

8215

Diag. Cht. No. 1242-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. BN-1253 Office No. H-8215

LOCALITY

State Georgia

General locality Coast of Georgia

Locality St. Simons Sound

19 54

CHIEF OF PARTY

H. J. Seaborg

LIBRARY & ARCHIVES

DATE March 14, 1956

8215

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-8215

Field No. BN 1253

State GEORGIA

General locality COAST OF GEORGIA

Locality ST. SIMONS SOUND

Scale 1:10,000 Date of survey 9 February - 22 March, 1954

Instructions dated 2 OCTOBER 1953

Vessel LAUNCHES NOS. 1, 2, 3, and 4.

Chief of party Commander H. J. Seaborg

Surveyed by J. R. Plaggmier, J. F. Vance, Jr. H. J. Seaborg

Soundings taken by fathometer, ~~graphic recorder~~ hand lead, ~~wire~~ pole

Fathograms scaled by Ship's Personnel ✓

Fathograms checked by J. R. Plaggmier & Norfolk Processing Office ✓

Protracted by R.D. Lynn

Soundings penciled by R.D. Lynn

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

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

DESCRIPTIVE REPORT

To Accompany

INSHORE HYDROGRAPHIC SURVEYS

H-8216 H-8215
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 CS-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 ^{H-8215 (1954)} 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° - 02' - 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. (Junction with H-4462 not shown on smooth sheet.)
^{No junction made} ✓✓

The survey on sheet BN-2153 ^{H-8216 (1954-55)} 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-4444 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. See Review, H-8216 ✓

C. VESSELS AND EQUIPMENT

^{H-8216 (54)}
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. ✓

^{H-8215 (54)}
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 30 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. ✓ DVA

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. ✓

← appended to Desc. Report of H-8216, planetable sheet has been destroyed.

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. ✓ See Review

T-9956(W), T-9956(S), T-9955(S) - (1951-55)

H. SOUNDINGS

Bn A-54 } See Seasonal Rpt for Lajant
Bn B-54 } 14/1954 H.J. Seborg ✓

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 ^{H-8216(54-55)} station Shoran 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), including all of H-8215.

J. ADEQUACY OF SURVEY

The survey on sheet 1253 ^{H-8215(1954)} complies with instructions and is considered to be adequate and complete.

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) ^{H-8216(1954-55)}

K. CROSS LINES

Cross lines were run in compliance with paragraph 357 of the Hydrographic Manual. ^{See Review}

L. COMPARISON WITH CHART AND PRIOR SURVEYS

A comparison was made with prior surveys Nos. H-4444, 4462, 5579, and 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) ^{See Review}

N. DANGERS AND SHOALS

^{H-8216} A dangerous shoaling action in the ship channel, St. Simons Sound, at Lat. 31°-05.94' N, Long. 81°-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. ^{H-8216}

L. COMPARISON WITH CHART AND PRIOR SURVEYS (continued)

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

- | <u>Item No.</u> | <u>Remarks</u> ✓ |
|-----------------|--|
| 15 | The charted pole has been destroyed. Two poles in the immediate vicinity were located and their positions noted in the sounding volumes. ($\phi 31^{\circ}09.68' \lambda 81^{\circ}21.92'$) |
| 16 | This cupola ^{has been} should be deleted from charts Nos. 1242 and 447. ^{Added TOWER} $\phi 31^{\circ}08.3' \lambda 81^{\circ}22.7'$ H-8215 L-427 (1953) L-217 (55) |
| 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. (on H-8216) |
| 18 | This area was developed with an apparent shoalest depth of 14 ft. ¹⁵ |
| 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). (H-8216) |
| 20 | There is no pile at this location ($\phi 31^{\circ}08.1' \lambda 81^{\circ}24.23'$) |
| 21 | The 14 foot sounding ^{$\phi 31^{\circ}08.2' \lambda 81^{\circ}25.25'$} was developed, but appears to be the shoalest depth. |
| 22. | The islets referred to are oyster beds. ^{$\phi 31^{\circ}08.22' \lambda 81^{\circ}26.62'$} |
| 23. | This area was carefully investigated, and the information is recorded in the sounding volumes. Bridge clearances are listed in the Coast Pilot Report. (Vicinity of bridges to St. Simons I.) |
| 24. | The wreck ^{noted} should be deleted from the chart. ^{840 - approach} $\phi 31^{\circ}11.00' \lambda 81^{\circ}24.00'$ (outside survey limits, H-8215) |
| 25. | The controlling depth of this channel appears to be ¹⁰ 9.0 feet (on range line) (bridges outside survey limits of H-8215) |
| 26. | These items were included in a previous report, a copy of which is appended to this report. (Coast Pilot 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.

