7968

Diag. Cht. No. 1257-2

CS-336

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. SO-2251 *Office No.* H-7968

LOCALITY

State FLORIDA

General locality West Coast

Locality Johns Pass to Indian Rocks

19~~4~~52

CHIEF OF PARTY

J. C. Bose and Riley J. Sipe

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7968

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-7968

Field No. SO-2251

State FLORIDA

General locality West Coast

Locality Johns Pass to Indian Rocks

Scale 1:20,000 Date of survey 15 October 1951 27 May 1952

Instructions dated 2 March 1949

Vessel Ship SOSBEE

Chief of party J. C. Bose and Riley J. Sipe

Surveyed by I. R. Rubottom and A. L. Wardwell

Soundings taken by fathometer, graphic recorder, [illegible], Pole

Fathograms scaled by K.B.A.

Fathograms checked by R.W.L. & J.A.D.

Protracted by Roy B. Davis & A. Kaupa.

Soundings penciled by A. Kaupa

Soundings in [illegible] feet at MLW [illegible] and are true depths

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

U. S. GOVERNMENT PRINTING OFFICE 777032

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-7968 (Field No. SO-2251)

Johns Pass to Indian Rocks - Florida West Coast

Scale 1:20,000 15 Oct. 1951 to 27 May 1952

U.S.C.& G.S.S. SOSBEE Riley J. Sipe, Comdg.

A. PROJECT:

This survey is part of Project CS-336 and was done in accordance with Instructions dated 2 March 1949.

B. SURVEY LIMITS AND DATES:

The survey covers the waters of the Gulf of Mexico between Johns Pass and the northern part of Indian Rocks, Florida, extending from the beach to about a mile offshore, and in latitude 27° 46' to 27° 55'.

Contemporary sheets with which junction was made are listed below:

SO-2249 on the north H-7877 (1949-50)
SO-1351 on the southEAST H-7967 (1951-52)
SO-2152 on the south H-7971 (1952) - Review addendum

Review, par. 4.

Field work was started on 15 October 1951 and completed on 27 May 1952.

C. VESSELS AND EQUIPMENT:

Skiff No. 735 was used for the lines in shoal water along the beach. This is a 25-foot wooden craft, powered by two ten-horsepower outboard motors and operating from the Ship SOSBEE basing at Madiera Beach, Florida. The speed of this skiff is about 5 knots maximum, with a turning radius of about 20 meters.

About 75 percent of the sounding was done with the Ship SOSBEE, a diesel-powered, single screw, wooden hull vessel 63 feet long at the waterline. Standard sounding speed of 1500 RPM averages, 9 knots. Turning radius of the SOSBEE is about 90 meters when turning to the left and about 110 meters when turning to the right.

The fathometer used in all the skiff sounding and A, B, E, F, G & H days with ship was 808J No. 115-S calibrated for a velocity of sound in sea water of 820 fm/sec. On C and D days 808G, serial No. 140-SP, was used.

D. TIDE STATIONS:

A portable automatic tide gage, installed at Johns Pass was used for reducing all of the soundings to the plane of mean low water.

E. SMOOTH SHEET:

Not in the scope of this report. (See Processing Office Addendum)

F. CONTROL STATIONS: See Processing Office signal list

Triangulation stations are all on the North American 1927 Datum and are as listed below:

HOT - Clearwater, Belleview Hotel, White Brick Stack (Stack 1925). Geographic position from page 204, Dunnellon to Naples, Fla.

LOO - LOOSE 1925. Geographic position from page 729, Vicinity of Tampa Bay, Fla.

SAX - SAX 1952 - J. C. Bose, Chief of Party.

