Field work was begun on the 21 Feb. 1955 and was ended on the 2 May 1955. During this period work was also being carried out on other contemporary surveys. An index of sheets is included to show junctions with contemporary surveys.

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 is about 6 knots and the turning radius is about 25 meters.

The skiff operated from a fishing camp $\frac{1}{2}$ mile north of Midnight Pass for the northern part of the survey and from Venice Yacht Club Dock at Venice Inlet for the southern part of the survey.

Model 808J portable depth recorders, calibrated at 820 fathoms per second were used for sounding where depth and character of bottom permitted. Number 140-SP was used only on g and r days, the 11th. and 12th. of April, 1955. Number 115-S was used on all other days but p day when a lead line and sounding pole were used. A wooden pole, graduated in feet, was used during all fathometer sounding to obtain shoal depths and to obtain soundings where the fathogram depths were uncertain.

D. TIDE AND CURRENT STATIONS:

The tide curve from the Nokomis, Fla. portable automatic tide gage was used without corrections ~~for~~ reducing all soundings on H-8154 (SO-1454). This gage was located at Lat. $27^{\circ} 07' .40$, Long. $82^{\circ} 28' .15$, on a fish house pier.

Current stations 16, 17, 18, and 19, project CS-353 were occupied within the area of the survey. Station No. 16 was in Venice Inlet at Lat. $27^{\circ} 06' .77$, Long. $82^{\circ} 28' .06$. Station No. 17 was at Albee Road Bridge, Lat. $27^{\circ} 07' .45$, Long. $82^{\circ} 28' .14$. Station No. 18 was at Blackburn Point Bridge, Lat. $27^{\circ} 10' .77$; Long. $82^{\circ} 29' .67$. Station No. 19 was at Midnight Pass, Lat. $27^{\circ} 12' .37$, Long. $82^{\circ} 30' .59$.

E. SMOOTH SHEET:

Not in scope of this report.

F. CONTROL STATIONS:

Triangulation stations used in hydrography:

LIZ - Δ LISP (USE), 1935
 RIP - Δ RIP, 1954
 IRK - Δ OSPREY (USE), 1935
 AMP - Δ CAMP (USE), 1935
 VEN - Δ VENICE MUNICIPAL TANK, 1934
 CUP - Δ VENICE BEACH CASINO CUPOLA, 1954

Topographic stations were located photogrammetrically, shore-line manuscripts T-11087, T-11088, and T-11090, photos of 1952 and 1953. (1954) (1954) (1954)

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

G. SHORELINE AND TOPOGRAPHY:

Shoreline and topography are from shoreline compilation sheets T-11087, T-11088, T-11089, and T-11090, photos of 1952 and 1953. (1952-53) (1953-54) (1952-54) (1953-54)

The hydrographer has shown revisions to the shoreline detail in red as noted in the following:

1. Revisions of the north and south shores of Midnight Pass, necessary due to natural changes in the area.
2. The hydrographer has sketched in a mangrove island at lat. $27^{\circ} 12' .51$, Long. $82^{\circ} 30' .24$. Personal observations and the field photographs were used to show the location.
3. The mangrove island at Lat. $27^{\circ} 12' .54$, Long. $82^{\circ} 30' .19$ was outlined using positions 66 and 67 on g day.

G. SHORELINE AND TOPOGRAPHY: Cont.

4. The hydrographer sketched in small mangrove clumps at Lat. $27^{\circ} 12' .51$, Long. $82^{\circ} 30' .11$ and Lat. $27^{\circ} 12' .30$, Long. $82^{\circ} 30' .08$ with aid of the Field Photos.

← see verifier's note

5. Mangrove clumps at Lat. $27^{\circ} 10' .27$, Long. $82^{\circ} 29' .25$ were sketch with the aid of the field photos.

6. A small mangrove clump at Lat. $27^{\circ} 08' .28$, Long. $82^{\circ} 28' .27$.

7. Due to an oversight in the transferring of the shoreline to the boatsheet the island at Lat. $27^{\circ} 06' .79$, Long. $82^{\circ} 27' .60$ was omitted. The boat sheet should be checked for the location of small mangrove clumps around this island but the shoreline manuscript should be the authority for the main island. The outline shown was taken from the field photos.

8. The shoreline manuscript shows the mangrove symbol at Lat. $27^{\circ} 06' .25$, Long. $82^{\circ} 26' .80$ but the hydrographer has sketched the major clumps on the boatsheet.

9. Probably due to a misinterpretation of the photos the mangrove shoreline N.E. of the causeways at Lat. $27^{\circ} 07' .18$ ~~$08' .1$~~ , Long. $82^{\circ} 27' .1$ was not correctly shown. The hydrographer used his personal observations, position 81 on t day, and the field photos to show a corrected shoreline on the boatsheet.

NOTE: The field photos mentioned in the above items were the nine lens prints used in field inspection.

The MLW line is shown in yellow on the boatsheet. Much of it was sketch using personal observations and the field photo indications. Full development of the LWL (low-water line) was not practical due to the low range of tide, the shallow water involved, the numerous oyster bars, and the great extent of shoreline. A shoaler draft craft than skiff No. 735 (15 inches) would have been beneficial.

H. SOUNDINGS:

Model 808J portable depth recorders No. 115-S and 140-SP, were used except in areas too shoal for this machine to sound where a wooden pole graduated in feet was used. A hand lead was used for sounding along the Venice Yacht Club Pier. Also see item U. for discussion on fathogram interpretation.

← $\phi 27^{\circ} 06' .72'$, $\lambda 82^{\circ} 27' .8'$

I. CONTROL OF HYDROGRAPHY:

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

I. CONTROL OF HYDROGRAPHY: Cont.

The location of some stations in the Midnight Pass area were incorrect when hydrography was first started. They are noted in the following paragraphs.

Photo-hydro station TOY was corrected on 9 Mar. 1955. It was apparently mis-identified on the photographs. Before 9 Mar. 1955 all fixes now plotted on the boat sheet used the incorrect location. *(Shown correctly on Smooth Sheet)*.

