

9736

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. WH-5-1-77
Office No..... H-9736

LOCALITY

State Georgia
General Locality St. Simons Sound
Locality Portion of Bar Channel

19 77

CHIEF OF PARTY
John W. Carpenter

LIBRARY & ARCHIVES

DATE February 9, 1979

9736

HYDROGRAPHIC TITLE SHEET

H-9736

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.

WH 5-1-77

State Georgia

General locality ST. Simons Sound
~~Southeast Georgia Coast~~

Locality Portion of
~~Brunswick Harbor Bar Channel~~

Scale 1 to 5000 Date of survey April 8 thru May 14 1977

Instructions dated November 22, 1976 Project No. OPR-436

Vessel NOAA Ship Whiting's survey launches 1203 and 1202

Chief of party J. W. Carpenter

Surveyed by M.F. Kolesar, D. R. Taylor, J.G. Gofus, D.M. Goodrich, G. Barone, J. Rubino
R. Mandzi

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by Ship personnel

Graphic record checked by D. R. Taylor, J.G. Gofus

Protracted by _____ Automated plot by CALCOMP-618
Hydroplot

Verification Soundings processed by _____
D.V. Mann
January 5, 1979

Soundings in fathoms feet at MLW MLLW

REMARKS: All times are Coordinated Universal Time

Misc. data Filed with Field records

Applied to etals 5/14/79
[Signature]

JEKILL
ISLAND

ST. SIMONS SOUND

ST. SIMONS
ISLAND

81° 22'



R N 10'
19"
DELL

R N 14'
13"
DELL

31° 07'

DESCRIPTIVE REPORT
TO ACCOMPANY SURVEY

WH 5-1-77

A. PROJECT

Whiting survey WH 5-1-77 was conducted under project instructions for OPR-436 dated November 22, 1976 as amended by changes 1, 2, and 3, dated January 21, February 2, and March 11, 1977 respectively.

B. AREA SURVEYED

The area surveyed was the coast of Georgia in the ~~Brunswick Harbor~~ Bar Channel.

The major area surveyed was the channel between buoy pairs 3 and 4 and buoy pairs 9 and 10. Hydrography included the areas to each side of the channel approximately $\frac{1}{4}$ to $\frac{1}{3}$ of a mile. Hydrography began on April 8, julian day 98 and was completed on May 14, 1977, julian day 134. Junctions were effected with survey H-8216 (1954-1955).

The U.S. Army Corps of Engineers had a dredge working in the channel throughout the period that the Whiting was in the area to accomplish this and three other surveys. This hampered the operation of the survey launch and renders the hydrography in the area of the channel as useless for charting purposes. ← Note

C. SOUNDING VESSEL

All hydrography was accomplished with the Whiting's launch 1203 (VESNO 2931). All hydrography was done in a Range-Range mode. All hydrography was done at standard speed. Settlement and Squat corrections are incorporated on the TC/TI tape.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

Launch 1203 was equipped with a Raytheon Model 723D fathometer, serial number 37010. Operators performed frequent initial checks and A-F checks. Bar checks were performed each day of operation if the state of the sea permitted. Bar check data was not sufficient to provide a good basis for determining velocity correctors. Therefore the velocity correctors for VESNO 2931, derived during survey H-9679, WH 20-3-77 which was a short distance away, were used. Settlement and squat tests were run on Launch 1203 during May 1977. Values for settlement and squat are abstracted in the appendix and are applied on the TC/TI tape.

E. HYDROGRAPHIC SHEETS

A work sheet was prepared aboard the Whiting using the automated plotting system. Program RK 201 was used for the grid at a scale of 1:5000 and a skew of 327 degrees. Field work was done using program RK 111, the on-line Range/Range program. All data is on a single plotter sheet including the developments done for the pre-survey items in the survey area. Main scheme sounding lines were run perpendicular to the axis of the ~~Brunswick Harbor~~ Bar Channel on courses of 035°T and 215°T. Cross lines were run parallel to the channel on each side of the channel and in the channel. The field sheet is oriented in the same manner as the work sheet, at a skew of 327 degrees. All data was plotted ^{on the field sheet} using program RK 211, the off-line plot. All soundings have been corrected for predicted tides, draft, and velocity. Settlement and squat corrections were not applied. All data will be forwarded to Processing Division, Atlantic Marine Center.

