

9211

Diag. Cht. No. 1240-3.

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-20-2-73
Office No. H-9211

LOCALITY

State South Carolina
General Locality Northeast of Port Royal Sound
Locality Fripp Inlet to Trenchards Inlet

1973

CHIEF OF PARTY
J. G. Garlen

LIBRARY & ARCHIVES

DATE 5-31-74

9211
1126

HYDROGRAPHIC TITLE SHEET

H-9211

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 20-2-73

State South Carolina

General locality Northeast of Port Royal Sound

Locality Fripps ~~Island~~ Inlet to Trenchard's Inlet

Scale 1:20,000 Date of survey May 31 to July 16, 1973

Instructions dated April 11, 1973 Project No. OPR-436-WH-73

Vessel NOAA Ship WHITING

Chief of party CDR Jeffrey G. Carlen, NOAA

Surveyed by CDR Carlen, LCDR North, LCDR Veselenak, LTJG Kaiser, ENS Decker, ENS Polvi, ENS McMillan, ENS Gastaldo, CST Hill

Soundings taken by echo sounder, ~~hand lead~~, pole

Graphic record scaled by Ship's personnel

Graphic record checked by Ship's personnel

Processed by _____ Automated plot by AMC-Calcomp Plotter
WHITING system ²⁶¹⁸

Soundings penciled by WHITING shipboard system

Soundings in ~~feet~~ feet at MLW ~~MLW~~

REMARKS: This survey used Greenwich Mean Time.

LAUNCH WH-I and WH-II, Serial Numbers 1206 and 1208, are new to the WHITING having been placed on board in April of 1973.

Area 3
Chart
1240
1111
793
571

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-9211

SCALE 1:20,000

31 May 1973 to 16 July 1973

COAST OF SOUTH CAROLINA

OPR-436-WH-73

NOAA SHIP WHITING

CDR. J. G. CARLEN, NOAA, COMMANDING

A. PROJECT:

This survey was accomplished in accordance with PROJECT INSTRUCTIONS OPR-436-WH-73, dated April 11, 1973. ✓

B. AREA SURVEYED:

The boatsheet is located Northeast of Port Royal Sound, South Carolina. Sheet limits are Latitude $32^{\circ} 12.00'N$ and Latitude $32^{\circ} 21.86'N$, Longitude $80^{\circ} 18.20'W$ and Longitude $80^{\circ} 37.50'W$. The registry number for this survey is H-9211. ✓

The area surveyed is bound on the north by St. Helena Island and contemporary survey PE 20-1-73, H-9364. The eastern boundary of the sheet is contemporary survey PE 40-1-73, H-9363, and prior survey 1257-40-1-71, H-9198. Hydrography junctions southward with contemporary survey H-9314 WH 20-3-73, (registry number not assigned). The western boundary is prior survey 1931, H-5119.

Survey operations began on May 31 and ended on July 16, 1973.

C. SOUNDING VESSELS:

Nearly all hydrography for this survey was accomplished using WHITING Launches WH-1 and WH-2. Launch WH-1 used odd-thousand number positions (1000-1999, 3000-3999, etc.) while Launch WH-2 used even-thousand number positions (2000-2999, 4000-4999). Several soundings were taken with WHITING large whaler WH-4. The zero-foot curve near Fripps Inlet, Skull Inlet and Pritchards Inlet was surveyed on foot by WHITING personnel. ✓

D. SOUNDING EQUIPMENT:

Sounding instrument used aboard Launch WH-1 was a Raytheon DE-723D survey fathometer; fathometer recorder serial no. 37018. ✓

Launch WH-2 was equipped with a Ross Model 5000 Fineline depth recorder, serial no. 1049.

WHITING large whaler WH-4 used a sounding pole. ✓
Shoreline and shoals walked by WHITING personnel were surveyed at mean low-water to determine the zero depth curve.

Bar checks and leadline comparisons were taken in the working area as often as sea conditions permitted, averaging one every two days. The launch fathometer operators continually checked for proper initial setting, stylus arm length, and A-F scale checks.

Temperature-depth-conductivity (TDC) casts were taken in the working area in water as deep as that encompassed by the survey as an additional source of sounding corrections. See "Velocity and Fathometer Corrections Report."

E. SMOOTH SHEET:

The smooth sheet ^{was} ~~will be~~ plotted on the computer plotting system at the Atlantic Marine Center, Norfolk, Va. The boatsheet discussed in this report was divided into two plotter sheets: WH 20-2W-73(West) and WH 20-2E-73(East). In addition, two corresponding development sheets consisting of crosslines and developments, and a 1:10,000 scale development sheet of Fripps Inlet and surrounding shoals are being submitted. ✓

F. CONTROL:

The primary method of control for this survey was "Sea-Fix", a hyperbolic electronic surveying system utilizing a frequency of 1618.650 kHz. See "Electronic Control Report" for details of the "Sea-Fix" System's characteristics and use as a means of control for this hydrographic survey. In addition, visual control was used in areas where "Sea-Fix" reception was not reliable or questionable. ✓

Station:	Slave 1	Master	Slave 2
Located By:	AMC also Photo Party 62	Photo Party 62	WHITING
Locality	Mayport, Fla.	Harris Neck, Ga.	Seabrook I., S.C.
Lat.:(N)	30°23' 40.366"	31°37' 19.524"	32°36' 29.611"
Long.:(W)	81°23' 41.056"	81°15' 56.407"	80°08' 30.713"

G. SHORELINE:

The shoreline was not verified due to the non-availability of current shoreline manuscripts. The shoreline appearing on the boatsheet, taken from manuscripts T-12615, T-12616 and T-12617, was used solely as an aid for the launch operators. A line of traverse was run along the shoreline covered by WH 20-2-73 by Photo Party 62. *The reviewed manuscript* ✓

H-9211
The project instructions stated "it will not be necessary to fully develop the mean low water line"; however, most hydrography was extended to the MLW line. *Shoreline was added at the time of review.*

H. CROSSLINES:

Crosslines composed 12.1% of the total length of main sounding lines. The agreement between crosslines and the main system of lines was excellent, averaging 1 to 2 feet. ✓

I. JUNCTION:

Agreement in depths at junctions with surveys listed in section B., Area Surveyed, was generally very good. ✓

<u>Survey</u>	<u>Agreement</u>	<u>Comment</u>
PE 20-1-73, H-9364	0 to 2 feet	Very Good ✓
PE 40-1-73, H-9363	0 to 2 feet	Very Good
WH 20-3-73, H-9314	0 to 2 feet	Very Good
HSL 40-1-71, H-9198	0 to 5 feet	Good

The High Speed Launch survey, H-9198, has areas as much as five feet deeper than found by the WHITING. This could be accounted for by shifting sand since the entire area covered by WH 20-2-73 consisted of a fine sand bottom.

J. COMPARISONS WITH PRIOR SURVEYS:

PRE-SURVEY REVIEW ITEMS

No. 3 The wreck originating from T-3814 and T-3815 (1920) was found on 168 day by WHITING launch WH-1. The rudder quadrant of the wreck located at 32° 19.'05N and 80° 24.'25W, is at position No. 3150¹ and projects 9.4 feet above ~~predicted~~ mean low water. A steel obstruction nearby, position No. 3151⁹ projects 9.4 feet above predicted MLW. *The final S.S. elevation is (3') above MHW. Charted. Elev. should be revised to agree with the S.S.* ✓

No. "G" Shoaling to less than 4 feet at MLW in the vicinity of Fripp's Inlet has been found. The inlet has been extensively developed to adequately delineate the present channel and to verify the reported shoaling. *concur* ✓

No. "GG" No evidence to support the existence of a fish haven, 500 feet in diameter and covered 4 feet at MLW, could be found. The wreck it was to be surrounding was found as mentioned in Item No. 3. Depths surrounding the wreck range from 9. to 16 feet which are typical of that area.

The above three items are clearly delineated on a 1:10,000 scale development sheet submitted with the boatsheet. ✓

Except for Elevation change noted in #3 above retain the fish haven as charted.