Hydrographic stations AZO and CAR were used at an incorrect location before 9 Mar. 1955. Positions 61 and 117, b day, were adjusted on the boatsheet but all other hydrography was left unadjusted. *(Stations correctly located on Smooth Sheet)*

A plotting error in the location of hydro-station ACE was corrected before hydrography began on 26 Feb. 1955. No adjustment of previous positions was made. *(Ace correctly located on Smooth Sheet)*

J. ADEQUACY OF SURVEY:

The survey is considered complete and adequate to supersede prior surveys for charting on both the present 1:80,000 scale chart (No. 1256) and for the proposed 1:40,000 scale chart. Junctions with adjoining surveys are satisfactory and depth curves are continuous.

A large *(1:6500)* scale insert is shown of the Venice Yacht Club Dock and the soundings along it. This is an important dockage for medium sized vessels, being one of the three most important dockages on Chart No. 1256 (the other two are the municipal piers at Sarasota and Bradenton). $\phi 27^{\circ}06.72'$, $\lambda 82^{\circ}27.2'$

The three foot depth curve is shown on the boatsheet and consideration should be given to showing it on the proposed 1:40,000 scale chart of the area.

K. CROSSLINES:

Crosslines make up about 8% of the sounding lines run. Soundings at crossings checked with-in the unit used for inking soundings (one foot).

L. COMPARISON WITH PRIOR SURVEYS:

A comparison was made with H-1559b, 1:20,000, survey in 1883. Due to natural and numerous man-made changes, it was only possible to make a comparison in selected areas. Agreement in these areas was good.

P5
Re-
view

The passes shown on H-1559b, Little Sarasota Pass and Casey's Pass, no longer exist at the locations given. Winding "Little Sarasota Pass" has closed off, the pass that opened up to the south is now known as Midnight Pass. Casey's Pass has closed off and is replaced to the south by Venice Inlet which is jet-tied and maintained by the U. S. Engineers.

L. COMPARISON WITH PRIOR SURVEYS: Cont.

A comparison was also made with H-1557b, 1:40,000, 1883. The area affected is small and the hydrographer found a fair agreement in the area examined.

P5
Review

A comparison was made with U.S.E. surveys in the area. Only those of Venice Inlet (Casey's Pass) were of recent date and useful in comparison. All U.S. Engineer surveys of the area will be forwarded with the boatsheet. Future surveys of the area are probable by the U.S.E. in connection with the proposed 9 foot Inland Waterway channel from Sarasota to Lemon Bay.

P6
Review

Below are listed the latest survey sheets furnished this party by the U.S.E.:

1. U.S.E. sheets 41H-16,100, March 1950 and 41H-20,605, Dec. 1951 of the Venice Inlet. There appeared to be no material disagreement with SO-1454.
2. U.S.E. sheet 57-10,372, of Dona and Roberts Bays, May 1935. Agreement was good in areas unaffected by man-made changes.
3. The U.S.E.'s 1938 Survey of the Intracoastal Waterway, sheets 39 through 44, File No. 41-12,208. The hydrographer does not believe they are of any value for comparison but they are also forwarded for final disposition by the processing office.

See
P6
Re-
view

M. COMPARISON WITH CHART: (Review P6)

1. Comparison was made with Chart No. 1256, Print date 3 Jan. 1955. This chart shows very little detail of the area covered.
2. The Midnight Pass area, which is very unstable, at Lat. 27° 12'.3 could be better shown on the chart as to present depth and shoreline.
3. The Intracoastal Waterway at Lat. 27° 12'.4 has shoaled out from the western edge and there is now a controlling depth of 2.58 feet at this spot. This is the shoalest depth found in the Intracoastal Waterway between Sarasota and Venice. The remainder of the channel has a minimum of 3½ feet in its center but in some areas there is considerable shoaling at the edges. (A-8154 shows depth of 3 ft pos. 15-16c p.s. 15-16c just n. of Bn 54).
4. Two additional uncharted markers now mark the deepest water at the above mentioned shoal, Lat. 27° 12'.4. These markers are Little Sarasota Bay Daybeacon 53A at Lat. 27° 12'.35, Long. 82° 30'.10 and Little Sarasota Bay Daybeacon 54A at Lat. 27° 12'.44, Long. 82° 30'.13.
5. The detail of shoals, oyster bars, and mangrove islands could be better shown on the chart. Several examples are the shoal and oyster bar 50 m.'s east of Little Sarasota Bay Daybeacon 51; oyster bar and shoal at Lat. 27° 11'.40, Long. 82° 29'.75; oyster bars alongside Little Sarasota Bay Daybeacons 45, 46, and 47; and the shoal and oyster bars southerly of Little Sarasota Bay Day-

P6
Re-
viewShown on chart
dated 12-24-56

M. COMPARISON WITH CHART: Cont.

beacon 23. These were picked as items which might be shown on a revised edition of Chart No. 1256 before the proposed 1:40,000 chart is published.

There are numerous daybeacons charted for the surveyed area. A general check was made of their charted positions. The chart shows Little Sarasota Bay Daybeacon 40 at Lat. $27^{\circ} 10' .55$ but it presently exists at Lat. $27^{\circ} 10' .38$, Long. $82^{\circ} 29' .44$. Also the bend in the channel shown just south of the charted daybeacon 40 no longer exists.

Features re-
vised on CH
1256, 12-24-56

Little Sarasota Bay Daybeacon 1 at Lat. $27^{\circ} 06' .78$, Long. $82^{\circ} 27' .78$ is not charted. (Area too congested on CH 1256)

Venice Inlet Daybeacon 7 is not shown in its correct location at Lat. $27^{\circ} 06' .73$, Long. $82^{\circ} 27' .80$. Venice Inlet Daybeacon 8x at Lat. $27^{\circ} 06' .77$, Long. $82^{\circ} 27' .74$ is not charted, probably due to the congestion in this area. Location revised on CH 1256, 12-24-56

There are numerous piling used as private navigational aids which are not charted. For their location see data under item P. in this report.

There are numerous new uncharted slips, private channels, and piers.

Continued development of the area can be expected.

