

9458

9458

Diag. Cht. No. 1242-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey HYDROGRAPHIC
Field No. MI-20-2-74
Office No..... H-9458

LOCALITY

State GEORGIA
General Locality . JEKYLL ISLAND
Locality ST. ANDREW SOUND

1974

CHIEF OF PARTY
R. M. Buffington

LIBRARY & ARCHIVES

DATE 4-25-77

Via J
Ct
84/30 A
458
1242
111

4/25/77
RMB
5/1/77

HYDROGRAPHIC TITLE SHEET

H-9458

~~INCOMPLETE~~

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

MI-20-2-74

State GEORGIA

JEKYLL ISLAND

General locality ~~South East Atlantic Coast~~

Locality Entrance to St. Andrew Sound

Scale 1:20000

Date of survey ²²⁴ ²⁷⁵ 12 Aug to 2 Oct 1974

Instructions dated 24 Oct 73

Project No. OPR-436-MI-74

Vessel NOAA Ship Mt. Mitchell MSS-22

Chief of party Ronald M. Buffington, CDR, NOAA, Commanding Officer

Surveyed by Ship's Officers. See Remarks.

Soundings taken by echo sounder, hand lead, pole _____

Graphic record scaled by Ship's Personnel

Graphic record checked by Harry R. Smith - AMC - Norfolk, Virginia

Protracted by _____ Automated plot by CALCOMP-618-AMC

Soundings penciled by _____

Soundings in ~~XXXXXXXX~~ fathoms feet at MLW ~~XXXXX~~

notes in red by the Verifier

REMARKS: CDR R.J. DeRycke

LT M.R. Mulhern

LTJG P.B. Loiseau

LTJG R.J. Pawlowski

ENS D.A. Pasciuti

ENS D.M. Kuhl

ENS T.G. Russel

ENS K. O'Donnell

ENS M.E. Ziolko

ENS E.J. Fields

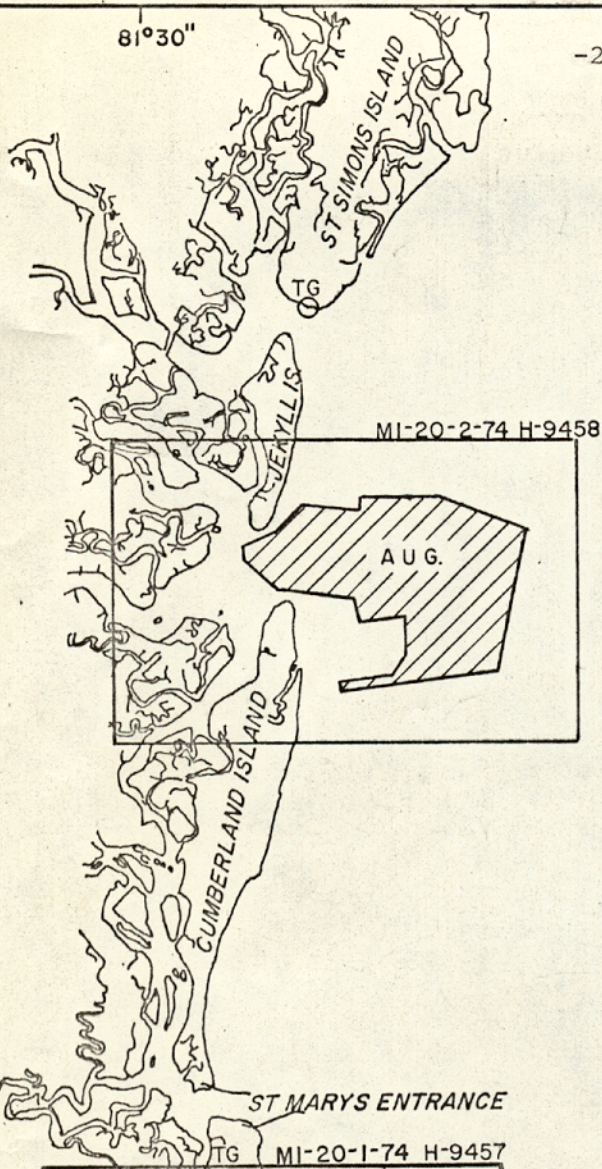
ENS R.E. Marriner II

This survey is incomplete, requiring further work on sounding lines, developments and bottom samples.

81°30"

-2-

81°00"



31°00"

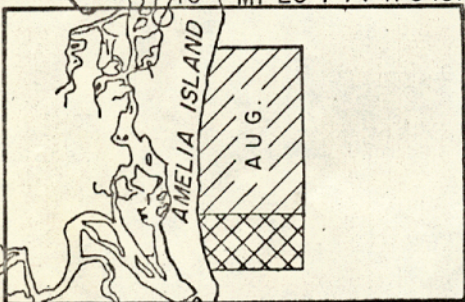
31°00"

PROGRESS SKETCH

OPR-436-MI-74
 SOUTHEAST ATLANTIC COAST
 HYDROGRAPHIC OPERATIONS
 MAR. - OCT. 1974
 NOAA SHIP MT MITCHELL (MSS-22)
 RONALD M. BUFFINGTON, CDR, NOAA, COM'D'G.
 SCALE OF NOS CHART NO. 1111

30°30"

30°30"



LEGEND

JUL.	AUG.	SEP.	OCT.	
66	666		17	L.N.M. - SOUNDING LINE
11	196		10	L.N.M. - MISC. DISTANCE
32	184		26	L.N.M. - DISTANCE TO & FROM
6	53		10	SQ.N.M. - AREA SOUNDED
0	10		0	BOTTOM SAMPLES
16	5		0	SIGNALS ERECTED

69 sq miles completed
749 L in miles hydro

81°30"

81°00"

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY MI-20-2-74

OPR-436-MI-74
COAST OF GEORGIA
ENTRANCE TO ST. ANDREW SOUND
SOUTHEAST ATLANTIC COAST

1974 FIELD SEASON

NOAA SHIP MT MITCHELL MSS-22
RONALD M. BUFFINGTON, COMMANDER, NOAA
COMMANDING OFFICER

*Approved to state 8/30/77
CRB*

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A. Project:

This survey was an inshore portion of OPR-436-MI-74, Southeast Atlantic Coast, and Project SCOPE, Southern Coastal Plains Expedition, and was conducted in accordance with SCOPE guidelines and Project Instructions dated 24 October, 1973, as amended by Change #1, dated 6 December, 1973; Change #2, dated 8 February, 1974; Change #3, dated 12 April, 1974; and Change #4, dated 8 July, 1974. The registry number is H-9458. ✓

B. Area Surveyed:

This survey was conducted at the entrance to St. Andrew Sound, to the mean low water lines on Little Cumberland and Jekyll Islands. The survey area can be defined by joining the following points in a clockwise direction: 31° 01.4' N, 81° 26.4' W; 31° 01.8' N, 81° 24.2' W; 31° 02.1' N, 81° 19.5' W; 31° 01.1' N, 81° 15.5' W; 30° 56.5' N, 81° 17.0' W; 30° 55.8' N, 81° 22.6' W; 30° 58.7' N, 81° 22.2' W; and 30° 58.9' N, 81° 25.2' W. The borders junction with H-8216 (1954-55) to the northeast and H-9449 (1974) to the southeast. Work began on 12 August, 1974 (J.D. 224) and was stopped on 2 October, 1974 (J.D. 275). ✓