F. CONTROL STATIONS

All control stations on this survey were established or recovered by Photo Party 62 using third order or better methods.

The following stations were used:

- 105 St. Simons Light House Eccentric
- 108 Sea Island, Station J-12

A complete listing of stations is included in the appendices.

G. HYDROGRAPHIC POSITION CONTROL

Positioning was determined by two Del Norte units in the range/range configuration. Three point sextant fixes were obtained each day of the survey to determine corrections to Del Norte readings. Distance measuring units, masters, and remotes were calibrated bi-weekly using a known base line distance. Problems were encountered using the Del Norte Trisponder system for position control. The left station was located on the catwalk of the St. Simons Light House approximately 30 meters above sea level. In the survey area at a range of 7000 to 9500 meters the readings were erratic with many flyers that were 20 meters or greater in error. This situation made steering lines somewhat difficult. However since most of the ranges were correct, the erroneous readings were plotted on a time and course basis.

H. SHORELINE

There is no shoreline on this survey.

I. CROSSLINES

There were 12 nautical miles of crosslines. This was 14 per cent

of the hydrography done on the sheet. Agreement was generally good except for the crossline position numbers 703 through 740 which varied considerably on the west end along the side of the channel.

J. JUNCTIONS See Q.C. Report.

This survey junctions with H-8216 (1954-55). Agreement with this survey is generally good in the area south-west of the channel. Depths are for the most part within two feet with a few at three feet. Agreement in the area to the northeast of the channel is very poor except in isolated areas such as just north of buoy "4" where agreement is within 3 to 4 feet. The present survey shows a drastic change in this area. Shoals have shifted considerably. The area northeast of buoy "6"'s normal position (not as shown on field sheet) has shoaled considerably, 16 feet to 8 feet, 22 feet to 5 feet, 17 feet to 5 feet, etc.. The U.S. Army Corps of Engineers was dredging the channel primarily in this area during the period of the survey. With the strong currents in the area the sandy shoals are shifting continuously.

K. COMPARISON WITH PRIOR SURVEYS

The survey was compared with prior survey ^{H-8215, 1954,} H-8216 (1954-55). See section J. Junctions, for remarks on comparisons.

The following pre-survey review items were investigated. They were all dashed circled items.

31° 06' 25" N
81° 21' 45" W

This item consisted of four shoal soundings and are listed below from south to north.

12 foot charted sounding-least depth by fathometer found to be 11² feet. Recommend charting of 12² foot sounding. ✓

12 foot charted sounding-least depth found by fathometer to be 12² feet. The charted 12 foot sounding is very close to the 12 foot depth curve, therefore it is recommended that the 12 foot depth be retained. ✓ *Chart present depths*

11 foot charted sounding-least depth found by fathometer to be 13 feet. The charted 11 foot sounding is very close to the 12 foot depth curve, therefore it is recommended that the 11 foot depth be retained. ✓ *Chart present depths*

12 foot charted sounding-least depth found by fathometer to be 10 feet. Recommend charting of 10 foot sounding. ✓

31° 06' 23" N
81° 21' 18" W

The development of this charted 12 foot sounding resulted in a least depth of 17 feet. In comparison to the chart

and the prior survey this area is now 2 to 5 feet deeper. It is recommended that the 12 foot sounding be deleted from the chart. ✓ ~~this depth~~

31 04 38 N
81 18 35 W

This development of a charted 15 foot sounding indicated nothing shoaler than ¹⁵ feet. It is recommended that the 15 foot sounding be retained due to the sparse coverage of the development area. ✓ *Disregard 15 foot, changeable area.*

L. COMPARISON WITH THE CHART

This survey was compared with NOS chart number 11506, ~~Brunswick Harbor~~ Bar Channel. Agreement is generally good in the area southwest of the channel. As with the prior survey this survey compares very poorly with the chart in the area to the northeast of the channel.

