

9102

9102

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-20-1-65
Office No.	H-9102
LOCALITY	
State	South Carolina
General Locality	Magnolia Beach
Locality	Midway Inlet to Murrells
	Inlet
	19 65
	CHIEF OF PARTY LCDR J.P. Randall
LIBRARY & ARCHIVES	
DATE	April 27, 1974

HYDROGRAPHIC TITLE SHEET

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-20-1-65

State SOUTH CAROLINA

General locality Magnolia Beach
~~Coast of South Carolina~~

Locality Midway Inlet to Murrells Inlet

Scale 1:20,000 Date of survey 15 Mar - 16 Apr 1965

Instructions dated 22 Apr 64, 16 Dec 64 Project No. OPR 437

Vessel WHITING

Chief of party LCDR James P. Randall

Surveyed by ~~Ship's Officers~~ R. J. LAND, J. D. BOON III, J. E. DROPP,
RM. PETRYCZANKO, P. L. RICHARDSON

Soundings taken by echo sounder, ~~and~~ pole

Graphic record scaled by Ship's Personnel

Graphic record checked by Ship's Personnel

Protracted by Automated Plot by AMC-Calcomp

Soundings penciled by Automated Plot AMC

Soundings in ~~meter~~ feet at MLW ~~mean~~

REMARKS:

AWOIS of SIRE ✓ 12/6/85

Applied to stds 7/29/74

chc
11/12
1985

red ink

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-9102
FIELD NUMBER WH-20-1-65

Coast of South Carolina, Midway Inlet

Scale - 1:20,000
Ship WHITING

James P. Randall
Commanding 1965

Surveyed by:

LCDR James P. Randall
LT R. J. Land
LTJG J.D. Boon III
LTJG J. E. Dropp
ENS R. M. Petryczanko
ENS P. L. Richardson

A. Project

Authorization for this survey is contained in Instructions, Project OPR-437, Winyah Bay to Cape Hatteras, Coast of North and South Carolina, dated April 22, 1964 and supplemented December 16, 1964. ✓

B. Area Surveyed

The area surveyed is included between lats. $33^{\circ} 27.0'N$ and $33^{\circ} 31.5'N$ extending seaward from the coast to long. $78^{\circ} 51.3'W$. This area represents 65 percent of the total area to be completed on this boatsheet. Soundings were also taken inside the entrance to Murrell's Inlet. Hydrography began on March 15 and ended April 16, 1965 at which time the WHITING was ordered to return to Norfolk, Virginia to prepare for a special project. ✓

The adjoining survey is ^{H-8838 (1964-65)} ~~PE-20-2-64~~ to the south. Prior surveys ~~H-6539 (1939, 1:80,000)~~ and H-4616 (1926, 1:40,000; 1:20,000) contain the soundings that appear on the present chart, C&GS 1237. For this reason, only soundings from the chart and ~~PE-20-2-64~~ were placed on the boatsheet. The soundings along with other items such as buoys and shoals are denoted in azure blue pencil.

C. Sounding Vessels

Soundings were taken using the ship, launches I & II, and a skiff. Lower case day letters were assigned as follows: Launch I - blue; Launch II - red; skiff - green. Violet capital day letters were assigned to the ship. ✓

D. Sounding Equipment

✓
Depths recorded aboard both launches and the ship were obtained with Raytheon DE-723 fathometers. Fathometer #250 was installed on Launch I; fathometer no. 249 was used in Launch II until March 16, 1965 position 4b, after which unit no. 262 was installed due to mechanical failure in #249. The initial setting on both launch units was 1.0 feet, the resultant depths agreeing more closely with actual ones than at any other whole number setting. The ship used unit #251 throughout most of the project with some substitution by unit #249 (repaired) near the end. Both units were connected by switch to the same set of transducers and several sets of simultaneous comparisons revealed negligible differences between their readings. Ship soundings are based on an initial setting of 10.0 feet, approximately the ship's draft. Skiff soundings were taken with a pole graduated in feet.

