

9433

Diag. Cht. No. 1234-3.

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. .... AHP-05-3-74 .....  
Office No. .... H-9433 .....

LOCALITY

State ... NORTH CAROLINA .....  
General Locality ... BEAUFORT INLET .....  
Locality ... SHACKLEFORD SLUE .....

1974

CHIEF OF PARTY

F. T. SMITH

LIBRARY & ARCHIVES

DATE ... 3/25/75 .....

No. 1234  
A-1234

9433

9433

**HYDROGRAPHIC TITLE SHEET**

H-9433

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.

AHP-05-3-74

State North Carolina

General locality Beaufort Inlet

Locality Shackleford Slue

Scale 1:5,000 Date of survey 9/20/74 - 10/5/74  
11/12/74 - 11/16/74

Instructions dated 31 January 1974 Project No. OPR-513

Vessel AHP - Launch 1277

Chief of party F. T. Smith

Surveyed by F. Kleinschmidt, D. Bryant, W. Hill, R. Lewis

Soundings taken by echo sounder, hand lead, pole (All)

Graphic record scaled by Launch Personnel

Graphic record checked by Launch Personnel

Protracted by ~~N/A~~ *Calcomp* Automated plot by *AMC*  
~~PDP-8~~ *calcomp 18*

Verification by *AMC*

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

REMARKS:

*Applied to sheet 4/1/75  
CAS*

*Survey tube should contain position  
overlay for bp 91332 and records  
should include those for bp 91332 and ch L  
410 (1975)*

*RAC 3/75*

Descriptive Report  
To Accompany  
Hydrographic Survey H-9433  
AHP-05-3-74, Scale 1:5,000  
OPR-513  
Beaufort Inlet, North Carolina

A. Project

OPR-513 is a cooperative agreement between NOS & the U.S. Army Corps of Engineers to provide a new data base for computer studies of the Beaufort Inlet. The survey was accomplished in accordance with Project Instructions OPR-513-AHP-74, Beaufort Inlet, North Carolina. Dated 31 January 1974 and chapter 3 of the Atlantic Marine Center Manual. ✓

B. Area Surveyed

The area surveyed lies between Shackleford Banks and Bird Shoal, and extends from 76° 38' 05" to 76° 39' 40". Junction was made with Contemporary Survey H-9431, AHP-5-1-74, 1:5,000 scale 1974. This area is covered by Prior Surveys H-7963, 1:12,500 scale, 1952 and H-8565, 1:5,000 scale, 1960. ✓

All field work was accomplished during the time period (20 September 1974 to 16 November 1974.)

C. Sounding Vessel

Launch 1277 was used to accomplish hydrography - Skiff No. 1 obtained bottom samples. ✓

D. Sounding Equipment

A Raytheon Fathometer, model DE-723D, serial no. 1279 was used in Launch 1277. A to F checks were taken periodically to check stylus arm length. Numerous pole soundings were necessitated due to the fathometers inability to digitize consistently in depths less than 7 feet. Refer to Velocity and Fathometer Corrector Report, OPR-513, Beaufort Inlet, North Carolina. ✓

E. Smooth Sheet

Raw master tapes were logged and data plotted on the boatsheet by the Launch's PDP-8/e Hydroplot System. Edited master tapes, corrector tapes, velocity tapes, and TC/TI tapes were logged by Launch Personnel and submitted for smooth plotting by Processing Division, Atlantic Marine Center. ✓

F. Control

Control for Del Norte Hydrography was established with two remote transponders located over third order traverse and triangulation station: Bogue Banks "A" and Beaufort Inlet Channel Range Rear Light. ✓

All calibration of the Del Norte was accomplished at fixed points located by third order traverse.

Refer to Horizontal Control Report, OPR-513, Beaufort Inlet, 1974. See also enclosed Del-Norte Note for Station locations and discussion of problems encountered.