(H)

No. 200 The dashed-circle-1/2-foot sounding (32°17' ¹⁸59.00", ~~80°30' 00.00"~~ ^{1.29"}) was discovered in an area of shoals exposed at MLW. *The 1/2 ft. sdg. was found NW of its charted position.* X

~~20° 24' 50"~~
No. 201 The dashed-circle 5-foot sounding (32°17' 37.00", ~~80°30' 07.00"~~) was not found. Depths in that area were are 143 to 164 feet. *Retain Delete 5-ft sdg.* X

No. 202 The dashed-circle 1-foot sounding (32°18' 30.00", ~~80°26' 12.00"~~) was not located. Depths were found to be 45 to 7 feet. *retain This area is very changeable and the 1-ft sdg. probably does not exist at its charted position and can be deleted.* X

No. 232 The dashed-circle 9-foot sounding (32°15' 26.00", ~~80°32' 24.00"~~) was not found. Depths in the area were 16 to 19 feet. *retain Delete 9' sdg.* X

The new survey compares favorably with prior survey H-4170 (1:20,000) 1921, agreement ranging from 2 to 5 feet in most areas. There are areas, however, which seem to indicate sand shoal movement; the depths vary by as much as 11 feet. Prior survey H-5119 (1:20,000) 1931 agreement was good; agreement was from 2 to 4 feet. Again, one area showed a difference of 10 feet. See reviewer's report #5.

K.COMPARISION WITH THE CHART:

Agreement with the boatsheet and C&GS Chart No. 1240, eleventh edition, March 31, 1973, was good with the exception of Fripps Inlet. A two-foot disparity was typical, but differences ranged from 0 to 8 feet in certain areas.

Fripps Inlet channel was not found as shown on the chart. The 1:10,000 scale sheet accompanying this report indicates the present position of the channel. A newly found danger to navigation is a wreck discovered near the entrance to Fripps Inlet by WHITING personnel walking the shoals on 166 day. Part of the vessel's rigging, position No. 5111 projects ~~43.5~~ ^{43.5} feet above MLW. The vessel's engine block, position No. 5110, projects ~~27.5~~ ³⁶ feet above MLW. No part of the hull was visible. The wreck is located at position No. 5111, ~~43.5~~ ^{43.5} feet above MLW (32°19' 46.5", 80°26' 49.2"). It is delineated on the 1:10,000 scale development sheet submitted with the boatsheet. ✓

L. ADEQUACY OF THE SURVEY:

This survey is complete and adequate and should supersede all prior surveys. ✓

M. AIDS TO NAVIGATION:

The aid to ^{land} navigation located in the boatsheet area is Port Royal Channel Range Rear Light, U.S. Coast Guard Light No. 360.20 (E. Int. W., 6s). This aid adequately serves the purpose for which it was established. Its position which was verified by Photo Party 62 is, Latitude 32° 14' 42.813"N, Longitude 80° 36' 07.656"W. ✓

N. STATISTICS:

<u>Vessel</u>	<u>Miles of Sounding Line</u>	<u>Bottom Samples</u>	<u>Number of Positions</u>
WH-1	398.0	20	2134
WH-2	312.0	09	1202
WH-4	6.9	00	112
Walking	2.6	00	134
<u>TOTAL</u>	<u>719.5</u>	<u>29</u>	<u>3582</u>

Total square nautical miles = 56.8

+ 29
3611

O. MISCELLANEOUS:

None. ✓

P. RECOMMENDATIONS:

None. ✓

Q. REFERENCES TO REPORTS:

Electronic Control Report OPR-436-WH-73 ✓

Velocity and Fathometer Correction Report OPR-436-WH-73

SIGNAL TAPE LISTING

				COMPANY
002	32° 29' 02.04"	080° 19' 55.70"	EDISTO BEACH WATER TANK, 1963, 71	
004	32° 23' 31.77"	080° 25' 48.46"	SK-02B (tripod)	
006	32° 22' 31.36"	080° 26' 15.69"	HUNTING ISL. LIGHTHOUSE 1902, 1963	70
008	32° 20' 48.41"	080° 26' 55.99"	SK-08 (tripod)	
009	32° 19' 04.16"	080° 27' 34.95"	CALIBRATION POINT "A"	
010	32° 19' 21.90"	080° 27' 14.80"	ROSE 1971 (Topo)	
011	32° 18' 58.08"	080° 28' 33.83"	KS-04H (apex of house)	
012	32° 19' 02.80"	080° 28' 41.81"	FRIPPS ISLAND WATER TANK 1971 (Topo)	
013	32° 18' 49.19"	080° 28' 57.41"	KS-05H (chimney of house)	
014	32° 18' 32.59"	080° 29' 34.31"	KS-06H (offshore gable of house)	
015	32° 18' 24.78"	080° 29' 49.47"	KS-07 (tripod)	
016	32° 16' 55.78"	080° 33' 03.44"	MOON 1963 (tripod)	
018	32° 16' 27.68"	080° 34' 11.60"	TURTLE 1963	
020	32° 14' 42.81"	080° 36' 07.66"	DAY BEACON SOUTH OF BULL POINT (PORT ROYAL SOUND REAR RANGE) 1964-71	
022	32° 15' 53.28"	080° 38' 41.49"	GUTT 1963-70	
025	32° 20' 16.24"	080° 27' 13.70"	SK-10R (banner)	
026	32° 20' 22.10"	080° 27' 25.11"	SK-11R (tripod)	
027	32° 20' 33.04"	080° 27' 47.79"	KRELL 1963, 71	
028	32° 20' 12.68"	080° 27' 54.62"	KF-28 (flagged telephone pole)	
029	32° 19' 59.45"	080° 27' 47.99"	KF-29 (flagged telephone pole)	
030	32° 19' 52.32"	080° 27' 37.63"	KF-26 (banner near boat wreck)	
031	32° 19' 36.97"	080° 27' 19.64"	KF-25 (flagpole)	
032	32° 18' 22.02"	080° 30' 19.96"	SM-01 (destroyed)	

033 32° 18' 12.97" 080° 30' 29.12" SM-02 ✓
034 32° 17' 52.65" 080° 30' 19.21" CALIBRATION POINT "B"
035 32° 17' 55.90" 080° 31' 10.38" SM-04S
036 32° 17' 41.44" 080° 31' 36.85" SM-05
037 32° 17' 27.66" 080° 32' 02.20" SM-06S
100 32° 18' 22.62" 080° 30' 18.45"
101 32° 18' 26.36" 080° 30' 20.09"
102 32° 18' 31.93" 080° 30' 15.51"

Signals 009, 032, 034, 100, 101, and 102 are recoverable. Signals which are capitalized are triangulation of third or higher order. Signal 034 was located by WHITING personnel; field data sent with this report. The remaining positions were located and furnished by Photo Party 62.

140 32° 17' 15.79" 080° 32' 26.91"
148 32° 17' 12.56" 080° 32' 41.70"

CAM3-2
2-22-71

ATLANTIC MARINE CENTER
ELECTRONIC CONTROL PARAMETERS

1. Project # OPR-436-73 2. Reg. # H-9211 3. Field # WH 20-2-73
4. Type of Control: "Sea-Fix" (Hi-Fix, Raydist, EPI, etc.)
5. Frequency 1618.650 kHz (for conversion of electronic lanes to meters)
6. Mode of Operation (check one):

Range-Range

Range One (R₁)
Station I.D. _____
Range Two (R₂)
Station I.D. _____

Range-Visual

Lat. _____° _____' _____"
Long. _____° _____' _____"
Lat. _____° _____' _____"
Long. _____° _____' _____"

Hyperbolic (3-station)

Slave One
Station I.D. Mayport, FA
Master
Station I.D. Harris Neck, GA
Slave Two
Station I.D. McKee, 1973

Hyper-Visual

Lat. 30° 23' 40.366"
Long. 81° 23' 41.056"
Lat. 31° 37' 19.524"
Long. 81° 15' 56.407"
Lat. 32° 36' 29.611"
Long. 80° 08' 30.713"

7. 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=β

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.

