

7971

Diag. Cht. No. L257-2

336

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC
Field No. SO-2152 Office No. H-7971

LOCALITY

State FLORIDA
General locality West Coast
Locality ~~Pass-a-Grille~~ ^{Bunces Pass} to Johns Pass

194 52

CHIEF OF PARTY

Riley J. Sipe

LIBRARY & ARCHIVES

DATE JAN 12 1954

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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-7971

Field No. SO-2152

State Florida

General locality West Coast

Locality Bunces Pass
~~Pass a Grille to Johns Pass~~

Scale 1:20,000 Date of survey 19 February 1952 to 10 July 1952

Instructions dated 2 March 1949

Vessel Ship SOSBEE

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

Surveyed by I. R. Rubottom and A. L. Wardwell *Sipe's office*

Soundings taken by fathometer, graphic recorder, ~~and lead, and pole~~

Fathograms scaled by K. B. Ansell and J. A. Devlin

Fathograms checked by R. W. Larmour

Protracted by Richard D. Lynn

Soundings penciled by Richard D. Lynn

Soundings in ~~120000~~ feet at MLW ~~10000~~

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

RLB

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-7971 (Field No. SO-2152)

West Coast of Florida - Pass-a-Grille to Johns Pass

Scale 1:20,000

19 February to 10 July 1952

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

Riley J. Sipe, Commanding

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 from the northern tip of Mullet Key to the entrance at Johns Pass and extending two to three miles offshore. Both the South Channel and North Channel at Pass-a-Grille are in the area of this survey, the more important North Channel being sounded on a 1:10,000 scale insert on this sheet. Blind Pass also is within the area, but that entrance and the inshore waters extending from there to Johns Pass were surveyed on sheet SO-1152 at a scale of 1:10,000.

H-7969 (1952)

Contemporary surveys with which junction was made are listed below:

SO-2251 on the north H-7968 (1952)

SO-1351 on the north H-7967 (1952)

SO-1152 on the east, at Blind Pass H-7969 (1952)

SO-1252 on the east, at Pass-a-Grille H-7970 (1952)

Field work was started on 19 February and completed on 10 July 1952. Work on this survey was not continuous, as two other sheets in this same project were being done during the same period. Advantage was taken of weather and tides in determining the locality of each days work.

C. VESSELS AND EQUIPMENT:

Skiff No. 735 was used for the hydrography in shoal water along the beach and in the vicinity of the entrances at Pass-a-Grille where there are rather extensive shoal areas. This craft is a 25-foot wooden skiff powered by two ten-horsepower outboard motors and was operated from the ship SOSBEE basing at Gulfport, Florida. The speed of this skiff is about 5 knots maximum, with a turning radius of about 20 meters.

C. VESSELS AND EQUIPMENT: CONT.:

About 60 percent of the sounding was done with the ship SOSBEE a diesel-powered, single-screw, wood hull vessel 63 feet long at the waterline. This vessel has a speed of about 9 knots at the standard sounding engine speed of 1500 R.P.M. 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 for the soundings on A and B days was 808G, serial No. 140-SP. On all other days, 808J, No. 115-S, was used. Both these machines are calibrated for a velocity of sound in sea water of 820 fm/sec.

D. TIDE STATIONS:

Portable automatic tide gages were installed at Johns Pass and at Pass-a-Grille. The Johns Pass tide records were used in reducing all of the soundings except those in the immediate vicinity of Pass-a-Grille, where that tide station was used.

E. SMOOTH SHEET:

Not within the scope of this report.

F. CONTROL STATIONS:

Triangulation^{and topo.} stations are all on the North American 1927 Datum and are as listed below:

- △ VET - Tank, U.S. Veterans Administration Hospital Squat, White Tank 1934. Geographic position from page 206, Dunnellon to Naples, Fla.
- △ ROL - St. Petersburg, Florida Military Academy, cupola, flagpole 1934 (Rolyato 1926). Geographic position from page 206, Dunnellon to Naples, Fla.
- ⊙ SAX - Blind Pass Tank, 1952 - J. C. Bose, Chief of Party
- △ PORT- Gulfport, silver municipal tank, flagpole 1934. Geographic position from page 206, Dunnellon to Naples, Fla.
- △ SAR - Don-Ce-Sar Hotel, silver water tank 1934. Geographic position from page 206, Dunnellon to Naples, Fla.
- ⊙ NOR - Normul 2 U.S.E. 1945. Geographic position from U. S. Engineers. (See Photogrammetric Plot Report, Tampa Photogrammetric Office, Project Ph-91(52)).
- △ MUL - Mullet Key, U.S. Quarantine Station, white wooden water tank (High Quar. W.T. 1908)1934. Geographic position from page 209. Dunnellon to Naples, Fla.