APPROVED AND FORWARDED,

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

Respectfully submitted,

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

STATISTICS FOR HYDRO SURVEY H

(Field) BN-1253 (1954)

USC&GSS BOWEN - CS-365

		DATE	DAY LETTER	VOLUME NUMBER	NO. OF POSITIONS	DETACHED POSITIONS	STAT. MI. SOUNDING
I	LAUNCH NO. 1	Feb. 9	a blue	1	77 \checkmark	5	8.2
		10	b blue	1 & 2	237 \checkmark	2	23.3
		11	c blue	2 & 3	176 \checkmark	5	26.0
		12	d blue	3	69 \checkmark		12.2
		15	e blue	3 & 4	197 \checkmark		42.6
		Totals -	- - - -	- - - -	756 \checkmark	12	112.3
II	LAUNCH NO. 2	Feb. 16	a green	4 & 5	243 \checkmark		43.0
		17	b green	5 & 6	252 \checkmark		43.3
		18	c green	6 & 7	192 \checkmark		27.6
		19	d green	7	79 \checkmark		12.7
		23	e green	7 & 8	178 \checkmark		31.0
		24	f green	8	34 \checkmark		11.5
		25	g green	8 & 9	220 \checkmark		46.5
		26	h green	9	48 \checkmark		10.4
		Totals -	- - - -	- - - -	1246 \checkmark		226.0
III	LAUNCH NO. 3	March 2	a purple	9 & 10	63 \checkmark	1	10.4
		3	b purple	10	130 \checkmark		18.5
		12	c purple	15	39 \checkmark	39	0.0
		Totals -	- - - -	- - - -	232	39 40	28.9
IV	LAUNCH NO. 4	March					
		5	a brown	11	72 \checkmark		17.3
		6	b brown	11	69 \checkmark		14.4
		8	c brown	11 & 12	245 \checkmark		46.5
		9	d brown	12 & 13	212 \checkmark		48.3
		10	e brown	13 & 14	242 \checkmark		45.6
		11	f brown	14 & 15	301 \checkmark		42.0
		12	g brown	16	260 \checkmark		35.9
		15	h brown	17	168 \checkmark		31.1
		16	j brown	17 & 18	110 \checkmark	45	26.5
		17	k brown	18 & 19	228 \checkmark		27.0
		18	l brown	19	204 \checkmark	4	27.8
		19	m brown	20	23 \checkmark	14	18.3
		20	n brown	20	154 \checkmark	8	15.0
		22	p brown	20 & 21	63 \checkmark		4.0
		Totals -	- - - -	- - - -	2351 \checkmark	71	399.7
					2400		
	Skiff	March 17	a red	20	44 \checkmark	26	1.4
					4678		
					4629	87 149	768.3
		TOTALS FOR SHEET	- - - -	- - - -	- - - -	- - - -	26.8
		Total Square Statute Miles	- - - -	- - - -	- - - -	- - - -	768.3

W.E. Ray

LIST OF CONTROL STATIONS ✓

Boat Sheet BN-1253 (Field)

	-	SOURCE OF CONTROL	-	YEAR	SIGNAL NAME
I	TRIANGULATION				
		Brunswick Point Cut Front Range		1954	BRUN
		Brunswick Point Cut Rear Range		1954	WICK
		CLAM		1954	CLAM
		DUBIN (U.S.E.)		1954	DUBIN
		Plantation Creek Front Range Beacon		1933	FRONT
		Plantation Creek Rear Range Beacon		1933	REAR
		Saint Simons Yacht Club Flagpole		1933	SAINT
		St. Simons Island Golf Club Flagpole		1933	OLE
		St. Simons Lighthouse		1872	SIMON
		SPOT		1898	SPOT
II	TOPOGRAPHIC				
		ABE	BN-A-54	1954	ABE
		BEA	" (Rec.)	"	BEA
		CAT	"	"	CAT
		DIG	"	"	DIG
		EVA	"	"	EVA
		FAR	"	"	FAR
		GAB	"	"	GAB
		HAT	"	"	HAT
		JEKE	" (Rec.) form 524	"	JEKE
		KILL	" (Rec.) form 524	"	KILL
		LUN	"	"	LUN
		NAT	"	"	NAT
		NED	"	"	NED
		ODD	"	"	ODD
		PEG	"	"	PEG
		RAG	BN-B-54	"	RAG
		SAG	"	"	SAG
		TAN	"	"	TAN
		TRI	BN-A-54	"	TRI
		VAN	BN-B-54	"	VAN
III	PHOTO-HYDRO				
		<u>SIGNAL NAME</u>	<u>FIELD SHEET NO.</u>	<u>PHOTO NUMBER</u>	<u>DESCRIPTION</u>
		ANN	T-9955 S	3505 A	Stake
		BAR *	"	4323	SW corner bare spot
		BOY	-9956 S	3500 A	Center of brush
		CAN *	-9955 S	4323	E. point grassy area
		CUP	"	3505 A	Cedar tree
		DAY	"	—	Slanted day beacon (Rec.)

LIST OF CONTROL STATIONS (continued) ✓

Boat Sheet BN-1253 (Field)

PHOTO-HYDRO (continued)

