

# 8216

Diag. Cnt. No. 1242-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. BN-2153 Office No. H-3216

### LOCALITY

State Georgia

General locality Coast of Georgia

Locality Off St. Simons Sound

19454-55

### CHIEF OF PARTY

H.J. Seaborg and M.T. Paulson

### LIBRARY & ARCHIVES

DATE April 19, 1956

8216

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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-8216

Field No. Bn-2153

State GEORGIA

General locality COAST OF GEORGIA

Locality OFF ST. SIMONS SOUND

Scale 1:20,000 Date of survey 27 Jan. 1954 to March 1955

Instructions dated 2 October 1953; 13 Dec. 1954

Vessel SHIP BOWEN & EAST COAST FIELD PARTY

Chief of party H.J. SEABORG & MARVIN T. PAULSON

Surveyed by H.J. SEABORG; J.R. PLAGMIER; J.F. VANCE; R.H. HOULDER; M.T. PAULSON;  
C.W. TUPPER & E.K. McCAFFREY

Soundings taken by ~~echo sounder~~ graphic recorder, hand lead, ~~and~~ SOUNDING POLE

FATHOGRAMS SCALED BY: SHIP PERSONNEL CHECKED BY: SHIP PERSONNEL &

Protracted by W.L. JONNS NORFOLK PROCESSING OFFICE

Soundings penciled by W.L. JONNS

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

REMARKS: This folder contains descriptive reports for the 1954 & 1955 seasons.

27/5

# DESCRIPTIVE REPORT

To Accompany

INSHORE HYDROGRAPHIC SURVEYS

FIELD NOS. BN-2153 & 1253

ST. SIMONS SOUND, GEORGIA

U. S. C. & G. S. S. BOWEN

Harold J. Seaborg, Commanding

Scale, 1:10,000 H-8215  
1:20,000 H-8216

6 January - 22 March 1954

## A. PROJECT

A basic hydrographic survey was accomplished in the immediate vicinity of St. Simons Sound, Georgia, under instructions for Project GS-365, dated 2 October 1953. ✓

## B. SURVEY LIMITS AND DATES

Field work commenced on 6 January 1954 and terminated on 22 March 1954.

The survey on sheet BN-1253 <sup>H-8215</sup> is bounded on the East by Long. 81 - 21 - 15, and on the West by the mainland. Inside the sound, the North and South limits are Lat. 31 - 10 - 15 and Lat. 31 - 06 - 45. On the outer coast, these limits are Lat. 31 - 10 - 00 and Lat. 31 - 03 - 50. ✓

Junction was made with prior surveys H-5590 and H-5579 of 1934 at a scale of 1:10,000, and H-4462 of 1924 at a scale of 1:20,000.

The survey on sheet BN-2153 <sup>H-8216</sup> is bounded by Lat. 31 - 13 - 50 on the North, Long. 81 - 08 - 50 on the East, Lat. 31 - 00 - 10 on the South, and Long 81 - 22 - 30 on the West.

Junction was made at the south with survey H-4464 of 1924 at a scale of 1:20,000, and at the north with survey H-3983 of 1916-17 at a scale of 1:80,000. <sup>TP. 4</sup> Review

## C. VESSELS AND EQUIPMENT

<sup>H-8216</sup>  
Sheet 2153 was accomplished using the Ship BOWEN and a private launch referred to in the records as Launch No. 5. The BOWEN, sounding at a speed of 800 R.P.M. or about 10 knots-per-hour, has a turning radius of 75 meters. All soundings by the Ship BOWEN were obtained using fathometer No. 157 SPX, an 808-J type portable depth recorder. Fathometer No. 100 S was used on Launch No. 5 which sounded at a speed of about 5 knots-per-hour. This speed was erratic however, due to the poor condition of the launch engine.

<sup>H-8215</sup>  
Sheet 1253 was accomplished using four launches and an aluminum skiff. In the sounding volumes, these launches have been numbered from No. 1 to No. 4. ✓

## VESSELS AND EQUIPMENT (continued)

Launch No. 1 is a U.S. Coast Guard motor launch. Sounding speed was 7 knots ~~per hour~~ and at this speed the turning radius was 20 meters. ✓

Launch No. 2 is a U.S. Coast Guard picket boat. Sounding at 8 knots ~~per hour~~, the turning radius was 20 meters. ✓

Launch No. 3 is an 18-foot aluminum skiff, obtained from Photogrammetric Party No. 1. Powered by two 10-HP outboard motors, the skiff had a sounding speed of 6 knots ~~per hour~~ and a turning radius of 20 meters. ✓

Launch No. 4 was a private launch hired for the survey. This launch has now been acquired by the Coast Survey and has a designation of CS-175. At the sounding speed of 10 knots ~~per hour~~, the turning radius of the launch was 10 meters. ✓

Fathometer No. 160 SPX was used for all sounding by these four launches.

## D. TIDE AND CURRENT STATIONS

An automatic portable tide gage was maintained on the Community Pier at St. Simons Island, Georgia, and was used to furnish tide corrections for both sheets. During the four days that the gage was not in operation, hourly heights were furnished by the Washington Office and were based on observed tides at Fort Pulaski, Georgia. ✓

There was no investigation of currents. ✓

## E. BOAT SHEETS

Both boat sheets were furnished by the Norfolk Processing Office. A Shoran calibration sheet was also furnished by this office, and materially increased the value of the Shoran calibration checks. ✓

## F. CONTROL STATIONS

A list of Control Stations is appended to this report. These stations were located by triangulation, plane table topography, photogrammetry, and sextant cuts. Four stations located by the photogrammetrist are partially dependent on sextant cuts. This information has been appended to this report, but more complete information will be found in the photogrammetrist's report. ✓

A separate report has been submitted pertaining to the plane table survey.

## G. SHORELINE AND TOPOGRAPHY

Shoreline and topography are to be obtained from Photogrammetric Survey PH-83, 1953, of the area except along Jekyll Island, where the shore line was located by standard plane table survey. ✓

T-9956(N), T-9956(S), T-9955(S), { BN-A-52 / plane table sheet marked  
BN-B-54 / for destruction

## H. SOUNDINGS

All soundings were obtained using Submarine Signal Company type 808-J portable depth recorders.

## SOUNDINGS (continued)

Standard procedure was used in obtaining all usual corrections applicable. Additional corrections for faulty fathometer speed have also been tabulated where required. These corrections have all been entered in the sounding volumes, and the analysis forwarded to the Norfolk Processing Office.

Leadline soundings and bottom characteristics were obtained in accordance with the Hydrographic Manual.