F. CONTROL STATIONS CONT.:

Topographic stations were located on the following surveys:

Register No.	Date	Method of Location
S0-E-51	1951	Graphic Control
HY-D-49	1949-52	" " } to be
HY-C-49	1949-52	" " } destroyed
T-5829	RS-450 - 1941 (R.S. 1952)	Air Photo Compilation
T-5831	RS-452 - " " "	" " "
T-5833	RS-454 - " " "	" " "

G. SHORELINE AND TOPOGRAPHY:

The shoreline was transferred to the boat sheet from film positives of topographic sheets furnished by the Washington Office.

As much as possible of the low water line was delineated by running the sounding skiff close to the beach at high water.

H. SOUNDINGS:

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

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

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

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. A sheet listing these corrections is pasted in front of Volume No. 1. In applying these corrections, a realistic view of the ship's behaviour was taken. Thus in areas of irregular bottom the average depth was used rather than varying the correction for each ridge and depression passed over. (Special Report #19, 1951)

I. CONTROL OF HYDROGRAPHY:

The hydrography was controlled in position by three-point sextant fixes on objects located 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.

K. CROSSLINES:

Crosslines comprising ten percent of the total mileage were run. Discrepancies were not over 1 foot.

L. COMPARISON WITH PRIOR SURVEYS:

Comparison was made with surveys H-4569, 1:10,000 1926; H-4570, 1:10,000 1926; and H-4580, 1:40,000 1924-26. The common area covered by H-4569 is the immediate vicinity of the channels at Pass-a-Grille which area is subject to natural changes in location of channels and shoals. A study of the general configuration shows receding of the shoreline on the peninsula at the northern side of North Channel, considerable change in the locations and shapes of the seaward side of the several small islands between North Channel and Mullet Key, and a southward shift of the deep narrow South Channel. See Item N for discussion of shoal areas investigated.

Comparisons with H-4570 and H-4580 show very good agreement between the old and new surveys, except that depths of the new survey seem to be one or two feet shoaler. This may be due to a general shifting of the sand bottom, or to a better tidal datum for reduction of soundings, or a combination of both. In two places located at approximately Lat. $27^{\circ} 45.2'$ Long. $82^{\circ} 46.7'$ and Lat. $27^{\circ} 44.8'$ Long. $82^{\circ} 46.4'$ are small areas shown surrounded by the 12-foot curve. These positions agree very closely with the old survey. The present survey gives a depth of 10 feet at each of these places, which is 2 feet shoaler than on the old survey. Of course the sounding lines are much more closely spaced on the present survey, thus may pick up shoaler spots.

M. COMPARISON WITH CHART NO. 1257:

This survey is in agreement with chart No. 1257, print date 7/16/51, except for minor differences in the vicinity of the entrances at Pass-a-Grille.

N. DANGERS AND SHOALS:

No definite new shoals were found. A fathometer sounding of 3 feet was obtained at Lat. $27^{\circ} 40.35'$, Long. $82^{\circ} 45.40'$ which is about 80 meters west of Pass-a-Grille North Channel Entrance Light No. 2. Handlead soundings were obtained while drifting over this spot at low tide, the bottom being faintly visible. The least depth thus obtained reduced to $\frac{4}{3}$ feet.

Two spots marked for investigation on the copy of chart 1257 furnished with project instructions are at the two channels at Pass-a-Grille. No. 1 was developed by the skiff work on e day and No. 2 was covered on the 1:10,000 scale insert for North Channel. These are simply changes in the positions of the channels, as can be expected in such areas of shifting sands.

O. COAST PILOT INFORMATION:

In the area of this survey there are three entrances to the inside waters of Boca Ciega Bay. The most northerly one, Blind Pass, is covered on survey SO-1152 at a scale of 1:10,000. At Pass-a-Grille there are two channels of which the northerly one is more definite and better marked. A depth of 5 feet can be carried in across the bar by approaching with the entrance light No. 2 on range with the most southerly hotel on the seawall in Pass-a-Grille Beach (course 42° true). Leave this light close to starboard and proceed on a course of 50° True towards channel marker No. 3. When channel marker No. 5 and light No. 8 are on range, change course to 77° True and proceed through the deep channel where shoal water is visible on both sides. This channel was used several times by the SOSBEE, drawing 6 feet, during the period of this survey, care being taken to navigate it only in calm weather when there was at least a foot of tide. Channel Subject to Change.

South Channel at Pass-a-Grille is deep but narrow for some distance out from the southern tip of Shell Island, but at about longitude 82° 45' it peters out in an area of 3' to 5 foot depths.

As might be expected, fairly strong tidal currents were encountered in the passes. A current survey was made in 1950 and a Tidal Current Chart of Tampa Bay published in 1951. The hydrographic party observed that, while the currents in the deeper channels were axial, those over the shoaler parts on either side appeared to set southerly with the flood and northerly with the ebb.

P. AIDS TO NAVIGATION:

All fixed aids to navigation are to be reported on Form 567 by the Tampa Photogrammetric Office. There are no floating aids to navigation.