		SIGNAL NAME	FIELD SHEET NO.	PHOTO NUMBER	DESCRIPTION
		DOG *	T-9955 S	4323	N. tip of shell bank
		DOL	"	4321	N. dolphin of six (Rec.)
		EAST	"	--	E. tower of lift span (Rec.)
		EGG *	"	4323	W. tip sand bank
		FIN	"	4321	S. dolphin of six (Rec.)
		IDA	"	4321	Intersection of two drains
		JOY *	"	4321	Intersection of two drains
		KEY *	"	4321	E. corner of L turn in drain
		LAD	"	4321	SE corner of dock
		LAG	"	4292	Coast Guard Flagpole
		LAS	-9956 S	--	Chimney (Rec.)
		LIT	-9955 S	--	St. Simons Sound Light (Rec.)
		MAN	"	4321	SE corner of old bridge
		MAT	-9956 S	3500 A	Center of brush
		MJD	"	3501	Chimney (Rec.)
		NOW	-9955 S	4321	Intersection of drain and slough
		OAK	"	4321	Tip of brush
		PAID	"	--	E. tower draw span (Rec.)
		PAL	"	3503	S. side of old bridge (Rec.)
		PIE	-9956 S	3501	Pilothouse on building (Rec.)
		PRIN	-9955 S	--	TOWER, 1953 (Rec.)
		PUT	"	3501	Water gable
		QUE	"	3503	Dolphin at S. end of pier (Rec.)
		RAN *	"	--	Approach Range Front Light 248
		RAT	-9956 S	--	E. gable (Rec.)
		RED	-9955 S	--	Frederick River Range Fr.beacon(Rec)
		RIV	"	--	Frederick R.approach Rnge Fr.Lt.(Rec
		ROB	"	3503	Intersection of drains
		SAM	"	3505 A	Water gable
		TOLL	"	--	W. tower of draw span (Rec.)
		TOM	"	3505 A	Chimney (Rec.)
		TOP	-9956 S	3500 A	Center of brush
		UGO	-9955 S	3505 A	NE gable (Rec.)
		WEST	"	--	W. tower lift span (Rec.)
		YAP	"	3505 A	Dolphin at SW corner of pier (Rec.)
		ZIP	"	3505 A	Peak of house roof (Rec.)
		* - Denotes positions checked by sextant			
IV	HYDROGRAPHIC	<u>SIGNAL NAME</u>	<u>VOLUME NUMBER</u>	<u>YEAR</u>	<u>R E M A R K S</u>
		GAL	--	1954	Located by Photogrammetrist
		HOD	--	1954	Sextant cuts appended to this rept

CONTROL STATIONS ✓

located by Photogrammetry

using Sextant Angles

STATION	From -	To -	ANGLE
GAL	Omni Range	St.Simons Light Hse	108 - 48
	St.Simons Lt.Hse	SPOT, 1933	48 - 31
	SPOT	Plantation Cr.Range, Ft.	16 - 18
	Plant.Cr.Range,Ft.	" " " Rr.	49 - 45
	" " " Rr.	Tree	84 - 44
	Tree	Omni Range	51 - 54
HOD	Omni Range	St.Simons Water Tank	113 - 21
	St.Simons Wat.Tk	SPOT, 1933	83 - 51
	SPOT, 1933	Plantation Cr. R.R.	34 - 16
	Plantation Cr.R.R.	Tree	78 - 11
	Tree	Omni Range	50 - 21
MAT	Photo Point is center of brush		Photo 3500 A
	Direction? → Bearing		
	TANK, 1953	00 - 00	
	Hydro Signal MAT	271 - 12 - 20 (R)	
TOP	Distance 51.40 m (168.7 ft.)		
	Photo point is center of clump of Spanish Bayonet		Photo 3500 A
	Direction? → Bearing		
	TANK, 1953	00 - 00	
	Hydro Signal TOP	271 - 06 - 30 (R)	
	Distance 16.5 m (54.1 ft.)		

FLOATING AIDS TO NAVIGATION
H-8215

<u>BUOY</u>	<u>LAT.</u>	<u>LONG.</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
SAINT SIMON SOUND					
Entr. Buoy 11A	31-06. ⁷¹ 72	81-21. ³⁹ 40 ✓	20'	149c (blue) ✓	2-11-54
Entr. Buoy 12	31-06. ⁹⁴ 97	81-21. ⁶⁶ 67 ✓	30' ^{NP}	147c " ✓	"
Entr. Buoy 13	31-06. ⁹² 93	81-21. ⁷⁸ 79 ✓	30'	148c " ✓	"
Entr. Lighted Bell	31-07. ³⁰ 29	81-22. ⁴² 43 ✓	34' ^{NP}	33b " ✓	2-10-54
Buoy 15					
Bell Buoy 17	31-07. ⁵⁵ 56	81-23. ³⁷ 38 ✓	38' ^{NP}	23b " ✓	"
Buoy 19	31-07. ⁶⁶ 68	81-24. ¹⁹ 21 ✓	33' ^{NP}	118b " ✓	"
Lighted Buoy 20	31-07.60	81-24.88 ✓	26' ^{NP}	226c " ✓	2-11-54
Lighted Buoy 22	31-06.63	81-25.81 ✓	31' ^{NP}	10a " ✓	2-9-54
Plantation Creek Spit Buoy	31-07. ⁹⁴ 95	81-25.28 ✓	14' ✓	237b " ✓	2-10-54

PROCESSING OFFICE
LIST OF SIGNALS

H-8215

TRIANGULATION STATIONS

✓KAY KAY, 1953
✓BRUN BRUNSWICK POINT CUT RANGE, FRONT LIGHT, 1954
✓CLAM CLAM, 1954
✓DUBIN DUBIN (U.S.E.), 1954
✓FRONT PLANTATION CREEK FRONT RANGE BEACON, 1933
✓OLE SAINT SIMON ISLAND GOLF CLUB, FLAGPOLE, 1933
✓REAR PLANTATION CREEK REAR RANGE BEACON, 1933
✓SAINT SAINT SIMON YACHT CLUB, FLAGPOLE, 1933
✓SIMON SAINT SIMON ISLAND LIGHTHOUSE, 1932
✓SPOT SPOT, 1898-1933
✓WICK BRUNSWICK POINT CUT RANGE REAR LIGHT, 1954