Corrections to the ship's soundings were derived from lead-line comparisons and one temperature-salinity measurement. Launch corrections to recorded depths were derived from bar checks averaged over several selected time intervals during the survey. All the above corrections are presented in Table I. Corrections are scaled to the nearest 0.5 foot and depths recorded to the nearest foot except in inshore areas where corrections are to the nearest 0.2 foot and depths to the nearest 0.5 foot.

E. Smooth Sheet

The plotting of the smooth sheet ~~is to be~~^{was} done by the Norfolk processing office. ✓

F. Control

✓
Hydrography was controlled both visually using three-point fixes (sheet B, Launch II and skiff) and electronically using HIRAN equipment (Launch I and Ship). Hiran fixes were taken in offshore areas, visual fixes taken inshore where HIRAN arcs intersected at 30° or less. It is to be noted that while a HIRAN arc was used for a guide, control on sheet B is entirely visual. Visual signals include triangulation stations plotted on the boatsheet and topographic signals pricked through from manuscripts T-12298, ~~T-12299~~, and T-12301. A photogrammetrist, Mr. Robert Tibbetts of party 6420 was assigned to the project by Washington. ✓

HIRAN station VANDAL was located over the triangulation station VANDAL, 1962. HIRAN station NEW was erected over a temporary third-order mark established by ship's personnel using a Wild T-2 theodolite and an electrotape. Corrections to electronic distances were determined from visual fixes on triangulation marks and are presented in Table II.

G. Shoreline

The shoreline was transferred from ^{reviewed Class I shoreline} ~~blue~~ line manuscripts T-12298, ~~T-12299~~, and T-12301 of 1963-64. ✓

H. Crosslines

Crosslines were run to the extent of approximately ten percent. Generally good agreement was obtained, i.e. within one or two feet at the intersection, with two notable exceptions. On boatsheet B in the extreme southwest corner near station NEW, three splits and a crossline were run which have soundings of two to three feet less compared with adjacent soundings. These lines are noted in pencil on the boatsheet. As the difference appears regular, it is expected that once actual tides are used, the difference will be resolved. No subsequent malfunction of the fathometer or scanning errors were discovered. Another discrepancy occurs on boatsheet A at lat. $33^{\circ} 27.7'N$, long. $79^{\circ} 03.1'W$ here tides are again suspect, particularly so because the time of operation is about the same as for the first incident, a different launch and crew are involved and crossline soundings are again too shallow by two to three feet. ✓

OK using actual tides.

I. Junctions

The junction with ^{H-8838} ~~PE-20-2-64~~ to the south is good, soundings generally agreeing within one or two feet. ✓

J. Comparison with Prior Surveys

The only OPR-437 presurvey review item ^(No. 3) listed for the area surveyed is a 27 foot sounding at lat. $33^{\circ} 27.95'N$, long. $78^{\circ} 55.6'W$ originating with H-4616 (1926). Additional development in the area disclosed a depth of 38⁶ feet at this point and nothing less than 36 feet in the immediate vicinity. In all areas requiring development, the development was done on small overlays which were then placed in the respective sounding volumes. *CONCUR Delete from chart*

Prior surveys H-^{4615 (1925-26)} 6539 and H-4616 ⁽¹⁹²⁶⁾ are essentially contained in chart 1237 which will be compared in their place.

K. Comparison with the Chart

Comparison with C&GS chart 1237 shows depth agreement generally within one or two feet. Exceptions are found in certain inshore localities and near the 30 foot depth curve as follows:

1. Comparison of the chart and latest photographic manuscripts indicates a recession of the shoreline immediately south of Murrell's Inlet. The survey bears this out in that 10 to 12 feet of water now occurs where the chart shows a 2 foot depth. Other differences occur in the shoal area around the inlet. CONCUR

2. An irregular bottom east of Murrell's Inlet appears on both the chart and the present survey. Near the 30 foot depth curve, the chart shows several isolated shoal depths which do not appear in the survey, most notably the 27 foot depth mentioned in the presurvey review. The bottom here consists of coarse to fine sand with shell fragments and the shoal depths are believed to represent the peaks of sand waves which could easily have migrated since the time of the last survey in 19~~36~~³⁷. CONCUR

L. Adequacy of survey

This survey is complete and adequate for charting as far as it has progressed at present. Approximately 35 per cent of the boatsheet remains to be surveyed. ✓