C. Sounding Vessels:

All soundings were obtained by two Pacific Plastics' Launches, NOAA #1204 (MI-5, Vessel #2225) and #1205 (MI-4, Vessel #2224), and by Uniflite Launch NOAA #1261 (MI-6, Vessel #2226). Data was logged and recorded manually on Launches 2224 and 2225, with processing completed on board the MT MITCHELL (MSS-22). Launch 2226 maintained an on-line Hydroplot system, with final processing completed on board the MT MITCHELL. ✓

D. Sounding Equipment:

The three launches included the following sounding equipment:

Equipment	2224	2225	2226
Raytheon DE-723 Survey Fathometer	Type B #1280	Type B #1285	Type D #37019
Decca Sea-Fix Receiver Type 9435	#002	#008	#002
Panalogic Navigation Interface	PMC #6	PMC #5	PMC #6 ✓

Equipment (con't)	2224	2225	2226
Climatronics Model DL-10 Logger and Teletype	#9	#7	
PDP-8E Computer			85090/ 5024 4309-1
NOS Hydroplot Controller			85089/ 7605411 ✓
Epsco Strip Chart Recorder			

The initial was set at zero on all echo-sounders. Initial drift was reset to zero. Any variance from zero was applied when the graphic records were scanned. ✓

The following checks were made frequently on the Raytheon Fathometers: A-F scale check (with fine arc), speed count, MRV, initial and paper alignment. Corrections were applied between sounding lines, except for corrections to the initial. The graphic records were scanned and checked by trained personnel, with additional spot checks for errors by the officer-in-charge of the particular launch. These checks insured that the data was correctly interpreted in accordance with Paragraphs 1-34, 5-121, and 5-122 of the Hydrographic Manual (20-2). Velocity corrections and instrument error for the launches were determined by bar checks and confirmed by leadline comparisons. These were taken at least once per day if weather and sea conditions permitted. An abstract of velocity corrections is included in this report. ✓

Skiffs were used for the delineation of some shoals. Control for this was visual and sounding poles were used for some observations. ✓

E. Smooth Sheet:

The smooth sheet will be prepared by the Atlantic Marine Center, Norfolk, Virginia. The following tapes were supplied, along with printouts:

1. Hyperbolic Master Tapes (#2224 and #2226)
2. Hyperbolic Corrector Tapes
3. Visual Master Tapes (#2225 and #2227)
4. Visual Corrector Tapes
5. Velocity Correction Tapes
6. TC/TI Tapes
7. ASCII Signal Tapes
8. Computer Parameter Tapes ✓

7

The following hydroplot system programs were used:

	<u>Program</u>	<u>Version date</u>
1.	RK 110 Hyperbolic Real Time Hydroplot	04/01/74
2.	AM 201 Grid and H/R Lattice Plot	11/10/72
3.	RK 210 Hyperbolic Non-Real Time Plot	05/07/74
4.	RK 212 Visual Station Table Load & Plot	04/01/74
5.	RK 215 Visual Position & Sounding Plot	05/03/74
6.	RK 337 Unscrambler	08/08/74
7.	PM 360 Electronic Corrector Abstract	03/21/74 ✓

Data for vessels #2224 and #2225 was recorded using manual loggers, and was edited and reformatted aboard ship, using RK 337 (Unscrambler) to the hydroplot master tape format for smooth processing. ✓

F. Control:

Control for this survey was electronic for 2224 and 2226, and visual following a hyperbolic steering arc for 2225. The electronic control stations were as follows: ✓

Master, SIMON 1974	Latitude	31 ^o 08' 27.120" N ✓
	Longitude	81 ^o 22' 33.110" W ✓
Slave 1, MAYPORT 1973	Latitude	30 ^o 23' 40.366" N ✓
	Longitude	81 ^o 23' 41.056" W ✓
Slave 2, RADD 2 1974	Latitude	32 ^o 01' 12.300" N ✓
	Longitude	80 ^o 50' 35.220" W ✓

Pattern 1 was the steering arc for both 2224 and 2225. ✓

The visual control and Sea-Fix calibrations were from stations located by at least third order methods on Cumberland, Little Cumberland, Jekyll, and St. Simons Islands. Signals 193-199, 201-204, and 206-209 were traverse stations established by Photo Party 62 Traverse. Signals 200, ~~205~~, and 210-240 are published triangulation stations. Signal lists for 212-218 and RK 561 are included in this report. ✓

Calibrations for the Sea-Fix patterns were from the mean of daily calibrations, using three point visual fixes, with a check angle. A sawtooth strip chart was maintained on launches 2224 and 2226 to monitor lane count while surveying. These were scanned for lane jumps while surveying and appropriate corrections made. For further information on Sea-Fix related control, refer to Electronic Control Report, MI-20-2-74. ✓

G. Shoreline:

Shoreline was transferred from National Ocean Survey Topographic Manuscripts TP-00496 and TP-00497, compilation completed July 1974. The mean low water lines on some shoals were established by visual fixes with check angles (Positions #7001-7043, #7201-7230, and #7601-7604). Tapes of the check angles for these positions were made and plotted as a check of these detached positions. The tapes of the check fix positions have not been forwarded. A record of these positions is included in the sounding volumes. ✓

H. Crosslines:

Crosslines were run to the extent of 9% of the sounding lines. Junction is good, generally within 1-2 feet. Pattern 2 was used as a steering arc for Vessel #2225 crosslines. ✓

I. Junctions:

Survey work junctions with H-8216, 1:20,000 (1954-55) on the north-east corner (east of $81^{\circ} 20'$). Junction is good, with soundings consistently within 1-2 feet. ✓

Survey work junctions with H-9449, 1:40,000 (1974) to the east. Junction is good, with soundings generally within 1-2 feet. Some variance of 3 feet is found around $30^{\circ} 59.5' N$, $81^{\circ} 16.0' W$. This is believed to be due to the unevenness of the bottom in this area. ✓

This survey does not junction with H-8215 on the northwest along Jekyll Island. ✓

J. Comparison with Prior Surveys:

The survey area was previously surveyed by H-3770, 1:80,000 (1915) and H-4444, 1:20,000 (1924). Junctions with H-3770 is good, with soundings within 1-2 feet. The area around $30^{\circ} 56.4' N$, $81^{\circ} 18.2' W$ has shoaled to a consistent 29-30 feet, from 34-35 feet. ✓

The junction with H-4444 is good offshore, with soundings junctioning within 1-2 feet. However, major bar shifting has occurred inshore, resulting in little junction. *Concur*

The shoal area at $30^{\circ} 57.6' N$, $81^{\circ} 20.0' W$ has shifted to the southwest, leaving the area 3-4 feet deeper. A shoal now exists at $30^{\circ} 56.4' N$, $81^{\circ} 20.2' W$, showing a 6-8 feet shoaler depth. The minimum depth found for this area was ~~8~~ feet. ✓