### I. CONTROL OF HYDROGRAPHY

H-8216 Two station Shore control was used for the major portion of the work on sheet 2153. A small amount of three point fix control, using sextants, was necessary for the inner portion of the main ship channel. All launch work was sextant controlled (paragraph F of this report).

### J. ADEQUACY OF SURVEY

H-8215- The survey on sheet 1253 complies with instructions and is considered to be adequate and complete.

H-8216- The survey accomplished by the Ship BOWEN on sheet 2153 is also considered to be adequate and complete, and in compliance with instructions. Between these two surveys is an area only partially surveyed by Launch No. 5. Completion of the survey in this area was not possible because of the necessity of returning the ship to Norfolk. (Completed in 1955)

### K. CROSS LINES

Cross lines were run in compliance with paragraph 357 of the Hydrographic Manual.

### L. COMPARISON WITH CHART AND PRIOR SURVEYS

A comparison was made with prior surveys Nos. H-4444, 4462, 5579, and TP 5 & 6 5590, and with charts Nos. 447 and 1242. Except for an apparent shoaling action on the northern side of the access channel (see paragraph N), no unexpected changes of the bottom were noted. (Paragraph L continues on next page)

### N. DANGERS AND SHOALS

A dangerous shoaling action in the ship channel, St. Simons Sound, at Lat.  $31^{\circ}-05.94'N$ , Long.  $81^{\circ}-19.79'W$ , was the subject of a special report to the Director, dated 1 March 1954. The District Engineer, Savannah, Georgia, and the U. S. Coast Guard, have been notified of this shoal. (Chart letter 200,1954)

US Hydrographic Office  
Fathometer Rpt - none submitted  
Shoran Rpt - none submitted  
Sextant Rpt - H. J. Seaborg 1954/11  
Triangulation - " 1954/11  
Shoran correction  
Fathometer Corrections } 1954 (filed in one cabinet with H-8216)  
Velocity Corrections }

## L. COMPARISON WITH CHART AND PRIOR SURVEYS (continued)

With reference to the preliminary review, the following items were investigated.

### Item No.

### Remarks

- 15 The charted pole has been destroyed. Two poles in the immediate vicinity were located and their positions noted in the sounding volumes. *H-8215*
- 16 This cupola should be deleted from charts Nos. 1242 and 447. ✓  
*φ 31° 07.70, λ 81° 18.60*
- 17 No evidence of a 16 foot shoal was found in this area. It is assumed that a one fathom error was made, as the new records show a general 22 foot depth. *(see P6 R=View)*
- 18 This area was developed with an apparent shoalest depth of <sup>15</sup> ~~14~~ ft. ✓  
*φ 31° 04.2, λ 81° 18.4*
- 19 A report pertaining to this shoaling action has been forwarded to the Washington Office. ~~A copy thereof is appended to this report.~~ See paragraph N of this report (previous page). *(CL 200,1954)*
- 20 There is no pile at this location. *(H-8215)*
- 21 The 14 foot sounding was developed, but appears to be the shoalest depth. *(H-8215)*
22. The islets referred to are oyster beds. *(H-8215)*
23. This area was carefully investigated, and the information is recorded in the sounding volumes. Bridge clearances are listed in the Coast Pilot Report. *(H-8215)*
24. The wreck noted should be deleted from the chart. *(H-8215)*
25. The controlling depth of this channel appears to be 9.0 feet. *(H-8215)*
26. These items were included in a previous report, a copy of which is appended to this report.

## O. COAST PILOT INFORMATION

A separate report, copy of which is appended, has been submitted to the Director on Coast Pilot changes.

## P. AIDS TO NAVIGATION AND LANDMARKS FOR CHARTS

A separate report has been submitted for Nonfloating Aids and Landmarks for Charts. A copy is appended to this report. A list of Floating Aids to Navigation is attached.

Respectfully submitted,

APPROVED AND FORWARDED,

Harold J. Seaborg, Cdr, USC&GS,  
Chief of Party.

Richard H. Houlder,  
Ensign, U.S.C. & G.S.

TIDAL NOTE

Hourly heights for the area covered by this survey were obtained from a portable tide gage maintained at the Community Pier, on St. Simons Island, Georgia.

Lat.  $31^{\circ}-08.01$ ; Long.  $81^{\circ}-24$ .

During the four days that this gage was not in operation, hourly heights were furnished by the Washington Office, and were based on observed tides at Fort Pulaski, Georgia.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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-8216

Field No. Bn-2153 (1955 SEASON)

State GEORGIA

General locality COAST OF GEORGIA

Locality OFF ST. SIMONS SOUND

Scale 1:20,000 Date of survey 24 Feb. to March 1955

Instructions dated 2 Oct. 1953 & 13 Dec. 1954

Vessel EAST COAST FIELD PARTY

Chief of party MARVIN T. PAULSON

Surveyed by MARVIN T. PAULSON, C.W. TUPPER & E.K. McCAFFREY

Soundings taken by ~~HYDROGRAPHIC~~ graphic recorder, hand lead, ~~WIRE~~ SOUNDING POLE

Protracted by W.L. JONNS

Soundings penciled by W.L. JONNS

Soundings in ~~1000~~ feet at MLW ~~MEAN~~ and are true depths

REMARKS:



DESCRIPTIVE REPORT ADDENDUM

TO ACCOMPANY

HYDROGRAPHIC SHEET H-8216 (Field No. BO 2153B)

Vicinity of St. Simons Sound, Georgia

EAST COAST FIELD PARTY

M. T. PAULSON, CHIEF OF PARTY

PROJECT CS-365

SCALE 1:20,000

24 February - 31 March 1955

\* \* \* \* \*

A. PROJECT

A basic survey in the immediate vicinity of St. Simons Sound, Georgia under instructions as follows:

Instructions 22/MEK, S-2-BN dated 2 October 1953,  
addressed to the Commanding Officer, USC&GS Ship BOWEN. ✓

Supplemental Instructions 22/MEK, Field Party, East Coast dated 2  
October 1955, addressed to CDR. Clarence R. Reed, Officer in  
Charge, East Coast Field Party. ✓

B. SURVEY LIMITS AND DATES

Field work commenced on 24 February 1955 and terminated on 31 March 1955. ✓

The survey on this sheet is a completion of the survey begun by the Ship BOWEN 1954. The area completed is bounded on the north by latitude  $31^{\circ} 10.0'$ , on the south by the entrance channel to St. Simons Sound, on the west by longitude  $81^{\circ} 21.4'$ , and on the east by a diagonal line from longitude  $81^{\circ} 19.0'$  at the north end to longitude  $81^{\circ} 18.1'$  on the south end in mid-channel. ✓

Several cross-lines and splits were run in the area directly south of the above area to latitude  $31^{\circ} 00.10$ .