See Processing Office Addendum

Topographic stations were located on the following surveys:

Register No.	Date	Method of Location
SO-A-49 } To be destroyed subsequent to review of hydro. surveys in the area.		Graphic Control
SO-C-51	1951	" "
SO-D-51	1951	" "
SO-E-51	1951 Bp.49617	" "
T-5826	1941 (RS-1952)	Air-photo Compilation
T-5829	1941 (RS-1952) Bp.49451	" "

G. SHORELINE AND TOPOGRAPHY: See Processing Office Addendum

The shoreline was transferred to the boat sheet from film positives of Topographic sheets T-8324, T-8326 and T-8329.(1941)

The low-water line was not entirely delineated by hydrography. However, the sounding skiff was run as close as possible to the beach at high tide.

H. SOUNDINGS:

Two 808 model fathometers were used, the same machines being transferred from skiff to ship as required. See paragraph 3 under Item C.

Bar Checks were obtained in accordance with 5572 of the Hydrographic Manual and the fathometers adjusted to read the correct depths.

In depths too shoal for the fathometer to record properly, a sounding pole, graduated in feet, was used.

H. SOUNDING CON'T.:

Soundings obtained with the Ship SOSBEE were corrected for settlement and squat in accordance with data contained in the special report on settlement and squat tests made on 28 and 29 May 1951. In applying these corrections, a realistic view of the ships behaviour was taken - in other words, in an area of irregular bottom the average depth was used rather than changing the correction for every place where the depth changed for only a short period of time.

I. CONTROL OF HYDROGRAPHY:

The hydrography was controlled in position by three-point sextant fixes on objects located on the boat sheet as outlined in Item F.

J. ADEQUACY OF SURVEY:

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

Junctions with adjoining surveys are satisfactory. Depth curves are continuous at these junctions. *Review, par. 4.*

K. CROSSLINES:

Crosslines totalling about six percent of the total mileage were run. Discrepancies were not over 1 foot.

L. COMPARISON WITH PRIOR SURVEYS: *Review, par. 5.*

Comparison was made with survey No. H-4572, 1926 scale 1:10,000, and with H-4580, 1924-26, scale 1:40,000. Two 10-foot soundings in the vicinity of Lat. 27° 51.2' Long. 82° 51.8' were found which were not shown on older survey, they probably being missed due to the wide spacing of the lines. The general agreement with the prior surveys is very good.

M. COMPARISON WITH CHART NO. 1257:

This survey is in agreement with chart No. 1257 print date 7/16/51 which is the only one covering the area. *Review, par. 6.*

N. DANGERS AND SHOALS:

No new dangers and shoals were found. *Review, par. 5.*

O. COAST PILOT INFORMATION:

This is an area of open coast with a built-up beach. No protected anchorages are to be found.

P. AIDS TO NAVIGATION:

There are no fixed aids to navigation in this area. The only floating aids are at the entrance to Johns Pass, which was covered at a scale of 1:10,000 on field sheet SO-1351, these floating aids being located during that survey. H-7967 (1951-52)

Q. LANDMARKS FOR CHARTS:

Two elevated water tanks near Johns Pass and Indian Rocks, respectively, are prominent landmarks and are listed on form 567.

R. GEOGRAPHIC NAMES:

No report required.

S. SILTED AREAS:

None found.

T. BY-PRODUCT INFORMATION:

NONE.

~~V~~-Y. MISCELLANEOUS:

None.

Z. TABULATION OF APPLICABLE DATA:

Attached to this report are:

1. Statistics sheet
2. Tidal Note
3. List of Signals
4. Approval Sheet

Submitted by,

Arthur L. Wardwell

Arthur L. Wardwell
Commander, C&GS

STATISTICS

For Hydrographic Survey H-7968 (Field No. SO-2251)

Project CS-336 Scale 1:20,000

U.S.C.& G.S.S. SOSBEE Riley J. Sipe, Comdg.