The shoal area at $30^{\circ} 59.0' N$, from $81^{\circ} 20.0' W$ to $81^{\circ} 21.0' W$ has shifted to the south, leaving depths 3-4 feet deeper. The bar now occurs at $30^{\circ} 58.3' N$, $81^{\circ} 21.3' W$, with zero as its shoalest depth. The bar occurs along the north edge of the channel. ✓

The bottom at $30^{\circ} 59.8' N$, $81^{\circ} 21.1' W$ has shallowed from 10-20 foot depths, to 7-12 feet. There has also been a consistent 3-4 feet deepening in the vicinity of $30^{\circ} 59.4' N$, $81^{\circ} 21.5' W$. ✓

The bar at $30^{\circ} 59.8' N$, $81^{\circ} 21.1' W$ has shifted 1000 meters to the northwest, with this area being 18-30 feet deep. The shoalest depth for the bar is 2 feet. ✓

A large shoal, that bares at low water, has built up at $30^{\circ} 59.7' N$, $81^{\circ} 24.2' W$, in an area of previously 8-10 foot depths. A large channel has developed 200 meters north of this bar, with depths of 14-22 feet, in an area previously surveyed at 1-16 feet. The channel is 600 meters wide, with steep shoals and breakers to the north and south. ✓

A large bar along $31^{\circ} 00.5' N$, from $81^{\circ} 23.6' W$ to $81^{\circ} 25.8' W$ has shown a northwesterly shift and an overall widening. This shoal has bare low water areas at $31^{\circ} 00.6' N$, $81^{\circ} 24.3' W$, $31^{\circ} 00.7' N$, $81^{\circ} 25.3' W$, and ~~$31^{\circ} 00.6' N$, $81^{\circ} 25.1' W$~~ ✓
and

Shoaling has also occurred from $81^{\circ} 24.3' W$ to the edge of the survey, along $30^{\circ} 59.6' N$. Differences of 10 feet are common, with new depths being 6-15 feet. ✓

The marked channel has shown an overall shallowing throughout the survey area. The northern part, from St. Andrew Light #32 to St. Andrew Sound Lighted Buoy #29 (Temporary) has showed a consistent 3-4 foot shoaler depth, with a range from 16-47 feet. The western channel, from St. Andrew Sound Light #32 to $30^{\circ} 59.0' N$, $81^{\circ} 25.2' W$ has shown a consistent 5-6 feet shoaler sounding than previously surveyed. The channels depth ranges from 16 feet at St. Andrew Light #32 to 68 feet at $30^{\circ} 59.1' N$, $81^{\circ} 24.3' W$. The eastern channel, from St. Andrew Light #32 to St. Andrew Inner Mid-Channel Buoy has shown a consistent 5-6 foot shoaler sounding. The channel ranges from 16 feet at the light to ~~34~~ 32 feet at $30^{\circ} 58.9' N$, $81^{\circ} 22.5' W$. ✓
with maximum depths of 77 ft. found in the vicinity of lat. $30^{\circ} 59.10'$, long. $81^{\circ} 23.90'$.

K. Comparison with Charts:

The survey area occurs on NOS Charts #11009 (1001), 11480 (1111), 11504 (448), and 11489 (841-SC). Charts #11009 and 11480 show this area as blue tint, with no junction soundings. Chart 11502 ✓

shows good comparison with most areas junctioning within 1-2 feet. A bar exists at $30^{\circ} 59.7' N$, $81^{\circ} 24.2' W$ that bares at low water and is shown just as a shoal. The area which bares, has appeared to have shifted south from the charted one. There is a 16-21 foot channel between two barren shoals at latitude $31^{\circ} 00.0' N$ from $81^{\circ} 24.2' W$ to $81^{\circ} 23.6' W$. The charted depths in this area are 3 feet. The 80 foot sounding ^{charted} at $30^{\circ} 59.2' N$, $81^{\circ} 24.4' W$ has shallowed to $\frac{7}{8}$ feet; as the greatest depth of the hole. *is 77 ft. to the east of this position.*

Chart #11504 shows good junction offshore, with most soundings within 1-2 feet. Inshore, it has the same changes as Chart #11502, along with several additional discrepancies. The shoal around $30^{\circ} 59.5' N$, $81^{\circ} 22.5' W$ has narrowed to a small band at $30^{\circ} 59.2' N$, with 7-10 feet depths to the north.

A major shoal has built up at $30^{\circ} 58.2' N$, $81^{\circ} 21.2' W$, with chart showing area of 13-14 feet. This shoal ~~has appeared~~ to have shifted southeasterly from its' charted position, mentioned above. Channel depths appear to be consistent with charted depths. The Aids to Navigation also occur as charted, with exception of Racoon Key Spit Daybeacon, which was missing. *Beacon is not missing. It is used as a signal on the present survey.*

Chart #11489 requires the same corrections to the inshore bars as listed for #11502 and 11504.

The following pre-survey review items were surveyed:

Pre-survey review item #19, a wreck, was found at $31^{\circ} 00' 42'' N$, $81^{\circ} 22' 04'' W$, position 3053. No minimum depth was established nor development completed. Further investigation is necessary. *Retain on chart*

An unnumbered sounding of 5 feet, at $30^{\circ} 01' 10'' N$, $81^{\circ} 24' 04'' W$ was not found, with area being 12 feet. A 5 foot sounding is found ~~200~~ meters to the west, southwest.
700

Shoaling was reported at $30^{\circ} 59' 40'' N$, $81^{\circ} 25' 09'' W$. The area is on a 7-10 foot shoal, with 5-6 feet found 300 meters to the south.
(An unnumbered sounding of 6 feet, at $30^{\circ} 58' 19'' N$, $81^{\circ} 20' 04'' W$ was not found, with area being 13-17 feet.

An unnumbered sounding of 18 feet, at $30^{\circ} 56' 36'' N$, $81^{\circ} 20' 53'' W$ was found to have shoaled to 12 feet. *Unjustified statement - no hydrography in the area of the charted 18. Disregard.*

An unnumbered sounding of 12 feet, at $30^{\circ} 56' 30'' N$, $81^{\circ} 19' 39'' W$ was not found, with area varying from 15-17 feet deep.

The pre-survey review Aids to Navigation have been listed in section M, Aids to Navigation.

L. Adequacy of the Survey:

This survey is incomplete, with much of the area needing sounding lines and development. Major holidays exist over several shoals inshore, and most of the offshore channel. Bottom samples are still needed for the area. Otherwise, the area surveyed is adequate to supersede previous surveys.

M. Aids to Navigation:

The area included 8 buoys and 1 daybeacon maintained by the U.S. Coast Guard. The following positions were established for those aids not previously located as signals:

Name	Latitude	Longitude
St. Andrew Sound Outer Entrance Buoy Light List #497	30° 55'41.0"N	81° 18'58.2" W - <i>No pos'n taken.</i>
St. Andrew Sound Inner Midchannel Buoy Light List #497	30° 57'56.4"N	81° 22'01.5" W - <i>pos'n 3569.</i>
St. Andrew Sound Buoy #3 Light List #497	30° 58'55.6"N	81° 23'28.2" W - <i>pos'n. 3565.</i>
St. Andrew Sound Lighted Buoy #30 Light List #3792	31° 00'07.5"N	81° 25'25.4" W - <i>pos'n. 3563.</i>
Lighted Buoy #29 Temporary	31° 00'42.0"N	81° 26'07.0" W - <i>pos'n. 3564.</i>

Positions were not established for St. Andrew Sound Buoys #2 and #4. Also Racoon Key Spit Daybeacon #6, Light List #497, was not found, nor any remains exposed.

