9042

Diag. Cht. Nos. 1233-2 & 1234-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

(HYDROGRAPHIC)

Type of Survey HYDROGRAPHIC

Field No. PE-20-1-69

Office No. H-9042

LOCALITY

State NORTH CAROLINA

General Locality ONSLOW BAY

Locality SOUTHWEST OF CAPE LOOKOUT

1969

CHIEF OF PARTY
J. Austin Yeager

LIBRARY & ARCHIVES

DATE 1/20/70

☆ U.S. GOV. PRINTING OFFICE: 1975—668-353

9042

FORM C&GS-537 (8-15-59)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO.

HYDROGRAPHIC TITLE SHEET ✓

H-9042

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.
Pe 20-1-69

State NORTH CAROLINA

General locality ONSLOW BAY

Locality SOUTHWEST OF CAPE LOOKOUT

Scale 1:20,000 Date of survey 06 26 69 - 08 26 69 March 1969

Instructions dated Feb. 7, 1969 Project No. OPR-486

Vessel USC&GS SHIP PEIRCE

Chief of party LCDR J.A. YEAGER

Surveyed by J.A.YEAGER, N.C.AUSTIN, J.H.SNOOKS, K.W. SIGLEY, A.B. MOSTUE

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by SHIP PERSONNEL

Graphic record checked by SHIP PERSONNEL

Protracted by GERBER DIGITAL PLOTTER - PMC

Soundings penciled by GERBER DIGITAL PLOTTER - PMC

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~

Norfolk-verification

REMARKS: This survey is complete

Instructions amended Feb. 26, 1969

USCOMM-DC 9272-P62

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY PE 20-1-69
1969 FIELD SEASON

USC&GS SHIP PEIRCE — SCALE 1:20,000
J. AUSTIN YEAGER, LCDR USESSA — CHIEF OF PARTY

A. PROJECT

This survey was accomplished under PROJECT OPR-486, Bathymetric Surveys, North Carolina Coast. Instructions dated February 7, 1969, ammended February 26, 1969, supercede all previous instructions.

B. AREA SURVEYED

The area covered by this survey is the northeastern portion of Onslow Bay just off shore of the entrance to Morehead City and Beaufort harbors. The survey junctions with prior survey H-7963 on the northern edge and with prior survey H-8247 on the northeastern and eastern edges. The western limit junctions with contemporary survey PE 80-1-69 (H-9044) at λ76° 44.5'W; the southern limit junctions with the same survey at φ 34°30.0'N. Contemporary survey PE 20-2-69 (H-9043) joins with this survey in the southeastern corner along λ76°37.4'W and across φ34°32.6'N.

C. SOUNDING VESSEL

All hydrography on this sheet was performed by the Ship PEIRCE. Position numbers are denoted in violet.

D. SOUNDING EQUIPMENT

One Raytheon, (type 723), fathometer was used in this survey. Fathometer number 246 was used to obtain soundings in depths up to 70 feet.

The velocity corrections for the ship were obtained by taking Nansen cast oceanographic stations. Depth and temperature data were recorded in the field.

Salinity data was determined by means of a salinometer carried on board. Results from the oceanographic observations were used in determining layer velocities for sound. These values were then graphed and velocity corrector values picked off in 0.2 foot increments.

The initial was held at 9.0 feet for soundings observed in feet. Included in the initial is a reduction of one foot from the draft of the vessel transducer as per instructions in a memorandum from the Chief, Instrument Division dated October 1, 1962.

A draft corrector of 0.0 foot was calculated for the ship. Derivation of this figure is discussed in Appendix "D".

There was no phase correction necessary as the fathometer was carefully maintained as per instructions in a correspondence for the Chief, Engineering Division dated December 22, 1966. Hourly comparisons of the "A" and "F" scale initial traces were made. Twice daily checks were made of the Hi-Fix mark trace with that of the fine arcs on the fathogram. All comparisons remain with the fathogram.