MARKED TOPOGRAPHIC STATIONS

✓JEKE JEKE, 1954 Bn-A-54
✓KILL KILL, 1954 Bn-A-54

DESCRIBED TOPOGRAPHIC STATIONS

SOURCE T-9955S

✓East ✓Paid ✓Prin ✓Toll ✓West ✓Tank

TOPOGRAPHIC STATIONS

SOURCE T-9955(S)

✓Ann ✓Bar ✓Can ✓Cup ✓Day ✓Dog ✓Dol ✓Egg ✓Fin ✓Ida ✓Joy
✓Key ✓Lad ✓Lag ✓Lit ✓Man ✓Now ✓Oak ✓Pal ✓Put ✓Que ✓Ran
✓Red ✓Riv ✓Rob ✓Sam ✓Tom ✓Ugo ✓Yap ✓Zip

SOURCE T-9956(S)

✓Boy ✓Las ✓Mud ✓Pie ✓Rat

SOURCE Bn-A-54

✓Abe ✓Baa ✓Cat ✓Dig ✓Eva ✓Far ✓Gab ✓Hat ✓Jog ✓Lun ✓Nat
✓Ned ✓Odd ✓Peg ✓Rag ✓Tri

SOURCE Bn-B-54

✓Sag ✓Tan ✓Van

HYDROGRAPHIC STATIONS

SOURCE T-9955(S)

✓Gal ✓Hod

SOURCE T-9956(S)

✓Mat ✓Top

Note: Hydro stations were picked from compilations. All cuts are recorded in the descriptive report.

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. $81^{\circ}-21.83$

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.~~
Fernandina, Fla.

TO BE CHARTED

St. Simons Sound, Georgia, 22 March, 1954.

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~the~~ the charts indicated.

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

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

[illegible]

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.

STRIKE OUT ONE

NONTECHNICAL ADD-ONS OR LANDMARKS FOR CHARTS

St. Simons Sound, Georgia. 22 March 1954

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be ~~shown on~~ *shown on* (deleted from) the charts indicated.

The positions given have been checked after listing by ~~P. H. Youlde~~

[illegible]

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.

TO BE CHARTED
DOUGLAS BOEKER

St. Simons Sound, Georgia, 22 March, 1954.

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~the~~ the charts indicated.

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

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

[illegible]

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.

COAST PILOT REPORT

ATLANTIC COAST - SECTION D - FIFTH (1948) EDITION, AND
SUPPLEMENT SERIAL NUMBER 715 - 5, DATED 1 JANUARY 1953.

Project CS-365
Inshore Area along
Coast of Georgia

USC&GSS B O W E N
Harold J. Seaborg,
Commanding.

In connection with Instructions, Project CS-365, paragraph 24, dated 2 October 1953, the following items are noted.

ST. SIMONS SOUND and BRUNSWICK
Chart 447

Page 248. - Lines 8 - 9; and Supplement No. 715-5, page 40; read:

In March 1954 a hydrographic survey revealed a dangerous shoal encroaching from the north into the entrance ship channel between red nun buoys 6 and 8. A five and one-half ($5\frac{1}{2}$) foot sounding is at Latitude $31^{\circ}-05.94'$, Longitude $81^{\circ}-19.84'$. A seventeen (17) foot sounding is at Latitude $31^{\circ}-05.91'$, Longitude $81^{\circ}-19.85'$, placing it almost in mid-channel. Except for this shoal the controlling channel depth is as presently charted, 23 feet.

Lines 10 - 12; strike out:

St. Simons Range Front Light _ _ _ _ _ range, as it is not on the range line.

Lines 20 - 23; read:

A hotel tower 0.85 mile east-northeastward of St. Simons Light, the tall stacks of the Hercules Powder Company in Brunswick, and the water tank near the south end of St. Simons Island are prominent.

Line 45; read:

St. Simons is a summer resort with a substantial concrete pier at the south end of St. Simons Island. The pier is 107 feet along the outside face and is 25 feet wide. Protecting cluster piles are at the outer corners. The controlling depth is ²⁰19 feet at mean low water.

Page 249. - Line 5; read:

The bridge has a horizontal clearance of $33\frac{1}{2}$ feet and a vertical clearance of 8 feet at high water.

Line 15 (Supplement page 40); read:

A highway vertical lift bridge crosses the river 1.5 miles above the mouth. It has a horizontal clearance of 100 feet, a vertical clearance, closed, of $9\frac{1}{2}$ feet, and an open clearance of 85 feet.

Page 250. - Line 24; read:

Intracoastal Waterway. Jekyll Island is being converted into a State Park. Several large buildings (former palatial homes) are on the west side of the island near the landing.

Page 251. - Line 10; read:

An 80 bed modern hospital is found in Brunswick. The U.S. Public Health Service does not maintain a station here. A contract doctor has offices in the Dunwoodie Building.