N. Statistics:

Vessel - - - - -	2224	2225	2226	Total
Linear Nautical Miles, Sounding Lines including Crosslines	76.7	139.5	234.7	450.9
Square Nautical Miles, Area Surveyed	7	17	28	52

N. Statistics: continued

Vessel -	2224	2225	2226	Total
Number of Positions	283	597	365	*(79) 1324 ✓
Linear Nautical Miles, Crosslines (9.6%)	0	13.3	26.3	39.6 ✓

* Detached positions, Men walking shoals

O. Miscellaneous:

The shallow depths of this area, along with the apparent shift of several sandbars, suggest the importance of a chartlet being published in the Local Notice to Mariners. The area is under fairly heavy usage inshore, along the intercoastal waterway. Also many shrimpers have been observed working this area, both inshore and offshore. ✓

Sounding volumes labeled "Hydrographic Operations Log" (4 volumes) were used by the launches to record pertinent data for this survey. The boatsheet comprises two roll plotter (complot) sheets, A and B. Two mylar composite sheets, containing prior survey soundings, charted soundings, junction soundings, and pre-survey review items are forwarded as part of the record. ✓

P. Recommendations:

Further field work is required for completion of this survey. Additional sounding lines, developments, and bottom samples are required. ✓

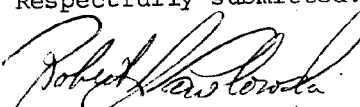
Q. Reference to Reports:

For complete evaluation of this survey, reference should be given to the following reports:

Report on Corrections to Echo-Soundings ✓
MI-20-2-74, H-9458

Report on Electronic Control ✓
MI-20-2-74, H-9458

Respectfully submitted:


Robert J. Pawlowski
Lt. (jg), NOAA



-11-

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY

Date : July 26, 1974

Reply to Attn. of: CAM102

To : Commanding Officer
NOAA Ship MT MITCHELL

From : *Ralph J. Land*
Ralph J. Land
Chief, Operations Division

Subject: Request for Registry Numbers, OPR-436-MI-74

REF: Your Memo dated July 19, 1974

Your referenced memo has been forwarded to C3233 for compliance.

The memo indicated that Boatsheet MI-20-2-74 would cover Cumberland Island, Georgia. Since the project instructions specify that the vicinity of St. Andrews Sound will be surveyed prior to Cumberland Island, Boatsheet MI-20-2-74 will cover St. Andrews Sound area instead of Cumberland Island. We have advised C3233 of the change and they will change their records accordingly.

The sheet limits (GP's of the 4 corners) are required for each boatsheet as stated in CAM22 memo dated March 20, 1973 (copy enclosed).

Enclosure

ATLANTIC MARINE CENTER

PROJECTION PARAMETERS

POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

- 1. Project No. 436
- 2. Reg. No. H-9458
- 3. Field No. MI-20-2-74
- 4. Requested By JSB
- 5. Ship or Office Verification
- 6. Date Required _____

7. Polyconic Modified Transverse Mercator

8. Central Meridian of Projection 81 ° 21 ' 00 "

9. Survey Scale: 1: 20,000

10. Size of Sheet (check one):

36 x 54 36 x 60 Other Specify _____

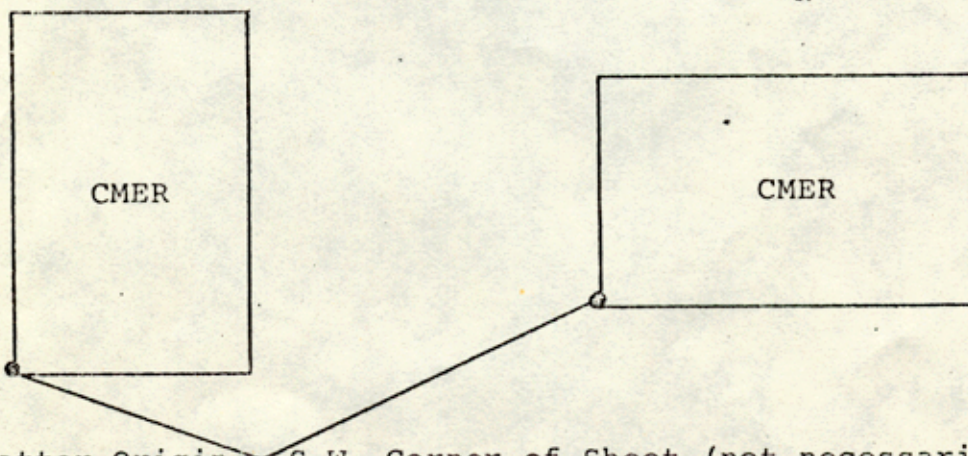
11. Sheet Orientation (check one):

NYX = 1

NYX = 0

N

N



12. Plotter Origin: S.W. Corner of Sheet (not necessarily a grid intersection)

Latitude 30 ° 53 ' 45 "

Longitude 81 ° 29 ' 45 "

13. G.P.'s of triangulation and/or signals attached

14. Material Desired: Tracing Paper Mylar

Smooth Sheet Other Specify _____

15. Remarks: _____

Atlantic Marine Center

Electronic Control Parameters

Project OPR-436-MI-7_4 Reg. No. H-9458 Field No. MI-20-2-7_4

Type of Control Sea-Fix (Sea-Fix, Hi-Fix, Raydist, etc.)

Frequency 1618.650 KHz (for conversion of lanes to meters)

Mode of Operation (check one)

Range-Range

Range-Visual

Range One (R1)

Station I.D. _____

Range Two (R2)

Station I.D. _____

Lat. _____ ° _____ ' _____ "N.

Long. _____ ° _____ ' _____ "W.

Lat. _____ ° _____ ' _____ "N.

Long. _____ ° _____ ' _____ "W.

Hyperbolic (3-station)

Hyper-Visual

Slave One

Station I.D. Mayport1973

Master

Station I.D. Simon 1974

Slave Two

Station I.D. RADD 2 1974

Lat. 30 ° 23 ' 40 . 366 "N.

Long. 81 ° 23 ' 41 . 056 "W.

Lat. 31 ° 08 ' 27 . 120 "N.

Long. 81 ° 22 ' 33 . 110 "W.

Lat. 32 ° 01 ' 12 . 300 "N.

Long. 80 ° 50 ' 35 . 220 "W.

Location of Survey:

Range-Range

Imagine an observer is standing at R1 station and looking directly at R2 (check one):

Survey area is to observer's Right A=∅

Survey area is to observer's Left A=1

Hyperbolic

Looking from survey area toward Master station:

Slave One must be to observer's Left

Slave Two must be to observer's Right

This form is submitted as an aid in preparing a boat sheet.

This form applies to all data on this survey.

This form applies to part of the data on this survey.