#### G. Shoreline

Shoreline detail was taken from incomplete manuscripts TP-00519, TP-00520, TP-00521, and TP-00522. A "hydro-shoreline" run as close as possible to the HWL indicates a number of areas of discrepancies, particularly at the N.W. Tip of Shackelford Banks and in the vicinity of Bird Shoal. *Shoreline in red was transferred from Photobathymetry manuscripts which were revised from photographs flown in December 1974.* Numerous notes pertaining to distance to the HWL are indicated on the printouts as an aid to the verifier.

The shoreline is shown in pencil on the boatsheet pending recompilation of the HWL by the Photogrammetric Division.

#### H. Crosslines

Crosslines were run at approximately 12% of the regular system of hydrography, the agreement with main scheme hydrography was good and all soundings agree to the nearest foot.

#### I. Junctions

Junctions with H-9431, AHP 5-1-74 are in excellent agreement. All depth curves can be drawn continuously from H-9433, AHP 5-3-74 to H-9431, AHP-5-1-74 with no displacement.

#### J. Comparison with Prior Surveys

Comparison with H-7963, 1:12,500 scale, 1952; and H-8565, 1:5,000 scale, 1960 shows considerable change over entire area with extensive shoaling in center of survey. The prior survey showed a passage with depths of 19-20 feet at Lat.  $34^{\circ} 41' 50''$ , Long.  $76^{\circ} 39' 20''$ . The present survey, H-9433, shows soundings of 1-5 feet in this area.

#### K. Comparison with the Chart

Comparison with charts No. 423, 15th Edition, December 8, 1973 and No. 420 41st Edition, December 16, 1972 shows same differences as mentioned in Section J of this report. There were no pre-survey review items contained within the limits of H-9433.

#### L. Adequacy of Survey

This survey is complete and adequate to supersede prior surveys for charting purposes.

M. Aids to Navigation

There are 2 floating aids to navigation within the limits of this survey. A comparison between charts No. 423, 15th Edition, December 8, 1973 and No. 420, 41st Edition, December 16, 1973 and Light List Volume I, Atlantic Coast 1974 showed no difference. Nun No. 2 marks the off-shore end of a rock jetty and the limits of deep water in this vicinity. Can No. 1 marks deep water near Bird Shoal, however deep water does not extend between these buoys. It is recommended an additional buoy or marker be established at Lat.  $34^{\circ} 41' 50''$ , Long.  $76^{\circ} 39' 20''$  to mark the existence of the shoal in this vicinity. The recommended passage lies close to shore at the Northwest tip of Shackelford Banks.

N. Statistics

<u>Vessel</u>	<u>Nautical Miles of Sounding</u>	<u>Square Miles of Hydro.</u>	<u>No. of Bottom Samples</u>	<u>No. of Positions</u>
1277	65.3	2	0	1066
Skiff No. 1	0	0	6	6

O. Miscellaneous

None

P. Recommendations

Refer to Section M.

Q. Reference to Reports

1. Fathometer and Velocity Correction Report, OPR-513, Beaufort Inlet, North Carolina, 1974.
2. Horizontal Control Report, OPR-513, Beaufort Inlet, North Carolina, 1974.

Respectfully Submitted

*Robert A. Lewis*

Mr. Robert A. Lewis  
Asst. Chief, AHP

APPROVAL SHEET

SURVEY H-9433(AHP-05-3-74)

The hydrographic records transmitted with this report are complete and adequate.



F. T. Smith  
Lt. Cdr., NOAA  
Chief, AHP

#### DEL NORTE NOTE

Del Norte electronic positioning equipment, which operates in a range-range mode, was used to control hydrography on this survey with the exception of bottom samples positioned by sextant fixes. One network was used on this sheet, with the shore stations located over established third order traverse stations. Calibration was established twice daily by positioning the boat at a known third order traverse station. Del Norte ranges were compared to ranges computed by the PDP-8/e using program AM407.