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

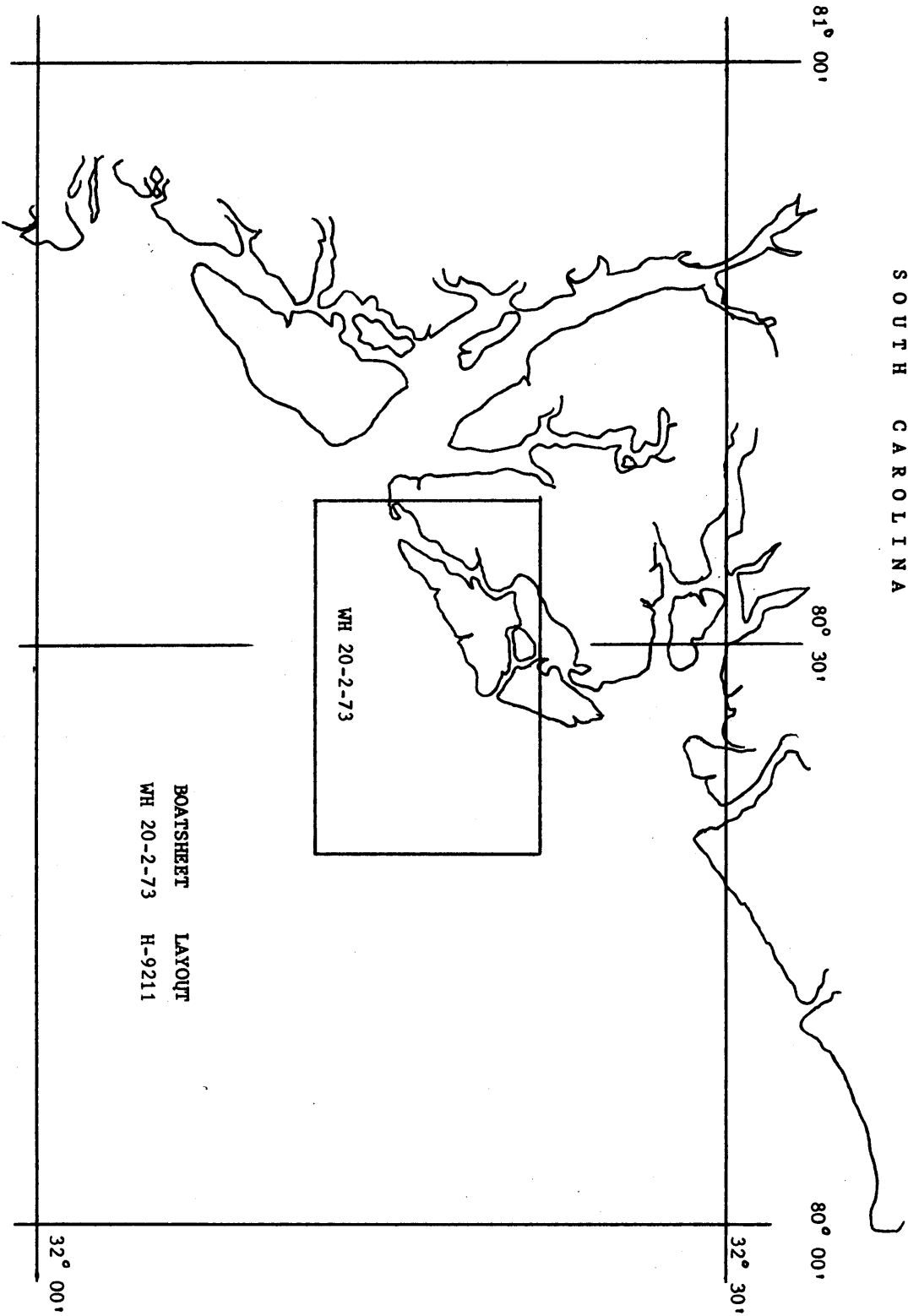
This form applies to all data on this survey.

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

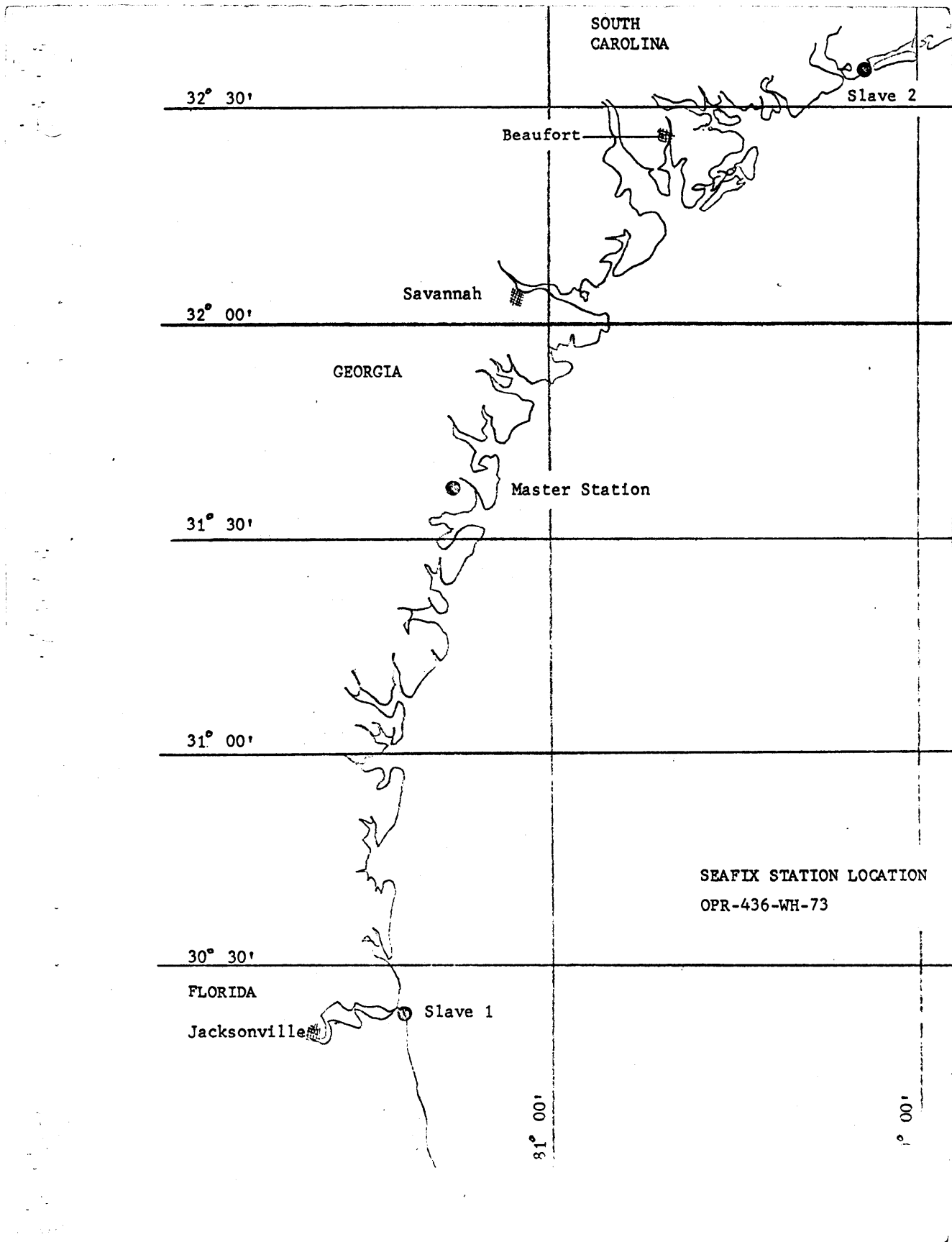
Vessel EDP #	From		To		Position Numbers (inclusive)
	Time	Day	Time	Day	
_____	_____	_____	_____	_____	_____ to _____
_____	_____	_____	_____	_____	_____ to _____
_____	_____	_____	_____	_____	_____ to _____