Junction and overlap was in close agreement with the survey by the BOWEN on sheet BQ-2153A and BQ02153B. (H-8216)

C. VESSELS AND EQUIPMENT

(H-8216)  
Launch No. 175 was used entirely on Sheet 2153. It was operated from the C.G. Boathouse on St. Simons Island near Lanier Island. Launch 175 was operated at a sounding speed of 1700 RPM (8.5 Knots) having a turning radius of 10 meters at this speed. ✓

808 type fathometer, No. 77, was used for all sounding with the transducer units mounted inboard just aft of the engine. ✓

D. TIDE AND CURRENT STATIONS

A portable automatic tide gage was maintained on the Community Pier

(D.CONTD) at St. Simons Island. Tidal data for the entire survey was taken from this gage. The tidal note is appended to this report. Smooth tide curves will be submitted in a separate envelope.

E. SMOOTH SHEET

*was*  
The smooth sheet ~~will be~~ plotted by the Norfolk processing office.

F. CONTROL STATIONS

Control consisted of triangulation and photo-hydro stations. Photo-hydro signals were plotted on the Topographic Manuscripts T-9956(N), T-9956 S, and T-9955 S by photogrammetrist J. Guth. These were then transferred to the boat sheet. One additional hydrographic signal was located.

G. SHORELINE AND TOPOGRAPHY

*graphic control survey BN-A-54, which was marked for*  
The shoreline and topographic detail was transferred from Topographic Manuscripts T-9956(N), T-9956-S, and T-9955-S. There was no shoreline that had to be developed on Sheet 2153. The low water line on shoals that bare at MLW was developed by soundings at high tide. *(H-8216)*

*destruction, and*

H. SOUNDINGS

Soundings were obtained with an 808 type graphic recorder, with the least depths being verified by the hand lead and sounding pole in accordance with section 46 of the Hydrographic Manual.

Standard procedure was used in obtaining velocity correction. All corrections have been entered in the Sounding Volumes and an abstract of Velocity Corrections is appended to this report. Velocity curves will be submitted in a separate envelope.

I. CONTROL OF HYDROGRAPHY

Hydrography was controlled by three point fixes. No unusual jumps were observed in changing control stations.

J. ADEQUACY OF SURVEY *(H-8216)*

The survey on Sheet BO-2153 B complies with instructions and is considered adequate to supersede prior surveys for charting.

No additional sheets on this project were started because of limited time.

K. CROSS LINES

Cross lines were run to the extent of 8-10% of regular system of sounding lines excluding development and agreement was satisfactory.

L. COMPARISONS WITH PRIOR SURVEYS

A comparison with prior survey H-4462 (Scale 1:20,000 1924) and Chart 447-(Rev. 1953) showed some discrepancies caused by shifting sand bottom. The comparison with prior surveys together with the preliminary review of Chart 447 are listed in the following item M.

M. COMPARISON WITH CHART AND PRIOR SURVEYS

*1242*  
The following items refer to the Preliminary Review of Chart ~~447~~ dated 1953. Items 15, 16, and 18, on Chart ~~447~~ which are applicable to

*1242*

this survey were described in the descriptive report submitted by the BOWEN in 1954 for sheets BN 2153 and BN 1253. (H-8215)

H-8216

Item No. on  
Preliminary Review

Remarks

Dashed Area The 12' sounding circled in lat.  $31^{\circ} 07.30$ , long.  $81^{\circ} 20.49$  was not found in this exact location; however, the 12' depth curve is located only <sup>100</sup> meters west of the charted depth. ✓

Dashed Area The 1 ft. sdg. in lat.  $31^{\circ} 07.12$ , long.  $81^{\circ} 21.08$  has shifted north <sup>85</sup> ~~425~~ meters and bares 1 foot at MLW. The sand bar that bares at MLW is fully described under N-DANGERS AND SHOALS. Item 1, P.N. ✓

Dashed Area The 1 ft. sdg. lat  $31^{\circ} 07.43$ , long.  $81^{\circ} 21.35$  was not found. Shoalest depth was 3 ft. ✓

Dashed Area The 2 ft. sdg. charted at lat.  $31^{\circ} 07.29$ , long.  $81^{\circ} 21.22$  was not found. Shoalest depth was <sup>5</sup> ft. ✓

Dashed Area The 5 ft. sdg. charted at lat.  $31^{\circ} 07.50$ , long.  $81^{\circ} 21.03$  was found to be shifted only <sup>100</sup> meters NW. ✓

Dashed Area The 6 ft. sdg. charted at lat.  $31^{\circ} 07.50$ , long.  $81^{\circ} 20.88$  was verified as shown. (7 ft 5/5) ✓

Dashed Area The 2 ft. sdg. shown at lat.  $31^{\circ} 07.00$ , long.  $81^{\circ} 21.00$  was found to be shifted NW <sup>100</sup> meters. ✓

Dashed Area The shoal of 6 ft. and 5 ft. in lat.  $31^{\circ} 06.79$ , long.  $81^{\circ} 20.15$  was verified as charted. ✓

Dashed Area The 6 ft. sdg. at lat.  $31^{\circ} 06.05$ , long.  $81^{\circ} 19.43$  has shifted <sup>90</sup> ~~120~~ meters SW. (see TPN, Item 3) ✓

Item 19 Transfer of the channel limits to sheet 2153 shows the shoal to be encroaching along the north edge of the channel. The shoal that shows on Chart 447, print date 54-10/25 Correction date 22 Jan. 55, encroaching half way across the channel in lat.  $31^{\circ} 05'-55''$ , long.  $81^{\circ}-19'-48''$  is not in agreement with sheet BO 2153B. This shoal was the subject of a special report mentioned in the Ship BOWEN'S descriptive report for sheets BN-2153 and BN-1253 1954. The new location of Nun "8", Volume 8 of 9 page 70, shows the buoy to be set well inside the channel to allow for this shoal. The shoalest soundings between buoys Nun "6" and Nun "8" is 12 ft. Prior to the printing of a new chart it would be advisable to contact the Coast Guard for information concerning the location of buoys in the channel. ✓