Q. LANDMARKS FOR CHARTS:

A low, oval elevated tank at Pass-a-Grille Beach, a much higher tank and prominent hotel building about a mile north, another elevated tank about two miles north, and an oval elevated tank at the northern end of Long Key, at Blind Pass bridge, are prominent landmarks and are to be listed on Form 567 by the Tampa Photogrammetric Office.

R. GEOGRAPHIC NAMES:

No report required.

S. SILTED AREAS:

None found.

T. BY-PRODUCT INFORMATION:

None.

U. - Y. MISCELLANEOUS: ✓

Aerial photographs of this area were taken in February 1952, and the shoreline and topography should be taken from the photogrammetric surveys revised from these latest photographs. In addition, the smooth plotter may find the actual photographs helpful as a supplement to the soundings in defining the outlines of shoal areas. ✓

Z. TABULATION OF APPLICABLE DATA:

Attached to this report are:

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

Submitted by,

Arthur L. Wardwell
Arthur L. Wardwell
Comdr., USC&GS

STATISTICS

For Hydrographic Survey H-7971 (Field No. SO-2152)

Project CS-336

Scale 1:20,000

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

Riley J. Sipe, Comdg.

Day Letter	Vol. No.	Date 1952	No. of Positions	Statute Miles	No. of Pole Soundings
A (blue)	1	19 Feb.	30	9.8	-
B "	1	22 "	20	6.8	-
C "	1	27 May	30	6.9	-
D "	1 & 2	28 "	282	70.0	-
E "	2	29 "	145	34.0	-
F "	2 & 3	17 June	236	59.3	-
G "	3	18 "	342	84.1	-
H "	4	19 "	145	36.6	-
*a "	5	21 April	35	5.1	3
*b "	5	6 May	93	13.2	16
*c "	5	7 "	140	17.7	53
*d "	5 & 6	8 "	153	20.0	32
*e "	6	9 "	112	14.7	41
*f "	6	15 "	95	13.6	6
*g "	7	16 "	42	6.9	-
*h "	7	3 June	4	-	4
a "	8	5 May	68	9.9	-
b "	8	16 "	29	5.1	-
c "	8	22 "	147	22.5	7
d "	8 & 9	23 "	89	13.0	153
*e (red)	9	8 July	204	29.2	57
*f "	9 & 10	9 "	174	25.6	112
*g "	10	10 "	111	15.3	22
Totals			2726	519.3	506

* ⁿ ~~days~~ days worked on 1:10,000 scale insert.

Area = 21.8 square statute miles.

TIDE NOTE

Portable tide gages were maintained in the entrance at Johns Pass, just outside the bridge, Lat. $27^{\circ} 47.05'$ N., Long. $82^{\circ} 46.94'$ W., during the period of this survey, and at the western side of Pass-a-Grille Channel, Lat. $27^{\circ} 41.37'$ N., Long. $82^{\circ} 44.14'$ W., during the period of work in that vicinity. Data from the Pass-a-Grille gage were used in reducing only the soundings obtained by the skiff in the immediate vicinity of that entrance. Johns Pass tides were used in reducing all the other work. ✓

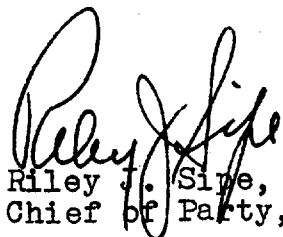
Zero of the tide staff at Johns Pass was 2.6 feet below the mean low water plane of reference, as furnished by the Washington Office in letter 36-kh, dated 1 November 1951. ✓

Zero of the tide staff at Pass-a-Grille was 2.2 feet below the mean low water plane of reference as determined by leveling from the staff to tidal bench marks established in 1949. ✓

APPROVAL SHEET

The survey of the area covered by SO-2152(H-7971) 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. 4, 5, & X ^{2 (to RS-450, 452 and 454)} 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 photogrammetric methods and red circles indicate location by graphic control sheets.



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

LIST OF SIGNALS
H-7971

TRIANGULATION STATIONS

MUL MULLET KEY, U.S. QUARANTINE STA., WHITE, WOODEN WATERTANK (HIGH, 1908), 1934
~~NOR~~ ~~NORMUL 2, U.S.E., 1945~~ Idmk
 PORT GULFPORT, SILVER MUNICIPAL TANK, FLAGPOLE, 1934 Idmk
 ROL ST. PETERSBURG, FLA., MILITARY ACADEMY, GUPOLA, FLAGPOLE, 1934 Idmk
 SAR DON-CE-SAR HOTEL, SILVER WATERTANK, 1934 Idmk
~~SAX~~ ~~SAX, 1952~~
 VET U.S. VETERANS HOSPITAL, (N.W. OF ST. PETERSBURG) SQUAT, WHITE TANK, 1934
Idmk