M. ADEQUACY OF SURVEY

This special investigation is ~~not~~ adequate to supersede prior surveys ~~of~~^{in the common} the area. It does ~~however~~ show that the area has changed considerably, especially to the northeast of the channel.

N. AIDS TO NAVIGATION

Several buoys were located in the area of the survey. These buoys mark the channel and were located in the following positions:

<u>BUOY NUMBER</u>	<u>POSITION</u>
10	31 06 33.628N, 81 20 54.968W ✓
9	31 06 29.366N, 81 21 01.036W ✓
8	31 06 09.752N, 81 20 12.643W ✓
7	31 06 03.059N, 81 20 15.244W ✓
6	31 05 37.201N, 81 19 15.587W ✓
5	31 05 38.747N, 81 19 31.851W ✓
4	31 05 18.237N, 81 18 40.817W ✓
3	31 05 14.301N, 81 18 47.159W ✓

O. STATISTICS

Miles Hydrography	85.7
Percentage Crosslines	14.0
Number of Positions	1555
Bottom Samples	0
TDC Casts	0
Tide Gages	3

P. MISCELLANEOUS

NONE

Q. RECOMMENDATIONS

With the U.S. Corps of Engineers dredging the channel at the time of this survey a majority of the data at least in the channel is of no value for charting. The investigation was done in response to local reports of shoaling at buoy number 6 which the dredge corrected. The investigation did point out that the area to the northeast of the channel has changed considerably. With the strong currents observed in the area this is probably an area which is undergoing constant change. Due to this, it is recommended that this area be shown on future editions of the chart as changeable. ✓

R. AUTOMATED DATA PROCESSING

The following computer programs were used during the course of this survey.

<u>PROGRAM NUMBER</u>	<u>NAME</u>	<u>VERSION</u>
RK 111	Range/Range Real Time Hydroplot	1/30/76
RK 201	Grid, Signal, and Lattice Plot	4/18/75
RK 211	Range/Range Off-Line Plot	1/15/76
RK 300	Utility Computations	2/10/76
PM 360	Electronic Corrector Abstract	2/ 2/76
AM 401	Transverse Mercator State Plane Coordinates	4/ 1/73
AM 500	Predicted Tide Generator	11/10/72
RK 561	Hyperbolic and Range/Range Geodetic Calibrations	2/19/75
AM 602	Extended Line Oriented Editor	5/21/75

S. REFERENCE TO REPORTS

NONE

APPROVAL SHEET

Supervision of field and office work on this hydrographic survey was continuous on a day to day basis to ensure completeness of the survey and that all work was done in accordance with the project instructions.

Approved/Forwarded:

Dirk R Taylor

Dirk R. Taylor

LT. NOAA

Operations Officer, NOAA Ship WHITING

SIGNAL TAPE PRINTOUT

WH 5-1-77

✓	101	3	31	04	02813	081	24	21776	139	0000	000000	Captain Wylly Road Water Tank	off
✓	102	3	31	04	04124	081	24	56840	139	0000	000000	Southern Bell Central Microwave Tower	off
✓	103	3	31	05	08134	081	24	40686	139	0000	000000	North Water Tank	off
✓	104	3	31	05	55049	081	24	29136	139	0000	000000	Horton Road Water Tank	off
* ✓	105	3	31	08	01918	081	23	37499	139	0000	000000	St. Simons LH Eccentric	off
✓	106	3	31	08	01989	081	23	37555	139	0000	000000	St. Simons Light House	off
✓	107	3	31	08	28406	081	23	38209	139	0000	000000	St. Simons Water Tank	off
* ✓	108	3	31	10	37574	081	20	56613	139	0000	000000	J-12, Sea Island	off

* Field positions pending final adjustment

LISTING: VELOCITY CORRECTIONS

VESNO 2931

000023	0	0000	0001	000	293100	020377
000038	0	0001				
000056	0	0002				
000073	0	0003				
000092	0	0004				
000107	0	0005				
000128	0	0006				
000144	0	0007				
000163	0	0008				
000180	0	0009				
000198	0	0010				
000214	0	0011				
000233	0	0012				
000250	0	0013				
000268	0	0014				
000284	0	0015				
000303	0	0016				
000320	0	0017				
000338	0	0018				
000356	0	0019				
000373	0	0020				
000391	0	0021				
000408	0	0022				
999999	0	0023				

(Let 1 inch equal 2 fathoms ... 1 inch equal 0.4 fathom for sound.)