More than one set of stations used to control hydrography on this boat sheet: _____ Yes No (If Yes: See additional copy of this form)

From: T:145330 Jul. Day 224 to T:193537 Jul. Day 275

Remarks: _____

SIGNAL LIST, RK 212

MI-20-2-74

SF 06

193 1 30° 56' 14926" 081° 24' 13568" 000 0000 000000

SF 03S

196 1 30 58 02361 081 24 28510 000 0000 000000

SF 02

197 1 30 58 37911 081 24 25505 000 0000 000000

SF 01S

198 1 30 58 37352 081 24 47726 000 0000 000000

SF 00

199 1 30 58 31196 081 25 05391 000 0000 000000

LITTLE CUMBERLAND ISLAND LIGHTHOUSE 1860

200 1 30 58 33520 081 24 47750 000 0000 000000

RACON KEY SPIT DAYBEACON #6

201 1 31 00 21225 081 26 22012 000 0000 000000

CUMBERLAND RIVER LIGHT #35

202 1 30 57 26643 081 25 41370 000 0000 000000

CUMBERLAND RIVER LIGHT #34

203 1 30 57 55240 081 26 06301 000 0000 000000

ST ANDREWS SOUND LIGHT #32

204 1 30 59 23734 081 24 19513 000 0000 000000

JEKYLL CABLE TV CO TOWER 1974

205 1 31 01 10540 081 25 57370 000 0000 000000

SATILLA RIVER DAYBEACON #10

206 1 30 58 55927 081 28 04401 000 0000 000000

SIGNAL LIST (CONT.)

00000
SATILLA RIVER DAYBEACON #8
207 1 30° 59' 29.299" 081° 28' 00.102" 000 0000 000000
SA-01
208 1 30 59 56035 081 27 39805 000 0000 000000
KE-08
209 1 31 00 59529 081 27 07389 000 0000 000000
JEKYLL ISLAND SOUTHERNMOST WATER TANK 1968
210 1 31 01 33890 081 25 08750 000 0000 000000
EMMA 1933
211 1 31 01 32303 081 27 18783 000 0000 000000
JEKYLL ISLAND SOUTH WATER TANK 1968
215 1 31 02 42050 081 24 47440 000 0000 000000
JEKYLL ISLAND SOUTHERN BELL CENTRAL MICROWAVE TOWER 1974
220 1 31 04 04120 081 24 56840 000 0000 000000
JEKYLL ISLAND CAPTAIN WYLLY ROAD WATER TANK 1974
225 1 31 04 02810 081 24 21780 000 0000 000000
JEKYLL ISLAND NORTH WATER TANK 1967
230 1 31 05 08130 081 24 40690 000 0000 000000
JEKYLL ISLAND HORTON ROAD WATER TANK 1974
235 1 31 05 55050 081 24 29140 000 0000 000000
ST SIMONS LIGHTHOUSE 1872-1932
240 1 31 08 01990 081 23 37560 000 0000 000000

SIGNAL LIST (CONT.)

MAYPORT 1973

310 1 30° 23' 40.3⁶⁶~~70~~" 081° 23' 41.0⁵⁶~~60~~" 000 0000 161865

SIMON 1974

320 1 31 08 27120 081 22 33110 000 0000 161865

RADD 2 1974

330 1 32 01 12300 080 50 35220 000 0000 161865

*Does not match electronic
Control parameter sheet or
Lat, Long on Control Paragraph*

VELOCITY TABLES LISTING

H-9458

N^o 1

000025 0 0008 0001 000 222400 009458

000066 0 0010

000107 0 0012

000150 0 0014

000192 0 0016

000232 0 0018

000275 0 0020

000316 0 0022

000357 0 0024

000399 0 0026

000439 0 0028

000481 0 0030

000522 0 0032

000530 0 0034

999999 0 0034

N^o 2

000027 0 0008 0002 000 222500 009458

000067 0 0010

000109 0 0012

000151 0 0014

000192 0 0016

000233 0 0018

000275 0 0020

000316 0 0022

000358 0 0024

000399 0 0026

000441 0 0028

000482 0 0030

000523 0 0032

000564 0 0034

000607 0 0036

000647 0 0038

000688 0 0040

000729 0 0042

999999 0 0042

N^o 3

000019 0 0012 0003 000 222600 009458

000053 0 0014

000086 0 0016

000120 0 0018

000153 0 0020

000186 0 0022

000220 0 0024

000253 0 0026

000286 0 0028

000320 0 0030

000354 0 0032

000386 0 0034

000420 0 0036

000452 0 0038

000460 0 0040

999999 0 0040

№ 4

000050 0 0000 0004 000 222700 00945R

999999 0 0000

ABSTRACT OF SETTLEMENT AND SQUAT CORRECTORS

NOAA Ship MT MITCHELL MSS-22

17 September 1974

Uniflite launch MI-6 (NOAA 1261)

<u>Speed (RPMs)</u>	<u>Corrector (Tenths of foot)</u>
1000	0.0
1100	0.0
1200	0.0
1300	0.1
1400	0.1
1500	0.2
1600	0.3
1700	0.4
1800	0.6
1900	0.6
2000	0.6
2100	0.6
2200	0.5
2300	0.3
2400	0.2
2500	0.1
2600	0.0

ABSTRACT OF SETTLEMENT AND SQUAT CORRECTORS

NOAA Ship MT MITCHELL MSS-22

19 August 1974

Launch MI-4 (NOAA 1205)

RPM'S	CORRECTOR
800	.10
900	.10
1000	.10
1100	.10
1200	.10
1300	.10
1400	.20
1500	.20
1600	.20
1700	.20
1800	.20
1900	.30
2000	.20
2100	.20
2200	.20

Launch MI-5 (NOAA 1204)

RPM'S	CORRECTOR
1100	.10
1200	.10
1300	.10
1400	.10
1500	.10
1600	.20
1700	.20
1800	.20
1900	.20
2000	.20
2100	.20
2200	.20
2300	.20
2400	.10

2/19/74

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): St. Simons Island

Period: August 12 - October 2, 1974

HYDROGRAPHIC SHEET: H9458

OPR: 436

Locality: Coast of Georgia

Plane of reference (mean ~~lower~~ low water): 5.2 ft.

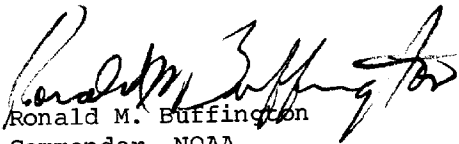
Height of Mean High Water above Plane of Reference is 6.6 ft.

Remarks: Zone direct on St. Simons

Jane E. Hubbard
for Chief, Tides Branch

* APPROVAL SHEET *

The field work and processing of data from Hydrographic Survey H-9458 was under my daily supervision. The sheets and records have been reviewed and approved by me. The survey is incomplete. Additional field work is recommended in the area of this survey.



Ronald M. Buffington
Commander, NOAA

Commanding Officer, NOAA Ship MT MITCHELL (MSS-22)

ATLANTIC MARINE CENTER
APPROVAL SHEET
FOR
AUTOMATED SURVEY H- 9458

- A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/~~has not~~ been made. A new final sounding printout has/~~has not~~ been made.

Date: March 22, 1977

Signed: *William J. Jones*

Title: Chief, Verification Branch

- B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic and AMC Manuals. Exceptions are listed in the verifier's report.