see  
TPG  
Re-  
view

JFK checking with CG 9-4-56  
for 100' buoys on Chart 447  
RND 9-4-56

## N. DANGERS AND SHOALS

<u>ITEM</u>	<u>LOCATION</u>	<u>REMARKS</u>
1.	lat. 31-08'. long. 81-21'.	Extensive shoaling in this area is noted. The two shoals labeled on the boat sheet were outlined by detached pole soundings on half tide. (Volume 7 of 9 pages 69, 70 & 71). Each of these shoals bare <del>2 1/2</del> <sup>4 1/2</sup> ft. at MLW. When there is any wind and current present, breakers occur in the areas at all stages of tide. 1/2 & 1 ft.
2.	lat. 31-06 1/6 81-20.5	Extensive shoaling in this area is noted. The shoal on the boat sheet in this position is awash at MLW. There are breakers over this shoal at most stages of the tide when winds and current are present.
3.	lat. 31-06' 0 long. 81-19' 8	The <del>5 1/2</del> <sup>6</sup> foot shoal is verified at this position. There is also a <del>3 1/2</del> <sup>5</sup> foot shoal encroaching along the edge of the channel <del>100</del> <sup>120</sup> meters SE of the above position; however, buoy number Nun "8" has been moved well inside the old channel limit to avoid the shoal. The shoalest sounding between buoys "6" and "8" is <del>12</del> <sup>15</sup> feet. This item is also described under M-COMPARISON WITH CHART AND PRIOR SURVEYS Item 19. (plots 5 ft. on H-8216)
4.	lat. 31-04.60 long. 81-19.60  Line misplotted	The 3' foot sounding obtained by the BOWEN in 1954 on sheet BO 2153B was <del>not</del> verified. <del>The shoalest depth obtained was 8 ft. at this location.</del> There was a depth of 4 feet about <del>200</del> <sup>120</sup> meters <del>SE</del> <sup>E</sup> of the above position. There appears to be extensive shifting in this area and it is likely that this shoal has changed. There were no breakers observed south of the channel while running crosslines or development.

## O. COAST PILOT INFORMATION

There was no additional Coast Pilot information. The BOWEN submitted all pertinent information in a special Coast Pilot report during the field season of 1954. ✓

## P. AIDS TO NAVIGATION

No new aids to navigation were located. The BOWEN submitted a report on floating and non floating aids to navigation in 1954. ✓

Q. LANDMARKS FOR CHARTS

The BOWEN submitted a report on LANDMARKS FOR CHARTS in 1954. ✓  
No new landmarks for charts were located.

R. GEOGRAPHIC NAMES

No new geographic names are recommended.

Items S, T, U-Y are not needed and are excluded from this report. ✓

Respectfully submitted,

*Clifford W. Tupper*

Clifford W. Tupper  
ENS., USC&GS

Approved and forwarded,

*Martin T. Paulson*

M.T. Paulson  
LCDR., USC&GS  
Chief of Party

ATTACHMENTS

Appendix

- A - List of Control Stations
- B - Abstract of Velocity Corr.
- C - Statistics
- D - Tidal Note
- E - Approval sheet

*Season Report -*

*M.T. Paulson 1955/137*

APPENDIX E

APPROVAL SHEET

All records for this survey have been examined by me and are approved. The boat sheet was inspected by me daily.

During the final stages of this project the progress was delayed slightly by smoke and haze from numerous forest fires in Georgia.

In accordance with letter 20-ret FP-E.C. dated 1 March 1955 the field work on this project was suspended on the 31 March 1955.

This survey is considered adequate for the purpose intended.

*Marvin T. Paulson*

M.T. Paulson  
Ch. of Party

APPENDIX B

VELOCITY CORRECTIONS

24 February to 8 March 1955

GROUP I

808 RECORDER NO. -77

A RANGE

Corr.(ft.)	From	To
0.0	0.0	1.5
-0.2	1.6	18.0
-0.4	18.1	21.9
-0.6	22.0	25.5
-0.8	25.6	32.0
-1.0	32.1	End

GROUP II

9 March to 24 March 1955

808 Recorder 77

A RANGE

Correction - 0.0 entire range

## APPENDIX D

### TIDAL NOTE FOR SURVEY (BO-2153 B)

All tidal data for reduction of soundings was obtained from a portable automatic tide gage maintained at the community pier on the southern end of St. Simons Island, Georgia. The gage was located at latitude  $31^{\circ} 08.0$ ; longitude  $81^{\circ} 23.8$ .

A time difference of 25 minutes was subtracted from results of the portable gage to correct the data to the Outer Bar in accordance with difference noted in the tide tables. This difference is incorporated into all smooth tide data entered in the sounding volumes.

Mean low water corresponds to the 0.3' reading on the tide staff.

Hourly heights were scaled directly from the maragrams applying the above corrections to the observed tides to adjust all data to the Outer Bar.



LIST OF SIGNALS  
H-8216

TRIANGULATION STATIONS

SIMON ST. SIMONS L.H., 1932

MARKED TOPOGRAPHIC STATIONS

JEKE JEKE, 1954 (destroyed in 1955)

TOPOGRAPHIC STATIONS

SOURCE Bn-A-54

Bea Eva Pam

SOURCE T-9956(N)

Gon Imp Ump Sun

SOURCE T-9956(S)

Boy Did End Fig Las Mar Mat Mud Pie Top

SOURCE T-9955(S)

Bab Hot Lag Prin Put

HYDROGRAPHIC STATIONS

Eke Vol. 32, pg. 62

PLANIMETRIC FEATURES

Cup T-9956(S)

On H-8216, launch 175 during 1955  
work called "Prin" by name "Ant." Volumes  
were corrected to Prim by P.O. although  
list of signals and B.S. spelled "Prin"  
also H-8215  
c//

## 1954 SEASON

STATISTICS  
H-8216

VESSEL	DATE	DAY LTR.	CONTROL	VOL. NO.	NO. POS.	DET. POS.	STAT. MI.
Bowen	1-27-54	A (red)	Shoran	1	136		43.9
	1-28-54	B "	"	1&2	144		45.5
	2- 1-54	C "	"	2&3	177		59.8
	2- 2-54	D "	"	3&4	187		66.7
	2- 3-54	E "	"	4&5	195		79.5
	2- 4-54	F "	"	5	122		44.9
	2- 5-54	G "	"	5&6	120		42.6
	2- 8-54	H "	"	6	156		65.6
	2- 9-54	J "	"	6&7	26		8.6
	2-10-54	K "	"	7	163	1	51.2
	2-11-54	L "	"	7&8	143	9	46.0
	2-15-54	M "	"	8&9	223		77.7
	2-16-54	N "	"	9&10	220		79.4
	2-17-54	P "	"	10&11	165		56.3
	2-23-54	Q "	"	11	191		54.3
	2-24-54	R "	"	11&12	223		68.8
	2-25-54	S "	"	12&13	199	1	67.2
	2-26-54	T "	"	13&14	216		69.5
	2-27-54	U "	"	14&15	204		68.5
	3- 2-54	V "	"	15	187		46.3
	3- 3-54	W "	"	16	179	1	56.5
	3- 4-54	X "	" & vis.	16&17	172		44.7
	3- 5-54	Y "	"	17	158		47.3
	3- 6-54	Z "	"	18	90	3	22.8
	3- 8-54	AA "	"	18	103	18	17.3
	3- 9-54	BA "	"	18&19	147	21	21.9
	3-10-54	CA "	"	19	173	20	35.7
	3-11-54	DA "	"	19&20	158		35.4
			TOTALS		4577	74	1423.9
Lch. 5	3-15-54	a (red)	Visual	21	66		10.4
	3-16-54	b "	"	21	131		22.7
	3-17-54	c "	"	22	167		28.4
	3-18-54	d "	"	23	148		27.6
	3-20-54	e "	"	23	105		19.8
			TOTALS		617		108.9