Day Letter	Vol. No.	Date	Number of Pole Sdgs.	No. of Positions	Statute Miles
a	1	18 Oct. 1951	14	122	40.8
b	1	20 Nov. 1951	2	89	20.7
c	2	26 Nov. 1951	397	140	28.3
A	3	15 Oct. 1951	-	40	12.0
B	3	17 Oct. 1951	-	32	10.2
C	3	19 Feb. 1952	-	37	12.1
D	3	22 Feb. 1952	-	36	12.1
E	3 & 4	22 Apr. 1952	-	133	42.8
F	4 & 5	23 Apr. 1952	-	276	75.3
G	5	24 Apr. 1952	-	157	30.8
H	5 & 6	27 May 1952	-	162	35.1
Totals		15 Oct. 1951 to 27 May 1952	413	1224	320.2

Area = 13.9 square statute miles.

TIDE NOTE

Portable tide gage No. H-301 was located in the entrance at Johns Pass, just outside the bridge, Lat. 27° 47'.05 N., Long. 82° 46'.94 W. Data from this gage, with no corrections for differences in time, were used in reducing all soundings.

The zero of the tide staff was 2.6 feet below the mean low water plane of reference. This figure was furnished by the Washington Office in letter 36-kh, dated 1 November 1951.

APPROVAL SHEET

The survey of the area covered by SO-2251(H-7968) is adequate for charting purposes. The sounding records and boat sheet have been inspected and are approved this date. Additional work is not necessary.

Positions of hydrographic signals as shown on overlay sheets No. 5 & 6 and graphic control sheet SO-C-51 cover the area and are to be used for smooth plotting. These positions do not check positions as shown on the boat sheet as a photogrammetric re-survey was made while hydrography was in progress. Black circles indicate location by photogrammetic methods and red circles are from graphic control sheets.

Riley J. Sipe,
Chief of Party, C&GS

FLOATING AIDS TO NAVIGATION
H-7968

1953 LIGHT LIST	LAT.	LONG.	DEPTH	POS. NO.	DATE
Lighted Buoy JP	27-46.14	82-47.53	17	2A	10/15/51

LIST OF SIGNALS
H-7968

TRIANGULATION STATIONS

HOT CLEARWATER, BELLEVIEW HOTEL, WHITE BRICK STACK (STACK, 1925), 1934
LOO LOOSE, 1925
SAX SAX, 1925

TOPOGRAPHIC STATIONS

(Source, So-A-49 1952 revision)

Hut Poi

(Source, So-C-51 1952 revision)

Nig	Nut	Old	Orb	Pep(d)	Pup	Rip(d)	Rub(d)	Sad	Sip(d)
Sop	Try(d)	Tub(d)	Vim(d)	Wag	[redacted]	Yes(d)			

(Source, RS-450, T-5829, Overlay 5)

Ace	Act	Ado	Age	Alp	Amy	Ant	Jag	Lap	Leg	Lug
Max	Nat	Now	Obi	Out	Pal	Pix	Rev	Sal	Sam	Tan
Tid	Via									

(Source, RS-455, T-5826, Overlay 6)

Apt	Ask	Bay	Bat	Bib	But	Cab	Cam	Cat	Dip	Hi
Meg	Ned	Pad	Pin	Rat	Sis	Wit	Zig			

PHOTOGRAMMETRIC STATIONS

(Source, RS-455)

Wig

GEOGRAPHIC NAMES

Survey No. H-7968

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	
Florida									B.G.N	1
Gulf of Mexico										2
Johns Pass			(tide station)						B.G.N	3
Sand Key			(two places)							4
Indian Rocks Beach									B.G.N	5
Clearwater Harbor										6
										7
					Names approved 12-29-58. L. Heck					8
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										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7968....

Records accompanying survey:

Boat sheets ..1..; sounding vols. ...6..; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 7 Env.;

special reports, etc. .1 Smooth Sheet; 1 Descriptive Report;.....

.....