Line 18; read:

BRIDGES - A highway bridge is under construction across the Brunswick River just east of the junction where Turtle River and Oglethorpe Bay enter Brunswick River. The bridge will connect the mainland with Colonels Island. In March 1954 the concrete supports were in place and the approach aprons completed. When completed, the lift bridge will have a 250 foot horizontal clearance, vertical clearance closed of 24 feet, and vertical clearance open of 139 feet.

Line 25; read:

----- at the shipyard. Most of the piers and wharves are in poor condition and some are in ruins. The dock and slip belonging to the Brunswick Port Authority offers the best berthing facilities for medium size craft. However, the entrance has filled with silt. The controlling depth at the entrance is 8 feet at mean low water in February 1954. The wharves of etc. -----

Line 32; read:

stores, coal, gasoline, diesel fuel, ice, and fresh water are procurable.

Line 38; read:

MARINE REPAIRS - There is only one sizeable firm offering marine repairs. The capacity of the railway is 400 tons. Vessels of 136 foot length, draft forward of 6 feet, draft aft of 9½ feet, can be accommodated.

Line 43; read:

In March 1954, there was practically no coastwise shipping and -----

JOHNSON CREEK TO BRUNSWICK RIVER Chart 840

Page 265. - Line 25; read:

The lift bridge over Back River is described in another section.

BRUNSWICK RIVER TO NASSAU SOUND Chart 841

Page 266. - Line 24; add:

A highway bridge is under construction, vertical lift type, (March 1954) across Jekyll Creek to the island. When completed, this lift bridge will have a horizontal clearance of 100 feet, a vertical clearance closed of 9½ feet, and vertical clearance open of 85 feet.

"Harold J. Seaborg,
Comdr., USC&GS

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8215 (Field No. Bn-1253)

GENERAL

Much difficulty was experienced during the smooth plot of this survey due to the use of slender angles in the off-shore areas. Also, a large number of questionable angles were encountered thru-out and an unusually high number had to be rejected. It is recommended that this survey be carefully verified in the vicinity of channels and in other critical areas.

SOUNDINGS

Agreement of soundings at crossings is only fair. This disagreement is more noticeable in the off-shore areas where the bottom is irregular, the sextant angles slender, and where much of the hydrography was done under fairly heavy sea conditions in a bottom that probably changes considerably with each storm.

Lat. 31-06.⁸⁹~~78~~ Long. 81-21.52 ✓ The 18' sounding falling in the channel is particularly questionable as it is plotted on a 2 position line.

Lat. 31-08.00 Long. 81-25.05 The positioning of the 12' ^{*}sounding in this area is questionable and additional developement should have been accomplished.

Removed from smooth sheet... fixes 26, 27, 28 are faulty and are rejected. (launch 4) (br) REE 3-14-56

Detached positions 1 thru 39c (purple). The plotting of these positions of bottom samples are questionable as they were recorded without check angles and were never plotted on the boat sheet. The soundings on a few do not agree with surrounding hydrography.

DISCREPANCIES

Lat. 31-07.90 Long. 81-25.70 Soundings between positions ²⁴~~21~~ and 30a (blue) were not smooth plotted as the course was extremely erratic and soundings do not agree with surrounding hydrography.

(con't)

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys:~~

16 April 1956

Division of Charts: R. H. Carstens

Plane of reference approved in
21 volumes of sounding records for

HYDROGRAPHIC SHEET

8215

Locality St. Simons Sound, Ga.

Chief of Party: H. J. Seaborg in 1954
Plane of reference is mean low water, reading
3.5 ft. on tide staff at St. Simon Lighthouse
17.2 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:

NOTE: Tide reducers for the positions below have been
revised in red and verified:

Vol.	Positions
3	1d - 39d, 1e - 96e ✓
8	1g - 32g ✓
10	12a - 25a ✓
9 -	10a - 11a - <u>WER</u>
	Sdgs. corrected - <u>WER</u>

William H. Seaborg
Branch
Chief, ~~Division of~~ Tides and Currents.

GEOGRAPHIC NAMES

Survey No. H-8215

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
✓ <u>Georgia</u>									B.G.M.	1
✓ <u>St Simons Sound</u>									"	2
✓ <u>St. Simons Island</u>									"	3
✓ <u>Jekyll Island</u>									"	4
✓ <u>Goulds Inlet</u>									"	5
✓ <u>Sea Island</u>									"	6
✓ <u>Blackbank River</u>										7
✓ <u>King Creek</u>										8
✓ <u>Frederica River</u>										9
✓ <u>Lanier Island</u>										10
✓ <u>Mackay River</u>										11
✓ <u>Back River</u>										12
✓ <u>Plantation Creek</u>										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved

3-29-56. L. Heck

(see chart 447 for
placement of names)

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ~~215~~215.....

Records accompanying survey:

Boat sheets ~~1~~1.; sounding vols. ~~21~~21.; wire drag vols.;
 bomb vols.; graphic recorder rolls ~~19~~19; Envelopes ✓
 special reports, etc. ~~1-Descriptive report, 1-Smooth sheet, and~~.....
~~1-Folder, Fathometer correction data.~~.....