## 1955 SEASON

Lch. 175	2-24-55	a (blue)	Visual	24	128		23.3
	2-28-55	b "	"	24 & 25	145	1	27.4
	3- 1-55	c "	"	25	127	2	25.3
	3- 2-55	d "	"	26	69		13.8
	3- 3-55	e "	"	26	144		29.6
	3- 4-55	f "	"	27	72	1	14.1
	3- 7-55	g "	"	28	177		33.4
	3- 8-55	h "	"	28	1	1	0.0
	3- 9-55	j "	"	28&29	151		28.2
	3-10-55	k "	"	29	97		20.0
	3-15-55	l "	"	30	82	1	16.0
	3-17-55	m "	"	30	114	17	16.1
	3-18-55	n "	"	31	6		1.2
	3-21-55	p "	"	31	45	1	9.2
	3-22-55	q "	"	31	41		7.1
	3-23-55	r "	"	31&32	167	9	23.2
	3-24-55	s "	"	32	140		28.0
			TOTALS		1700	32	317.9
			GRAND TOTALS		6894	106	1850.7

FLOATING AIDS TO NAVIGATION  
H-8216

<u>BUOY</u>	<u>LAT.</u>	<u>MET.</u>	<u>LONG.</u>	<u>MET.</u>	<u>DDEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
St. Simons Ltd. Whistle Buoy ST S	31-04 <sup>4</sup>	<sup>105</sup> 250	81-16 <sup>4</sup>	<sup>980</sup> 995	33' <sup>4</sup>	<sup>163K</sup> 162N	2-16-54
Entr. Ltd. Bell Buoy 1	31-04 <sup>4</sup>	1570 <sup>4</sup>	81-18 <sup>4</sup>	195 <sup>4</sup>	24' <sup>4</sup>	9L	2-11-54
Entr. Buoy 2	31-05 <sup>4</sup>	<sup>190</sup> 260	81-18 <sup>4</sup>	<sup>570</sup> 495	24' <sup>4</sup>	22d	3- 2-55
Entr. Ltd. Bell Buoy 3	31-05 <sup>4</sup>	<sup>465</sup> 250	81-18 <sup>4</sup>	<sup>1325</sup> 1300	24' <sup>4</sup>	98r	3-23-55
Entr. Buoy 4	31-05 <sup>4</sup>	<sup>810</sup> 825	81-18 <sup>4</sup>	<sup>1495</sup> 1440	23' <sup>4</sup>	97r	"
Entr. Buoy 5	31-05 <sup>4</sup>	<sup>825</sup> 853	81-19 <sup>4</sup>	<sup>270</sup> 202	24' <sup>4</sup>	99r	"
Entr. Buoy 6	31-05 <sup>4</sup>	<sup>1350</sup> 1338	81-19 <sup>4</sup>	<sup>730</sup> 656	28' <sup>4</sup>	101r	"
Entr. Ltd. Bell Buoy 7	31-05 <sup>4</sup>	<sup>1230</sup> 1250	81-19 <sup>4</sup>	<sup>880</sup> 835	26' <sup>4</sup>	129r	"
Entr. Buoy 8	31-06 <sup>4</sup>	<sup>40</sup> 75	81-20 <sup>4</sup>	15 <sup>4</sup>	24' <sup>4</sup>	89r	"
Entr. Ltd. Bell Buoy 9	31-06 <sup>4</sup>	62 <sup>4</sup>	81-20 <sup>4</sup>	<sup>370</sup> 312	23' <sup>4</sup>	122r	"
Entr. Buoy 10	31-06 <sup>4</sup>	562 <sup>4</sup>	81-20 <sup>4</sup>	701 <sup>4</sup>	29' <sup>4</sup>	108r	"
Entr. Ltd. Bell Buoy 11	31-06 <sup>4</sup>	963 <sup>4</sup>	81-21 <sup>4</sup>	50 <sup>4</sup>	21' <sup>4</sup>	109r	"
Entr. Buoy 11A	31-06 <sup>4</sup>	<sup>1320</sup> 1315	81-21 <sup>4</sup>	<sup>600</sup> 600 <sup>4</sup>	21' <sup>4</sup>	110r	"
Entr. Buoy 12	31-06 <sup>4</sup>	<sup>1795</sup> 1775	81-21 <sup>4</sup>	1000 <sup>4</sup>	31' <sup>4</sup>	3DA	3-11-54
Entr. Buoy 13	31-06 <sup>4</sup>	<sup>1735</sup> 728	81-21 <sup>4</sup>	<sup>4</sup> 1253	30' <sup>4</sup>	2DA	"
Entr. Ltd. Bell Buoy 15	31-07 <sup>4</sup>	<sup>4</sup> 1562 <sup>4</sup>	81-22 <sup>4</sup>	<sup>735</sup> 648	34' <sup>4</sup>	11	3-15-55
Bell Buoy 17	31-07 <sup>4</sup>	1044 <sup>4</sup>	81-23 <sup>4</sup>	432 <sup>4</sup>	38' <sup>4</sup>	1b	2-28-55
*Bell Buoy 9	31-04	85	81-11	53	38'	75S (Vol. 13, pg. 5)	<del>2-25-54</del>

\*Not listed or charted. Not plotted. Never on Aid Book or in Lt. List. or on Boat Sheet.

X

ADDENDUM  
To Accompany

HYDROGRAPHIC SURVEY H-8216 (Field No. Bn-2153)

GENERAL

Agreement of soundings at crossings was only fair on this survey. This may be partially attributed to the bumpy character of the bottom, a considerable amount of wave action on most days, and the changeable bottom, particularly in shallow water. *Depths at crossings brought into agreement by at times using daily bar-check corrections instead of seasonal mean bar-checks.*  
All work done during the 1954 season was assigned red position numbers, the 1955 season blue.