CORRECTIONS IN FEET, FATHOMS

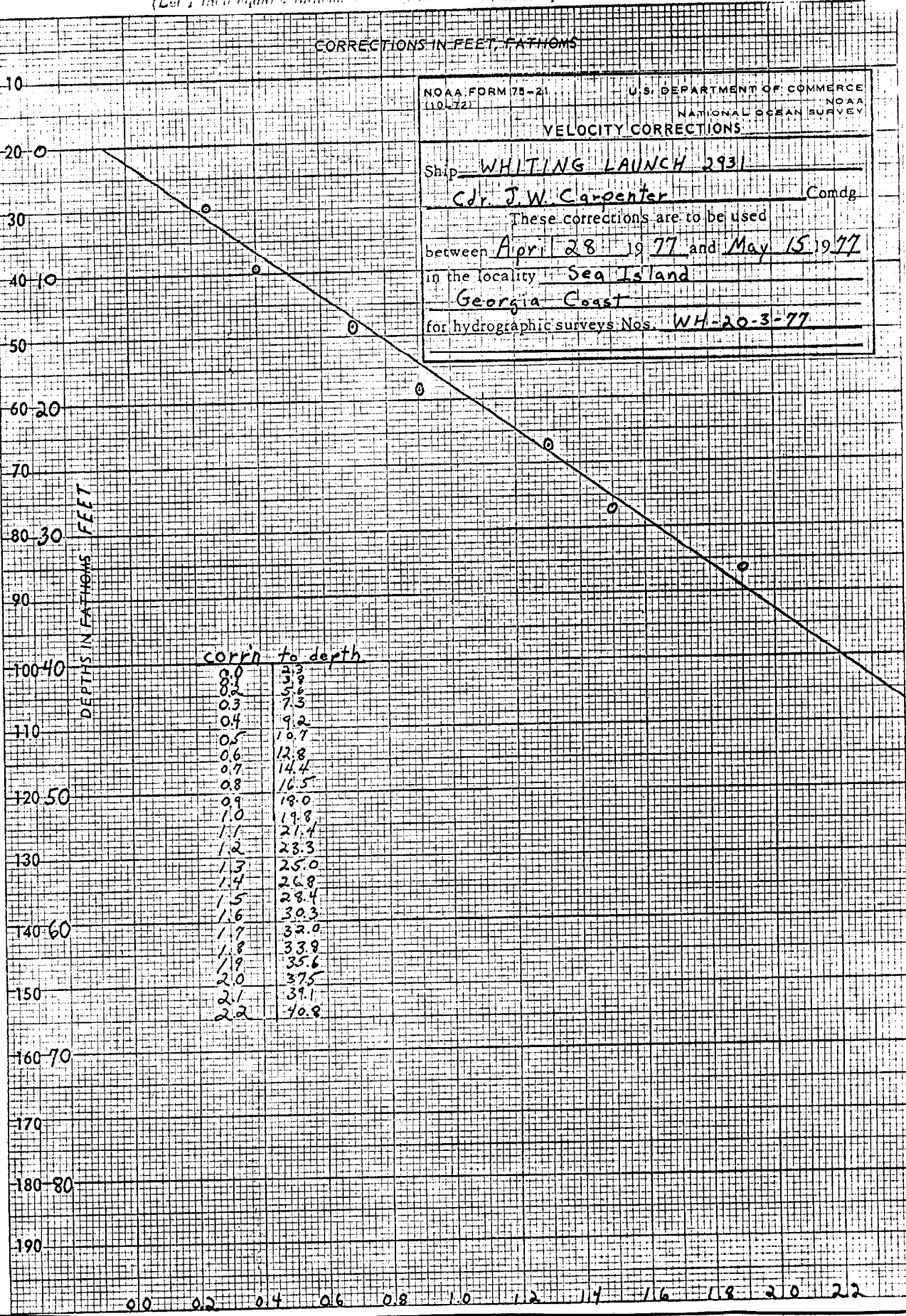
NOAA FORM 75-21 (10-72) U.S. DEPARTMENT OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SURVEY