The Cable area reported in N. to M. No. 13, 26 Mar. 1955, page 584 was noted and its termini located. A slight discrepancy with the reported position was found. The termini are located in Vol. 4, pages 21 and 22. The eastern terminus was located at Lat. $27^{\circ} 08' .28$, Long. $82^{\circ} 28' .12$ and the western terminus at Lat. $27^{\circ} 08' .28$, Long. $82^{\circ} 28' .31$ with the cable area noted about 10 meters wide. The cable is submerged the entire distance between these termini. The previously erected, but unused, power pole (~~to BEN~~) has been sawed off at about 2 feet above the high water line as have the adjacent supporting piling. (See page 57, vol. 1).
($27^{\circ} 08' .27$ λ $82^{\circ} 28' .18$)

The steel piling shown on T-5853 and located by positions 110, 111, and 112, k day, SO-1454 at Lat. $27^{\circ} 06' .20$, Long. $82^{\circ} 27' .75$ are not charted. (Charted on CH 1256, 12-24-56).

N. DANGERS AND SHOALS:

The only important newly found danger or shoal was the shoal at Lat. $27^{\circ} 06' .65$, Long. $82^{\circ} 26' .92$. The least depth was 0.6 feet on pos. 48, t day. The shoal and bottom were plainly visible. The charted detail in this area is too sparse to make charting immediately important. (Charted on CH 1256, 12-24-56)

N. DANGERS AND SHOALS: Cont.

Notice of the shoaling in the Inland Waterway at Lat. 27° 12' .4 (2.5 feet) has been sent to the Coast Guard District Commander and to District U.S.E. office. See tabulation of applicable data for copies of letters.

O. COAST PILOT INFORMATION:

1. A coast pilot report is to be submitted in the near future for the area south of Big Sarasota Pass to Alligator Creek, Lemon Bay.
2. The hydrographer has no anchorages to recommend. The SOSBEE spent part of the survey alongside the Venice Yacht Club Pier where fresh water and fuel were available. The pier is not in very good condition for large craft; sway bracing is gone and many floor boards are rotten.
3. Controlling depth in the Inland Waterway was $(2.8)^3$ feet at MLW just north of Little Sarasota Bay Daybeacon 54. The rest of the channel had at least 3.5 feet in its center but caution should be exercised due to shoaling along the channel edges in some areas. (See PM-3)
4. The controlling depth into Midnight Pass was 4 feet at MLW but the deep water is unmarked and the area is subject to change.
5. The controlling depth into the Venice Yacht Club Pier is 8 feet at MLW.
6. The controlling depths into upper Dona and Roberts Bays is ~~3.5~~⁴ feet but the deep water is not well marked.
7. Currents as high as 2.5 knots were measured in Midnight Pass. At Venice Inlet and other restricted areas near the passes 1 to 2 knots can be expected.

P. AIDS TO NAVIGATION:

The positions of fixed aids to navigation were reported on form 567 by the Tampa Photogrammetric Office on 29 Sept. 1954. The location of Venice Inlet Daybeacons 3 and 5 were revised and form 567 was resubmitted by them. The photogrammetric location of Little Sarasota Bay Daybeacon 25 was also revised and is to be resubmitted by the Tampa Photogrammetric Office. C.L.
996
1954
C.L.
58
1955

Little Sarasota Bay Daybeacon 53A and 54A were not located photogrammetrically and form 567 is being submitted by the hydrographer for these. (C.L. 12/1, 1955)

No floating aids to navigation exist in the area. There appears to be no discrepancies with the 1955 Light List. No azimuth of ranges were measured.

P. AIDS TO NAVIGATION: Cont.

1. A report was made to the Coast Guard and the U. S. Engineers relative to the ~~2.78~~ foot shoaling in the Inland Waterway at Lat. 27° 12' .4, a copy of this correspondence is included in the applicable data of this report. (*See TP 11-3*)
2. Minor unofficial aids to navigation are numerous. Establishment and maintenance if any are unknown. Those located by this survey are:
 1. a piling at Lat. 27° 11' .52⁶, Long. 82° 29' 95⁰ which marks the eastern edge of a shoal area with numerous oyster bars. It is photo-hydro station 8811, T-11088.
 2. range markers, front and rear, at Lat. 27° 10' .47^{86° 27.67}. They were photo-hydro stations APT and WHO and they were reported on form 567 by the Tampa Photogrammetric Office on 29 Sept. 1954.
 3. a piling at Lat. 27° 08' .16⁶⁶, Long. 82° 28' .32 located by pos. 1087 g day. It marks the southern edge of the outer end of a narrow channel.
 4. a piling with pointer, photo-hydro station NED, 9046, T-11090. It is a 4" x 4" post that marks the S.E. side of the deep water channel into Dona Bay. *φ 27° 06.80' λ 82° 27.70*
 5. a piling with pointer, photo-hydro station POT, 9047, T-11090. It marks the S.W. corner of a shoal with oyster bars. Pointer toward deep water into Roberts Bay. *φ 27° 06.58' λ 82° 27.58'*
 6. a piling with pointer, photo-hydro station RIM, 9048, T-11090. Pointer toward the south and the deep water into Roberts Bay. *φ 27° 06.63' λ 82° 27.43'*
 7. a piling, photo-hydro station SAX, 9049, T-11090. Marks northern edge of shoal and oyster bar area in Roberts Bay. *φ 27° 06.57' λ 82° 27.28'*
 8. a piling with pointer, photo-hydro station VAL, 9050, T-11090. Marks the E.N.E. edge of the deep water into Hatchet ~~Creek~~ Creek with pointer toward the W.S.W. *φ 27° 06.48' λ 82° 26.87'*

The clearances of bridges was reported ^{instead of 5.1 ft.} by the field inspector in his Field Inspection Report. This information is duplicated here with one exception; the vertical clearances value for the Shackett Creek Railroad Bridge were obtained by the hydrographer. The field inspection report gives 6.1 feet as the clearance - the reason for the discrepancy is unknown. All values are in feet.