E. SMOOTH SHEET

The smooth sheet will be computer plotted at the Pacific Marine Center, Seattle, Washington. Field records were encoded on punched tapes designed for computer use. This "RAW DATA TAPE" was made during the field operations and contained position information including time, depth, day number and the two Hi-Fix readings. Corrector tapes were also logged which provide calibration corrections to Hi-Fix readings as well as as all other data (smooth tides, transducer corrections, etc.), necessary to reduce the depths to final, correct values. The tapes will be integrated by computer to obtain data for the computer plotter.

F. CONTROL

Hi-Fix was used for positioning the ship during hydrographic operations. Shore stations established at "CLUB" (Atlantic Beach, N. C.) and at "SAIL" (Surf City, N. C.)generated the electronic control required.

Hi-Fix calibration was accomplished through three-point sextant fixes. Prior to operations the ship was brought close enough to shore so as to be able to obtain a good three-point fix. There a series of fixes was taken by sextants (a fix consisted of a three-point fix taken by two sextant men and a check angle taken by a third sextant man). The fixes were then plotted by a three arm protractor on the calibration sheet for Hi-Fix scaled 1:10,000 of the area. With the sextant fixes plotted on the calibration sheet, corresponding Hi-Fix values were read from the sheet. Simultaneously with the fixes, Hi-Fix values were read from the Hi-Fix console. The difference between the values corresponding to the sextant fixes and the values from the Hi-Fix console were meaned, and this mean value was recorded as the error for the Hi-Fix system for the particular day's calibration.

G. SHORELINE

There was no shoreline to be considered on this sheet.

H. CROSSLINES

Crosslines were run at 8.4% of total mileage on the boat sheet. All crosslines were in good agreement.

I. JUNCTIONS

Junction was made with contemporary surveys PE 80-1-69 (H-9044) on the west and south and PE 20-2-69 (H-9043) on the southeast corner. Junction in all cases was excellent. and with H-8247(1955) on the north and northeast

J. COMPARISON WITH PRIOR SURVEYS

Comparison and junction were established with prior surveys H-7963 and H-8247. Depths obtained by the Ship PEIRCE were generally 2 and 3 feet shoaler than the prior survey depths. Velocity correctors derived from Nansen cast oceanographic stations and final tide corrections will modify the smooth depths so that general agreement will be within one foot.

Considerable change from the prior surveys was noted in the spoil area, ~~ø34°38.5'N, λ76°42.1'W.~~ From development in this area, depths as shoal as ~~29~~ 30 feet were recorded. (See Section "P", Recommendations). ø 34°38.38' λ 76°41.55'

No pre-survey review items or questionable soundings required the hydrographer's attention on this sheet.

K. COMPARISON WITH THE CHART

Comparison was made with Charts 1233, 1234, 1110, 420, corrected through Notice To Mariners #11, March 15, 1969. With the exception of the spoil area noted in Section "J" of this report, agreement with the chart was excellent. Only minor shifts in the shape and positions of depth curves occured.

L. ADEQUACY OF SURVEY

This survey is complete and adequate to supersede prior surveys of the area.

M. AIDS TO NAVIGATION

Two buoys were noted on this survey. Red Whistle Buoy "2B1", Lighted (flashing 2-1/2 sec), Radar Reflector, was located in φ 34° 38' 40"N, λ 76° 40' 30"W (position #1357). Red Lighted (Qk Fl R) Buoy "WR6", Radar Reflector, was fixed in φ 34° 32' 50"N, λ 76° 36' 04"W (position #963). Both buoys agreed well with charted positions.

N. STATISTICS

	NO. POS.	NAUT.MI. SDG.LINE	BOTTOM SAMPLES	AREA SURVEYED
Ship PEIRCE	1368	695.8	15	54.8 Sq.Mi.

O. MISCELLANEOUS

Two oceanographic stations fell on this sheet. Oceanographic station #2 was taken on March 12, 1969 at φ 34° 38.4'N, λ 76° 42.7'W. Oceanographic station #3 was observed on March 15, 1969 at φ 34° 34' 33"N, λ 76° 40' 57"W.

A lane count buoy was established March 12, 1969 at φ 34° 32.82'N, λ 76° 34.78'W. Plot values for the fix were: 867.40 (Pattern 1, "SAIL"), 274.08 (Pattern II, "CLUB").