VELOCITY CORRECTIONS

Ship WHITING LAUNCH 2931
 Comdg. Cdr. J.W. Carpenter
 These corrections are to be used
 between April 28 1977 and May 15 1977
 in the locality Sea Island
Georgia Coast
 for hydrographic surveys Nos. WH-20-3-77

(For deep water add a 0 to these figures)

DEPTH IN FATHOMS
 FEET



corr'n to depth

0.0	3.3
0.1	3.8
0.2	5.6
0.3	7.3
0.4	9.2
0.5	10.7
0.6	12.8
0.7	14.4
0.8	16.5
0.9	18.0
1.0	19.8
1.1	21.4
1.2	23.3
1.3	25.0
1.4	26.8
1.5	28.4
1.6	30.3
1.7	32.0
1.8	33.8
1.9	35.6
2.0	37.5
2.1	39.1
2.2	40.8

45 1240

20 X 20 TO THE INCH 7 X 10 INCHES
 KEUFFEL & ESSER CO. N.Y. U.S.A.

SETTLEMENT AND SQUAT TRIALS

7 May 1977

Trials were run at State Dock, Brunswick, Georgia using Level No. C&GS-90. The level rod was held over the transducer location. Results are the average of one run toward the observer and one run away at the designated speeds.

	<u>Speed (RPM)</u>		
	<u>1000</u>	<u>1500</u>	<u>1800(Full)</u>
Launch 1202	-0.13'	-0.25'	-0.25'
Launch 1203	-0.14'	-0.26'	-0.27'

Corrections for settlement and squat are made on the TC/TI tape. Periods of reduced speed during actual hydrography are noted on the printouts. The annotation "reduced speed" means 1500 RPM, except when otherwise noted. All range/azimuth work was run at reduced speed, except as noted.

FIELD TIDE NOTE

There were three tide gages in the vicinity of this special investigation. They were installed and maintained by ship personnel. Two of the gages were the gas purging type, the third was an ADR.

<u>GAGE SITE</u>	<u>NUMBER</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>TYPE</u>
Jekyll Island	867-8082	31 01.4N	81 25.1W	gas
St. Simons Island	867-7344	31 07.9N	81 23.8W	ADR
Little St. Simons Is.	867-6555	31 15.0N	81 16.7W	gas

The Jekyll Island gage was installed on the open beach. The vitrified scale was secured to a 16 foot pipe which was jettied into the hard sandy bottom. Problems were experienced in keeping this gage operational. The staff and orifice location was not sheltered from the Atlantic Ocean. The strong currents in the area of the staff resulted in data lost due to leaks at the unions. In one case a section of hose had to be replaced because the current had stretched it from the normal 3/8 inch O.D. to approximately 1/8 inch O.D..

The St. Simons gage was installed on a pier at the entrance to St. Simons Sound. Extremely strong currents in the area caused the PVC floatwell to vibrate. This resulted in some down time when a glue joint failed and trouble occurred with the punch block.

The Little St. Simons Island gage was installed in a similar manner as the Jekyll Island gage. This gage was not accessible by overland routes. The only route available was via the Altamaha or Hampton Rivers then by following the open coast to the gage site. Access to the gage was limited to days of fair weather and calm seas.

July 1, 1978

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:

Tide Station Used (NOAA Form 77-12): 867-7344 St: Simons Lighthouse

Period: April 8-May 14, 1977

HYDROGRAPHIC SHEET: H-9736

OPR: 436

Locality: Brunswick Harbor - Bar Channel, Georgia

Plane of reference (mean ~~lower~~ low water): 4.74 ft.

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

Remarks: Recommended zoning:
Apply range ratio x0.94.