M. Aids to Navigation

All aids to navigation shown on chart 1237 were found as indicated. Additional aids in the form of moored fifty-five gallon drums have been installed by local residents to mark the channel in Murrell's Inlet. These are located and described in this survey. ✓

N. Tides

A portable automatic tide gage was installed in the Pawley's Island fishing pier at lat. $33^{\circ} 25.89'N$, long. $79^{\circ} 07.10'W$. The mean low water value relative to the tide staff zero is +2.1 feet. Times are based on the meridian $75^{\circ}W$. ✓

O. Other

Settlement and squat corrections are presented in Table III. ✓

P. Statistics

<u>Vessel</u>	<u>Number of Positions</u>	<u>Nautical Miles Sounding Lines</u>
Launch I	493	153.9
Launch II	630	172.5
Skiff	91	8.0
Ship	<u>1062</u>	<u>380.0</u>
	2276	714.4

Total Area Surveyed: 493 square nautical miles

Number of Bottom Samples: 42

Respectfully submitted

John D. Boon III
LTJG, USC&GS

ATLANTIC MARINE CENTER
VERIFICATION OF SMOOTH TIDES

SURVEY H- 9102

PLANE OF REFERENCE MLW OR ~~xxxxx~~
TIME MERIDIAN 75
HEIGHT DATUM ON STAFFS 1. 2.1 2. _____ 3. _____

TIDE STATIONS	POSITION	TYPE GAGE	TIME CORR.		HEIGHT CORR. *	
			H.W.	L.W.	H.W.	L.W.

1. PAWLEYS I., S.	<u>0.33</u> <u>25.91'</u>	Portable				
	<u>Y 79</u> <u>07.05'</u>					

2.	ϕ					
	Y					

3.	ϕ					
	Y					

HOURLY HEIGHTS FROM ROCKVILLE OFFICE
 FROM FIELD MARIGRANS

VERIFIED BY: Rockville

TIDE ZONING NOT APPLICABLE
 BY COMPUTER
 FROM TWO OR MORE GAGES

LIMITS AND DESCRIPTION OF ZONING METHODS

TIDE CORRECTIONS COMPILED BY COMPUTER
 MANUALLY

VERIFIED BY: GFT
VERIFIED BY: _____

HEIGHT OF NHF ABOVE PLANE OF REFERENCE 4.8

TIDE CORRECTIONS VERIFIED ON SOUNDING PRINTOUT BY: GFT

DATE OF VERIFICATION Feb. 5, 1974

WLJ

*OR RATIO

EXAMINED & APPROVED

CAM3-1
2-18-71

ATLANTIC MARINE CENTER



PROJECTION PARAMETERS

POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR 437 4. Requested By G.F.Trefethen
2. Reg. No. H-9102 5. Ship or Office Verification
3. Field No. WH-20-1-65 6. Date Required ASAP

7. Polyconic Modified Transverse Mercator

8. Central Meridian of Projection 78° 58' 00"

9. Survey Scale: 1:20,000

10. Size of Sheet (check one):

36 x 54 36 x 60 Other Specify _____

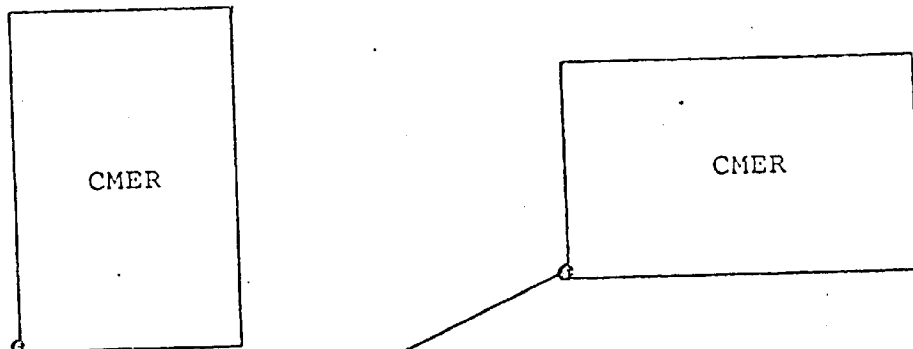
11. Sheet Orientation (check one):