Tides for the survey are supplied by a tide gage established at the U. S. Coast Guard Pier, Cape Lookout Bight, φ 34° 34' 49"N, λ 76° 32' 18"W, on March 6, 1969.

P. RECOMMENDATIONS

The ~~29~~ 30 foot shoal now existing in the spoil area noted in Section "J" should be considered for charting due to it's proximity to the Beaufort Inlet Channel Entrance; (Ref: Memorandum of April 17, to Chief Marine Chart Division, from C. O. Ship PEIRCE, subject Impt. changes to chart).

Q. REFERENCES TO REPORTS

Report on Landmarks & Fixes Aids to Navigation, USC&GSS PEIRCE, 1969 Field Season.

Coast Pilot Report, USC&GSS PEIRCE, 1969 Field Season.

Season's Report, USC&GSS PEIRCE, 1969 Field Season.

Project Report, OPR-486, USC&GSS PEIRCE, 1969 Field Season.

Respectfully submitted,

A. Brian Meeks

LTJG, USESSA

APPROVED/FORWARDED

J. Austin Yeager
LCDR USESSA

APPROVAL SHEET ✓

FIELD NUMBER PE 20-1-69

The field work and processing of data from this hydrographic survey was under my immediate, daily supervision. The boat sheet and all records have been reviewed and are approved by me. It is believed this survey is complete and adequate with the exceptions and comments noted in Sections "J", "K" and "P".

J. Austin Yeager
LCDR USESSA
Chief of Party

ABSTRACT OF CORRECTIONS TO ECHO SOUNDINGS

Velocity corrections for this survey were obtained by taking Nansen cast oceanographic stations. Temperature and depth were obtained in the field. Salinity was determined in the laboratory at a later date. There were a total of 13 casts taken. The method of ascertaining the velocity correctors was in accordance with Section 5-117, "Numerical Determination of Velocity Correctors", of the Hydrographic Manual. The results were then plotted on C&GS Form 117. Because of the dates of the surveys, the dates of the casts, and the depth involved, it was decided that casts numbered 1, 3 & 4 would be averaged together for PE 20-1-69. This was called "Table 1". Results obtained from cast 2 differed only slightly from casts 1, 3 & 4, but because of suspected error involved in obtaining the data this station was not used.

Results were picked off in 0.2 foot increments. Below are given the results of the casts in graph form.

Velocity Corrections

To Depth	Correction
19.0	0.0
36.5	+ 0.2
51.5	+ 0.4
62.0	+ 0.6
68.0	+ 0.8
71.5	+ 1.0
75.0	+ 1.2
81.0	+ 1.4
88.0	+ 1.6
999.0	+ 1.8

ABSTRACT OF TRA CORRECTORS

The TRA corrector is a combination of various correctors to be applied to electronic soundings. TRA is defined as follows:

TRA =	Transducer draft	+	Instrument error	+
	Phase correction	+	Initial corrector	+
	Settlement & Squat	+	Fathometer speed error	

The components of the TRA corrector are discussed as follows:

Transducer Draft

The transducer draft assumed on the PEIRCE during field operations for OPR-486 (this survey) was 10.0 feet. This 10.0 foot transducer draft was eliminated by setting the initial at 9.0 feet in accordance with the memorandum dated October 1, 1962, for the Chief, Instrument Division. Ten feet is the actual transducer draft with 25,000 gallons of fuel on board. With a full load of fuel (40,000 gallons) the draft is 10.6 feet (calculated in 1966 by officers Richardson and Knecht).

This survey requires 0.2 foot increments for draft correction as specified by the Hydrographic Manual. The following table of draft corrections has been determined from the above mentioned data:

Amount of Fuel	Correction
37,500 and up	+ 0.6
32,400 to 37,500	+ 0.4
27,400 to 32,400	+ 0.2
20,000 to 27,400	0.0

Taking in to account the amounts of fuel on board as indicated in the ship's log, we have the following table of draft corrections:

Day	Time	To	Day	Time	Correction
071	0000		073	2130	+ 0.4
073	2130		074	2400	+ 0.2

APPENDIX C

ABSTRACT OF CORRECTIONS ✓

TO

DISTANCE MEASUREMENTS

HIFIX was used for position control of all ship hydrography. HIFIX stations SAIL (Pattern 1) and CLUB (Pattern 2) were used for boat sheets PE-20-1-69, PE-20-2-69, and PE-80-1-69. For boat sheet PE-80-2-69, station DOW was used to generate Pattern 1 and CLUB remained in use supplying Pattern 2 arcs.