In order to allow space for sounding lines on the East edge of the sheet, stations St. Simons L.H., Jeke and Eke were plotted on a temporary dog ear while positions were being protracted.

CONTROL

All shoran positions on cross lines, in the channel and in all closely developed areas were protracted in the conventional manner. Those positions falling in open areas were pricked directly from a positive film transparency of the boat sheet in accordance with our letter to the Director, titled "Report On Smooth Plotting From Boat Sheet Transparencies", dated 21 Nov. 1955.

This method appears to be entirely practicable for plotting shoran positions and should result in a considerable saving in plotting time. This was the first time this method has been used, so a considerable amount of time was spent checking the accuracy of the transfer, therefore, comparative time figures cannot be furnished for this survey.

All positions checked in the volumes in red pencil were plotted with an Odessa protractor. Those bearing a blue check were pricked from the transparency. Positions having red and blue marks were checked for accuracy with a protractor after the transfer.

DISCREPANCIES

Soundings between positions 14 and 19C (red), Vol. 2, were not smooth plotted. See note in volume. *see overlay*

Lat. 31-05.90, Long. 81-19.75- ✓ The 2' sounding on the north edge of the channel was disproved by 1955 hydrography. The shoal was probably dredged on receipt of the report by the District Engineer. *(2 ft revised to 3 ft and actually falls about 10 m northward.)*

Respectfully submitted,

*Hugh L. Proffitt*  
Hugh L. Proffitt  
Cartographer.

Norfolk, Va.  
16 April 1956

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

Registry No. \_\_\_\_\_

Field No.s. ~~BN-A-54~~ and BN-B-54

Scale 1:10,000

State GEORGIA General locality ST. SIMONS SOUND

Specific locality JEKYLL ISLAND

Dates: Survey began 22 JANUARY 1954 Completed 30 JANUARY 1954

Photography \_\_\_\_\_, Supplemented by ground surveys to \_\_\_\_\_

Project No. CS-365 Instructions dated 2 October 1953

Vessel } ~~REDA~~ BOWEN Chief of party Harold J. Seaborg

Field work by R.H.Houlder Office work by H.J.Seaborg and R.H.Houlder

Final inking by R.H.Houlder

Ground elevations } in feet above { M. H. W.  
Treetop elevations } or { \_\_\_\_\_

Contours } by { Planetable } Interval \_\_\_\_\_ ft.  
Approximate contours } Multiplex }  
Form lines } \_\_\_\_\_ }

REMARKS The purpose of this survey was to ascertain the high water line along Jekyll Island and to locate necessary signals for inshore hydrography.

\* BN-A-54 partially applied to H-8216

DESCRIPTIVE REPORT

To Accompany

TOPOGRAPHIC SURVEYS

SHEETS NOS. BN-A-54 AND BN-B-54

U. S. C. & G. S. S. BOWEN

H. J. Seaborg, Chief of Party

Scale: 1:10,000

22 January - 30 January 1954

A. PROJECT

The plane table survey shown on sheets BN-A-54 and BN-B-54 were accomplished under instructions for Project CS-365, dated 2 October 1953. ✓

B. PURPOSE

This survey was undertaken to provide the high water line and control on north end of Jekyll Island for hydrographic surveys accomplished under Project CS-365. ✓

C. CONTROL

On sheet A, a  $4\frac{1}{2}$  mile traverse was run from triangulation station CLAM, 1954 to triangulation station KAY, 1933. Distances were obtained by using a 300 meter cable. The closing error was 5 meters and was adjusted on the topographic sheet. ✓

Two recoverable topographic stations, \* "JEKE" and \* "KILL", were established. *Destroyed in 1955*  
Copies of form 524 giving pertinent information are appended to this report.

Plane table positions on sheet B were obtained by solving the three point problem. ✓

\* Falls on H-8215

D. LANDMARKS FOR CHARTS

One object located by this survey is recommended to be charted. Station BEA on sheet A is the subject of the report on form 567 appended to this report. ✓

Respectfully submitted,

*Richard H. Houlder*

Richard H. Houlder,  
Ensign, U.S.C. & G.S.

APPROVED AND FORWARDED,

*Harold J. Seaborg*  
Harold J. Seaborg,  
Commander, USC&GS,  
Chief of Party.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

**STRIKE OUT ONE**

The positions given have been checked after listing by R. H. Houlder

Harold J. Seaborg, Cdr, USC&GS, USN

Harold J. Seaborg, Cdr. USC&GS, Chief of Party.

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

# GEOGRAPHIC NAMES

Survey No. ~~H~~-8216

Name on Survey	A	B	C	D	E	F	G	H	K	
<u>Georgia</u>									BH	1
<u>St Simons Sound</u>									"	2
										3
<u>Jekyll Island</u>									"	4
<u>St Simons Island</u>									"	5
<u>Sea Island</u>									"	6
<u>Goulds Inlet</u>									"	7
<u>Bar Channel</u>										8
										9
										10
<u>Community Pier</u>										11
<u>St Simons Island</u>										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

} For title

Names approved  
5-8-56 L. Heck  
(see Chart 447)

(tide station)



# Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-8216....

## Records accompanying survey:

Boat sheets 1(2-Pts) sounding vols. 32....; wire drag vols. ....;  
bomb vols. ....; graphic recorder rolls 29-Envelopes  
special reports, etc. 1-Descriptive report, 1-Smooth sheet, 1-Cahier,...  
Fathometer & Shore Correction Data, 1-Cahier, Velocity Correction.....  
Curves, and 1-Overlay Tracing.

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

Number of positions on sheet	6894
Number of positions checked	101
Number of positions revised	50⊕
Number of soundings revised (refers to depth only)	5%⊕
Number of soundings erroneously spaced	24
Number of signals erroneously plotted or transferred	0
Topographic details <i>Extensive changes from revisions on air photo manuscripts</i>	Time 16 hrs.
Junctions	Time 3 hrs.
Verification of soundings from graphic record	Time 40 hrs.

Verification by *C. R. Helmer*.....Total time *584 hrs.* Date *11/21/57*.

Reviewed by *Jim Jaskind*.....Time *7.2* Date *2/10/58*.

⊕ A Pinc. Office overlay was applied to smooth sheet during verification.

⊕ see Ver. Rep. Numerous minor corrections - differences between seasons ave. & daily bar checks - applied to smooth curves and eliminate crossing discrepancies in flat bottom areas.