	Type	Horizontal				Vertical	
		Bridge Book		C&GS		Br. Book	C&GS
		E	W	E	W	ab.MHW	ab.MHW
Little Sarasota Bay, Osprey Bridge (Hwy)	SW	55	55	54.7	32.0*	9.2	9.4
South Creek (Hwy)	F	Rebuilt 1950 No. inform.		center 16.5			7.0'

P. AIDS TO NAVIGATION: Cont.

	Type	Horizontal				Vertical		
		Bridge Book		C&GS		Bridge Book	C&GS	
		E	W	E	W	ab.	MHW	ab.MHW
Little Sarasota Bay, Nokomis Br. (Hwy.)	SW	Rebuilt 1954 No. confor.		xx	47.2	55.0		7.2
Shakett Creek (N.) (Hwy.)	F	Rebuilt 1954 No confor.			Center 18.1			6.3
Shakett Creek (Railroad)	F	Center 20.0		Center xxx 15.0		6.9	4.9 (see note)	
<p>Note:- Vertical Clearance of wires at MHW only 4.4 ft. for this bridge. Bridge was possibly rebuilt recently.</p>								
Shakett Creek (S) (Hwy.)	F	No Infor.			Center 18.0			5.9
Curry Creek (Hwy.)	xxxx F	Rebuilt 1950 No Infor.			Center 39.5			6.0
Curry Creek (Railroad)	F	Center 20.0		Center 18.9		6.9		5.9
Hatchet Creek (Hwy.)	xxxx F	Rebuilt 1950 No Infor.			Center 39.0			5.1

* West Channel partially blocked by net racks under bridge and mangrove limbs at north end of channel.

xx The draw fender is to the east of the center pier which accounts for difference in E & W clearances.

xxx Submerged piling at each side of channel account for difference with bridge book.

xxxx Bascule bridges not equipped for raising.

There are five (5) overhead power cables crossing navigable water. Vertical clearances above MHW at lowest point on catenary are given. Values were measured by field inspector and listed in his field inspection report.

- | | |
|--|------------|
| 1. Intracoastal Waterway opposite east side of Turner Key (Venice Inlet) | 48.3 feet. |
| 2. West Channel around Turner Key | 40.1 " ✓ |
| 3. Curry Creek at U.S. Highway 41 bridge | 25.4 " ✓ |
| 4. Hatchett Creek at U.S. Highway 41 bridge | 34.4 " ✓ |
| 5. Intracoastal Waterway, Osprey Bridge | 65.0 " ✓ |

P. AIDS TO NAVIGATION: Cont.

The submarine cable at Curry Creek highway bridge was indicated by the field inspector and shown on the shoreline manuscript. This was the only cable indicated by the Photogrammetric field inspector. The hydrographer noted no submerged cables, however no specific investigation was made. *(not shown on smooth sheet)*

Q. LANDMARKS FOR CHARTS:

Landmarks for chart for this area was submitted on form 567 as Part II, Landmarks for Charts, Project CS-353, 26 May 1955. Recommended landmarks within the survey are:

VEN - Δ VENICE MUNICIPAL TANK, 1934 ~~44~~)

CUP - Δ VENICE BEACH CASINO CUPOLA, 1954

R. GEOGRAPHIC NAMES:

No special investigation of geographic names was made by the hydrographer. No discrepancies were noted during hydrographic operations.

S. SILTED AREA: ✓

None noted.

T. BY-PRODUCT INFORMATION:

None.

U. FATHOGRAM INTERPRETATION:

During this survey ghost soundings were obtained in the Venice Inlet area, particularly near the Venice Yacht Club Pier. In the area near the Yacht Club Pier these soundings were definitely disproven and the cause established within a reasonable doubt - schools of small fish (1 to 8 inches) which were noted to be in abundance in the area. A lead line dropped here would vibrate rapidly although fish were barely visible in the upper strata. ✓ These ghost soundings were obtained with fathometer 115-S which had previously given similar returns. Fathometer 140-SP was also experimentally tried in the area and indications of ghost soundings were also obtained with this machine. Ghost soundings were obtained in true depths of 6 - 13 feet and most all of them are included in the records. *(See Pgs. 25)*

Special attention is called to the Descriptive Report for SO-1154 (H-8098) which fully describes previous experience with similar ghost soundings. This survey, SO-1454, marked the first time a definite cause could be attributed with certainty to this type of ghost soundings in Gulf Coast waters. ✓

U. FATHOGRAM INTERPRETATION: Cont.

The following fathograms are examples on SO-1454 of the above mentioned ghost soundings:

1. Between positions 18 and 20, 1 day.
2. On position 22 on 1 day.
3. See fathogram between positions 25 and 28, 1 day.
4. Thirty seconds out from position 28, 1 day.
5. On m day fathogram before initial bar check.
6. An example of shallow water fish interference is shown on the fathogram for g day before the initial bar check.
7. On g day just before hydrography began.

Z. TABULATION OF APPLICABLE DATA:

Attached to this report are:

1. Statistics sheet
2. Tide Note
3. Approval Sheet
4. List of Stations
5. Index of Sheets
6. Correspondence regarding survey

Wilfred V. Warner
Wilfred V. Warner,
Ensign, USC&GS

STATISTICS SHEET

HYDROGRAPHIC SURVEY H-8154 (SO-1454)

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

Roswell C. Bolstad, Chief of Party

Project CS-353

Scale 1:10,000

Skiff No. 735

Venice Inlet to Midnight Pass, Fla.