Don Spillman
85 Chief, Tides Branch

GEOGRAPHIC NAMES

H-9736

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				
BAR CHANNEL												1
ST SIMONS SOUND (TITLE)												2
												3
												4
												5
												6
												7
												8
												9
												10
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												24
												25

APPROVED

Chas. E. Hovington

CHIEF GEOGRAPHER - C3X5

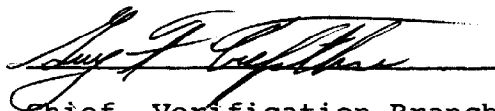
6 MARCH 1979

APPROVAL SHEET
FOR
SURVEY H-9736

- 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.
- B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic Manual. Exceptions are listed in the Verifier's Report.

Date: 2/2/79

Signed:



Title: Chief, Verification Branch

HYDROGRAPHIC SURVEY STATISTICS

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS & PRELIMINARY OVERLAYS <i>1 - BOAT SHEET</i>		1	
DESCRIPTIVE REPORT		1	SMOOTH OVERLAYS: POS. ARC, EXCESS <i>1 - pos. 1 - excess</i>		2	
DESCRIP-TION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES	1					1 - misc. data
CAHIERS			1 with photos			
VOLUMES	1					
BOXES						

T-SHEET PRINTS (List)

1 - CHART #11506

SPECIAL REPORTS (List)

OFFICE PROCESSING ACTIVITIES

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

PROCESSING ACTIVITY	AMOUNTS		
	PRE-VERIFICATION	VERIFICATION	TOTALS
POSITIONS ON SHEET			1555
POSITIONS CHECKED		150	
POSITIONS REVISED		5	
SOUNDINGS REVISED		75	
SOUNDINGS ERRONEOUSLY SPACED		0	
SIGNALS (CONTROL) ERRONEOUSLY PLOTTED		0	
	TIME - HOURS		
CRITIQUE OF FIELD DATA PACKAGE (PRE-VERIFICATION)	2		
VERIFICATION OF CONTROL		1	
VERIFICATION OF POSITIONS		18	
VERIFICATION OF SOUNDINGS		62	
COMPILATION OF SMOOTH SHEET		7	
APPLICATION OF TOPOGRAPHY		0	
APPLICATION OF PHOTOBATHYMETRY		0	
JUNCTIONS		0	
COMPARISON WITH PRIOR SURVEYS & CHARTS		10	
VERIFIER'S REPORT		9	
OTHER		20	
TOTALS	2	123	125
Pre-Verification by K. Ainsley	Beginning Date 02/10/78	Ending Date 02/10/78	
Verification by J. Wilson, B. Stephenson, D. Mason	Beginning Date 02/10/78	Ending Date 02/10/79	
Verification Check by B. J. Stephenson	Time (Hours) 8	Date 01/09/79	
Marine Center Inspection by Hydrographic Inspection Team (AMC)	Time (Hours) 4	Date 01/24/79	
Quality Control Inspection by RW Derkaganian	Time (Hours) 38	Date 3/2/79	
Requirements Evaluation by B. Steiner	Time (Hours) 2	Date 3/30/79	

143p Carstens 3 hr 2/20/79

Reg. No. 9736

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. _____

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 6-10-82 TIME REQ'D. _____ INITIALS JSC

REMARKS:

c. The development of bottom configuration and the investigation of least depths are considered adequate.

4. Condition of Survey

The smooth sheet and accompanying overlays, hydrographic records, and reports are adequate and conform to the requirements of the Hydrographic Manual, except as follows:

a. Bottom samples were not taken as required by Section 4.7.1 of the Hydrographic Manual, and Section 5.9 of the Project Instructions.

5. Junctions See Q.C. Report

There are no contemporary surveys in the survey area so no junctions were made.

6. Comparison With Prior Survey

H-8215	(1954)	1:10,000
H-8216	(1954-55)	1:20,000

The above prior surveys cover the present survey area. A detailed comparison was made during verification. Depth differences vary from as much as 12 feet shoaler to 12 feet deeper in this very changable area. These differences are adequately described under Section J. of the Descriptive Report.