Date: 3-24-77

Signed: *R.A. Trunk*

Title: Chief, Processing Division

GEOGRAPHIC NAMES

H-9458

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	GRAND McNALLY ATLAS	U.S. LIGHT LIST			
JEKYLL ISLAND		✓								1	
JEKYLL POINT		✓								2	
LITTLE CUMBERLAND ISLAND		✓								3	
LONG POINT		✓								4	
NORTH BREAKERS		✓								5	
PELICAN SPIT		✓								6	
ST. ANDREW SOUND		✓								7	
										8	
										9	
										10	
										11	
										12	
										13	
										14	
										15	
										16	
										17	
										18	
										19	
										20	
										21	
										22	
										23	
										24	
										25	

APPROVED

Chas. E. Harrington

STAFF GEOGRAPHER -CS1x2

31 MAY 1977

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-9458
MI-20-2-74

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET with smooth PNO & excess overlay		1	BOAT SHEETS (2 parts)		1	
DESCRIPTIVE REPORT		1	OVERLAYS (preliminary)		1 2	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
Accordion ENVELOPES	2/					1
CAHIERS	with 2-printouts		1			
VOLUMES	4					
BOXES			1 *			

T-SHEET PRINTS (List)

SPECIAL REPORTS (List) * Smooth printouts, sawtooth records, tides, sndg. vol. & misc. data
ELECTRONIC CONTROL REPORT FOR H-9458, REPORT ON CORRECTIONS TO ECHO SOUNDINGS

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				1273
POSITIONS CHECKED	15	200		
POSITIONS REVISED		15		
DEPTH SOUNDINGS REVISED	27	203		
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		16		
JUNCTIONS		6		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		12		
SPECIAL ADJUSTMENTS				
ALL OTHER WORK		268		
TOTALS		302		
PRE-VERIFICATION BY J. Griffin	BEGINNING DATE 03/29/76	ENDING DATE 03/31/76		
VERIFICATION BY J. Griffin and J. S. Bradford	BEGINNING DATE 04/01/76	ENDING DATE 07/08/76		
REVIEW BY Harry R. Smith	BEGINNING DATE 11/17/76	ENDING DATE 01/21/77		

QUALITY Control By *X.W. Wellman*
28 E215

45 hrs.
8

Reg. No. _____

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey the following shall be completed:

CARDS CORRECTED

DATE _____ TIME REQ'D _____ INITIALS _____

REMARKS:

Reg. No. H-9458

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE 5/27/82 TIME REQ'D. _____ INITIALS JAC

REMARKS:

During update, the position number should be determined for the 13 ft. sounding formerly smooth plotted on lat. 30° 58.04', long. 81° 20.11'. This sounding should be placed in excess to reconcile the junction between H-9458 and H-9676 (1977)
R.W.W. 2-9-79

H-9458

Information for Future Presurvey Reviews

This is an area of shifting bottom sediments and changeable shoreline. Additional work is necessary to complete the development in the present survey area as described in section P of the Descriptive Report. In addition, a least depth should be determined for the wreck located on the present survey in latitude 31°00'42", longitude 81°22'04".

<u>Position</u>	<u>Index</u>	<u>Bottom Change</u>	<u>Use</u>	<u>Resurvey</u>
<u>Lat.</u>	<u>Long.</u>	<u>Index</u>	<u>Index</u>	<u>Cycle</u>
305	0813	4	2	25 years
305	0812	4	2	25 years
310	0813	4	2	25 years
310	0812	4	2	25 years

ATLANTIC MARINE CENTER
VERIFIER'S REPORT

REGISTRY NO. H-9458

FIELD NO. MI-20-2-74

Georgia, Southeast Atlantic Coast, Entrance to St. Andrew Sound

SURVEYED: August 12 through October 2, 1974

SCALE: 1:20,000

PROJECT NO.: OPR-436

SOUNDINGS: Raytheon DE-723 Fathometer
Sounding Pole

CONTROL: Sea-Fix and
Visual

Chief of Party	R. M. Buffington
Surveyed by	R. J. DeRycke
.....	M. R. Mulhern
.....	P. B. Loiseau
.....	R. J. Pawlowski
.....	D. A. Pascuiti
.....	D. M. Kuhl
.....	T. G. Russell
.....	K. O'Donnell
.....	M. E. Ziolkko
.....	E. J. Fields
.....	R. E. Marriner, II
Automated Plot by	Calcomp Plotter #618 (AMC)
Verified and Inked by	H. R. Smith

1. Introduction

No unusual problems were encountered during the verification of this survey.

This survey was considered incomplete by the hydrographer. Because there were no plans to continue the project in the near future this survey was considered complete by approval of CAM3 for processing.

The projection parameters ^{were} ~~was~~ revised during verification.

2. Control and Shoreline

a. The source of control is adequately described in Section F of the Descriptive Report and in the Electronic Control Report, dated 12-26 August, 1974.

b. The shoreline was transferred from Shoreline Manuscripts TP-00496 and TP-00497, final reviewed, photograph dates of September and October 1973, and April 1974. Field edit date - August 1974.

3. Hydrography

- a. Depths at crossings are in good agreement.
- b. The standard depth curves are adequately delineated, except in areas of incomplete coverage, (see below) *(See Q.C. Report-item 1)*
- c. The development of the bottom configuration and investigation of least depths are considered incomplete.

4. Condition of Survey

The Smooth Sheet and accompanying overlays, hydrographic records, and reports are adequate ^{and} to conform to the requirements of the Provisional Hydrographic Manual, with the following exceptions: *(See Q.C. Report - item 7)*

The survey is incomplete as to: developments, ~~and~~ least depths, ~~and~~ bottom configuration, and bottom samples. Holidays centered at the following locations made the delineation of depth curves in these areas inadequate:

- a. 31° 00' 30"
81° 24' 20"
- b. 30° 59' 30"
81° 24' 00"
- c. 30° 59' 40"
81° 21' 00"
- d. 30° 58' 35"
81° 22' 30"

The Descriptive Report did not discuss the development done on day 232, Vessel 2226, positions 8020 through 8031. The development was for the purpose of investigating strays. Notes on the master tape printout and the fathogram indicate that the strays were considered to be fish; however, the Hydrographic Volume (No. 3) notes wreck. It is noted that the charts show no wreck in the area. The strays were considered to be fish and were not plotted on the Smooth Sheet.

Data for nine positions (7201-7205 and 7601-7604) included in Volume #4, Vessel 2224, day 236, were not logged by the field. This data was logged and inserted during verification.