Day Letter	Date 1955	Volume Number	No. of Positions	Statute Miles	No. of Pole Sdgs.
a	24 Feb.	1	124	14.1	133
b	25 Feb.	1	132	10.1	238
c	28 Feb.	1 & 2	185	17.9	368
d	1 Mar.	2	187	19.6	470
e	2 Mar.	2 & 3	169	13.2	465
f	3 Mar.	3	53	7.0	112
g	10 Mar.	3	159	14.3	554
h	23 Mar.	4	129	10.2	334
j	24 Mar.	4	28	2.1	57
k	30 Mar.	4	163	23.5	113
l	5 Apr.	5	120	9.1	305
m	6 Apr.	5	107	8.4	262
n	7 Apr.	5 & 6	134	10.8	307
p	8 Apr.	6	4	-	44 LL
q	11 Apr.	6	118	11.0	245
r	12 Apr.	6	141	8.5	300
s	21 Apr.	7	106	9.2	210
t	2 May	7	95	6.7	238
Totals			2,154	195.6	4,845

Square Statute Miles = 3.6

PROCESSING OFFICE
LIST OF SIGNALS
To Accompany
H-8154

TRIANGULATION STATIONS

AMP CAMP (USE), 1935
CUP VENICE BEACH, CASINO CUPOLA, 1954(Landmark)
IRK OSPREY (USE), 1935
LIZ LISP (USE), 1935-54
RIP RIP, 1954
VEN(VENICE, MUNICIPAL TANK, 1934-44(Landmark)

TOPOGRAPHIC STATIONS

SOURCE T-11087

Ann	Ask	Bed	Cod	Day	Eat	Fin	Hut	Ivy	Lam
Man	Mop	New	Oil	Owl	Pal	Pin	Rag	Rio	Sop
Sox	Sam	Wig	Yes	Zig					

SOURCE T-11088

Deb	Ebb	Fig	Gam	Gus	Hod	Joy			
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SOURCE T-11089

Apt	Arm	Art	Boa	Cab	Cat	Con	Cry	Cut	Dim
Doc	Egg	Elm	Fat	Fez	Gag	Gas	Gig	Hen	Hoe
Hub	Ida	Don	Its	Jap	Jay	Jim	Joe	Ken	Kid
Lad	Lax	Lip	Lug	Max	Met	Mug	Mum	Nat	Nil
Nip	Nod	Nor	Oak	Odd	Off	Peg	Pix	Ram	Roy
Sag	Ski	Tap	Thy	Via	War	Who	Yak	Yea	Zag

SOURCE T-11090

Ant	Bib	Big	Cow	Dog	Dot	Eel	End	Eon	Eva
Ice	Kim	Lay	Leo	Low	Mag	Mal	Mar	Ned	Neo
Nut	Ohm	Ora	Orb	Out	Par	Pep	Pie	Pot	Pug
Pup	Rat	Rig	Rim	Sax	Sis	Sol	Sub	Tan	Try
Val	Van	Wax	Wed	Win	Wit	Yet			

PLANIMETRIC FEATURES

SOURCE T-11090

Gem Ray

HYDROGRAPHIC STATIONS

				Fox	Vol. 1, pg. 4		
				Gal	" 5, "	30&31	
				Hag	" 7, "	12,13&25	
Abe	Vol. 1, pg. 4			Jut	" 4, "	29	
Ace	" 1, "	4		Ked	" 4, "	29	
Alp	" 1, "	6		Mid	" 5, "	18	
Azo	" 1, "	38		Nul	" 3, "	32	
Ben	" 4, "	21&22	<i>removed see Vol. 1 p 57</i>	Pro	" 3, "	30	
Bum	" 3, "	32		Rib	" 7, "	17	
Bus	" 1, "	4		Rob	" 7, "	16	
Car	" 1, "	38		Rot	" 5, "	16	
Coo	" 4, "	21&22		Sal	" 3, "	40&41	
Dif	" 1, "	38		Sue	" 3, "	40&41	
Duo	" 1, "	4		Toy	" 1, "	31&38	
Ego	" 1, "	4		Tub	" 5, "	39	
Fog	" 5, "	30&31		Vat	Vol. 7, pg. 21		
				Vim	Vol. 1, pg. 4		

TIDE NOTE

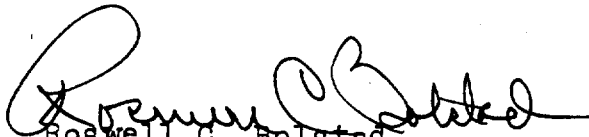
SO-1454 (H-8154)

A portable automatic tide gage was maintained at Nokomis, Florida, Lat. $27^{\circ} 07'.39$, Long. $82^{\circ} 28'.16$ 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 2.5 feet according to the Acting Director's letter, 36-78-982, dated 8 Feb. 1955.

Approval Sheet

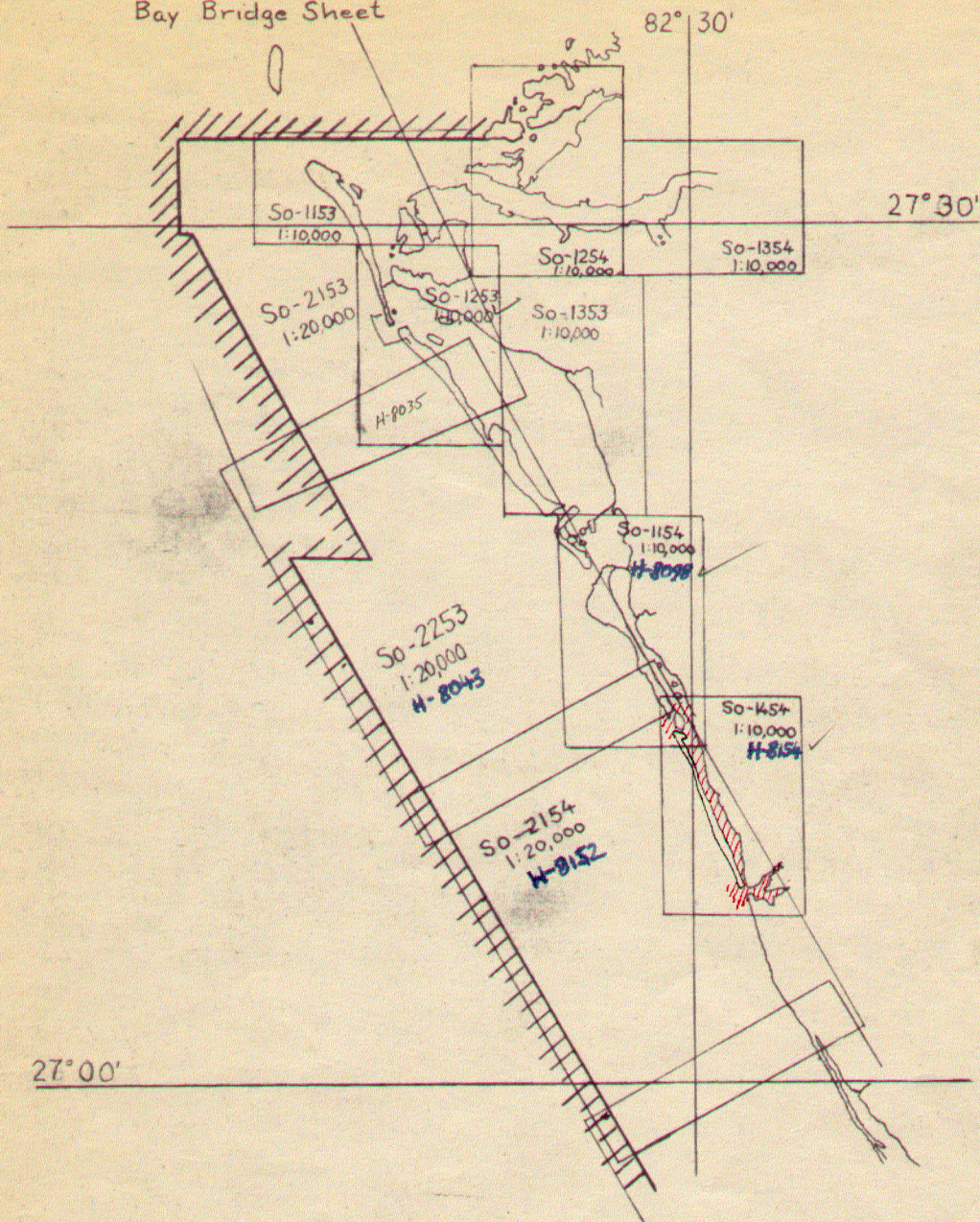
The survey of the area covered by SO-1454 (H-8154) is adequate for charting purposes. The sounding records and boat sheet have been inspected and are approved this date. Additional field work is not necessary.