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

Number of positions on sheet		1224
Number of positions checked		102
Number of positions revised		—
Number of soundings revised (refers to depth only)		0
Number of soundings erroneously spaced		15
Number of signals erroneously plotted or transferred		0
Topographic details	Time	—
Junctions	Time	12
Verification of soundings from graphic record	Time	24

Prelim. Verification by: J.A. Vinsmore --- 30 hrs. --- 13 Jan. 1954

Verification by C.K. Taylor ..... Total time 48 ... Date 26 Mar. 54

Reviewed by J.A. Vinsmore ..... Time 24 ... Date 18 Jan. 1954

Review Addendum .... W Evans 20 4/10/56

M-2232-1

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7968 (Field No. So-2251)

GENERAL

This appears to be an excellent basic survey and no unusual difficulties were experienced during the smooth plot.

Sloughs and pot-holes in most of the area covered created many irregularities in the depth curves and left numerous detached humps outside the general trend of curves.

Sand waves exist at the following positions: Lat. 27-51.0, Long. 82-50.6 and Lat. 27-49.6, Long. 82-51.0.

SHORELINE

The shoreline was projected directly to the smooth sheet from the original 1:10,000 scale manuscripts numbered, RS-449 (T-5824), Bp.49450 RS-455 (T-5826) Bp.49617 and RS-450 (T-5829) Bp.49451 (Revision sheets of 1952)

CONTROL

The topographic control was projected directly to the smooth sheet from overlay 6 (RS-455), Bp.49617 Overlay 5 (RS-450) Bp.49451 and from graphic control sheets So-C-51, So-D-51, So-E-51 and So-A-49 (1952 revisions) (Graphic control sheets to be destroyed after the verification & review of the surveys in the area.)

Respectfully submitted,

Hugh L. Proffitt

Hugh L. Proffitt
Cartographer

Norfolk, Va.
4 December 1953

Approved & Forwarded:

Hugh L. Proffitt for

H.A. Paton
Supervisor, S.E. District.

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7968 FIELD NO. SO-2251

Florida, West Coast, Johns Pass to Indian Rocks

Project No. CS-336

Surveyed Oct.-1951 - May 1952 Scale 1:20,000

Soundings:

808 Fathometer
Pole

Control:

Sextant fixes on shore signals

Chief of Party - J. C. Bose, R. J. Sipe
Surveyed by - I. R. Rubottom, A. L. Wardwell
Protracted by - R. B. Davis, A. Kaupa
Soundings plotted by - A. Kaupa
Preliminary Verification by - T. A. Dinsmore
Verified and inked by -
Reviewed by - T. A. Dinsmore 18 January 1954
Inspected by - R. H. Carstens

1. Shoreline and Signals

The origin of the shoreline and signals is given in the Descriptive Report (see Processing Office Addendum).

2. Sounding Line Crossings

Depths at crossings are in very good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

Sand waves are found in several localities, the most notable example occuring in lat. 27°51.3' long. 82°51.8' where they reach a height of 6 ft. Numerous small detached shoals and depressions also occur throughout the area. Except for these irregularities, the bottom is generally smooth and undulating.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7877 (1950) on the north and H-7967 (1951-52) on the southeast. The transfer of junctional soundings is deferred pending the complete verification of the present survey. Project surveys on the south and west have not yet been received in this office. At these limits, charted depths are in harmony with depths on the present survey.

see Review Addendum

5. Comparison with Prior Surveys

a. H-1557a (1883) 1:40,000

Present survey depths are generally 1-2 ft. less than the depths shown on this early reconnaissance survey. The widely - spaced sounding lines on this small-scale survey do not reveal the detached shoals or bottom irregularities defined by the close development on the present survey. This prior survey has been superseded for charting purposes by the larger-scale surveys discussed in the succeeding paragraph.

b. H-4570 (1926)1:10,000
H-4571 (1926) 1:10,000
H-4572 (1926) 1:10,000
H-4580 (1924-26)1:40,000

These prior surveys taken together cover the area of the present survey. A comparison of the prior and present depths reveals no appreciable changes in the bottom. However, numerous offshore detached shoal soundings obtained on the present survey were apparently not revealed on the prior surveys because of the widely - spaced prior sounding lines.