5. Junctions

Adequate junctions were effected with H-8216 (1954-55) on the northeast and H-9449 (1974) on the east. No contemporary survey joins the present survey on the south ^{west} or the northeast ^{west}. It is noted that the area is scheduled to be surveyed during the 1977 season, (see OPR-436-WH-77). (See Q.C. Report-item 2)

6. Comparison with Prior Surveys

a. H-3770 (1915) 1:80,000

The above prior survey, which covers the eastern edge of the present survey, reveals good agreement with depths of one to three feet deeper on the prior survey. The 30 foot curve has shifted eastward on the present survey. (See Q.C. Report-item 3)

b. H-4444 (1924) 1:20,000 H-5698 (1935) 1:10,000

A comparison between the above prior surveys, which taken together cover the western portion of the present survey, reveals extensive change:

(1) Change in shoreline - the southern end of Jekyll Island shows ~~erosion~~ ^{erosion} on the east (seaward) side. On the western tip there has been some filling causing a small bulge. The northern end of Little Cumberland Island shows erosion with some filling at the central tip of the island. (See Q.C. Report-item 4)

(2) Bottom configuration - there has been extensive shifting of bottom features (shoals). Generally, the depth curves have shifted shoreward. The passages of deeper water between the two main shoal systems in the entrance to St. Andrew Sound have enlarged and deepened. Changes are due to natural and artificial causes. No developments of least depths were taken on this survey; therefore, the following soundings from prior survey H-4444 (1924), (unnumbered, dashed-circled PSR Items) are carried forward on the present survey: (See Q.C. Report-items 5 and 6)

12 foot sounding at 30° 59' 47",	81° 21' ⁰⁸ 10"
1 foot sounding at 30° 59' ⁷ 19",	81° 23' ¹² 14"
6 foot sounding at 30° 58' 19",	81° 20' 05"
12 foot sounding at 30° 56' 30",	81° 19' ³⁸ 40"

(Also see Item J of the Descriptive Report.)

Except as noted the present survey is adequate to supersede the prior surveys within the common area.

7. Comparison with Charts 11502 (formerly 1242), 13th Edition, November 1, 1975 and 11504 (formerly 448), 9th Edition, May 22, 1976

a. Hydrography (See Q.C. Report-item 8)

The charted hydrography originates apparently with the application of the boat sheet ^{data} of the present survey, supplemented by the previously discussed prior surveys which require no further consideration.

Attention is directed to the following:

(1) The visible wreck (PSR Item No. 15), charted at latitude 31° 02', longitude 81° 23' - originates with Notice to Mariners No. 43 of 1956. This item was not investigated. It should be retained on the chart.

(2) The 14 foot depth (PSR Item No. 16), reported, charted at latitude 30° 57' 25", longitude 81° 21' 29" - originates with Chart Letter 324 of 1963 (Notice to Mariners No. 23 of 1963). This item falls in an unsurveyed area of this survey; it should be retained on the chart.

(3) The sunken wreck (PSR Item No. 19), charted at latitude 31° 00' 40", longitude 81° 22' 04" - originates with Chart Letter 882 of 1936. This item was located on a regular line - five seconds before position 3053, day 224. A 16 foot reduced depth was obtained from the fathogram. This item should be retained on the chart. It is recommended that a least depth be determined by diver or wire drag.

(4) A 12 foot sounding found on the present survey and on Chart 11504 at latitude 31° 01' 12", longitude 81° 21' 52" - this depth is not found on Chart 11502. This is the shoalest sounding in the immediate area.

(5) The shoal area charted (11504) at latitude 30° 59' 25", longitude 81° 21' - originates with undetermined source and was not verified or disproved by the present survey. It is recommended that this shoal area be retained, as charted. *Originates with the boat sheet of the present survey. Disregard; data rejected by hydrographer and not shown on the smooth sheet.*

Except as indicated the present survey is adequate to supersede the charted information in the common area.

b. Aids to Navigation

A D.P. (position 3565) taken on buoy and identified as C#3 - Charts 11502 and 11489 show C#3 at this location. Chart 11504 shows C"13" at this location but shifted to the east; this chart also notes (Note A) that buoys 3, 5, 7, and 9 are not charted as they are frequently shifted in position. Plotted on the smooth sheet as C"13". (See Q.C. Report - item 9)

Except as noted above the position of aids to navigation located by the present survey are in agreement with the chart. The aids in the survey area adequately mark the features intended.

8. Compliance with Instructions

This survey is incomplete, as indicated in the Descriptive Report and is considered adequate to supplement the charted data.

9. Additional Field Work

Additional field work is recommended. See Item P (Recommendations) in the Descriptive Report. Additional field work is required to assert minimum depths of the area are found, the PSR Items investigated, and the many holidays surveyed.

Additional work will be accomplished early in the 1977 season by the NOAA Ship WHITING during the survey of an adjunct sheet.

SURVEY H-9458

Examined and Approved:
Hydrographic Inspection Team
Date: March 23, 1977

Robert A. Trauschke

CDR Robert A. Trauschke, NOAA
Chief, Processing Division

Jeffrey G. Carlen

CDR Jeffrey G. Carlen, NOAA
Chief, Coastal Mapping Division

C. Douglas Mason

C. Douglas Mason, LT, NOAA
Chief, EDP Branch

William L. Jonns

William L. Jonns
Chief, Verification Branch

Guy F. Trefethen

Guy F. Trefethen
Verification Branch

Approved/ Forwarded

Robert C. Munson

Robert C. Munson
RADM, NOAA
Director, Atlantic Marine Center



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

C352

May 27, 1977

TO: *A. J. Patrick*
A. J. Patrick
Chief, Marine Surveys Division

THRU: Chief, Quality Control Branch

FROM: K. W. Wellman *K. W. Wellman*
Quality Evaluator

SUBJECT: Quality Control Report for H-9458 (1974), Georgia, Jekyll
Island, St. Andrew Sound

A quality control inspection of H-9458 has been accomplished to evaluate the accuracy and adequacy of the survey with respect to data acquisition, delineation of the bottom, determination of least depths and navigation hazards, junctions, shoreline transfer, decisions and actions by the verifier, and cartographic presentation of data.

In general, the present survey was found to conform to National Ocean Survey standards and requirements except as follows:

1. Section 3-b of the Verifier's Report is supplemented by the following:

A few dashed and supplemental depth curves were added to emphasize isolated shoaler depths.

2. During quality control inspection, it was necessary to revise the 30-foot depth curve segment on H-9449 (1974) in the area common to the present survey to reconcile the curve and bring it into coincidence with the present survey as required by section 6.3.4.7 of the provisional manual. In addition, a few 31-foot soundings and their associated dashed depth curves were transferred from H-9449 to supplement the present survey.

3. Comments in section 6-a of the Verifier's Report are considered misleading in that it is indicated that there is an easterly shift of the 30-foot depth curve and that present depths are generally 1 to 3 feet shoaler than prior depths. Further, no cause for the noted depth differences is included in the discussion (see provisional manual--section 6.6(11)).

Section 6-a of the Verifier's Report is superseded by the following:



Except as modified by the greater development on the present survey, the present 30-foot depth curve follows the same general configuration as on the prior survey with a net westerly migration of approximately 100 meters. A pattern of variable depth differences, within a range of ± 1 to 3 feet, was revealed by the comparison made during quality control inspection. The noted depth differences are attributed to natural causes.

4. Reference section 6-b(1) of the Verifier's Report:

The referenced section of the Verifier's Report reflects erroneous conclusions regarding the nature of the shoreline changes (i.e., accreted rather than eroded as stated) and, further, does not indicate the approximate magnitude of the changes as required by section 6.6(11) of the provisional manual.

Section 6-b(1) of the Verifier's Report is superseded by the following:

A comparison between the present and prior surveys reveals significant changes in the shoreline of Jekyll and Little Cumberland Islands. The southeastern end of Jekyll Island has accreted approximately 300 meters and presently extends into former depths of 12 feet. The southwestern tip of Jekyll Island has also accreted approximately 180 meters and presently extends to the former position of the 30-foot depth curve.