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

3 June 1955

SO 1554 is Tampa
Bay Bridge Sheet



INDEX OF SHEETS

PROJECT CS-353

(Northern Part)

P. O. Box 1158, Ship SOSBEE
Sarasota, Fla.

29 March 1955

To: Commander, 7th Coast Guard District
150 SE 3rd. Avenue
Miami 32, Florida

Subject: Dangers to Navigation - Inland Waterway.

In a recent hydrographic survey of the inland waterway between Nokomis and Sarasota the controlling depth at mean low water was found to be $2\frac{1}{2}$ feet; the present chart no. 1256 states " 3 feet ". This controlling channel depth is located at Lat. $27^{\circ} - 12'.38$ W., Long. $82^{\circ} - 30'.10$ N. The channel has narrowed considerably in this area and should be navigated with caution.

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

c.c.:- Director USC&GS
Supervisor, SED

Corps of Engineers, U. S. Army- 575 Riverside Ave.,
Jacksonville, Fla.

With reference to your letter of 14 March 1955, REF. SAKKM 800.12 (IWW CR to AR), black and white copies of the field surveys from Sarasota to Venice, Fla., will be forwarded in the near future.

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

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8154 (Field No. So-1454)

GENERAL

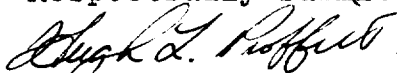
This appears to be an excellent basic field survey and no difficulties were experienced with the smooth plot, other than the problem of obtaining an accurate delineation of the bottom in narrow channels and in the numerous alongshore dredged areas. Soundings at crossings checked very well and the agreement between pole and fathometer soundings was also good.

DISCREPANCIES

The following "See Boat Sheet" positions were not smooth plotted as they could not be positively identified on the boat sheet:

4j	Vol. 4, pg. 29
1- 4l	Vol. 5, pg. 4&5
31l	Vol. 5, pg. 10
117n	Vol. 6, pg. 6
134n	Vol. 6, pg. 9

Respectfully submitted,



Hugh L. Proffitt

Norfolk, Va.
17 August 1956

GEOGRAPHIC NAMES

Survey No. H-8156

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
<u>Florida</u>										RGY	1
<u>Venice Inlet</u>											2
<u>Venice</u>											3
<u>Venice Yacht Club Pier</u>											4
<u>Roberts Bay</u>											4
<u>Hatchett Creek Fixed Bridge</u>											5
<u>Curry Creek</u>											6
<u>Curry Creek R.R. Bridge</u>											7
<u>Nokomis</u>											8
											(tide station)
<u>Shakett Creek</u>											9
<u>Dona Bay</u>											10
<u>Lyons Bay</u>											11
<u>Little Sarasota Bay Nokomis Fixed Bridge</u>											12
<u>Blackburn Bay</u>											13
<u>South Creek</u>											14
<u>South Creek Fixed Bridge</u>											15
<u>Dryman Bay</u>											16
<u>Blackburn Point Bridge</u>											17
<u>Little Sarasota Bay</u>											18
<u>Midnight Pass</u>											19
<u>Siesta Key</u>										RGY	20
											Names approved
<u>Turner Key</u>											9-7-56. L. Heck
<u>Casey Key</u>											23
											(see chart 1256 for best
											placement of names)
											25
											26
											27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8154....

Records accompanying survey:

Boat sheets ..1..; sounding vols. ..7..; wire drag vols. *PL. 11P.*;
 bomb vols. *NONE*; graphic recorder rolls 9-Envelopes
 special reports, etc. 1-~~Descriptive report~~, 1-Smooth sheet,....
 . and 1-Roll. USE prints.....