DESCRIBED TOPOGRAPHIC STATIONS

Cre, 1941 (Idmk) (d) RS-454 (T-5833)
 GAL, 1941 (Idmk) (d) Overlay 4, RS-452 (T-5831)
 TAN, 1941 (Idmk) (d) Overlay 5, RS-450 (T-5829)

TOPOGRAPHIC STATIONS

SOURCE - OVERLAY 5, RS-450 (T-5829)

Ace ✓ Cut ✓ Dug ✓ End (d) ✓ Key ✓ Leg ✓ Max (d) ✓ Nay (d) ✓ Ote ✓ Put ✓ She ✓ Sax (Idmk) (d)

SOURCE - OVERLAY 4, RS-452 (T-5831)

Ant ✓ Bed ✓ Bel (d) ✓ Big (d) ✓ Coo ✓ Dog ✓ Elk (d) ✓ Fig ✓ Fun ✓ Hop (d) ✓ How ✓
 Jag ✓ Ked (d) ✓ Nan ✓ Oak ✓ Rim ✓ Rot ✓ Shy ✓ Tel (d) ✓ Tom ✓ Vig ✓
(Idmk)

SOURCE - OVERLAY 2, RS-452 (T-5831)

Aim ✓ Grill (d) ✓ Hay ✓ Jut ✓ Lam ✓ Mid ✓ Mug ✓ New ✓ Nix ✓ Nod ✓ Odd ✓
 Ora ✓ Peg ✓ Pie ✓ Poi ✓ Rag ✓ Red ✓ Sip ✓ Sox ✓ Tax ✓ Vim ✓ Wig ✓ War ✓

SOURCE RS - 454 (T-5833)

Nat (d) (Idmk) Yea (d) (Idmk)

HYDROGRAPHIC STATIONS

Arm Vol. 9, Pg. 40, Pos. 145e
 Zoo Vol. 9, Pg. 44, Pos. 171e

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7971 (Field No. So-2152)

GENERAL

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

SHORELINE


The shoreline on this survey was transferred from ¹⁹⁵²air-photo compilations RS-450 (T-5829), RS-452 (T-5831) and RS-454 (T-5833).
(1939) (1939) (1939)

All shoreline on a 1:20,000 scale was projected directly to the smooth sheet from the original 1:10,000 scale shoreline manuscripts.

INSERTS

All hydrography, in the approaches to North and South Channels, was smooth plotted on a 1:10,000 insert in order to show bottom configurations more clearly.

Respectfully submitted,


Hugh L. Proffitt
Cartographer.

Norfolk, Va.
8 January 1954

ORIGINAL

ADDENDUM TO

DESCRIPTIVE REPORT FOR SURVEYS

SO-D-51, SO-E-51, HY-A-49, HY-C-49, HY-D-49

TAMPA PHOTOGRAMMETRIC OFFICE

A. PROJECT:

The work consisted of the verification and/or relocation of signals shown on Graphic Control Surveys SO-D-51, SO-E-51, HY-A-49, HY-C-49, HY-D-49, scale 1:10,000. Graphic Control Survey HY-B-49 was not used. The area covered by these surveys is also covered by Revision Surveys 450 to 455, inclusive.

The Instructions for all this work is listed:

<u>Addressee</u>	<u>Date</u>	<u>Reference</u>
1. LCDR Joseph E. Waugh	4/2/52	71-aal
2. C. O. Ship SOSEEE	4/2/52	22/MEK, S-2-50
3. C. O. Ship SOSEEE	4/18/52	21/MEK, S-1-50
4. LCDR Joseph E. Waugh	6/9/52	711-aal
5. LCDR Joseph E. Waugh	6/19/52	711-aal

B. SURVEY LIMITS AND DATES:

The field work on these revision surveys south of approximate Latitude 27° 53' was accomplished by personnel from the Ship SOSEEE during June - August 1952. Identification of signals on field prints was accomplished during this period to supplement the office identification wherever practicable.

C. CONTROL:

Please refer to the radial plot report for Project Ph-91 and submitted with the Compilation Report for Revision Survey 450 for the description of the control used. The verification and/or re-location of the signals were accomplished by photogrammetric methods. The necessary field work was accomplished by personnel working from the Ship SOSEEE in close cooperation with the Tampa Photogrammetric Office.

ORIGINAL

D. DISCREPANCIES:

The differences found are undoubtedly due to the differences in position of the signals used for control.

E. LANDMARKS:

No change. Revised Form 567 is being submitted for the entire project at one time.

F. REVISIONS:

South of approximate Latitude $27^{\circ} 53'$ the location of the signals as shown on the six (6) overlay sheets should be held. Please refer to the recommendation of the Commanding Officer, Ship SOSEEE, made on the hydrographic surveys submitted in the fall of 1952 and that of the Officer-in Charge of the Tampa Photogrammetric Office submitted with Revision Survey 450.