HIFIX correctors were determined in the field by the following process. Three point sextant fixes with check angles were observed from the Ship PEIRCE to prominent landmarks of secord order triangulation accuracy. Simultaneous with the sextant fix, the HIFIX patterns were read from the console. The sextant fixes were plotted, HIFIX lane readings scaled from the calibration sheet, and the difference between these scaled values and the recorded values with the proper algebraic sign became the corrector values. Approximately ten fixes were taken at each calibration to ensure accuracy - the average of the correctors arising from these fixes was then used as the accepted corrector.

On this project, the correctors changed very little from calibration to calibration. Because of this stability the results of the calibrations at the begining and the end of each cruise were combined and the resulting corrector used for that cruise only.

An abstract of the correctors applied follows:

APPENDIX A ✓

TIDAL NOTE

Tidal heights for this survey were obtained from graphs drawn using the hourly heights from marigrams on the portable tide station established by the USC&GS Ship PEIRCE at Cape Lookout, North Carolina. No corrector zoning was necessary for this survey. The hourly heights and the decision that no corrector zone was necessary were supplied in a memorandum dated May 19, 1969, from the Chief, Datum Planes Section, Oceanography Division (ATTN:C3311).

All times for this survey are based on zone 75° west. Height increments for this survey were scaled from the graph in 0.2 foot increments as specified by the Hydrographic Manual.

Pt. Lookout Tide Station
Lat. 34°34'49"
Long. 76°32'18"
} Info. from Ship Peirce 11/7/70

FORM C&GS-712
(10-67)

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

TIDE NOTE FOR HYDROGRAPHIC SHEET ✓

July 16, 1969

~~Marine Chart Division~~ Atlantic Marine Center

Plane of reference approved ~~in~~
~~volumes of sounding records for~~

HYDROGRAPHIC SHEET 9042

Locality: Cape Lookout, North Carolina

~~Chief of Party~~ Year: 1969

Plane of reference is mean low water

Tide Station Used (Form C&GS-681):

Cape Lookout,
North Carolina

Height of Mean High Water above Plane of Reference is as follows:

3.7 feet

Remarks

J. M. Symons
J. M. Symons
Chief, Tides and Currents Branch

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-9042 ✓

	Name on Survey	A On Chart No.	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	
✓	Cape Lookout (TITLE)										1
✓	Cape Lookout Shoals										2
✓	~~Cape Point~~										3
	ONSLOW BAY										4
											5
											6
											7
											8
											9
											10
											11
											12
											13
											14
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											23
											24
											25
											26
											27

PREPARED BY

Frank W. Pickett

CARTOGRAPHIC TECHNICIAN

APPROVED BY

C. H. Wright

CHIEF GEOGRAPHER

CGH
1-11-18

VERIFIER'S NOTE ✓
H-9042

GENERAL

This is considered to be an excellent basic survey. No problems were experienced during the verification process.

Hugh L. Proffitt
Chief, Hydro Branch, AMC

Norfolk, Va.
Jan. 12, 1970

FORM C&GS-946
(REV. 11-65)
(PRESC. 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-9042

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET & Pos. Overlay	1	BOAT SHEETS	1
DESCRIPTIVE REPORT	1	OVERLAYS	3

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES	[illegible]					
CAHIERS	1 with Brush Recorder Tapes					
VOLUMES						
BOXES						

T-SHEET PRINTS (List)
NONE

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				1368
POSITIONS CHECKED		140		
POSITIONS REVISED		23		
DEPTH SOUNDINGS REVISED				
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS		2 hrs		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		3 hrs		
SPECIAL ADJUSTMENTS				
ALL OTHER WORK		94 hrs		
TOTALS		99 hrs	115	

	BEGINNING DATE	ENDING DATE
PRE-VERIFICATION BY		
VERIFICATION BY G.F. TREFETHEN & ALLAN K. SCHUBELD	8 SEPTEMBER 1969	12 JANUARY 1970
REVIEW BY George A. Korewczak		3 April 1973

Ano Exp Ahnfeit 33 hrs 1/12/78

REGISTRY NO. H-9042

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. _____

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 REQUIRED_____ INITIALS_____

REMARKS:

H-9042

Items for Future Presurvey Reviews

The bottom is considered adequately developed on the present survey. Only minor differences in depths were noted since the prior surveys. In the vicinity of latitude 34°38.37", longitude 76°41.55', shoal depths of 30 feet are found on the present survey due to the establishment of spoil areas south of Beaufort Inlet.