9. Remarks: _____

SOUTH CAROLINA



BOATSHEET LAYOUT
WH 20-2-73 H-9211



SOUTH
CAROLINA

Slave 2

Beaufort

Savannah

GEORGIA

Master Station

31° 30'

31° 00'

SEAFIX STATION LOCATION
OPR-436-WH-73

30° 30'

FLORIDA

Jacksonville

Slave 1

81° 00'

80° 00'

PARAMETER TAPE LISTING

WH 20-2E-73, H-9211

FEST=70000

CLAT=3100000

CMER=80/45/00

GRID=1/00

PLSCL=20000

PLAT=32/12/50

PLON=80/30/00

MLAT=31/37/19.522

MLON=81/15/56.407

SILAT=30/23/40.366

SILON=81/23/41.056

S2LAT=32/36/29.611

S2LON=80/08/30.713

Q=1618.65

VES=2930

YR=73

(PARAMETER TAPE LISTING

WH 20-2W-73, H-9211

FEST=70000

CLAT=3100000

CMER=80/45/00

GRID=1/00

PLSCL=20000

PLAT=32/10/50

PLON=80/39/15

MLAT=31/37/19.522

MLON=81/15/56.407

SILAT=30/23/40.366

SILON=81/23/41.056

S2LAT=32/36/29.611

S2LON=80/08/30.713

Q=1618.65

VES=2930

YR=73

PARAMETER TAPE LISTING

WH 20-2-73 H-9211
1:10,000 FRIPPS INLET

FEST=70000

CLAT=3100000

CNER=80/45/00

GRID=0/30

PLSCL=10000

PLAT=32/18/00

PLON=80/29/00

MLAT=31/37/19.522

MLON=81/15/56.407

S1LAT=30/23/40.366

S1LON=81/23/41.056

S2LAT=32/36/29.611

S2LON=80/08/30.713

Q=1618.65

VES=2930

YR=73

TRA NOTE
WH 20-2-73 H-9211
OPR-436-WH-73

LAUNCH WH-2

The WHITING completed this sheet under the mistaken impression the correct TRA-draft correction was 3.3 feet (as indicated on the master tape listings). Subsequent measurements showed the actual value to be 2.4 feet. Therefore, the TC/TI tape indicates 0.9 feet are to be subtracted to yield the correct value.

All WH-2 hydrography was run at standard (full) speed, no change in squat & settlement was necessary.

LAUNCH WH-1

The WHITING completed this sheet under the mistaken impression the correct TRA-draft correction was 2.2 feet at standard speed and 1.8 feet at reduced speed. (as indicated on the corrector tape listings). Subsequent measurements showed the correct values to be 2.4 feet at standard and 2.0 feet at reduced speed. Therefore, the TC/TI tape indicates 0.2 feet are to be added to yield the correct value.

5 (Leh 6)
LARGE WHALER WH-4 and WALKING
Hydrography using the large whaler WH-4 and walking was all run using a sounding pole or by standing at the water's edge. Therefore NO draft, TRA, TC/TI, or velocity corrections apply.

LAUNCH WH-1 REDUCED SPEED

DAY	TIME
164	183420-184040
166	131500-154800
167	142940-143540
170	141400-150600
196	150620-153140 150240-150320 151940-152120

All other time and days at standard speed.

TC/TI TAPE LISTING

OPR-436-WH-73

WH 20-2-73

H-9211

000000 0 0002 0001 151 293100 009211

000000 0 1009 0002 151 293200 009211

000000 0 0024 0002 154 293200 009211

000000 0 1009 0002 156 293200 009211

VELOCITY TABLE NUMBER 1

OPR 436 WH 73 WH 20 2 73 H 9211 LAUNCH I

000034 1 0002 0001 000 293100 009211
000066 0 0000
000099 0 0002
000134 0 0004
000165 0 0006
000198 0 0008
000231 0 0010
000265 0 0012
000298 0 0014
000331 0 0016
000364 0 0018
000396 0 0020
000429 0 0022
000461 0 0024
000494 0 0026
000528 0 0028
000560 0 0030
000594 0 0032
000627 0 0034
000660 0 0036
000692 0 0038
000726 0 0040
000999 0 0000

VELOCITY TABLE NUMBER 2

OPR 436 WH 73

WH 20 2 73

H 9211

LAUNCH 2

000020 0 0000 0002 000 293200 009211

000050 0 0002

000090 0 0004

000130 0 0006

000170 0 0008

000210 0 0010

000250 0 0012

000290 0 0014

000320 0 0016

000350 0 0018

000400 0 0020

000440 0 0022

000480 0 0024

000510 0 0026

000550 0 0028

000590 0 0030

000630 0 0032

000670 0 0034

000700 0 0036

000740 0 0038

000780 0 0040

000800 0 0000

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)

CORRECTIONS IN FEET, FATHOMS

FORM C&GS-117 U.S. DEPARTMENT OF COMMERCE
 (11-65) COAST AND GEODETIC SURVEY
 255A
 VELOCITY CORRECTIONS

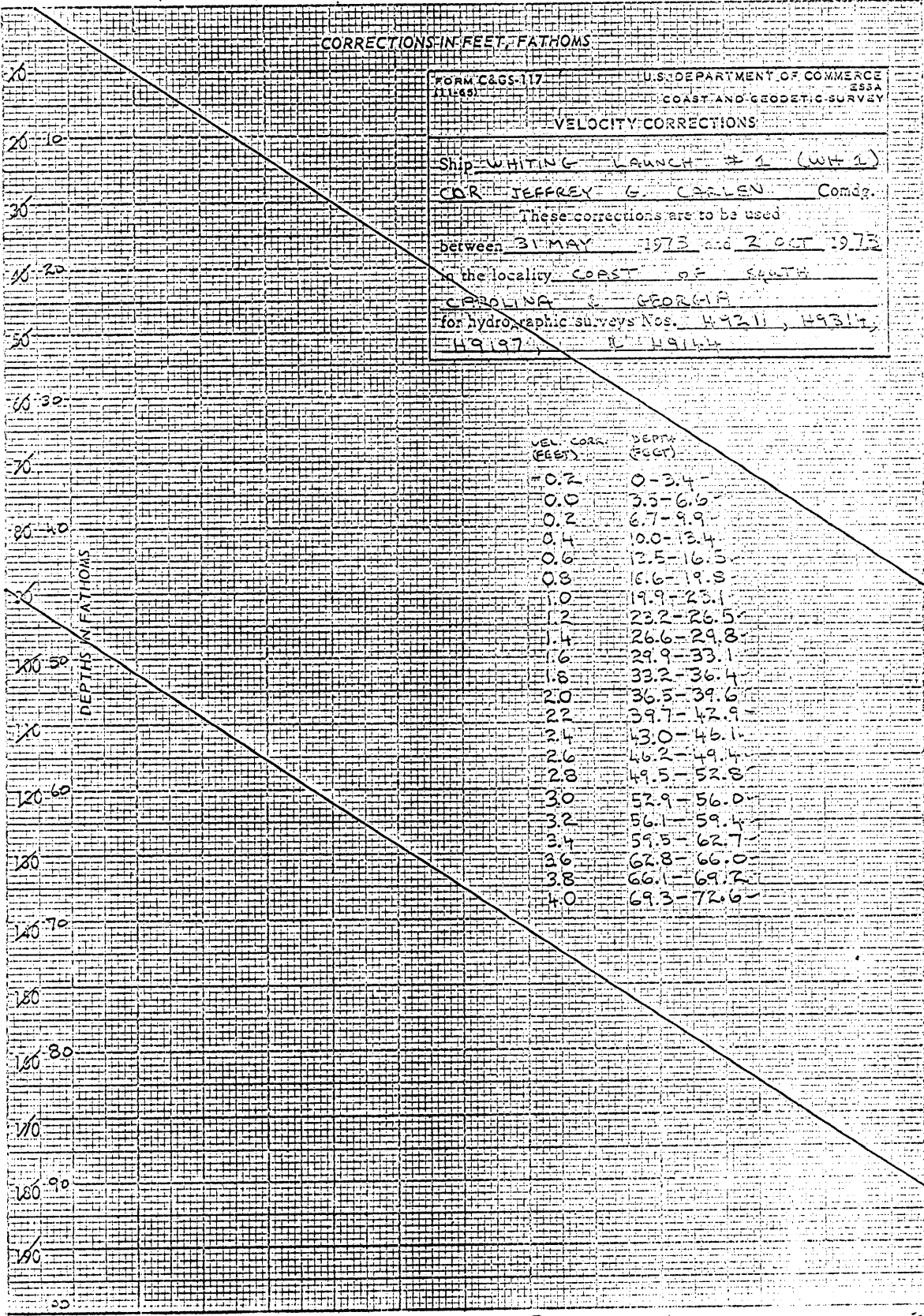
Ship WHITING LAUNCH # 1 (WH 1)
 CDR JEFFREY G. CARLEN Comdg.