The 11-ft sounding charted in lat. 27°52.04', long. 82° 51.92', should be disregarded. Originating with H-4580, the prior sounding falls in depths of 15-17 ft. on both the prior and present surveys. The prior sounding is noted in the Descriptive Report of H-4580 as being probably recorded 1 fm. in error. A subsequent check line on the prior survey showed only depths of 17 ft. A 13-ft. sounding slightly northward on the present survey is adequate for charting.

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

6. Comparison with Chart 1257 (Latest print date 4/27/53)

A. Hydrography

The charted hydrography originates with the previously discussed surveys which need no further consideration.

The present survey supersedes the charted information.

B. Aids to Navigation

No aids to navigation are charted within the limits of the present survey.

7. Condition of Survey

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

b. The preliminary inspection and verification of the survey indicates that the smooth plotting was accurately done. Further comment regarding the condition of the survey will be made when the verification of the survey is completed.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

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

Examined and Approved:

H. R. Edmonston
Chief, Nautical Chart Branch

H. Arnold Karo
Chief, Division of Charts

G. R. Fish
Chief, Section of Hydrography

Earl O. Heaton
Chief, Division of Coastal Surveys

ADDENDUM TO REVIEW

H-7968 (1951-52)

Verified and inked by ~~C~~ C. L. Tyosr (Norfolk)
Review Addendum by - L. V. Evans III, 4/5/56
Inspected by - R. H. Carstens

The verification of this survey has been completed. The soundings and depth curves are now completely inked and the junctional soundings have been transferred to adjoining contemporary surveys.

Junction with Contemporary Surveys

Adequate junctions were made with H-7877 (1949-50) on the north, H-7967 (1951-52) on the southeast, and H-7971 (1952) on the south.

Comparison with Chart 858 (latest print date 2/27/56
Chart 1257 (latest print date 12/19/55

The charted hydrography originates with the present survey after preliminary verification and review. No discrepancies with the charted information were noted.

Condition of Survey

Completion of the verification reveals that the smooth plotting was well done.

Approved:

E. R. McCarthy
Chief, Chart Division

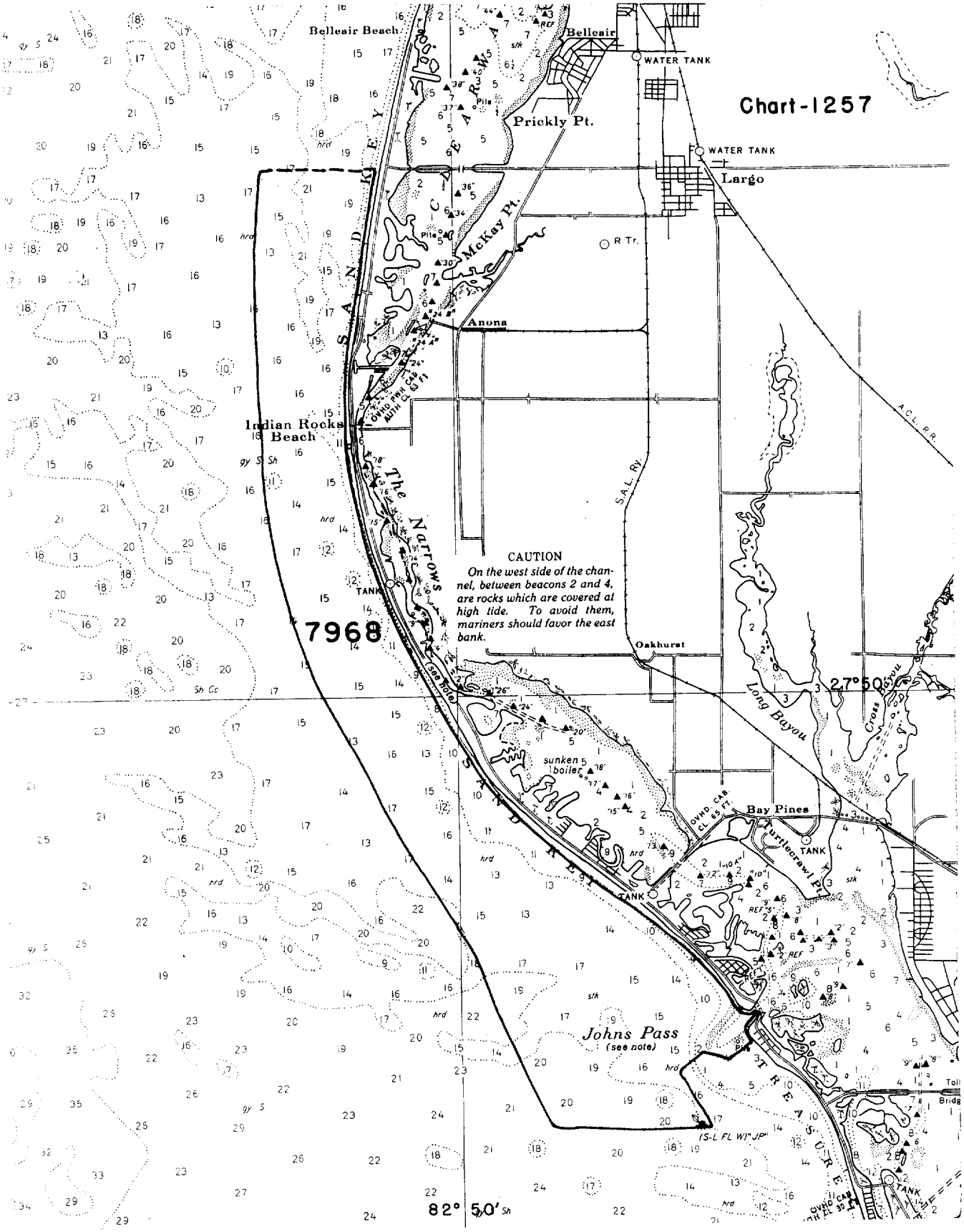
Chart-1257
Belleair Beach
Belleair
WATER TANK
Prickly Pt.
WATER TANK
Largo
McKay Pt.
R Tr.
Anona
Indian Rocks Beach
A.C.L.R.R.
S.A.L. Ry.
The Narrows
CAUTION
On the west side of the channel, between beacons 2 and 4, are rocks which are covered at high tide. To avoid them, mariners should favor the east bank.
7968
Oakhurst
27°50'
Long Bayou
Cross Bayou
sunken boiler
Bay Pines
TANK
Johns Pass
(see note)
82° 50'
Toll Bridge

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~ January 4, 1954

Division of Charts: R. H. Carstens

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 7968

Locality West Coast of Florida

Chief of Party: J. C. Bose) in 1951-52
R. J. Sipe)
Plane of reference is mean low water, reading
2.6 ft. on tide staff at Johns Pass
5.1 ft. below B. M. 1 (1951)

Height of mean high water above plane of reference is 1.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section of Tides
Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 756675

NAUTICAL CHARTS BRANCH

SURVEY NO. 7968

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
12/18/53	858	S.A.M.	Before ~~After~~ Verification and Review Verified after prelim review HBA 5/11/54
16 Nov 1954	858	Ernest H Bell	~~Before~~ After Prelim. Verification and Review Re-examined
2-21-55	1257	E.W.B	Partially appd. ~~Before~~ After Prelim Verification and Review Thru 858
7-8-55	1257	R. K. DeLaunder	Completely applied after prelim. V & R Before After Verification and Review and before curves were inked thru Chart 858
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.