NYX = 1

NYX = \emptyset

N

N



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

Latitude 33° 25' 50"

Longitude 79° 07' 20"

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

14. Material Desired: Tracing Paper Mylar

Smooth Sheet Other Specify _____

15. Remarks: USE THIS PARAMETER FOR THE SMOOTH SHEET ALSO.

ELECTRONIC CONTROL PARAMETERS

1. Project # OPR-437 2. Reg. # H-9102 3. Field # WH-20-1-65
 4. Type of Control: HI-RAN (Hi-Fix, Raydist, EPI, etc.)
 5. Frequency 931.023 (for conversion of electronic lanes to meters)
 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R₁)
 Station I.D. VANDAL
 Range Two (R₂)
 Station I.D. NEW

Lat.	<u>33°</u>	<u>39'</u>	<u>34.051"</u>
Long.	<u>78°</u>	<u>55'</u>	<u>01.641"</u>
Lat.	<u>33°</u>	<u>27'</u>	<u>29.966"</u>
Long.	<u>79°</u>	<u>06'</u>	<u>12.652"</u>

Hyperbolic (3-station)

Hyper-Visual

Slave One
 Station I.D. _____
 Master
 Station I.D. _____
 Slave Two
 Station I.D. _____

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

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		
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

9. Remarks: _____

VERIFICATION NOTES
SURVEY H-9201



GENERAL

This appears to be an excellent basic survey. Soundings are in good agreement at crossings and the depth curves adequately delineate the features of the area except for the Murrell's Inlet channel, which was not adequately developed. The private aids (55 gallon drums) are not shown on the smooth sheet. There was only one (1) located within the records, position 3495, volume 12, page 31.

Problems encountered during verification and the methods used to resolve them are explained in the accompanying AMC "Plotter Notes"

April 19, 1974

William L. Jonns
William L. Jonns
Chief, Verification Br., AMC

Norfolk, Virginia ✓
November 21, 1973

VERIFICATION NOTE TO EDP (AMC)
SURVEY H- 9102 CPR 437

Verifier: F.L. Saunders

This office has finished the verification of H-9102 Signal Overlay. Everything was found in order except for Signal 35; a new G.P. of $33^{\circ} 32' 35.574''$. No change in latitude.

The origin of the control was T-12298 and the boat sheet. All other control compilations have been destroyed by Rockville office.

W.L. Jones
W.L. Jones
Chief, Verification Branch

Verifier: Dorothy Calland

December 20, 1973

SURVEY H-9102 (WH 20-1-65)
OPR 437

Although the position printout and overlay were made without spooling the pattern correctors, this branch has completed the verification of this printout and overlay (11/27/73) and revised 126 positions, 40 of which were pattern changes and 60 were for visual control errors. Keypunched cards for same are herewith.

Please furnish this branched with a revised position overlay and printout.



W.L. Jonns
Chief, Verification Br.

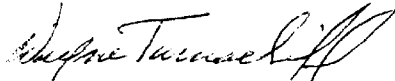
✓

Norfolk, Virginia
January 2, 1974

EDP NOTE TO VERIFICATION (AMC)
H-9102 (WH-20-1-65) OPR 437

Attached is a second position printout, which was not plotted because of many card punch errors and omissions of corrections. Check your corrections carefully and also check the applied hiran pattern corrections.

Both patterns and pattern correctors in the printout are ten times the real value; 123.56 in the printout is actually 12.356 statute miles. This confusion results from the fact that all of our printout programs expect only two decimal places where hiran has three. Rather than write a new program for a singular unique case, the existing programs were used, and the pattern values have to be read with the decimal place moved one to the left.



Wayne F. Turna Cliff
Data Preparation Group

Verifier: Roy G. Cram

January 17, 1974

VERIFICATION NOTE TO EDP (AMC)
SURVEY H-9102 OPR-437

This office has completed the verification of the second position overlay for H-9102.

There were 8 position changes and 1 time error that were corrected. In addition 91 positions (4000 to 4091) were made negative to ensure plottig of only position dots in a shoal investigation area.

Correctional cards were key-punched by this office. All corrections are on the printout in red pencil.

Please furnish this office with a sounding overlay and printout.