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

Number of positions on sheet	.....	4678
Number of positions checked	.....	550
Number of positions revised	.....
Number of soundings revised (refers to depth only)	.....	502
Number of soundings erroneously spaced	.....	8
Number of signals erroneously plotted or transferred	.....	1
Topographic details	Time	8 hrs.
Junctions	Time	56 hrs.
Verification of soundings from graphic record	Time	58 hrs.

Verification by William E. Roig Total time ~~391~~391 hrs. Date 11/20/59
 Reviewed by [Signature] Time 90 Date 9/5/59

LDRE

Lat. 31-08.65 Long. 81-25.30 -- Position 7b (blue) was not plotted ✓
as the fix was questionable and the time erratic.

Lat. 31-07.85 Long. 81-23.58 Soundings between positions 230 and 236b ✓
(blue) were not plotted as soundings do not agree with surrounding hydrography.

L Lat. 31-09.49 Long. 81-25.29 Soundings between 1 and 17e (blue) were ✓
not plotted as they do not agree with surrounding hydrography.

Lat. 31-07.00 Long. 81-21.75 Position 175e (green) was not plotted ✓
because of a weak fix.

Lat. 31-07.30 Long. 81-21.95 Position 74g (green) was not plotted because ✓
of a weak fix.

Lat. 31-03.01 Long. 81-21.76 Soundings between positions 22 and 27a ✓
(brown) were not plotted as they did not agree with surrounding hydrography.

Lat. 31-07.15 Long. 81-21.60 Positions 121 thru 123c (brown) were ✓
not plotted as the fixes were questionable.

Lat. 31-08.00 Long. 81-23.90 Positions 96 and 97d (brown) were not ✓
plotted because of weak fixes.

Lat. 31-07.90 Long. 81-23.68 Soundings between positions 153 and 155d-
(brown) were not plotted. ^{Adequate along slope.} Disagreement with surrounding hydrography.

Lat. 31-07.20 Long. 81-21.76 Soundings between positions 25 and 26e ✓
(brown) were not plotted. Disagreement with surrounding Hydrography. ✓

OK see preceding page

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer

Norfolk, Va.
16 Feb. 1956

DIVISION OF CHARTS.

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8215

FIELD NO. BN-1253

Georgia, St. Simons Sound

Surveyed - Feb.-March 1954

Scale: 1:10,000

Project No. CS-365

Soundings: 808 depth recorder
hand lead
pole

Control: Sextant
angles on
shore signals

Chief of Party - H. J. Seaborg
Surveyed by - H. J. Seaborg, J. R. Plaggmier, J. F. Vance, Jr.
Protracted by - R. D. Lynn (Norfolk)
Soundings plotted by - R. D. Lynn
Verified and inked by - W. E. Roig
Reviewed by - L. V. Evans III 5/15/59
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline north of lat. $31^{\circ}07.5'$ originates with reviewed photogrammetric surveys T-9955 and T-9956 of 1956 except in the vicinity of lat. $31^{\circ}08.1'$, long. $81^{\circ}23.2'$ where a short section of shoreline from the advance manuscript of T-9955 has been shown on the smooth sheet in red. That particular section as compiled from 1951 photographs is thought to reflect conditions contemporary to the hydrography better than the 1956 field edit revisions shown on the final topographic sheet.

The shoreline of Jekyll Island originated largely with plane-table surveys Bn-A-54 and Bn-B-54 by the hydrographic field party. Shoreline from the plane-table sheets is shown in red. A small section in the vicinity of lat. $31^{\circ}03'$ from the incomplete manuscript of T-9959 (field inspection in 1954) is shown in black.

On the west side of Brunswick River south of lat. $31^{\circ}07.5'$, a short section of shoreline was shown from T-5224 (1933-34).

The sources of hydrographic control are fully tabulated in lists appended to the Descriptive Report.

2. Sounding Line Crossings

Final depths are in adequate agreement at sounding line crossings. There are a number of 1-ft. discrepancies in areas of smooth bottom and in areas of more bottom relief some crossings reflect a lack of rigid positioning. Because of the somewhat unstable nature of the bottom the overall pattern of crossings is considered sufficient to confirm the adequacy of the survey for charting.

3. Depth Curves and Bottom Configuration

The depth curves are adequately defined by the hydrography. The bottom is rather irregular, with many bars and shoals.

4. Junctions with Contemporary Surveys

Adequate junctions were made with H-8216 (1954-55) to the east, H-5579 (1934-37) to the southwest and H-5590 (1934) to the northwest. On the south, where the survey extends to the present project limits, depths are in harmony with charted hydrography.

5. Comparison with Prior Surveys

H-537 (1856) 1:10,000	H-1830 (1888) 1:20,000
H-548 (1856) 1:10,000	H-2178 (1894) 1:20,000
H-590 (1856-7) 1:10,000	H-2390 (1899) 1:10,000
H-810 (1860) 1:20,000	H-4462 (1924) 1:20,000
H-1133 (1869-72) 1:20,000	H-5579 (1934-37) 1:10,000
H-1146 (1872) 1:20,000	H-5590 (1934) 1:10,000
H-1775 (1887) 1:10,000	

The surveys listed comprise the prior coverage of the area of the present survey. A comparison between the present and prior surveys reveals considerable change in depths. Within St. Simon Sound, except in the main channels, there has been general, and in places pronounced, shoaling, as shown by the following examples:

<u>Prior Depth</u>	<u>Source</u>	<u>Lat.</u>	<u>Long.</u>	<u>Present Depth</u>
7-9 ft.	H-5579	31°07.5'	81°25.7'	5 ft.
5-7 ft.	"	31°06.95'	81°25.9'	-1 ft.
17 ft.	"	31°08.0'	81°25.05'	12 ft.
35 ft.	"	31°07.8'	81°25.0'	25 ft.
8 ft.	"	31°08.55'	81°25.38'	3 ft.