Daily correctors were determined by averaging calibrations taken at the beginning and end of the workday. Performance of the Del Norte System was good with the only problems encountered being interference from Navy radar and U.S. Army Corps of Engineers "Mini Ranger".

ABSTRACT OF EQUIPMENT UTILIZATION

Shore Station Locations

- I. Unit S/N 249, OMNI Antenna, on 10' guyed pipe  
Location: Bogue Banks Station "A" (Fort Macon)  
34° 41' 39.911", 076° 40' 56.95"
- II. Unit S/N 181, Directional antenna, on 65' Light tower  
Location: Beaufort Inlet channel Range Rear Light  
34° 42' 52.980", 076° 39' 46.373"

Mobile Transponder

S/N 162

DMU

S/N 179



Electronic Corrector Abstract

Vessel: AHP-1277

Sheet: H-9433(AHP-05-3-74)

TIME	DAY	PATTERN 1	PATTERN 2
163731	263	+00004	-00002
150101	273	+00004	-00001
125652	274	+00004	-00001
133514	275	+00005	-00003
125719	277	+00003	-00002
144054	278	+00002	-00002

Signal List  
 OPR-513  
 Beaufort Inlet, N.C.

161	34	42	5321	278	43	2311	Bogue Sound Light 4	off sheet
164	34	42	6143	278	41	2113	Fort Macon Creek Light 2	" "
165	34	42	4521	278	41	4774	Morehead City Channel Light 23	" "
166	34	41	5703	278	39	5704	Beaufort Inlet Ch. Range Frnt Lt.	✓
167	34	41	1373	278	39	3100	Morehead Ch. Range Rear Light	off sheet
169	34	42	5203	278	39	4007	Beaufort Inlet Ch. Range Rear Lt.	✓
174	34	41	3991	278	41	5095	Bogue Banks Station A	off sheet
175	34	41	3934	278	41	1234	Bogue Banks Station Al	" "
180	34	43	1473	278	42	5541	*Morehead City T&T Micro Twr(1962)	" "
181	34	43	1637	278	42	3226	*Morehead City Standpipe (1913)	" "
182	34	42	5143	278	41	1149	*Morehead City Radio Wmbl (1962)	" "
183	34	43	4313	278	39	4992	*Beaufort Muni Water Tank (1927)	" "
235	34	42	1613	278	41	4206	Beaufort Harbor Channel Light 1	" "
175	34	43	1451	278	41	3932	Morehead Port Terminal Tank	" "
** 176	34	42	5222	278	33	5191	WBMA Radio Tower	" "
177	34	42	5673	278	41	4272	"Bl" SE Corner Port Terminal Wharf	" "