These corrections are to be used
 between 31 MAY 1973 and 2 OCT 1973

in the locality COAST OF SOUTH

CAROLINA & GEORGIA
 for hydrographic surveys Nos. H9211, H9317,
H9197, H9114

(For deep water add a 0 to these figures)



VEL. CORN (FEET)	DEPTH (FATHOMS)
0.2	0-3.4
0.0	3.5-6.6
0.2	6.7-9.9
0.4	10.0-13.4
0.6	12.5-16.3
0.8	16.6-19.8
1.0	19.9-23.1
1.2	23.2-26.5
1.4	26.6-29.8
1.6	29.9-33.1
1.8	33.2-36.4
2.0	36.5-39.6
2.2	39.7-42.9
2.4	43.0-46.1
2.6	46.2-49.4
2.8	49.5-52.8
3.0	52.9-56.0
3.2	56.1-59.4
3.4	59.5-62.7
3.6	62.8-66.0
3.8	66.1-69.2
4.0	69.3-72.6

Norfolk, Virginia
February 11, 1974

EDP NOTE TO VERIFICATION (AMC)
H-9145, H-9211, AND H-9314

There are two G.P.'s used for the Savannah Light Tower gages. The G.P. used with the Savannah Light (Digital) gage was obtained from Rockville. And for Savannah Light (Marigram) we used a G.P. from the triangulation. The Savannah Beach gage has 0.4 ft. subtracted from May 1973 hourly heights (see Form 712).

	<u>Days</u>	<u>Gages Used</u>
H-9211:	151-179	Savannah Light (Marigram) Savannah Beach - Edisto Beach
	195-197	Savannah Light (Digital) Savannah Beach - Edisto Beach
H-9145:	248-275	Savannah Light (Marigram) Savannah Beach - Edisto Beach
H-9314:	197-212	Savannah Light (Digital) Savannah Beach - Edisto Beach
	213-222	Savannah Light (Marigram) Savannah Beach - Edisto Beach
	223-225	Savannah Light (Marigram) Savannah Beach
	226-227	Savannah Light (Marigram) Savannah Beach - Edisto Beach
	233-239	Savannah Light (Marigram) Savannah Beach

Robert R. Hill, Jr.
Data Preparation Group

Verifier: R.G. Roberson

29*November-1973

H-9211(WH 20-3-73)
OPR-436
NOTE TO EDP

This Branch has examined the control overlay for this survey and found it to be adequate.

There are two revisions to be made on two signals. Signal 29 has an improper geographic position. Signal 32 was not plotted on the signal overlay but should be plotted since no list of signals used was available at the time of checking the overlay.

All signal number locations are shown on a copy of the list of signals as well as the corrections for signals 29 and 32.

After the revisions have been made please furnish this office with a position overlay and printout.



William L. Jonns
Chief, Verification Branch

H-9211

OFF SHEET	2	32	29	2.040	✓	80	19	55.700	✓	SE
	4	32	23	31.770	✓	80	25	48.460	✓	SE
	6	32	22	31.360	✓	80	26	15.690	✓	SE
	8	32	20	48.410	✓	80	26	55.990	✓	SE - NW SIGNALS
	9	32	19	4.160	✓	80	27	34.950	✓	SE - DISPLACED NW 2.5 CM
	10	32	19	21.900	✓	80	27	14.800	✓	SE NW - TRIANGULATION
	11	32	18	58.080	✓	80	28	33.830	✓	SE NW
	12	32	19	2.800	✓	80	28	41.810	✓	SE NW - TRIANG.
	13	32	18	49.190	✓	80	28	57.410	✓	SE NW
	14	32	18	32.590	✓	80	29	34.310	✓	SE NW
	15	32	18	24.780	✓	80	29	49.470	✓	SE NW
	16	32	16	55.780	✓	80	33	3.440	✓	SE W
	18	32	16	27.680	✓	80	34	11.600	✓	SE E - TRIANGULATION
	20	32	14	42.810	✓	80	36	7.660	✓	SE NW - 17cm - TRIANG.
	22	32	15	53.280	✓	80	38	41.490	✓	SE E TRIANG.
	25	32	20	16.240	✓	80	27	13.700	✓	SE NW
	26	32	20	22.100	✓	80	27	25.110	✓	SE
	27	32	20	33.040	✓	80	27	47.790	✓	SE NE - TRIANGULATION
	28	32	20	12.680	✓	80	27	54.620	✓	SE NW
	29	32	19	59.450	✓	80	27	47.990	✓	SE NW
	30	32	19	52.320	✓	80	27	37.630	✓	SE W
	31	32	19	36.970	✓	80	27	19.640	✓	SE W
	33	32	18	12.970	✓	80	30	29.120	✓	SE NW
	34	32	17	52.650	✓	80	30	19.210	✓	SE NW - 5cm - TRIANG.
	35	32	17	55.900	✓	80	31	10.380	✓	SE NW
	36	32	17	41.440	✓	80	31	36.850	✓	SE NW
	37	32	17	27.660	✓	80	32	2.200	✓	SE NW
	100	32	18	22.620	✓	80	30	18.450	✓	SE W - 2cm
	101	32	18	26.360	✓	80	30	20.090	✓	SE W - 2cm
	102	32	18	31.930	✓	80	30	15.510	✓	SE NE
	37	32	18	22.020		80	30	19.960		W

APPROVAL SHEET

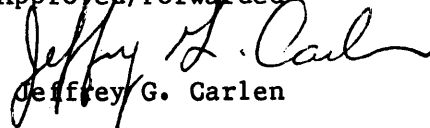
Supervision of field and office work on this hydrographic survey was continuous on a daily basis to insure completeness of the survey and that the work was done in accordance with the instructions.

Submitted by,


Michael C. McMillan

Ensign NOAA

Approved/Forwarded


Jeffrey G. Carlen

CDR NOAA

Commanding, NOAA Ship WHITING

Verifier: R.G. Cram

31 January 1974

VERIFICATION NOTE TO EDP (AMC)

Survey H-9211 (WH-20-2-73) OPR-436 ✓

This office has completed the verification of the preliminary position overlay for this survey.

Please change the point of origin; Lat. 32-11-45 Long. 80-37-15, form CAM 3-1 is attached.

There are six signal station changes, and two new signals. Signals 009, 010, 012, 020 and ⁰³⁴ need to be changed to Topo. ⁴⁰⁰Topo signals 140 and 148, ^{7h 34}were found to be used on the survey but were not included by the field. Signal 016 needs to be changed to Triangulation. Please plot 140 NE and 148 NW.

Please plot one Development Overlay (8X10) positions; 3150, 3152 thru 3173 record numbers 5541, 5543 thru 5601. Form CAM 3-1 is attached.

There were ^{≈ 300} 221 position duplications on this survey. These position numbers are; 2322 thru 2515, 2559 thru 2586. No 3547- action was taken other than being mentioned in this ⁷¹note. 3624

There are 251 changes to be made on this survey; 62 Time & Course records, 44 deleted positions, 145 negative positions. The 44 deleted positions were done by this office. They were DP's on shoreline and shoals that were not needed at the scale of this survey. The negative positions were made so to be able to identify the remaining positions in the area.