H-8215(1954)-3

In the area outside the inlet the changes have been more in the nature of bottom shifting, with varied shoaling and deepening as revealed by the following comparisons:

<u>Prior Depth</u>	<u>Source</u>	<u>Lat.</u>	<u>Long.</u>	<u>Present Depth</u>
6 ft (charted)	H-4462	31°05.0'	81°22.24'	9 ft.
33 ft.	H-2390	31°07.4'	81°23.4'	- $\frac{1}{2}$ ft.
3 $\frac{1}{2}$ ft.	"	31°07.6'	81°24.1'	29 ft.
4 ft.	H-1830	31°06.3'	81°22.1'	8 ft.
18 ft.	"	31°07.12'	81°21.45'	1 ft.
5-6 ft.	H-1133	31°05.4'	81°21.5'	10-12 ft.
13 ft.	"	31°06.0'	81°22.4'	6 ft.

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

6. Comparison with Chart 447 (print of 12/15/58) Chart 448 (print of 10/27/58)

A. Hydrography

Most of the charted hydrography originated with the prior surveys and needs no further discussion. Supplemental hydrography has been charted through preliminary application of the present survey from a print of the boat sheet (Bp 51831) and the penciled smooth sheet. Only minor differences of 1 - 2 ft. are noted between soundings so charted and the final smooth sheet depths. However, because of the importance of its location attention is called to the 18-ft. sounding, charted in lat. 31°07.94' long. 81°23.83' from the boat sheet of this survey, which has been revised to 20 ft. on the final smooth sheet and shifted slightly in position.

Attention is also called to the following:

(1) The 12-ft. sounding charted in lat. 31°07.60', long. 81°24.90' and the 26-ft. sounding in lat. 31°07.64' long. 81°24.62' are from a Corps of Engineers' survey of January 1957 (Bp 54932) and therefore supersede depths of this survey.

(2) The apparent pile symbol charted in lat. 31°08.22', long. 81°26.02' from an air photo office revision (Bp 48100) should be disregarded. Apparently the feature had been intended as an islet, since the hydrographer found only oyster beds, as shown on the survey, in the area (see Descriptive Report, Par. L, item 22.).

Except for information subsequent to the date of the field work this survey is adequate to supersede the charted hydrography within the common area.

(B) Controlling Depths

Controlling depths in the Bar Channel are charted from Corps of Engineers' surveys subsequent to this survey.

(C) Aids to Navigation

Plantation Creek Spit Buoy was found to be in lat. $31^{\circ}07.94'$ long. $81^{\circ}25.28'$, about 250 m. east of its charted position; the location as found on this survey appears somewhat preferable to the charted position. All other aids are charted in substantial agreement with their survey positions and adequately mark the features intended.

7. Condition of Survey

The field work on this survey does not meet the usual standards in the following respects:

(1) The positioning of the hydrography was not as rigid as would be expected in an inshore survey of this type.

(a) The choice of signals in many cases resulted in slim angles and weak fixes, although it would seem that stronger fixes should have been feasible.

(b) An unusually large number of questionable angles was found. Many fixes had to be rejected or plotted on 1 angle, time and course.

(2) Agreement of crossings and adjacent lines was not as consistent as normally expected.

(a) Numerous crossing discrepancies of 1 - 4 ft. had to be resolved by the smooth plotter and/or verified.

(b) Analysis of crossings revealed that the corrections applied in the field for fathometer speed were in some cases not valid.

(c) Empirical corrections in some instances had to be derived and applied to resolve discrepancies.

(d) Some crossings were improved by rescanning the fathograms. Instances were found where peaks at uneven intervals were scanned on the even interval and displaced soundings as much as 4 millimeters.

(e) In some cases the density of hydrography was such that whole lines or parts of lines which could not otherwise be reconciled could be rejected without causing a deficiency in coverage.

(B) The smooth plotting was satisfactory. Because of the difficulty caused by the factors discussed in the preceding paragraph considerable additional time was required beyond the normal time for a sheet of this type.

(C) The shoal indication (12 and 13-ft. soundings) in lat. $31^{\circ}08.0'$ long. $81^{\circ}25.05'$ should have been developed. The smooth plotting reveals a small holiday on the north side of this shoal. The control of the line involved was weak and the boat sheet plotting did not show the holiday; however, the shoal indication in itself should have called for more investigation.

8. Compliance with Project Instructions

Except for the items discussed in Section 7 this survey adequately complies with the project instructions.

9. Additional Field Work Recommended

This survey is considered basic for charting this unstable area and no additional field work is recommended. Because of the type of bottom, the shoal indication mentioned in Section 7 (C) is not considered of sufficient importance to justify recommending additional development.