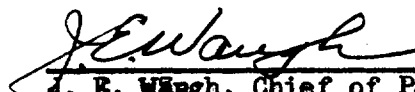
This method of showing the location (on overlays) of the revision surveys was decided by the Commanding Officer, Ship SOSEEE and the Officer-in-Charge of the Tampa Photogrammetric Office. It was agreed that a final location for all signals regardless of the method used in the location should be placed on one common sheet. The method was described in the radial plot. These positions should take precedence over the several graphic control surveys. The graphic control surveys were used to corroborate the final position.

The shoreline detail shown on the several planetable surveys is superseded by the several Revision Surveys.

Revised Forms 524 are being submitted with the Revision Surveys.

G. NEW NAMES:

No change.



J. E. Waugh, Chief of Party

ADDENDUM TO

DESCRIPTIVE REPORT FOR SURVEYS

SO-D-51, SO-E-51, HY-A-49, HY-C-49, HY-D-49

TAMPA PHOTOGRAMMETRIC OFFICE

A. PROJECT:

The work consisted of the verification and/or relocation of signals shown on Graphic Control Surveys SO-D-51, SO-E-51, HY-A-49, HY-C-49, HY-D-49, scale 1:10,000. Graphic Control Survey HY-B-49 was not used. The area covered by these surveys is also covered by Revision Surveys 450 to 455, inclusive.

The Instructions for all this work is listed:

Addressee	Date	Reference
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3. C. O. Ship SOSBEE	4/18/52	21/MEK, S-1-50
4. LCDR Joseph E. Waugh	6/9/52	711-aal
5. LCDR Joseph E. Waugh	6/19/52	711-aal

B. SURVEY LIMITS AND DATES:

The field work on these revision surveys south of approximate Latitude $27^{\circ} 53'$ was accomplished by personnel from the Ship SOSBEE during June - August 1952. Identification of signals on field prints was accomplished during this period to supplement the office identification wherever practicable.

C. CONTROL:

Please refer to the radial plot report for Project Ph-91 and submitted with the Compilation Report for Revision Survey 450 for the description of the control used. The verification and/or relocation of the signals were accomplished by photogrammetric methods. The necessary field work was accomplished by personnel working from the Ship SOSBEE in close cooperation with the Tampa Photogrammetric Office.

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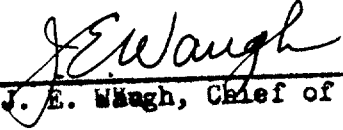
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The shoreline detail shown on the several planstable surveys is superseded by the several Revision Surveys.

Revised Forms 524 are being submitted with the Revision Surveys.

G. NEW NAMES:

No change.



J. E. Waugh, Chief of Party

ADDENDUM TO

DESCRIPTIVE REPORT FOR SURVEYS

SO-D-51, SO-E-51, HY-A-49, HY-C-49, HY-D-49

TAMPA PHOTOGRAMMETRIC OFFICE

A. PROJECT:

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4. LCDR Joseph E. Waugh	6/9/52	711-aal
5. LCDR Joseph E. Waugh	6/19/52	711-aal

B. SURVEY LIMITS AND DATES:

The field work on these revision surveys south of approximate Latitude $27^{\circ} 53'$ was accomplished by personnel from the Ship SOSBEE during June - August 1952. Identification of signals on field prints was accomplished during this period to supplement the office identification wherever practicable.

C. CONTROL:

Please refer to the radial plot report for Project Ph-91 and submitted with the Compilation Report for Revision Survey 450 for the description of the control used. The verification and/or relocation of the signals were accomplished by photogrammetric methods. The necessary field work was accomplished by personnel working from the Ship SOSBEE in close cooperation with the Tampa Photogrammetric Office.

D. DISCREPANCIES:

The differences found are undoubtedly due to the differences in position of the signals used for control.

E. LANDMARKS:

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F. REVISIONS:

South of approximate Latitude $27^{\circ} 53'$ the location of the signals as shown on the six (6) overlay sheets should be held. Please refer to the recommendation of the Commanding Officer, Ship SOSBEE, made on the hydrographic surveys submitted in the fall of 1952 and that of the Officer-in Charge of the Tampa Photogrammetric Office submitted with Revision Survey 450.

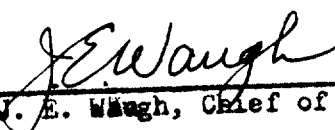
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The shoreline detail shown on the several planetable surveys is superseded by the several Revision Surveys.

Revised Forms 524 are being submitted with the Revision Surveys.

G. NEW NAMES:

No change.



J. E. Waugh, Chief of Party

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. **HY-A-49**

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE **FLORIDA**

GENERAL LOCALITY **BOCA CIEGA BAY**

LOCALITY **MAXIMO POINT**

SCALE **1:10,000**

DATE OF SURVEY **August**, 19 **52**

VESSEL **Ship SOSSEE**

CHIEF OF PARTY **RILEY J. SIFE**

SURVEYED BY **RILEY J. SIFE**

INKED BY **RILEY J. SIFE**

HEIGHTS IN FEET ABOVE MHW OR _____ TO GROUND TO TOPS OF TREES

CONTOUR APPROXIMATE CONTOUR _____ FORM LINE INTERVAL _____ FEET

PROJECT NUMBER **CS-336 and PH-91(52)**

REMARKS

This graphic control sheet was for the location of hydrographic signals and Non-Floating Aids to Navigation. No shoreline detail is shown.