Cards have been punched by this office for necessary changes.

After the needed changes have been made please furnish this office with a Sounding Overlay and Printout.

rgc

William L. Jonns

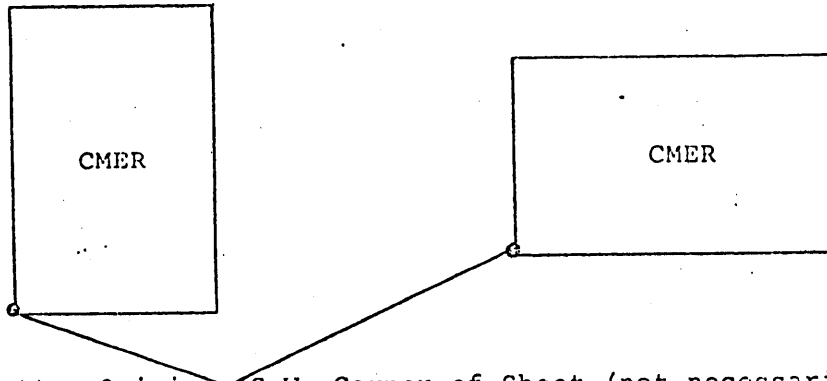
William L. Jonns

Chief, Verification Branch

CAM3-1
2-18-71

ATLANTIC MARINE CENTER
PROJECTION PARAMETERS
POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR-436-WH-73 4. Requested By R.G. Coon
2. Reg. No. H-9211 5. Ship or Office Verification branch
3. Field No. WH-20-2-73 6. Date Required A.S.A.P. 1974
7. Polyconic Modified Transverse Mercator
8. Central Meridian of Projection 80 ° 24 ' 15 "
9. Survey Scale: 1: 10,000
10. Size of Sheet (check one):
36 x 54 36 x 60 Other Specify 8x10 insert
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 32 ° 10 ' 15 "
Longitude 80 ° 24 ' 45 "
13. G.P.'s of triangulation and/or signals attached
14. Material Desired: Tracing Paper Mylar
Smooth Sheet Other Specify Insert for descriptive report
15. Remarks: Plot position Numbers 3150, 3152 thru 3174³ Record Number 5541; 5543 thru 5601. These position numbers are on a development and are not needed on the boat sheet.

CAM3-1
2-18-71

ATLANTIC MARINE CENTER

PROJECTION PARAMETERS

POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. DPR-436-WH-73 4. Requested By H.W. GUY
2. Reg. No. H-2A11 5. Ship or Office Verification Co.
3. Field No. WH-20-2-73 6. Date Required A.S.A.P. 1974

7. Polyconic Modified Transverse Mercator
8. Central Meridian of Projection 80° 0' 28" 21.0"
9. Survey Scale: 1: 20,000
10. Size of Sheet (check one):

36 x 54 36 x 60 Other Specify _____

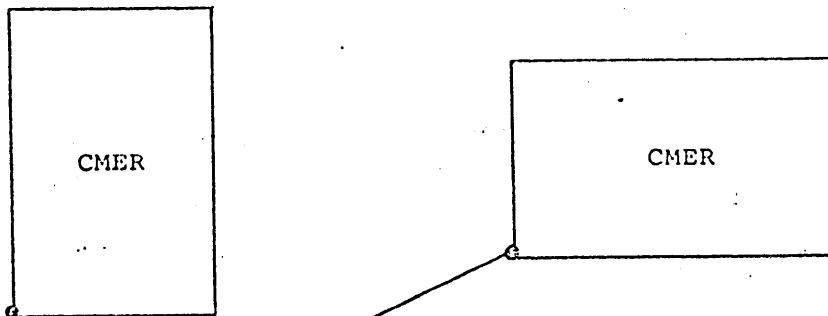
11. Sheet Orientation (check one):

NYX = 1

NYX = 0

N

N



12. Plotter Origin: S.W. Corner of Sheet (not necessarily a grid intersection)
Latitude 32° 11' 45"
Longitude 80° 37' 45"

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

14. Material Desired: Tracing Paper Mylar

Smooth Sheet Other Specify _____

15. Remarks: Change in point of origin only.

Verifier: CHAS. MEEKINS

March 28, 1974

VERIFICATION NOTE TO EDP
SURVEY H-9212 (WH-20-2-73)
OPR-436

The verification of the preliminary Sounding Overlay for the above survey is completed.

We are returning the sounding printout with all necessary corrections marked in red pencil. Correction cards have been key-punched and accompany this note.

There were approximately 245 changes to be applied to the sounding printout. These include sounding changes, excess level changes, and deletions of entire records.. (rec.15106 thru rec.15265 were deleted from the survey) Tide information was found to contain errors and was corrected during verification. There are no changes to the position control data.

After the above revisions have been completed, please furnish this office with a Smooth Sheet, one excess level, and a new sounding printout...(necessary due to changes in tides). Continue to plot with the same sheet size (36 x 60) and the same point of origin as was used for the sounding overlay.



WILLIAM L. JONNS
Chief, Verification Branch

WLJ/cm

VERIFICATION NOTES
SURVEY H-9211

GENERAL

This appears to be an excellent basic survey. Soundings are in good agreement at crossings and the depth curves adequately delineate the numerous features in this area of irregular bottom except in the areas of creek mouths and the western area of the sheet. Hydrography is insufficient to properly delineate the depth curves, therefore some were left in pencil.

A tide discrepancy of 2 to 4 feet was discovered on the preliminary sounding overlay. The soundings were not corrected on the preliminary overlay. The correct depths are shown on the smooth sheet and the final printout.

Norfolk, Va.
May 14, 1974

William L. Jenks
William L. Jenks
Chief, Verification Branch
AMC

ATLANTIC MARINE CENTER
APPROVAL SHEET
FOR
AUTOMATED SURVEY H-9211

- 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/~~not~~ been made. A new final sounding printout has/~~not~~ been made.

Date: 15 May 1974

Signed: *William L. Jonns*
Title: William L. Jonns
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: 15 May 1974

Signed: *C. Dale North Jr.*
Title: C. Dale North Jr., LCDR NOAA
Chief, Processing Division

TIDE NOTE

Soundings for hydrographic survey WH 20-2-73 were plotted on the boat sheet submitted using predicted tides based on the Savannah River Entrance predictions with appropriate corrections applied for Fripps Inlet, South Carolina.

Geographic locations for tide gages encompassed in the survey are:

<u>NAME</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>
Edisto Beach, SC	32 30.1'	80 17.8'
Savannah Beach, GA	32 00.3'	80 50.5'
Savannah Light, GA	31 57.0'	80 40.5'
Fort Polaski, GA	32 02.0'	80 54.1'

The standard tide gage at Fort Polaski (Savannah River Entrance) served as the basic control gage. Data from this station was sent directly to Tides Branch, Rockville Office, C331. The stations at Savannah Beach and Savannah Light was used to better determine the differences and constants between offshore and coastal tides. WHITING personnel maintained the Savannah Light gages during the survey.

The tidal data from Edisto Beach, Savannah Beach, and Savannah Light was sent directly to the WHITING each month for the duration of the survey. Hourly heights for Savannah Beach and Savannah Light bubbler gages were scanned and logged continuously by ship's personnel during the survey, including time in port. At no time were there breaks or invalid tide records in excess of three continuous days during hydrographic operations. These hourly heights were sent to the Tides Branch, Rockville along with the ADR tapes for Savannah Light and Edisto Beach for verification. A copy of the logged heights is included in this report. A copy of the letter to the Chief, Tides Branch is included. The letter requests the Tides Branch to furnish AMC Processing Division the MLW value on each tide staff, verification of WHITING's heights, hourly heights from the standard gage at Fort Polaski, and the recommended tidal zoning of the smooth sheet.



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

Date : 12 June 1973

Reply to Attn. of:

To : Chief, Tides Branch
ATTN: C-331

From : Commanding Officer
NOAA Ship WHITING


Subject: Tidal Data

Enclosed is Chart 1240 showing the smooth sheet layout for the WHITING's first 1:20,000 scale sheet on Project SCOPE, field number WH 20-2-73. The area between the dotted lines and the beach will be completed by the WHITING within the next two months; the remaining area will be completed as contemporary PEIRCE surveys.