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

REGISTRY NO. H-8216

FIELD NO. BN-2153

Georgia, Coast of Georgia, Off St. Simons Sound

Surveyed: Jan 1954 - March 1955

Scale 1:20,000

Project No. CS-365

Soundings:

Control:

808 Fathometer

Shoran  
Sextant fixes on shore  
signals

Chief of Party - H. J. Seaborg and M. T. Paulson  
Surveyed by - H. J. Seaborg, J. R. Plagmier, J. F. Vance, R. H.  
Houlder, M. T. Paulson, C. W. Tuper and E. K. McCaffrey  
Protracted by - W. L. Jonns  
Soundings plotted by - W. L. Jonns  
Verified and inked by - C. R. Helmer  
Reviewed by - I. M. Zeskind  
Inspected by - R. H. Carstens

Date: 2-10-58

1. Shoreline and Control

The shoreline originates with reviewed air-photographic survey T-9956N (1951-55) and T-9956 S (1951-55), with unreviewed air-photographic survey T-9955 S (1951-55), and with graphic control survey BN-A-54, which is marked for destruction. The shoreline from BN-A-54 is shown in red on the smooth sheet.

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., 24 ft., and 36 ft. depth curves were drawn to more clearly define the bottom configuration.

The bottom is fairly irregular. Submarine features such as shoals, deeps, troughs and ridges contribute to the bottom irregularity.

#### 4. Junctions with Contemporary Surveys

The junction with H-8215 (1954) on the west will be considered in the review of that survey. The present survey extends to the project limits on the north, east, and south, where adequate junctions with the charted hydrography were effected.

#### 5. Comparison with Prior Surveys

A. H-537 (1856), 1-10,000	H-2122 (1892), 1-20,000
H-590 (1856-57), 1-10,000	H-2178 (1894), 1-20,000
H-728 (1860), 1-300,000	H-2298 (1897), 1-1,250
H-810 (1860), 1-20,000	H-2343 (1897-98), 1-1,250
H-1133 (1869-72), 1-20,000	H-2396 (1898-99), 1-1,250
H-1830 (1888), 1-20,000	H-2409 (1899), 1-1,250

These surveys fall within the area of the present survey. A comparison between the prior and present surveys reveals radical changes in bottom configuration, which are attributed to the action of the current on the bottom, the dredging of Bar Channel, and the depositing of sediment. In some areas the bottom has eroded, and in other areas it has shoaled. Shoals have shifted their positions, or new shoals have been formed. Differences in depths of 1-5 ft. between the prior and present surveys in depths less than 30 ft. are noted. However, in several areas the differences in depths are greater, as for example, in the vicinity of lat.  $31^{\circ}06.4'$ , long.  $81^{\circ}20.0'$  where prior depths of 16-18 ft. fall in present depths of 3 ft. Only minor differences of 1-2 ft. are generally found in depths greater than 30 ft.

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

B. H-3554 (1910-12), 1-100,000	H-3983 (1916-17), 1-80,000
H-3770 (1915), 1-80,000	H-4462 (1924), 1-20,000

A comparison between the prior and present surveys reveals radical changes in bottom configuration. These changes are attributed to the causes mentioned in the preceding paragraph. In some areas new shoals have been formed or prior shoals have shifted their positions. An example of this latter condition occurs in lat.  $31^{\circ}08.0'$ , long.  $81^{\circ}21.2'$ , where the shoal has extended about 400 meters northeastward.

Where this shoal formerly uncovered at M.L.W., present depths of 11-12 ft. are found. In other areas the bottom has eroded, as for example, in the vicinity of lat.  $31^{\circ}10.85'$ , long.  $81^{\circ}14.3'$ , where a prior depth of 20 ft. falls in present depths of 23-26 ft. In general, the differences in depths between the prior and present surveys vary from 1-3 ft.

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

6. Comparison with Chart 447 (latest print date 11/11/57)  
     Chart 448 ( " " " 12/8/52)  
     Chart 1242 ( " " " 11/11/57)

A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys which need no further consideration, supplemented by critical soundings from the smooth sheet of the present survey before verification and review, and with the U. S. Corps of Engineers' surveys of 1937 (Bp. 30678-80) and 1939 (Bp. 32743). The following differences between the charted features and the present survey are noted:

1. The 16-ft. sounding charted in lat.  $31^{\circ}07.70'$ , long.  $81^{\circ}18.60'$ , from H-4462 (1924), falls in 21-22 ft. depths on the present survey. The charted sounding is believed to be recorded 1-fm. too shoal and should actually be 22 ft. The sounding should be disregarded.
2. The sunken wreck "PD" charted in lat.  $31^{\circ}01.00'$ , long.  $81^{\circ}13.0'$ , from HON to M 40, 1950, was neither verified or disproved by the present survey. The sunken wreck "PD" should, therefore, be retained on the chart.

The present survey is adequate to supersede the charted hydrography within the common area.

B. Dredged Channels

The charted information in Bar Channel is from the U. S. Corps of Engineers' surveys of 1957 (Bp. 55751-56), which was accomplished subsequent to the present survey and supersedes the present survey.

C. Aids to Navigation

The present survey positions of aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended, except as follows:

Buoy N 6 charted in lat.  $31^{\circ}08.0'$ , long.  $81^{\circ}19.64'$ , is 170 meters northwest of its present survey position. The buoy was moved subsequent to the present survey to better mark a shoal.

Buoy N 8 located on the present survey in lat.  $31^{\circ}06.02'$ , long.  $81^{\circ}20.01'$ , has been replaced by Lighted Whistle Buoy (FLR) "8" (HON to M 52, 1957). The latter buoy is charted 70 meters to the southwestward of its present survey position, where it marks an encroaching shoal on the right outer quarter limit of Bar Channel.

Buoy N 12 located on the present survey in lat.  $31^{\circ}06.98'$ , long.  $81^{\circ}21.64'$ , is charted as Lighted Whistle Buoy (FLR) "12". Buoy N 12 was replaced by the Lighted Whistle Buoy subsequent to the present survey (HON to M 52, 1957).

7. Condition of Survey

- a. The Descriptive Report and sounding records are complete.
- b. The smooth plotting was accurately done.

8. Compliance with Project Instructions

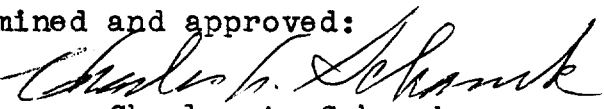
The survey adequately complies with the Project Instructions.

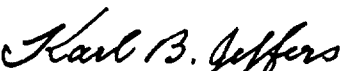
9. Additional Field Work Recommended

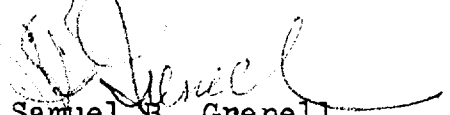
This survey is considered basic and no additional field work is recommended.