The northern end of Little Cumberland Island has eroded approximately 170 meters on its east side and accreted approximately 100 meters at its northeastern tip. The noted shoreline changes are attributed to natural causes.

5. Soundings brought forward from prior surveys should be accurately transferred to conform to generally accepted cartographic practices. Three of the four soundings carried forward from H-4444 (1924) were displaced (beyond acceptable limits) from the source document position; i.e., maximum displacement of 80 meters.

6. Section 6-b(2) of the Verifier's Report refers to the deepening of the natural channels in St. Andrew Sound. On the contrary however, a comparison with the prior surveys, made during quality control inspection, revealed variable depth differences of ± 11 feet in the natural channels. The verifier apparently concurs with the hydrographer in acknowledging the changeable nature of the present survey area but nevertheless carried forward four soundings to the present survey from H-4444 (1924). General changes of as much as ± 5 feet in proximity to the retained soundings render the prior depths invalid and therefore unsuitable for retention on the present survey. The retained soundings were deleted during the quality control inspection.

Section 6-b(2) of the Verifier's Report is superseded by the following:

A comparison between the present survey and prior surveys reveals a variable pattern of shifting bottom sediments with depth differences within a range of as much as ± 21 feet in the more changeable western portion of the present survey area. This variable pattern of depth differences (± 11 feet) also applies to the natural channels in St. Andrew Sound. The noted depth changes are attributed to natural causes. The present survey is adequate to supersede the prior surveys within the common area.

7. Section 4 of the Verifier's Report is supplemented by the following:

The editions of the chart used by the hydrographer were not identified in section K of the Descriptive Report as required by section 5.3.4(L) of the provisional manual.

8. During verification, the present survey was compared with editions of the chart dated subsequent to the date of the present survey in contravention of the requirements of sections 5.3.4(L) and 6.3.10 of the provisional manual. During Quality Control inspection, comparison was made with the editions of the charts current at the time of the survey.

Section 7-a of the Verifier's Report is superseded by the following:

Comparison with Chart 11502 (formerly 1242) 12th ed., August 24, 1974
11504 (formerly 448) 8th ed., September 16, 1972

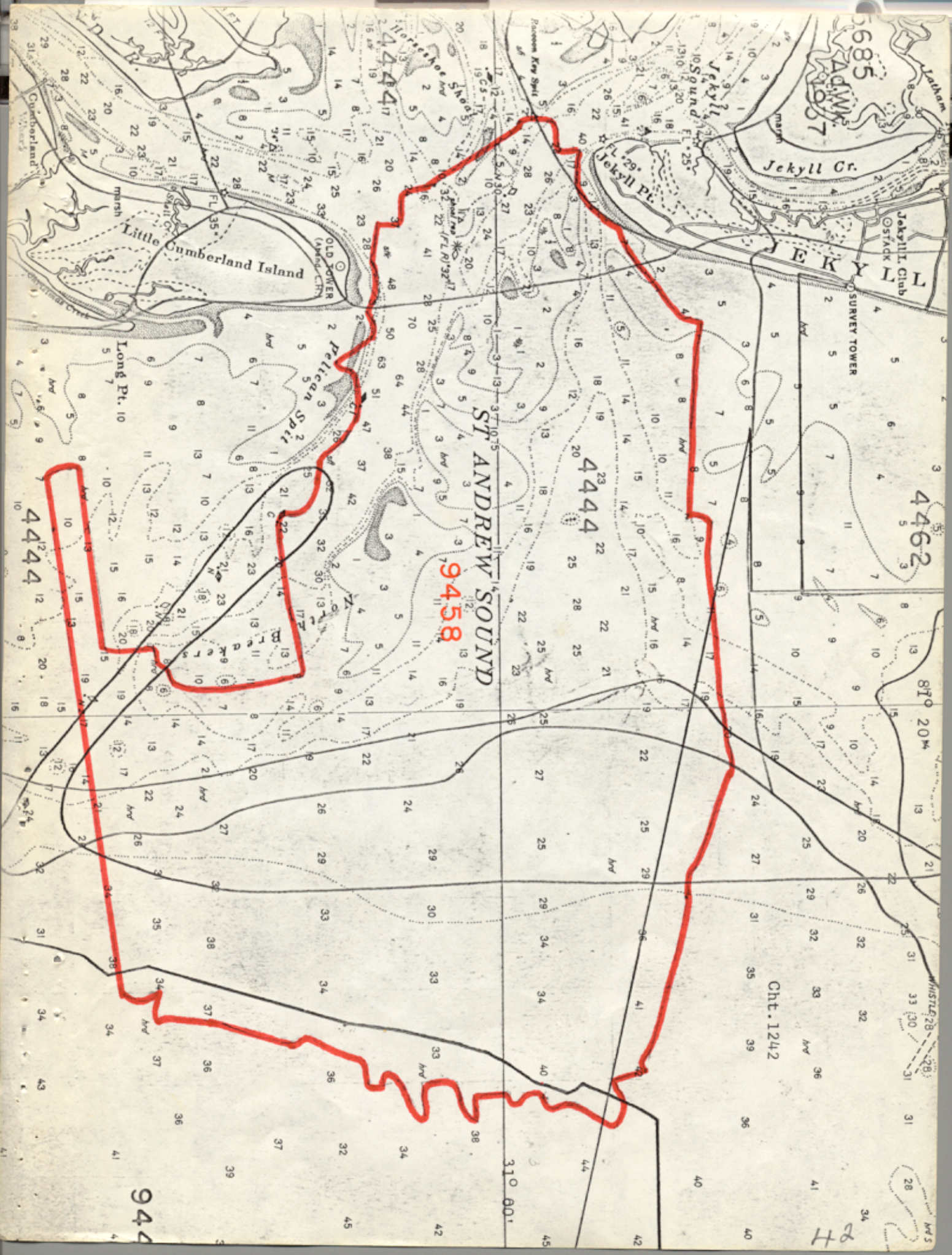
a. Hydrography

The charted hydrography originates with the prior surveys previously discussed, supplemented by miscellaneous chart letters and Notices to Mariners. Except as noted in section K of the Descriptive Report, the present survey is adequate to supersede the charted hydrography within the common area.

9. Reference section 7-b of the Verifier's Report:

The buoy, located at detached position 3565 on the present survey, is identified in the field records as buoy C"3" and is shown as such on the edition of chart 11504 current at the date of the survey. The buoy is shown as C"13" on the ninth edition of chart 11504 dated May 22, 1976, having been revised on the authority of LNM 13/76 subsequent to the date of the present survey. The identification of the buoy on the present smooth sheet as C"13" during verification is improper and it was, therefore, appropriately revised during quality control inspection.

cc:
C351



685

4444

4444

4462

4444

9458

944

ST. ANDREW SOUND

Ch't. 1242

H 2

Jekyll Cr.

Little Cumberland Island

Jekyll Pt.

Long Pt. 10

Pelican Spit

Jekyll Club

SURVEY TOWER

31° 00'

81° 20'

Whistle 28

Av 5