EXAMINED AND APPROVED:

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

Lorin F. Woodcock
Lorin F. Woodcock, Chief
Hydrography Branch

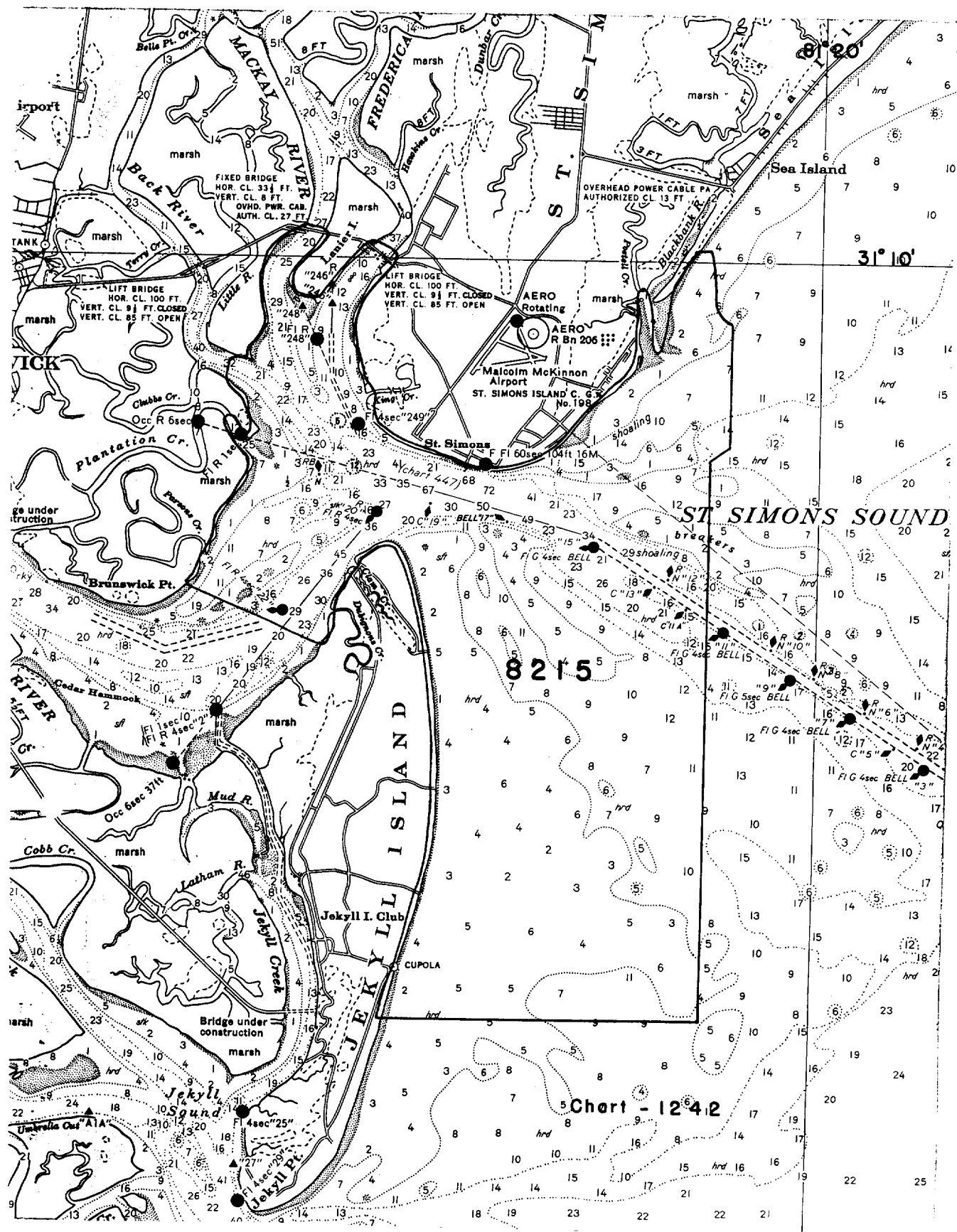
Ernest B. Lewey
Ernest B. Lewey, Chief
Chart Division

Samuel B. Grenell
by John Bowie
Samuel B. Grenell, Chief
Coastal Surveys Division

NOTES TO VERIFIER

Shoreline on H-8215 was obtained from advance manuscripts T-9956 (south half) and T-9955 (south half). Extensive shoreline field edit corrections shown in red have since been applied to the topographic manuscripts.

Shoreline in red for Jekyll Is. has no T-sheet, plane table survey destroyed prior to verification. Otherwise OK
WER



NAUTICAL CHARTS BRANCH

SURVEY NO. H-8215

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
7/20/56	1242	Jam	Before After Verification and Review added two ones off shore #7 Examined. No correction made, except as noted on aid proof. Part. appld
8-31-56	447	R.K. Richardson	Before After Verification and Review
11/16/56	840	J.P. Walker	Before After Verification and Review Part applied thru ch 447 Wing # 11
7/3/57	Reconst. 448	EAE	Before After Verification and Review
14 July 1959	447 } 448 }	Nichols }	Before After Verification and Review Completely applied
17 July 59	1242 (Thru 447 & 448 above)	Nichols	Before After Verification and Review Completely applied
20 July 59	1111	Nichols	Before After Verification and Review Thru 1242
11-29-61	447	A.A. Jones	Before After Verification and Review Completely appld. thru Bp 58431
			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.