Examined and approved:

  
Max G. Ricketts  
Chief, Nautical Chart Branch

  
Charles A. Schanck  
Chief, Division of Charts

  
Karl B. Jeffers <sup>2/24/58</sup>  
Chief, Hydrography Branch

  
Samuel E. Grenell  
Chief, Division of Coastal Surveys

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

21 May 1956

Division of Charts: R. H. Carstens

Plane of reference approved in  
32 volumes of sounding records for

HYDROGRAPHIC SHEET 8216

Locality St. Simons Sound, Georgia

(H. J. Seaborg in 1954  
Chief of Party: (M. T. Paulson in 1955  
Plane of reference is mean low water, reading  
3.5 ft. on tide staff at St. Simons Lighthouse (1954)  
17.3 ft. below B. M. 1 (1888)

0.3 ft. on tide staff at St. Simons Lighthouse (1955)  
17.3 ft. below B. M. 1 (1888)

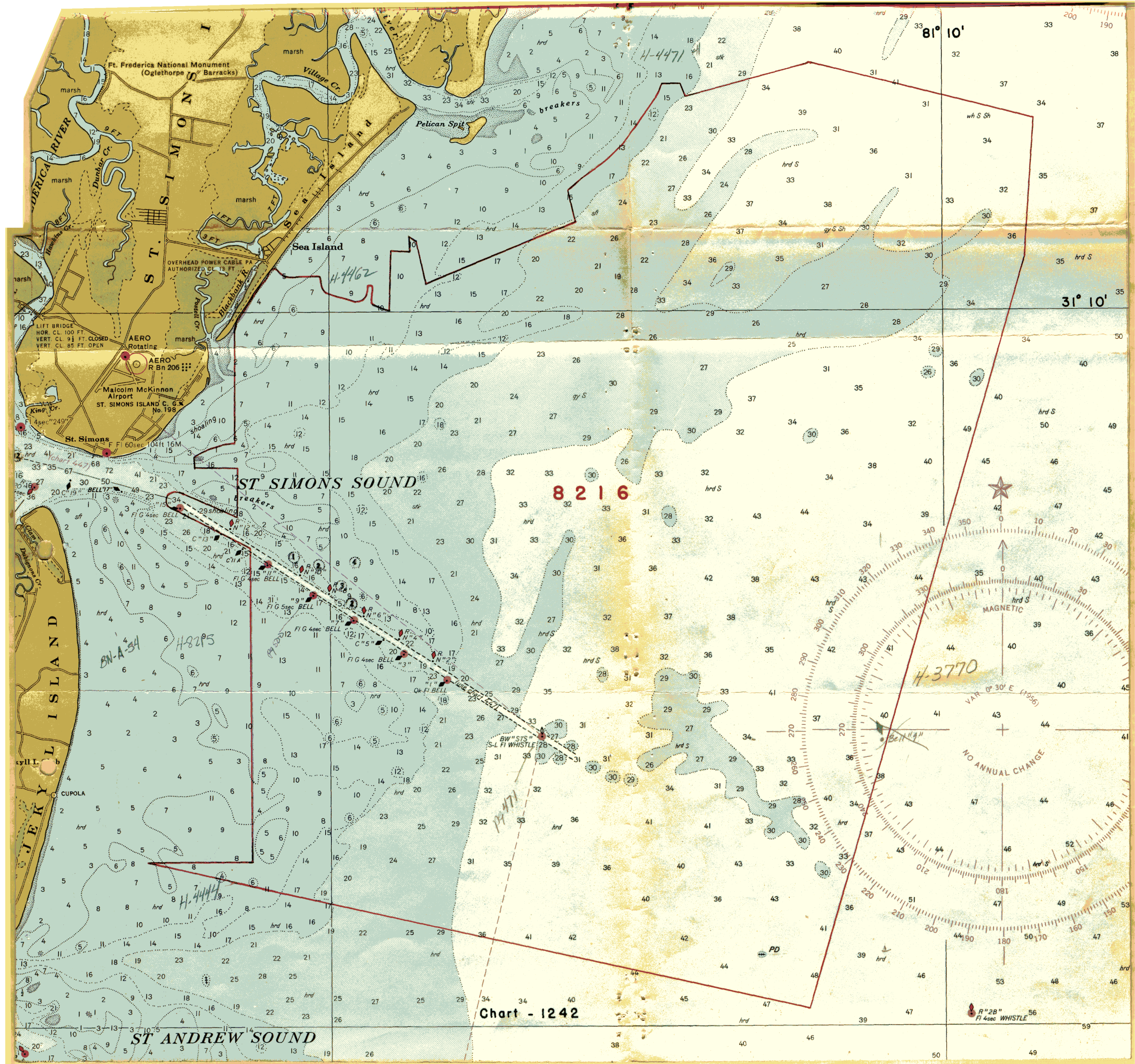
Height of mean high water above plane of reference is 6.6 feet

Condition of records satisfactory except as noted below:



Branch  
Chief, ~~Division of Tides and Currents~~







# NAUTICAL CHARTS BRANCH

SURVEY NO. H-8216

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
7/20/56	1242	<i>Sam</i>	Before <del>After</del> Verification and Review <i>Partially only. - (a few shoal edg's)</i>
7/23/56	1001	<i>Benson</i>	Before <del>After</del> Verification and Review <i>Partially only - thru 1242 above.</i>
8/21/56	1111	<i>Jordan</i>	Before <del>After</del> Verification and Review <i>Partially only thru 1242 above</i>
9-4-56	447	<i>R. K. DeLander</i>	Before <del>After</del> Verification and Review <i>Critical corrections only</i>
7/3/57	Reconst. 448	<i>EHF</i>	Before <del>After</del> Verification and Review <i>Sp. after rev. of hydro. sheet line before transfer. Many edg's changed. 1 to 2 feet. 2/10/57</i>
<del>7/8/58</del>			Before After Verification and Review
7/8/58	1007	<i>H. W. Burgoyne</i>	Before <del>After</del> Verification and Review <i>Completely Applied</i>
17 July 59	447	<i>Nichols</i>	Before After Verification and Review
17 July 59	448		<i>Completely applied</i>
20 July 59	1242	<i>Nichols</i>	Before After Verification and Review <i>Thru 447 &amp; 448.</i>
20 July 59	1111	<i>Nichols</i>	Before After Verification and Review <i>Thru 1242</i>
9/29/66	1001	<i>M. H. Hall</i>	Sheet falls in area where Hydro has been deleted, consider fully applied after Verification & 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.