Standard planstable methods were employed.

Triangulation was used as control.

The signals on this survey have been incorporated on Overlay No. 1 and Revision Survey 454 and these latter positions take precedence.

FORM 597a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. **HY-C-49**

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE
FLORIDA

GENERAL LOCALITY
WEST COAST

LOCALITY
PASS-A-GRILLE BEACH

SCALE
1:10,000

DATE OF SURVEY
July, 19 **52**

VESSEL
Ship SOSSEE

CHIEF OF PARTY
RILEY J. SIFE

SURVEYED BY
RILEY J. SIFE

INKED BY
Personnel from Ship SOSSEE

HEIGHTS IN FEET ABOVE MHW OR _____ TO GROUND TO TOPS OF TREES

CONTOUR APPROXIMATE CONTOUR FORM LINE INTERVAL _____ FEET

PROJECT NUMBER
CS 336 and HH-91(52)

REMARKS

This graphic control sheet was for the location of hydrographic signals. No shoreline detail is shown.

Standard planetable methods were employed. Triangulation Stations were used as control.

The signals on this survey have been incorporated on Overlay No. 2 and Revision Survey 452 and these latter positions take precedence.

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. **HY-D-49**

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE **FLORIDA**

GENERAL LOCALITY **WEST COAST**

LOCALITY **TREASURE ISLAND, LONG KEY, BOCA CIEGA BAY**

SCALE **1:10,000**

DATE OF SURVEY **Jan.-Feb.**, 19 **52**

VESSEL **Ship SOSBEE**

CHIEF OF PARTY **J. C. BOSE**

SURVEYED BY **V. ENGUSTIAN**

INKED BY **Personnel from Ship SOSBEE**

HEIGHTS IN FEET ABOVE MHW OR _____ TO GROUND TO TOPS OF TREES

CONTOUR APPROXIMATE CONTOUR FORM LINE INTERVAL _____ FEET

PROJECT NUMBER **CS-336 and Ph-91(52)**

REMARKS

The signals and shoreline revision on this survey have been incorporated on Overlay Nos. 2, 4 and 5 and Revision Surveys 450 and 452. These latter positions take precedence.

DESCRIPTIVE REPORT

TO ACCOMPANY SHEET T (HY-D-49)

BOCA CIEGA BAY, FLORIDA

SCALE 1:10,000

JAN.-FEB. 1952

USC&GS Ship SOSBEE

J. C. BOSE, COMDG.

A. PROJECT:

This survey accomplished under Project CS-336 in compliance with Instructions dated 2 March 1949.

B. SURVEY LIMITS AND DATES:

This survey covers Boca Ciega Bay and Gulf Coast from Treasure Island Causeway to DON CE SAR HOTEL Tank.

The work was accomplished during part of January and February 1952.

C. CONTROL:

Only triangulation stations were used as control in all planetable setups.

A traverse was run along the beach but an error made it necessary to completely rerun it. Since the geographic position of tank at the east end of Blind Pass Bridge was computed by triangulation, checks could be made on it as well as triangulation station TILE, 1926, in rerunning the traverse. As a result there was no error of closure.

A magnetic meridian was obtained by setting up over triangulation station OYSTER 2, R. M. 2.

No unusual methods were employed.

D. LANDMARKS:

Landmarks recommended for charting:

Tank at east end Blind Pass bridge.

E. REVISIONS:

All new fills and new piers were included.

The position of a built signal station "APT" fell slightly off the aluminum section of the sheet and it is recommended that another topographic sheet include that signal.

The tank at the east end of Blind Pass Bridge was computed and called SAX, 1952.

F. NEW NAMES:

No new names are recommended.

G. LIST OF PLANETABLE POSITIONS:

All recoverable topographic stations have been listed separately on Forms No. 524.

All Nonfloating Aids for Charts have been submitted on Form 567.

V. ENGUSTIAN
Deck Officer, USC&GS

RAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF HYDROGRAPHY AND TOPOGRAPHY~~

25 January 1954

Division of Charts: R. H. Carstens

Plane of reference approved in
10 volumes of sounding records for

HYDROGRAPHIC SHEET 7971

Locality West Coast of Florida

Chief of Party: R. J. Sipe in 1952
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)

2.2 ft. on tide staff at Pass-a-Grille
6.7 ft. below B.M. 2 (1949)

Height of mean high water above plane of reference is as follows:

Johns Pass = 1.5

Pass-a-Grille = 1.3 feet

Condition of records satisfactory except as noted below:

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

GEOGRAPHIC NAMES

Survey No. H-7971

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List			
<u>Florida</u>			(title)						B.G.H.		1
<u>Gulf of Mexico</u>											2
<u>Pass-a-Grille Channel</u>			(title of large-scale section)						B.G.H.		3
<u>Pass-a-Grille Beach</u>			(name of town)	(Tide station)							4
<u>Mullet Key</u>											5
<u>South Channel</u>									B.G.H.		6
<u>North Channel</u>									"		7
<u>Shell Key</u>											8
<u>Johns Pass</u>			(Tide station)						B.G.H.		9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names approved
1-21-54 L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ~~H-7971~~ H-7971..