\*\* Photo location

Third Order Traverse  
 \*Third Order Triangulation



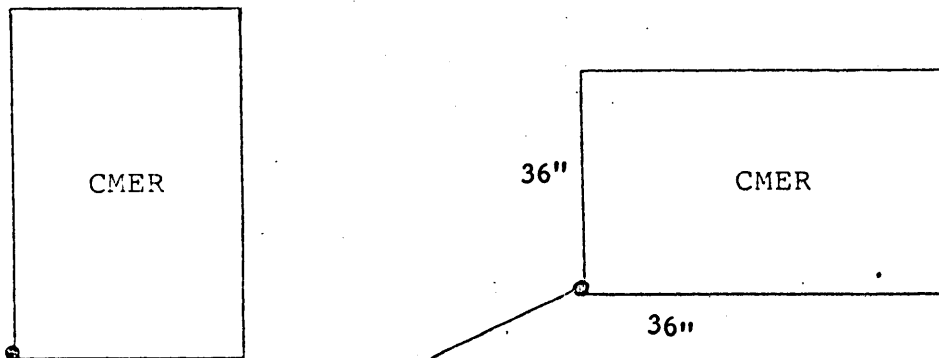
CAM3-1  
1/31/74

ATLANTIC MARINE CENTER

PROJECTION PARAMETERS

POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR-513 4. Requested By Verification Branch  
2. Reg. No. H-9433 5. Ship or Office AMC  
3. Field No. AHP-5-3-74 6. Date Required ASAP  
7. Polyconic  Modified Transverse Mercator   
8. Central Meridian of Projection 76° 40' 00"  
9. Survey Scale: 1: 5,000  
10. Size of Sheet (check one):  
36 x 54  36 x 60  Other  Specify 36" x 36"  
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 34° 40' 40"  
Longitude 76° 40' 15"  
13. G.P.'s of triangulation and/or signals attached   
14. Material Desired: Tracing Paper  Mylar   
Smooth Sheet  Other  Specify \_\_\_\_\_  
15. Remarks: \_\_\_\_\_

ATLANTIC MARINE CENTER  
ELECTRONIC CONTROL PARAMETERS

1. Project # OPR-513    2. Reg. # H-9433    3. Field # AHP-05-3-74  
 4. Type of Control Del Norte (Hi-Fix, Raydist, EPI, etc.)  
 5. Frequency 1498.35 (for conversion of electronic lanes to meters)  
 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R<sub>1</sub>) (Fort Macon)

Station I.D. Bogue Banks Station A

Range Two (R<sub>2</sub>) Beaufort Inlet Channel

Station I.D. Range Rear Light

Lat. 034 ° 41 ' 3991 "

Long. 076 ° 40 ' 5695 "

Lat. 034 ° 42 ' 5298 "

Long. 076 ° 39 ' 4637 "

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 R<sub>1</sub> Station and looking directly at R<sub>2</sub> (check one):

Survey area is to observer's Right   $\lambda = 0$

Survey area is to observer's Left   $\lambda = 1$

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 Time	Day	To Time	Day	Position Numbers (inclusive)
<u>1277</u>	<u>163731</u>	<u>263</u>	<u>190852</u>	<u>278</u>	<u>2056</u> to <u>3121</u>
_____	_____	_____	_____	_____	to _____
_____	_____	_____	_____	_____	to _____

9. Remarks: \_\_\_\_\_



ABSTRACT OF SETTLEMENT & SQUAT

<u>SPEED (RPM)</u>	<u>CORRECTION (FT)</u>
0-1499	+0.0
1500-2000	+0.2
2001-3000	+0.4





## FATHOMETER AND VELOCITY

### CORRECTION REPORT OPR-513

September - October 1974

#### A. Equipment

A Raytheon Fathometer, Model DE-723, serial no. 1279 was used on Launch 1277. Frequent A to F checks were taken to check stylus arm length. A major problem encountered with the fathometer was its inability to digitize consistently in depths less than 7 feet. This made it necessary to scale soundings from the analog fathogram and enter them on the corrector tape. A long corrector tape is not only time consuming to log but makes the offline plot considerably longer.

#### B. Velocity and Instrument Error Correctors

Bar checks were taken on a daily basis, weather permitting. All correctors for each depth covered by the bar check averaged less than 0.4 foot from the mean therefore one curve was used for this survey.

#### C. Settlement and Squat Correctors

Settlement and squat correctors were obtained as outlined in Section 5-108 of the Hydrographic Manual. An abstract of corrector values are included with this report.

(Bot. 1 inch equal 4 fathoms for deep water and 1 inch equal 0.1 fathom for shoal)

CORRECTIONS IN FEET, ~~FEET~~

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

**VELOCITY CORRECTIONS**

Ship Atlantic Hydrographic Party  
 Lch 1777 - E. Kleinschmidt Comdg.  
 These corrections are to be used  
 between 11 Sept. 1974 and 5 Oct. 1974  
 in the locality Beaufort Inlet,  
North Carolina  
 for hydrographic surveys Nos. H-9431 + H-9433

(For deep water add 0 to these figures)