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

Number of positions on sheet		<i>2154</i>
Number of positions checked		<i>50</i>
Number of positions revised		<i>✓</i>
Number of soundings revised (refers to depth only)		<i>✓</i>
Number of soundings erroneously spaced		<i>✓</i>
Number of signals erroneously plotted or transferred		<i>1</i>
Topographic details	Time	<i>50</i>
Junctions	Time	<i>30</i>
Verification of soundings from graphic record	Time	<i>10</i>

Verification by *John T. Sullivan* time *300*.. Date *13 Aug. 57*

Reviewed by *W. J. Eskind* Time *43* Date *17 Sept. 57*

RHE

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens:

24 September 1956

Plane of reference approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET 8154

Locality West Coast of Florida

Chief of Party: R. C. Bolstad in 1955

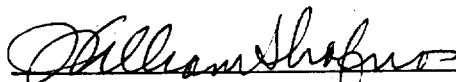
Plane of reference is mean low water, reading

2.5 ft. on tide staff at Nokomis

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

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

Condition of records satisfactory except as noted below:


Signature

Chief, Tides Branch

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8154

FIELD NO. SO-1454

Florida West Coast, Little Sarasota and Blackburn Bays,
Venice Inlet to Midnight Pass

Surveyed - Feb.-May, 1955

Scale 1:10,000

Project No. CS-353

Soundings:

808 Fathometer
Sounding Pole
Lead Line

Control:

Sextant fixes on
shore signals

Chief of Party - R. C. Bolstad

Surveyed by - M. V. Warner

Protracted by - W. W. Feazel & A. K. Schugeld

Soundings plotted by - A. K. Schugeld

Verified and inked by - J. T. Gallahan

Reveiwed by - I. M. Zeskind

Inspected by - R. H. Carstens

Date: 17 September 1957

1. Shoreline and Control

The shoreline originates with reviewed air-photographic surveys T-11087, T-11088, T-11089 and T-11090 of 1952-54, supplemented by changes in shoreline obtained by the field party. These latter changes are shown on the smooth sheet by dashed red lines.

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

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated. The 3-ft. and 24-ft. curves were drawn to better delineate the bottom configuration. The bottom is fairly irregular. Submarine feature such as flats, deeps, shoals and oyster bars contribute to the bottom irregularity.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-8098 (1954-55) on the north. The junction with H-8152 (1954-55) in Venice Inlet and Midnight Pass will be considered in the review of that survey.

5. Comparison with Prior Surveys

H-1557b (1883), 1-40,000
H-1559b (1883), 1-20,000

A comparison between the prior and present surveys reveals changes in shoreline and bottom configuration. These changes are attributed to both natural and artificial causes, such as the action of the current on the bottom, the opening, closing and shifting of inlets probably as a result of storms, the reclaiming of land, the accretion and erosion of shoreline, the dredging of channels and canals, and the construction of causeways and bridges. Both Midnight Pass and Venice Inlet were created since 1883. Venice Inlet is located about 450 meters southeastward of an inlet formerly known as Casey's Pass. This Pass has filled in and no longer exists. The shoreline in the vicinity of Venice Inlet has accreted as much as 200 meters. An entrance to Little Sarasota Bay was formerly located about 2 miles northwestward of Midnight Pass and was known as Little Sarasota Pass. This latter Pass has filled in and no longer exists. The greatest changes in depths have occurred in the vicinity of the inlets in depths less than 18 ft., and where the canals and channels have been dredged and causeways have been built. Elsewhere only minor differences of 1 ft. in depths between the prior and present surveys are noted.

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

6. Comparison with Drawing of Chart 857

(1st Ed. 1957)

A. Hydrography

The charted hydrography originates with the present survey after verification and review. Minor differences between charted and survey data have been brought to the attention of the chart compiler.

B. Aids to Navigation

The survey positions of the fixed aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended.

There are no floating aids to navigation within the limits of the present survey.

C. Dredged Channels

The present survey shows a controlling depth of 3 ft. in the dredged channel in lat. 27° 12.35' long. 82° 30.1'. The controlling depth of 2 1/2 ft. in the note on chart 1256 dated 9 September 1957, is from advance information of the present survey reported in chart letter 259 (1955).

7. Condition of Survey

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

b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended.

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

Examined and Approved:

Wallace A. Bruder
for Max G. Ricketts
Chief, Nautical Chart Branch

Karl B. Jeffers
Karl B. Jeffers 11/8/57
Chief, Hydrography Branch

Charles A. Schanck
Charles A. Schanck
Chief, Division of Charts

Samuel B. Grenell
Samuel B. Grenell
Chief, Division of Coastal Surveys

Discrepancy 0.56
H-8154-1955
H-8098-1954-55
H-8152-1954-55

8098

T11088

T11087

27°11'15"

T11089

27°10'

82°30'

H 8154

T11089

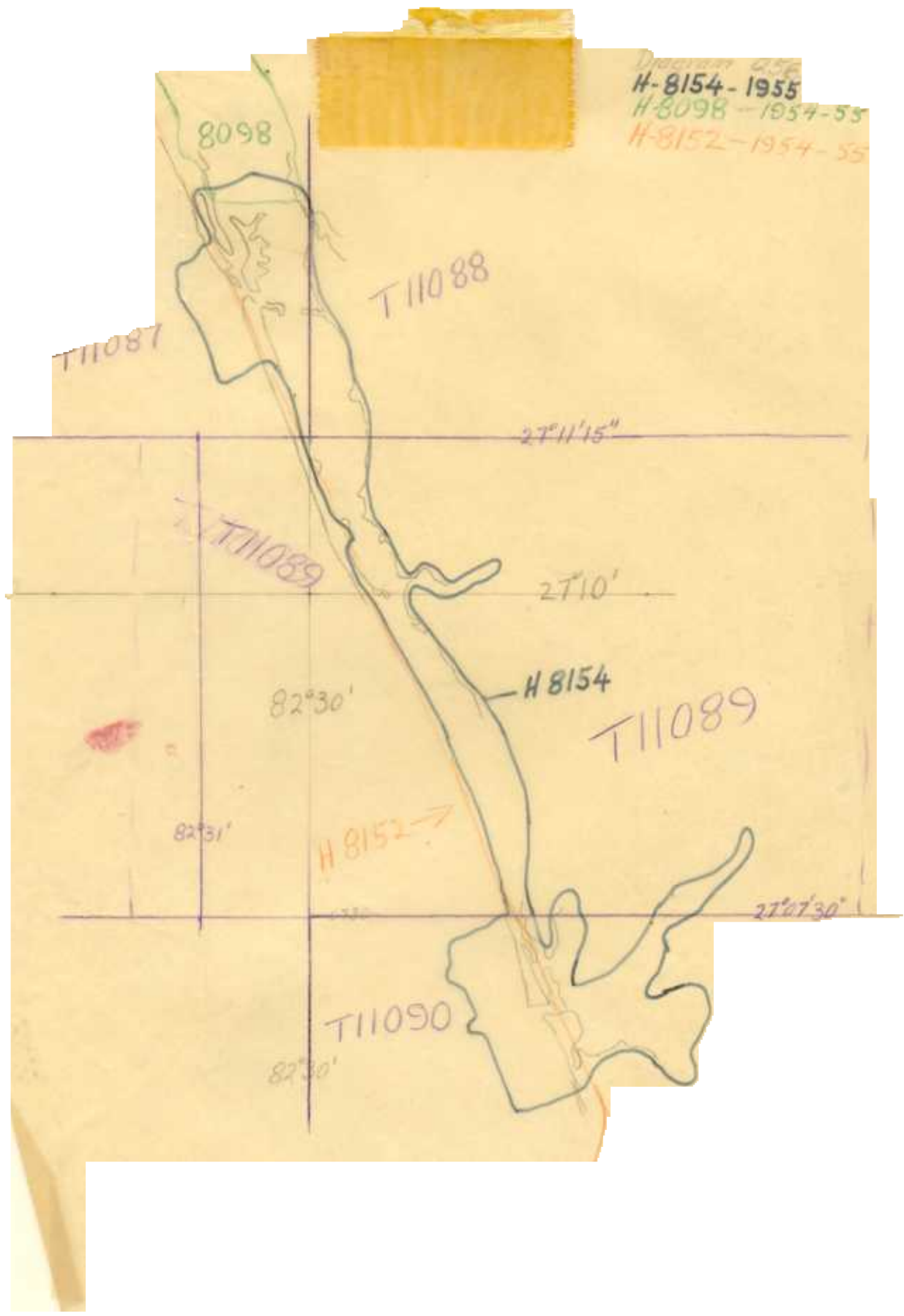
82°31'