Records accompanying survey:

Boat sheets ..1...; sounding vols. .10...; wire drag vols.;
 bomb vols.; graphic recorder rolls 11. Env.;
 special reports, etc. 1. Descriptive Report; 1. Smooth Sheet;.....

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

Number of positions on sheet	.....	2726
Number of positions checked	.....	50
Number of positions revised	.....	0
Number of soundings revised (refers to depth only)	.....	347 *
Number of soundings erroneously spaced	.....	4
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	26
Junctions	Time	24
Verification of soundings from graphic record	Time	4

Verification by *J.E. Gearhart*..... Total time *151*..... Date *3.8.55*

Reviewed by *A.P. STIRN*..... Time *46 hrs.* Date *4/7/55*

* Largely from adjustment of junction with insert

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7971

FIELD NO. 30-2152

Florida, Florida West Coast, Bunces Pass to Johns Pass

Project CS-336

Surveyed Feb. - July, 1952

Scale 1:20,000 and
1:10,000

Soundings:

808 Fathometer
Sounding 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. D. Lynn
Soundings plotted by - R. D. Lynn
Verified and inked by - J. E. Gearhart
Reviewed by - A. R. Stirni 4/7/55
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with air-photographic revision surveys R. S.-450 (1952) (T-5829, R. S.-452 (1952) (T-5831), and R. S.-454 (1952) (T-5833).

Two piles, one at lat. $27^{\circ}40.76'$, long. $82^{\circ}44.88'$, and the other at lat. $27^{\circ}40.78'$, long. $82^{\circ}44.63'$ were transferred to the present survey from planetable survey T-7105 (1948). The existence of the first pile was noted in the sounding volumes of the present survey.

The sources of the signals are given in the Descriptive Report. Graphic control surveys ^{Hy-C-1949}Hy-C-1949 and Hy-D-1949 have been marked for destruction. All pertinent information thereon has been transferred to the present survey.

2. Sounding Line Crossings

Depths at sounding line crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

The bottom is generally smooth and undulating except in the vicinity of North and South Channels where numerous sand ridges are evident on the shoal flats bounding the channels.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7967 (1951-52) and H-7968 (1951-52) on the north, H-7969 (1952) on the northeast and H-7970 (1952) on the southeast in the vicinity of North and South Channels. There are no contemporary surveys on the west and south. Depths on the present survey are generally 1-2 ft. shallower than charted soundings in these areas.

5. Comparison with Prior surveys

- | | | |
|----|-----------------------------------|---------------------------------|
| a. | H-1178a (1873), 1:20,000 | H-1486a (1881), 1:40,000 |
| | <u>H-1262 (1874-75), 1:20,000</u> | <u>H-1557a (1883), 1:40,000</u> |

Present survey depths are generally 1-2 ft. less than the depths shown on the earlier surveys. The 1-to 2-mile spacing of sounding lines on the prior surveys is of a reconnaissance nature consequently these surveys have been superseded for charting purposes by the surveys discussed in the succeeding paragraph.

- | | |
|----|-----------------------------------|
| b. | H-4569 (1926), 1:10,000 |
| | H-4570 (1926), 1:10,000 |
| | <u>H-4580 (1924-26), 1:40,000</u> |

Present survey depths are also 1-2 ft. shallower than the depths on the surveys made in 1924-26. The shoaling is most pronounced in depths greater than 12-ft. and results in an approximate 200-to 400-meter offshore shift of the 18-ft. curve compared with the 18-ft. curve on the prior surveys. At the channel entrances various changes have occurred since 1926, largely resulting from the scouring of the bottom and erosion of the islands during storms. It is noted in this area that South Channel is definitely shifting southward, and that scouring has occurred in lat. $27^{\circ}39.7'$, long. $82^{\circ}45.6'$ where present depths of 9-10 ft. supersede prior depths of 5 ft.

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

6. Comparison with Chart 586 (Latest print date 11-15-54)

A. Hydrography

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

The charted information is superseded by the present survey in the common area.

B. Aids to Navigation

The charted aids to navigation located on the present survey are the four beacons and the light marking North Channel (approx. lat. $27^{\circ}40.7'$, long. $82^{\circ}45.0'$), all of which have been either moved or renumbered subsequent to the date of the present survey. The changes are noted in H.O.N.M. 50, 1953.