DEPTHS IN FATHOMS

Depth (Ft.)	Corr (Ft.)
0.0 - 5.1	+0.0
5.2 - 9.6	+0.2
9.7 - 14.2	+0.4
14.3 - 18.6	+0.6
18.7 - 23.2	+0.8
23.3 - 27.7	+1.0
27.8 - 32.3	+1.2
32.4 - 36.7	+1.4
36.8 - 41.4	+1.6
41.5 - 45.9	+1.8
46.0 - 50.4	+2.0
50.5 - 55.0	+2.2
55.1 - 59.5	+2.4

Settlement and Squat Corrections  
 (determined 7 May 1974)

RPM	Corrections (FT)
0 - 1499	0.0
1500 - 2000	+0.2
2001 - 3000	+0.4

Table #2



ATLANTIC MARINE CENTER  
APPROVAL SHEET  
FOR  
AUTOMATED SURVEY H- 9433

- 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: 17 March 1975

Signed: William D. Jones

Title: Chief, Verification Branch

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

Date: 17 March 1975

Signed: C. A. [Signature]

Title: Chief, Processing Division

1/14/75

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): Beaufort Inlet Channel Range

Period: September 20 - November 16, 1974

HYDROGRAPHIC SHEET: H9433

OPR: 513

Locality: Beaufort Inlet

Plane of reference (mean ~~lower~~ low water): 8.8 ft.

Height of Mean High Water above Plane of Reference is 3.2 ft.

Remarks: Recommended zoning:

1. Approximately  $76^{\circ}39'.6$  -  $76^{\circ}39'.1$   
direct on Beaufort Inlet Channel Range.
2. Approximately  $76^{\circ}39'.1$  -  $76^{\circ}38'.8$   
Apply x0.91 Mn ratio and +12 min. time correction.
3. Approximately  $76^{\circ}38'.8$  -  $76^{\circ}37'.9$   
Apply x0.82 Mn ratio and +24 min. time correction.

*James R. Hubbard*  
for Chief, Tides Branch

H-9433

GEOGRAPHIC NAMES

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			
BEAUFORT INLET ✓											1
CARROT ISLAND ✓											2
HORSE ISLAND ✓											3
SHACKLEFORD BANKS ✓											4
SHACKLEFORD SLUE ✓											5
Bird Shoal ✓											6
											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25

Approved  
 Char E Harrington  
 Staff Geographer  
 10 Sept. 1975

**HYDROGRAPHIC SURVEY STATISTICS**  
**HYDROGRAPHIC SURVEY NO. H-9433 (AHP-5-3-74) and Field**  
**Investigation, same area.**

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET & 2-PNO		2	BOAT SHEETS		2	
DESCRIPTIVE REPORT		2	OVERLAYS		6	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
Accordian ENVELOPES	1		4			
CAHIERS	1		<del>XXXX</del>			
VOLUMES	1					
BOXES			1 & 2-Bundles of Raw Data P/O			
T-SHEET PRINTS (List)						
TP-00519, 00520, 00521, 00522.						
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				1494
POSITIONS CHECKED		145	20	
POSITIONS REVISED		20	-	
DEPTH SOUNDINGS REVISED		435	18	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		-		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		-		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		8	20	
JUNCTIONS		2	-	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		10	20	
SPECIAL ADJUSTMENTS (see other side)				
ALL OTHER WORK		81 92	55	
<b>TOTALS</b>		<b>187 112</b>	<b>95</b>	
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
F. L. Saunders, B. J. Stephenson	1/14/75		2/13/75	
VERIFICATION BY	BEGINNING DATE		ENDING DATE	
B. J. Stephenson	2/27/75		3/3/75	
REVIEW BY	BEGINNING DATE		ENDING DATE	
<i>B. Baemgardner</i>	Aug 18, 1975		Sept 9, 1975	

**SPECIAL ADJUSTMENTS**

**This time includes 49 hours for field investigation conducted in May and June 1974.**



H-9433 (1974)

Items for Future Presurvey Reviews

The bottom is considered adequately developed on the present survey.