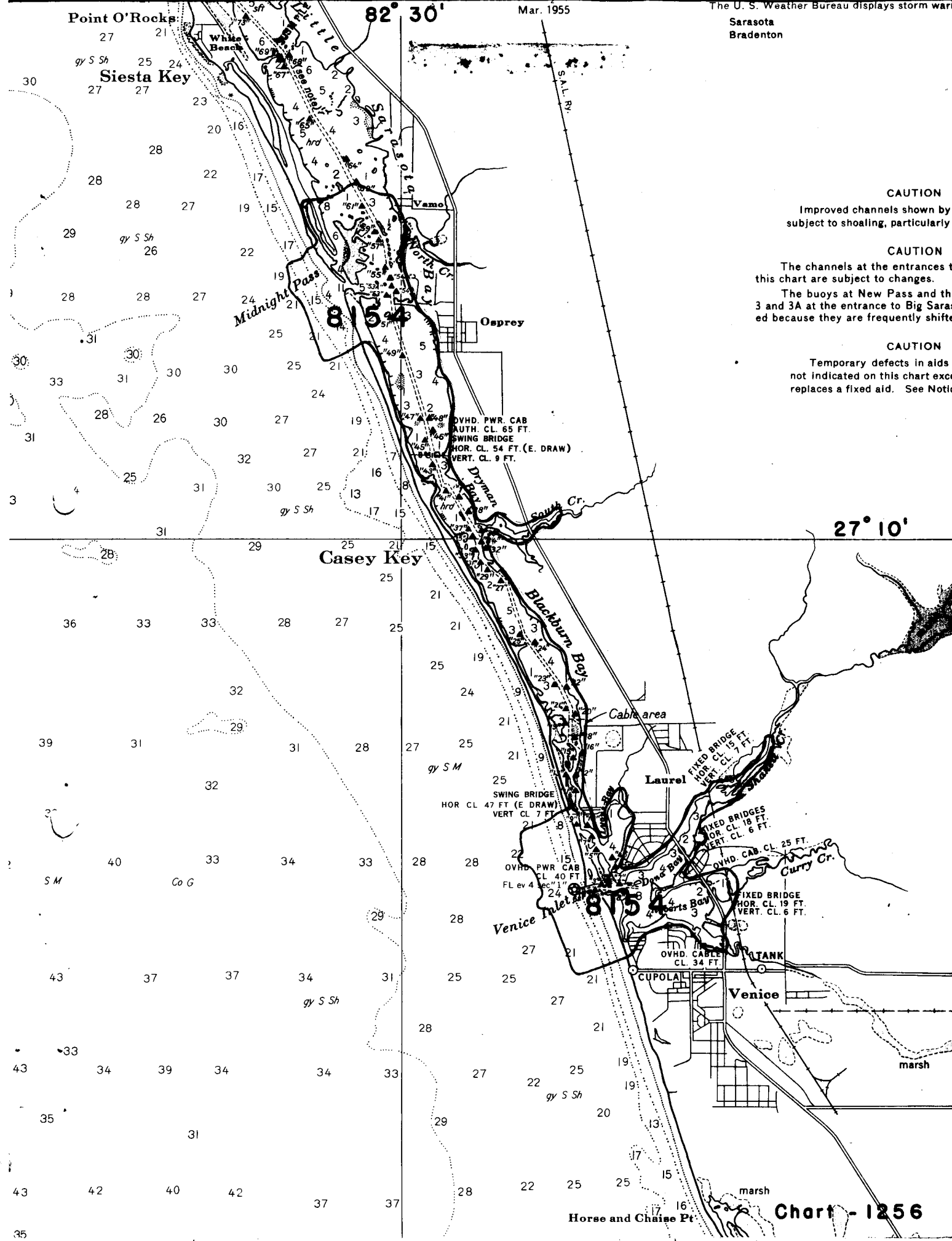
H 8152 →

27°07'30"

T11090

82°30'





CAUTION

Improved channels shown by 1 subject to shoaling, particularly y

CAUTION

The channels at the entrances to this chart are subject to changes.

The buoys at New Pass and the 3 and 3A at the entrance to Big Sarasota ed because they are frequently shifted

CAUTION

Temporary defects in aids to not indicated on this chart except replaces a fixed aid. See Notice

27° 10'