There are 3 unnumbered Pre-survey Review items on this survey. These items are adequately described in Section K. of the Descriptive Report. The present survey is adequate to supersede the above prior surveys within the common areas.

7. Comparison With Chart #11506 (27th Edition, June 14, 1975)

Hydrography

See Q.C. Report.

a. Hydro in Bar Channel should be considered superseded by past dredge surveys. The areas surveyed adjacent to the channel are recommend to supersede the charted hydro.

Controlling depths

b. There are no conflicts between the project depth and the present survey.

The present survey is considered adequate to supersede the charted hydrography in the common area at the time of the survey.

c. Aid to Navigation

There are eight floating navigational buoys located on the present survey. These aids are in substantial agreement with their charted positions and adequately serve the purposes intended.

8. Compliance With Instructions

This survey complies with Project Instructions except the survey was submitted to the Processing Division 9 months after the termination of the Project. Also see Section 4 of this report concerning bottom samples.

9. Additional Field Work

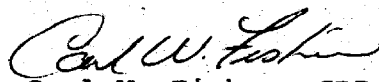
This survey is considered a good investigation survey, and no additional work is recommended at this time.

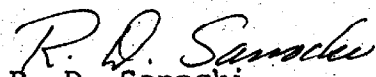
Inspection Report
H- 9736

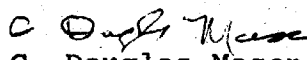
Any verification errors regarding procedures and presentation of survey data detected during inspection by the Hydrographic Inspection Team have been corrected before submission for administrative approval. HIT comments regarding quality of field work, compliance with instructions, and adequacy of the survey have been incorporated within the Verifier's Report.

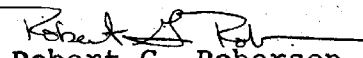
Examined and Approved:
Hydrographic Inspection Team
Date: January 24, 1979


Robert A. Trauschke, CDR, NOAA
Chief, Processing Division

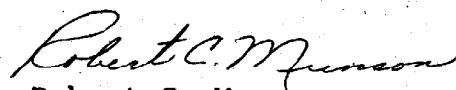

Carl W. Fisher, CDR, NOAA
Chief, Operations Division


R. D. Sanocki
Technical Assistant
Processing Division


C. Douglas Mason, LT, NOAA
Chief, Electronic Data
Processing Branch


Robert G. Roberson
Team Leader
Verification Branch

Approved/Forwarded


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

OA/C352:RWD

March 2, 1979

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

THRU: Chief, Quality Control Branch

FROM: R. W. DerKazarian *R.W. DerKazarian*
Quality Evaluator

SUBJECT: Quality Control Report for H-9736 (1977), Portion of Bar Channel, St. Simons Sound, Georgia

A quality control inspection of H-9736 was accomplished to monitor the survey for obvious deficiencies with respect to data acquisition, delineation of the bottom, determination of least depths, navigational hazards, junctions, sounding line crossings, smooth plotting, decisions and actions taken by the verifier, and the cartographic presentation of data. In general, it was found to conform to the National Ocean Survey's standards and requirements except as stated in the Verifier's Report, the HIT Report, and as follows:

1. Section 5 of the Verifier's Report is supplemented with the following:

Surveys H-8215 (1954) and H-8216 (1954-55) were to be considered for junctional purposes; however, due to a great change in the bottom, a junction could not be effected. Soundings on the north limits of the survey are in such disagreement that several charting curves will have to be blended independently of the present survey information.

2. Section 7 of the Verifier's Report is supplemented with the following information:

a. The charted hydrography originates with the previously discussed prior surveys which require no further consideration, supplemented by U.S. Corps of Engineers blueprints.

b. The controlling depths of Bar Channel are in substantial agreement with the project depths furnished by the U.S. Corps of Engineers; however, due to dredging being conducted simultaneously with the present survey, soundings in the channel should be considered for general information only.



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c. The survey position of St. Simons Lighted Bell Buoys 3, 5, 7, and 9 do not mark the left channel limit adequately; buoys 7 and 9 are as much as 65 meters off this limit.

cc:
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OA/C351