<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>
344	0764	5	2	25 years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

MODIFIED HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9433

FIELD NO. AHP-05-3-74

North Carolina, Beaufort Inlet, Shackelford Slue

SURVEYED: September 20 through October 5, 1974  
November 12 through 16, 1974

SCALE: 1:5,000

PROJECT NO.: OPR-513

SOUNDINGS: DE-723D Depth Recorder,  
Sounding Pole

CONTROL: Del Norte  
(Range-Range)

Chief of Party .....	F. T. Smith
Surveyed by .....	F. Kleinschmidt
.....	D. Bryant
.....	W. Hill
.....	R. Lewis
Automated Plot by .....	Calcomp Plotter #618 (AMC)
Verified and Inked by .....	B. J. Stephenson
Reviewed by .....	S. Baumgardner
.....	Date: September 9, 1975
Inspected by .....	G. K. Myers

1. Control and Shoreline

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

The shoreline originates with Class I Photogrammetric Bathymetry and Topographic Manuscripts TP-00519, 00520, 00521, and 00522 of 1973-74. Revisions in red represent the MHWL as determined by office interpretation of 1974 air photography.

The mean high water line is shown for guidance only; the true position is shown on the aforementioned manuscripts.

2. Hydrography

Depths at crossings are in good agreement. The usual depth curves were adequately delineated. The 3-foot depth curve was added to emphasize the bottom features. The development of the bottom configuration and the investigation of least depths are considered adequate.

### 3. Condition of the Survey

The sounding records, smooth plotting, various sounding print-outs, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual supplemented by the Instruction Manual-Automated Hydrographic Surveys. However, in many instances the analog trace was lost in the initial, which necessitated the use of sounding pole.

### 4. Junctions

The junction with H-9431 (1974) on the west will be considered in the review of that survey. No contemporary survey junctions with the present survey on the east. However, present depths are in general harmony with charted depths.

Soundings in red were determined by photobathymetric means, utilizing 1973 photography that was compiled on the Class I maps. These soundings supplement the present hydrography in the common area.

### 5. Comparisons with Prior Surveys

A.	H-246	(1850)	1:10,000	H-854	(1864)	1:20,000
	H-259	(1850)	1:10,000	H-856	(1864)	1:10,000
	H-419	(1854)	1:10,000	H-1219	(1874)	1:20,000
	H-576	(1857)	1:10,000	H-3436	(1913)	1:10,000
	H-789	(1862)	1:10,000	H-7963	(1952-53)	1:12,500
				H-8565	(1960)	1:5,000
						(unverified)

These early surveys fall in the area of the present survey but are not discussed in the present review.

B.	H-8934	(1967)	1:10,000	(Boat Sheet Bps. 72036, 72441)
	<u>Field Investigation</u>	(1974)	1:5,000	(Bp. 91332)

These surveys cover the area common to the present survey. The bottom in this area is very changeable with variable differences of as much as 14 feet between the present and prior surveys. Since 1967, extensive differences in shoreline have occurred. These changes are mainly attributed to the redistribution of bottom sediments during storms and strong current activity found within the area.

A pile and an iron pipe were carried forward from the prior surveys. With the addition of these items, the present survey is adequate to supersede the prior surveys in the common area.

6. Comparison with Chart 420 (latest print date March 22, 1975)  
Chart 423 (latest print date November 2, 1974)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration.

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

B. Aids to Navigation

The aids to navigation on the present survey are in substantial agreement with their charted positions and adequately mark the features intended.

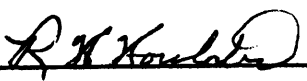
7. Compliance with Instructions

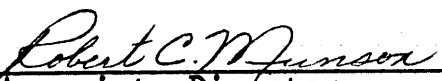
This survey adequately complies with the Project Instructions.