In accordance with Project Instructions: OPR-436-WH-73, ADR tapes from Savannah Light and Edisto Island and Bubbler records from Savannah Light and Savannah Beach for May were forwarded under separate cover. Forms 258, 638 and 77-12 for each gage near the work area is enclosed. Form 362's for the two bubbler gages are also enclosed for verification.

WHITING hydrography on the sheet began on 31 May 1973. Please furnish the Atlantic Marine Center the MLW value on each of the tide staffs, verification of the enclosed hourly heights, recommended zoning of the smooth sheet and hourly heights from the standard gage at Ft. Pulaski, Georgia, if necessary.

Monthly tapes from the Savannah Light, Savannah Beach, and Edisto Beach gages will be forwarded to you from the WHITING until this sheet is finished.


Jeffrey G. Carlen
CDR, NOAA

cc: CAM 2

U. S. DEPARTMENT OF COMMERCE
1/17/74 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): Savannah Beach
Savannah Light
Edisto Beach

Period: 31 May - 1 Oct 1973

HYDROGRAPHIC SHEET: H-9211, H-9314, H-9197, H-9144 and H-9145

OPR: 436

Locality: Coast of South Carolina and Georgia

Plane of reference (mean ~~lower~~ low water):

Height of Mean High Water above Plane of Reference is

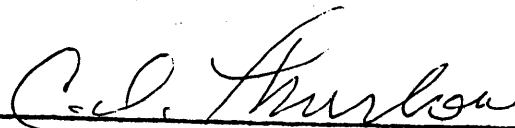
Remarks:

Station	Greenwich Intervals		Mean Range (ft)	MLW Datum (ft)
	HW	LW(hrs)		
Savannah Beach	12.55	6.63	6.6	1.7
Savannah Light	12.44	6.34	6.6	1.6 (Digital gage)(July) 8.9 (Marigram)
Edisto Beach	12.50	6.22	6.0	2.4

Zoning: Use automated zoning for the above Hydro Sheets.

Note: Savannah Beach - subtract 0.4 ft. from May 1973 hourly heights.

The difference between intervals represents the approximate time difference between the occurrence of high water or low water at the tide station.



Chief, Tides Division

GEOGRAPHIC NAMES

Name on Survey	Source of Name											
	A	B	C	D	E	F	G	H	K			
	ON CHART NO. 1240	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				
ATLANTIC OCEAN												1
BAY POINT ISLAND												2
BULL POINT												3
CAPERS ISLAND												4
FRIPP INLET												5
FRIPP ISLAND												6
PRITCHARDS INLET												7
PRITCHARDS ISLAND												8
ST. PHILLIPS ISLAND												9
SKULL INLET												10
TRENCHARDS INLET												11
												12
												13
												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25

Approved by:
Chas. B. Harrington
 Staff Geographer
 8 Aug. 1974

Fig. 19.

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET & PNO		1	BOAT SHEETS <i>copy</i> s		8 <i>mylar</i>	
DESCRIPTIVE REPORT		1	OVERLAYS		5	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	1					
VOLUMES	2					
BOXES			3			
T-SHEET PRINTS (List)						
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	REVIEW	TOTALS		
POSITIONS ON SHEET				3611		
POSITIONS CHECKED		300	21			
POSITIONS REVISED		251	—			
DEPTH SOUNDINGS REVISED		108	53			
DEPTH SOUNDINGS ERRONEOUSLY SPACED		---	7			
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		---	—			
TIME (MANHOURS)						
TOPOGRAPHIC DETAILS		8	17			
JUNCTIONS		(4) 20	23			
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		60	13			
SPECIAL ADJUSTMENTS		40	—			
ALL OTHER WORK		268	103			
TOTALS		396	156			
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE			
Frank L. Saunders	11/9/73		11/13/73			
VERIFICATION BY	BEGINNING DATE		ENDING DATE			
R.G. Roberson, R.G. Cram, D.C. Calland	11/29/73		5/7/74			
REVIEW BY	BEGINNING DATE		ENDING DATE			
Karen Malzke	5/29/75		7/23/75			

15?

Insp. D.J. Romesburg 8/29/75 69 hrs.
passed *Carroll* 3/17/76

H-9211

Items for Future Presurvey Reviews

Extensive bottom changes are expected to continue in the lesser depths, especially near the mouths of Trenchards Inlet, Fripps Inlet, and Skull Inlet.

<u>Position 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>
321	0803	5	2	25 years
321	0804	5	2	25 years

OFFICE OF MARINE SURVEYS AND MAPS
MARINE CHART DIVISION
MODIFIED HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9211

FIELD NO. WH-20-2-73

South Carolina, Northeast of Port Royal Sound, Trenchards
Inlet to Fripps Inlet

SURVEYED: May 31 to July 16, 1973

SCALE: 1:20,000

PROJECT NO.: OPR-436

SOUNDINGS: Sounding Pole, DE-723
Depth Recorder, Ross
Digital Depth Recorder

CONTROL: Sea-Fix (Hyper-
bolic), Sextant
Fixes on Shore
Signals

Chief of Party	J. G. Carlen
Surveyed by	J. G. Carlen
.....	C. D. North
.....	J. C. Veselenak
.....	T. C. Kaiser
.....	G. J. Decker
.....	R. D. Polvi
.....	M. C. McMillan
.....	M. C. Gastaldo
Automated Plot by	Calcomp Plotter 618 (AMC)
Verified by	D. C. Calland
Reviewed by	K. R. Malycke
.....	Date: July 23, 1975
Inspected by	D. J. Romesburg

1. Shoreline and Control

The origin of control is adequately covered in Part F of the
Descriptive Report.

The shoreline originates with reviewed photogrammetric manu-
scripts TP-00269, TP-00272, and TP-00273 of 1971-74.

The mean high water line is shown for guidance only and, except
for revisions in red determined by the hydrographer, the true
position is shown on the topographic surveys previously
mentioned.

2. Hydrography

A. Depths at crosslines are in good agreement.

B. The usual depth curves are adequately delineated. The 3-foot supplemental curve was added to better delineate certain offshore shoals.

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

3. Condition of the Survey

The plotting, sounding records, and printouts are adequate and conform to the Hydrographic Manual supplemented by the Instruction Manual - Automated Hydrographic Surveys, except as follows:

A. Final tide tape printout was not included as part of the survey records.

B. Position numbers were omitted from the fathogram on Julian Day 166, WHITING Launch No. 1.

C. Distortion ticks were not plotted on the smooth sheet.

D. Position numbers were duplicated on the following Julian Days and vessels:

<u>Julian Day</u>	<u>Duplicated Position No.'s</u>	<u>Vessel</u>
154, 156	2322 - 2515	WHITING Launch No. 2
157, 165	2559 - 2571	WHITING Launch No. 2
177, 179	3547 - 3624	WHITING Launch No. 1

4. Junctions

Adequate junctions were effected with H-9364 (1973) on the north, H-9198 (1971-72) on the east, H-9363 (1973) on the southeast, and H-9314 (1973) on the south.

The junction with H-9360 (1974) on the west will be discussed in the review of that survey.

5. Comparison with Prior Surveys

A.	H-535	(1855-56)	1:20,000
	H-620	(1856-57)	1:15,000
	H-649	(1853-57)	1:40,000
	H-830	(1863)	1:20,000
	H-832	(1863)	1:10,000
	H-833	(1863)	1:10,000

These early surveys, which no longer serve as a source of present charted soundings, fall in the area of the present survey but are not discussed in this review.