RGC

William L. Jonns
William L. Jonns
Chief, Verification Branch

✓

H-9102
OPR-437
NOTE TO EDP

VERIFIER G. F. T.

MARCH 13 1974

This branch has completed the verification of
the sdg!s O/L.

All changes are shown in red pencil in the prel.
sdg!s print out & cards were key punched by this
branch.

There were about 200 routine changes i.e. RS, EX, DR
Please furnish this branch with a smooth sheet .

W.L. Jonns
W.L. JONNS
CH. VER, BR.

✓

ATLANTIC MARINE CENTER
APPROVAL SHEET
FOR
AUTOMATED SURVEY H-9102

- 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: April 23, 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: April 23, 1974

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

1/31/74

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): Pawley's Island

Period: 14 March - 16 April 1965

HYDROGRAPHIC SHEET: H-9102

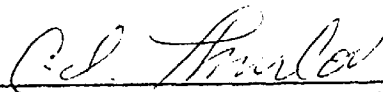
OPR: 437

Locality: Murrel's Inlet, South Carolina

Plane of reference (mean lower ~~low~~ water): 2.1 ft.

Height of Mean High Water above Plane of Reference is 4.8 ft.

Remarks: Zone Direct for entire sheet.



Chief, Tides Division

GEOGRAPHIC NAMES

H-9102

Name on Survey	A ON CHART NO. 1237 B ON PREVIOUS SURVEY NO. C ON U.S. QUADRANGLE MAPS D FROM LOCAL INFORMATION E ON LOCAL MAPS F P.O. GUIDE OR MAP G RAND McNALLY ATLAS H U.S. LIGHT LIST K											
	LITCHFIELD BEACH	✓										
LITCHFIELD BEACH	✓											2
LONG BAY	✓											3
MAGNOLIA BEACH	✓											4
MIDWAY INLET	✓											5
MURRELLS INLET	✓											6
												7
												8
												9
												10
												11
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Approved by:
 Chas. E. Harrington
 Staff Geographer
 6 Aug 1974

FORM C&GS-946
(REV. 11-65)
(PREP. BY
HYDROGRAPHIC
MANUAL 20-2,
6-94, 7-13)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY
NAUTICAL CHART DIVISION

HYDROGRAPHIC SURVEY STATISTICS
HYDROGRAPHIC SURVEY NO. H-9102
(WH 20-1-65) OPR 437

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT			
SMOOTH SHEET PNO & ESO	1	BOAT SHEETS	1 (2 Parts)			
DESCRIPTIVE REPORT	1	OVERLAYS	3 3			
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS / SOURCE DOCUMENTS
Accession ENVELOPES	Books					1
CAHIERS	1					
VOLUMES	14					
BOXES			1			

T-SHEET PRINTS (LIST) ~~T-10000, T-10200, T-10301~~

SPECIAL REPORTS (LIST) 1 copy HI-RAN Report 2 Control manuscripts
1 copy Fathometer Report

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				2276
POSITIONS CHECKED		230	100	
POSITIONS REVISED		135	0	
DEPTH SOUNDINGS REVISED		150	10	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0	0	
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	0	
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		6	2	
JUNCTIONS		6	4	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		16	10	
SPECIAL ADJUSTMENTS *	4			* Scanning Fath.
ALL OTHER WORK		159	41	
TOTALS		191	57	
PRE-VERIFICATION BY D.C. CALLAND, R.G. CRAM, G.F. TREFETHEN	BEGINNING DATE 12-11-73	ENDING DATE 3-13-74		
VERIFICATION BY B.J. STEPHENSON	BEGINNING DATE 4-9-74	ENDING DATE 4-12-74		
REVIEW BY <i>M Frank</i>	BEGINNING DATE 8-8-75	ENDING DATE 9-24-75		

D.H. Rosenberg 6-29-76 72 hrs

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-9102

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 _____ TIME REQ'D. _____ INITIALS _____

REMARKS:

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

REGISTRY NO. H-9102

FIELD NO. WH-20-1-65

South Carolina, Magnolia Beach, Midway Inlet to Murrells Inlet

SURVEYED: March 15 - April 16, 1965

SCALE: 1:20,000

PROJECT NO.: OPR-437

SOUNDINGS: DE-723 Depth Recorders
Sounding Pole

CONTROL: Sextant Fixes on
Shore Signals;
HIRAN

Chief of Party	J. P. Randall
Surveyed by	R. J. Land
.....	J. D. Boon III
.....	J. E. Dropp
.....	R. M. Petryczanko
.....	P. L. Richardson
Automated Plot by	Cal Comp 618 (AMC)
Verified by	B. J. Stephenson
Reviewed by	G. M. Frank
	Date: September 24, 1975
Cursory inspection made--survey	D. J. Romesburg
processing considered complete	June 29, 1976

1. Control and Shoreline

The source of control is given in the Descriptive Report, paragraph F.

The shoreline originates with reviewed Class I photogrammetric manuscripts T-12298 and T-12301 of 1963-64.

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

2. Hydrography

Sounding line crossings are in good agreement.

The depth curves are adequately delineated.

Bottom configuration and least depths are adequately developed.

3. Condition of the Survey

The field plotting, sounding records, automated printouts, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual supplemented by the Instruction Manual - Automated Hydrographic Surveys.

4. Junctions

An adequate junction was effected with H-8838 (1964-65) on the southwest, H-9260 (1971-72) on the south and east, and H-9289 (1972) on the north.

5. Comparison with Prior Surveys

A. H-1419 (1878-79) 1:40,000

This survey falls in the area of the present survey, but is not discussed in the present review.

B. H-4615 (1925-26) 1:40,000 H-4616 (1926) 1:40,000

A comparison between the present and prior surveys reveals a general difference in depths of 1-5 feet except in the vicinity of Murrells Inlet where present depths are 22 feet shoaler than those on the prior surveys. These depth differences can be attributed to the susceptibility of the bottom materials to shifting by frequent storms and ocean and tidal currents. The more drastic changes at Murrells Inlet are attributed to the same factors as above but their effect is much more pronounced because of the constricted area.

Several soundings were carried forward from H-4616 (1926) to supplement the present survey on certain relatively stable features. With the addition of these soundings, the present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 11535 (1237) (latest print date 6th Edition, January 18, 1975 Chart 11534 (835-SC) (latest print date 12th Edition, March 22, 1975)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration, supplemented by the

partial application of depths from the boat sheet of the present survey and U.S. Corps of Engineers surveys.

Attention is directed to the following:

(1) Presurvey Review Item No. 3 is discussed under paragraph J of the Descriptive Report.

(2) The 27-foot sounding charted in latitude 33°33.1', longitude 78°54.4' on chart 1237 originates with erroneous preliminary data on the boat sheet of the present survey. The correct value for this sounding is 32 feet.

(3) The obstruction, fish haven charted in latitude 33°31.15', longitude 78°58.4' on chart 1237 originates with Chart Letter 1220 of 1969 subsequent to the date of the present survey and should be retained on the chart.

Except as noted above, the present survey is adequate to supersede the charted hydrography within the common area.

B. Aids to Navigation

The aids presently charted adequately mark the features intended. The positions of the aids at Murrells Inlet are not charted because they are frequently shifted to mark the changing channel.

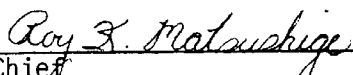
7. Compliance with Instructions


The survey adequately complies with the Project Instructions.

8. Additional Field Work

This survey is considered to be an excellent basic survey and no additional field work is recommended.

Examined and Approved:


Chief
Marine Surveys Division
Hydrographic Surveys Branch

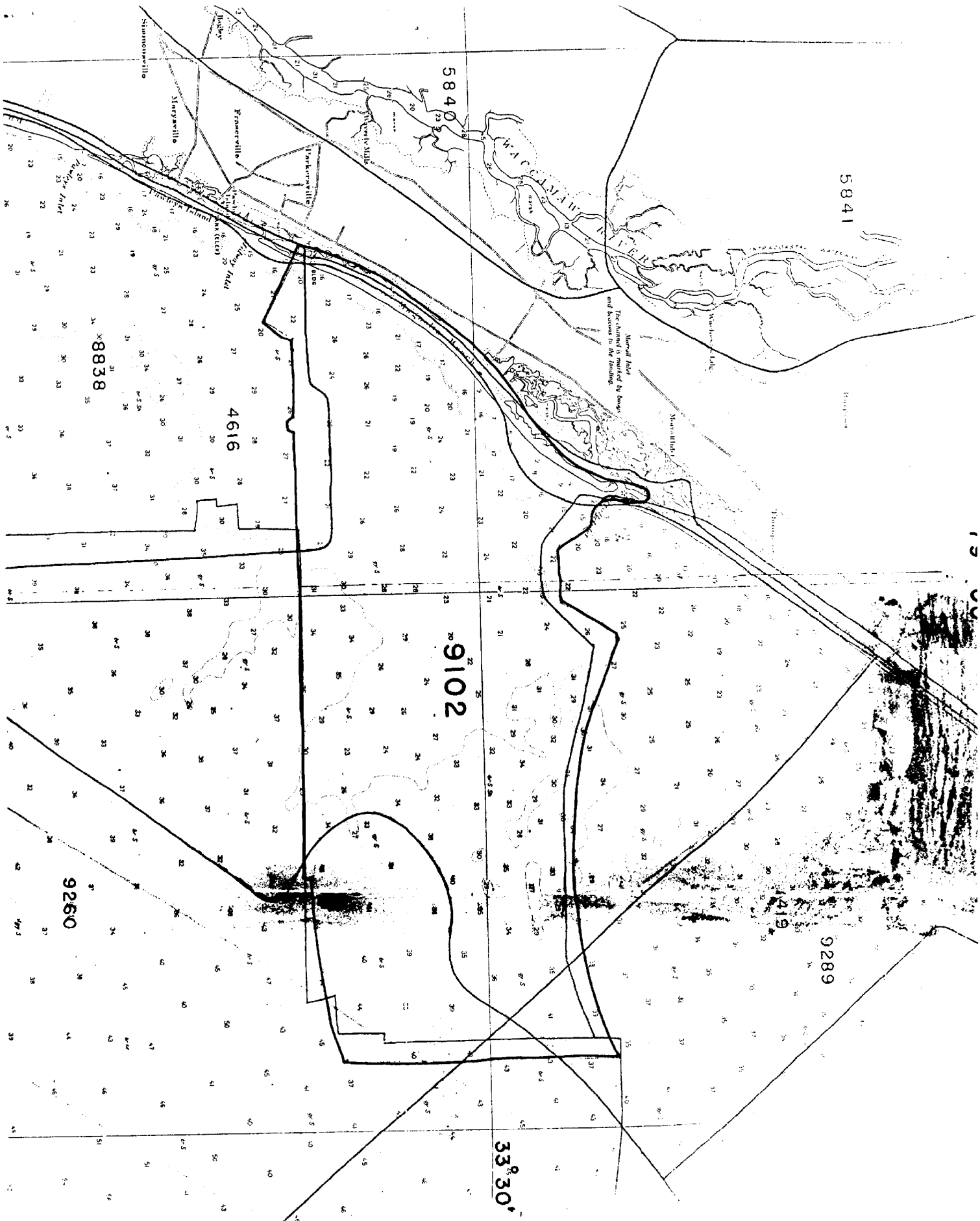

Associate Director
Office of Marine Surveys
and Maps
Chief
Nautical Charting Division

H-9102

Information for Future Presurvey Reviews

Continued shifting of the bottom sediments in this area can be expected because of ocean and tidal currents and frequent storms.

<u>Position Index</u>		<u>Bottom Change Index</u>	<u>Use Index</u>	<u>Resurvey Cycle</u>
<u>Lat.</u>	<u>Long.</u>			
332	0790	4	2	25 years
332	0791	4	2	25 years
333	0790	4	2	25 years
333	0791	4	2	50 years



5840

5841

8838

4616

9102

9260

9289

419

33° 30'

Merrill Hill Pond shown as marked by house and located to the building.

Sturtevantville

Ermeroville

Bankersville

Sturtevantville

Merrill Hill

Thompson

Thompson

12

79° 00'

9289

33° 30'

9102

4616

8838

9260

3545

Chart - 1237