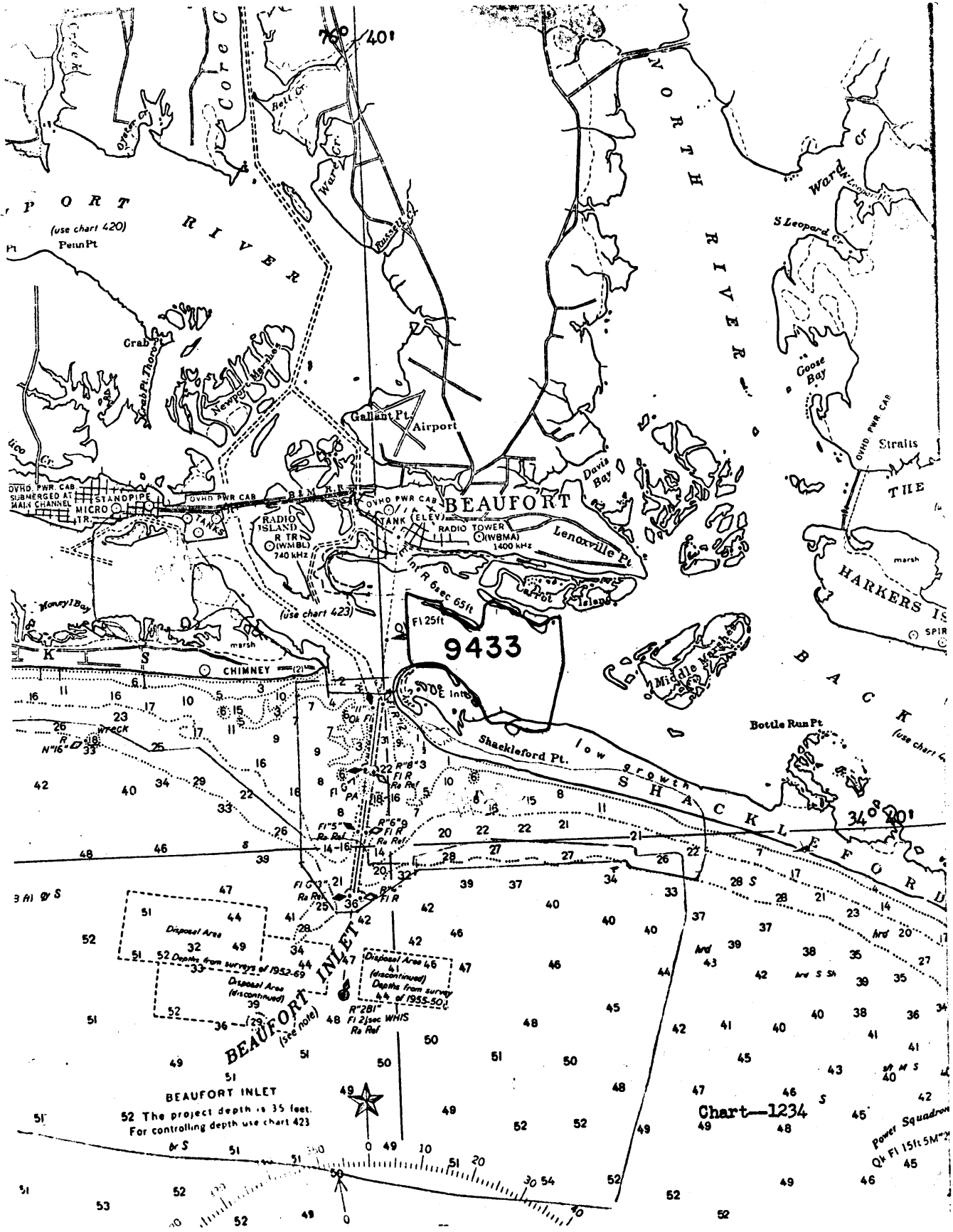
8. Additional Field Work

This is a 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



PORT RIVER  
(use chart 420)  
Penn Pt

BEAUFORT

9433

Chart 1234

BEAUFORT INLET  
52 The project depth is 35 feet.  
For controlling depth use chart 423

Power Squadron  
QV Fl 151t 5M