B. H-3926	1915-16	1:80,000
H-3898	1916	1:20,000
H-4153	1920	1:20,000
H-4170	1920-21	1:20,000
H-5517	1934	1:10,000
H-5717	1934	1:10,000
<u>H-5119</u>	<u>1931</u>	<u>1:20,000</u>

These surveys, taken together, cover the area of the present survey. A comparison between the prior and present surveys reveals changes in both the shoreline and bottom configuration. Present survey depths differ from prior depths by varying amounts depending on their location. At depths of 30 feet and greater, favorable comparisons within 1-3 feet are found. However, inside the 30-foot curve, depths were found to differ by 1-23 feet with the greatest discrepancies occurring in the vicinity of Trenchards Inlet, Fripps Inlet, and Skull Inlet. The greatest shoreline change has occurred on the southwestern tip of Capers Island at the mouth of Trenchards Inlet. Here, the high water line has receded approximately 1,610 meters from its 1934 position.

Besides changes resulting from frequent storms, the primary reason for the ongoing changes in this area is the susceptibility of the fine sand bottom to shifting by the tidal, stream, and ocean currents.

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

6. Comparison with Chart 11516, 19th Ed., November 2, 1974
 Chart 11517, 7th Ed., August 24, 1974
 Chart 11513, 12th Ed., November 23, 1974

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration, supplemented by the partial application of the boat sheet and verified smooth sheet of the present survey.

Attention is directed to the following:

(1) The Obstr Fish Haven (auth min depth 35 ft), Presurvey Review Item HH, charted in latitude $32^{\circ}16.9'$, longitude $80^{\circ}23.5'$ was not specifically investigated on the present survey and should remain as charted.

(2) The charted wreck symbol and elevation for Presurvey Review Item No. 3 positioned in latitude $32^{\circ}19.06'$, longitude $80^{\circ}24.26'$ should be revised to agree with the present survey.

(3) The elevation on the visible wreck charted in latitude $32^{\circ}19.77'$, longitude $80^{\circ}26.82'$ on chart 11513 should be revised to agree with the present survey.

Additional Presurvey Review information is listed under Paragraph J of the Descriptive Report.

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

B. Aids to Navigation

The aids to navigation located on the present survey agree with their charted positions and adequately serve the purposes intended.


8. Compliance with Instructions

This survey adequately complies with Project Instructions.

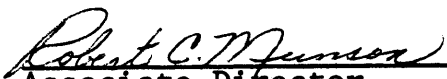
9. Additional Field Work

This is a very good basic survey and no additional field work is recommended.

Examined and Approved:



Chief
Marine Chart Division



Associate Director
Office of Marine Surveys
and Maps

REGISTRY 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 REQUIRED _____ INITIALS _____

REMARKS:

REGISTRY NO. H-9211

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 12-4-80 TIME REQUIRED _____ INITIALS JAC

REMARKS:

80° 24' 30"

80° 24' 00"

Pre Survey Review

Item no. 3

Wreck location

Day 168 - Launch WH-1

from pos. 3150 thru 3173

plotted on excess level no. 9

Scale 1:10,000

H-9211 WH-20-2-73

10
 3152
 14
 15 3157 13 14 15
 3158 3 3159 3160 3161
 14 16 17 15 16 17 18 3168 3170
 3162 3163 16 17 18 3171 3173
 15 16 17 18 17
 14 15 16 18 17
 14 15 16 15 3
 3164 10 7 9

32° 19' 00"

32° 19' 00"

13 14 13 8 7 9 3153 6
 14 12 12 14 3160 3154
 13 3172 3181

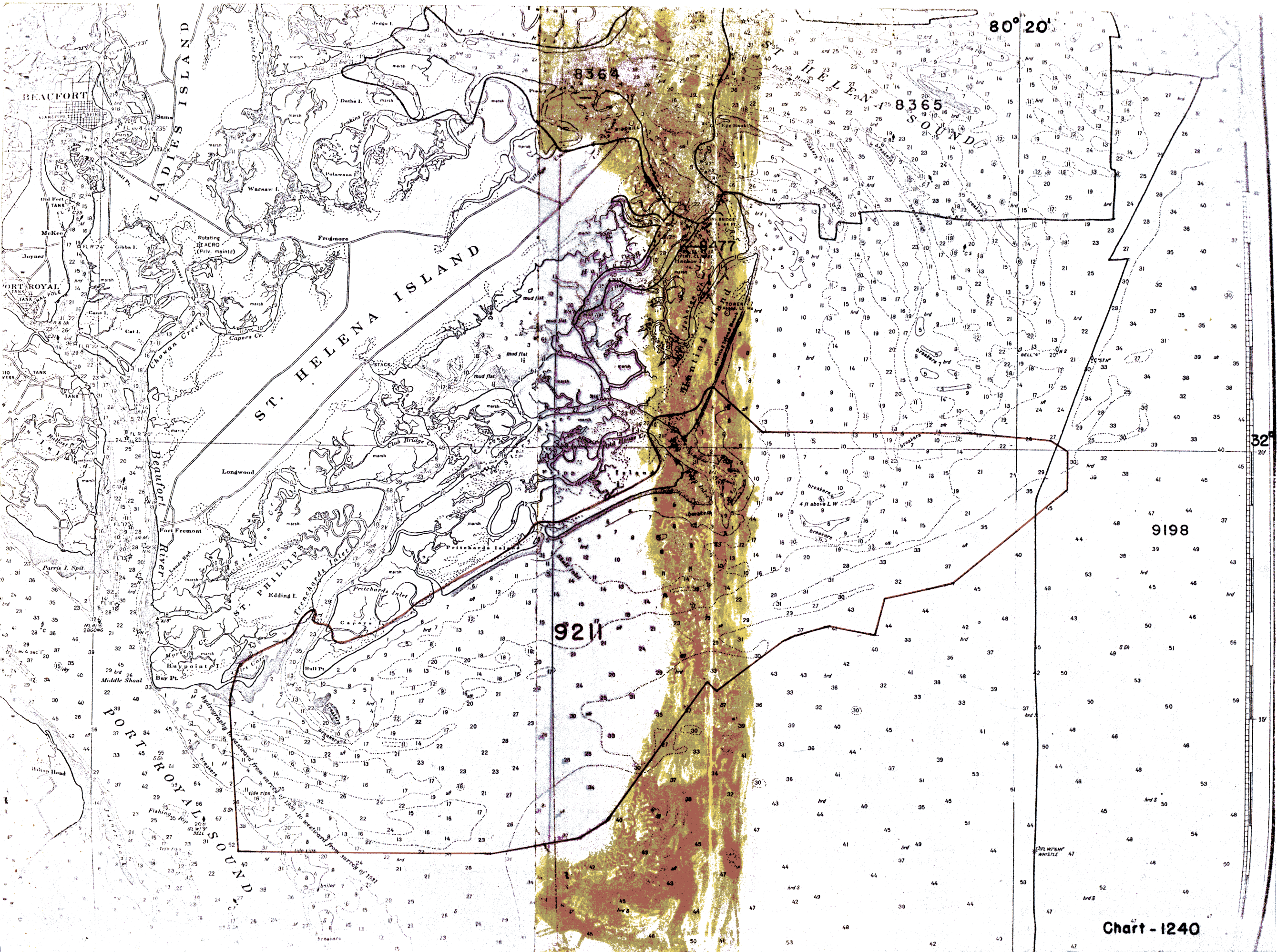
32° 18' 30"

32° 18' 30"

80° 24' 30"

80° 24' 00"

H-9211



RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. _____

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
571	6-28-74	M. J. Ward	Full Part Before After Verification Review Inspection Signed Via Drawing No.
1240	6-28-74	L. J. More	Full Part Before After Verification Review Inspection Signed Via Drawing No.
1111	7/12/74	D. CORDTS	Full Part Before After Verification Review Inspection Signed Via Drawing No.
571	11/24/76	J.B. Larner	Full Part Before After Verification Review Inspection Signed Via Drawing No.
793	8 Aug. 77	Alex. Radchench	Full Part Before After Verification Review Inspection Signed Via Drawing No.
1240 (11513)	12/21/78	J.H. SHERMAN	Full Part Before After Verification Review Inspection Signed Via Drawing No.
11480	6/9/80	Allen D. ...	Full Part Before After Verification Review Inspection Signed Via Drawing No. 32
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9211

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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