7. Condition of Survey

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

(b) The smooth plotting was accurately done.

(c) The use of aerial photographs (flown in Feb., 1952) in conjunction with shoal water hydrography, as suggested by the hydrographer, proved to be an excellent as well as economical means of checking the delineation not only of the low water curve but also of parts of the 3-ft. curve.

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 recommended.

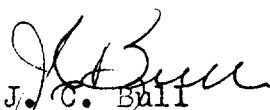
Examined and Approved:



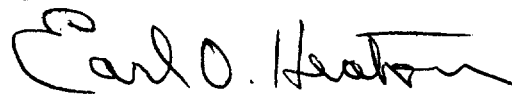
H. R. Edmonston
Chief, Nautical Chart Branch



E. R. McCarthy
Acting Chief, Chart Division



J. C. Ball
Chief, Hydrography Branch



Earl O. Heaton
Chief, Division of Coastal Surveys

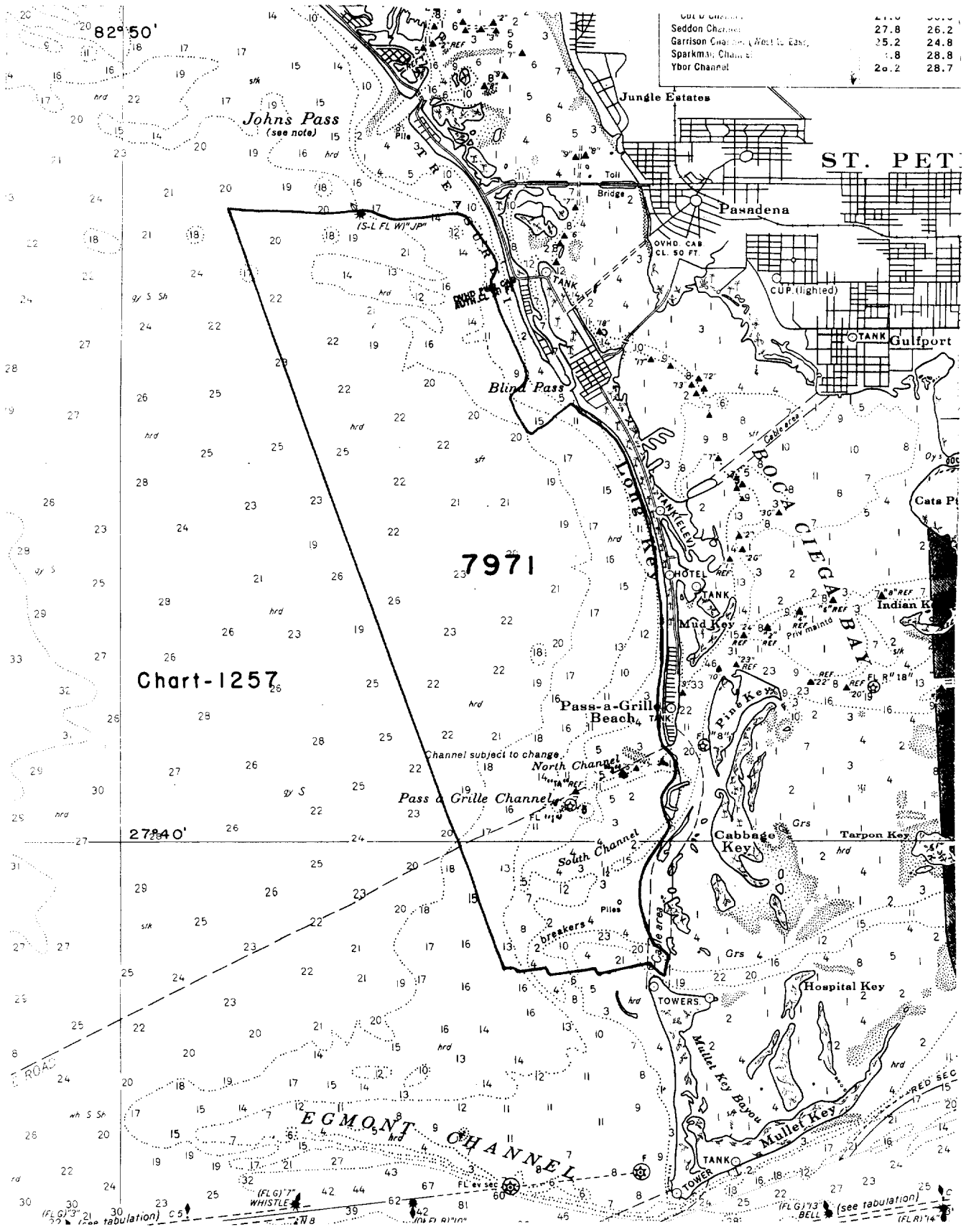


Chart-1257

7971

ST. PET.

(FLG) 7 WHISTLE

(FLG) 73 BELL (see tabulation)

(FLR) 14