Position Index		Bottom Change Index	Use Index	Resurvey Cycle
Lat.	Long.			
343	0764	2	0	50 years
343	0765	2	2	50 years

OFFICE OF MARINE SURVEYS AND MAPS

MARINE SURVEYS DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-9042 FIELD NO. PE-20-1-69

North Carolina, Onslow Bay, Southwest of Cape Lookout

SURVEYED: March 11-14, 1969

SCALE: 1:20,000 PROJECT NO.: OPR-486

SOUNDINGS: Raytheon DE-723 Depth Recorders CONTROL: Hi-Fix (Range-Range)

Chief of Party	J. A. Yeager
Surveyed by	J. A. Yeager
	N. C. Austin
	J. H. Snooks
	K. W. Sigley
	A. B. Mostue
Automated Plot by	Gerber Digital Plotter (PMC)
Verified by	A. K. Schugeld (AMC)
Reviewed by	G. A. Kozemczak
	Date: April 3, 1973
Cursory inspection made--survey processing considered complete	G. K. Myers January 2, 1978

1. Description of the Area

This survey covers an area of 54.8 square miles centered at a point approximately 7 miles west of Cape Lookout Shoals. It also lies in the northeastern portion of Onslow Bay just offshore of the entrance to Morehead City and Beaufort harbors. A small shoal feature which rises to a least depth of 30 feet in 50 feet of water is noted in the vicinity of spoil areas located near Beaufort Inlet. The bottom slopes gradually in a southwesterly direction with general depths of 49 feet in the northeast corner to depths of 67 feet in the southwestern corner of the survey. The bottom is composed chiefly of shells and sand.

2. Control and Shoreline

The source of control is adequately described in the Descriptive Report.

There is no shoreline to be considered on this sheet.

3. Hydrography

a. Depths at crossings are in good agreement.

b. The usual depth curves are adequately delineated.

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

4. Condition of Survey

The sounding records, automated plotting, the Descriptive Report, and the Atlantic Marine Center verification are adequate and conform to the requirements of the Hydrographic Manual and the Automated Hydrographic Survey Instruction Manual.

5. Junctions

An adequate junction was effected with H-9043 (1969) on the southeast. Conflicting soundings in the overlapping area with H-7963 (1952-53) on the northwest necessitated a butt junction. Junctions with H-9421 (1974) on the north, H-8247 (1955) on the north and east, H-9464 (1974) on the east, H-9465 (1974) on the east, H-9044 (1969) on the south, and H-9427 (1974) on the west are discussed in the reviews of those surveys.

6. Comparison with Prior Surveys

a.

H-577	(1857)	1:40,000
H-885	(1865-66)	1:40,000
H-3374	(1912)	1:10,000
H-4770	(1927)	1:40,000

H-577 covers the entire area of the present survey. The remaining surveys cover a small portion along the east and west limits of the present survey. In general, a comparison between the prior and present surveys reveals variable differences of only 1 to 3 feet. The 30-foot shoal in the vicinity of latitude 34°38.40', longitude 76°41.55' is not covered by the widely spaced sounding lines on H-577. Shoaling in this area is evidently due to the establishment of disposal areas subsequent to the prior surveys. The present survey is adequate to supersede the prior surveys within the common area.

b. F.E. No. 6 (1942)

This early reconnaissance survey covers a small portion of the present survey and shows nothing of interest for modern charts.

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

7. Comparison with Chart 423 (14th Edition, December 9, 1972)
Chart 420 (40th Edition, November 20, 1971)
Chart 1234 (12th Edition, April 22, 1972)

a. Hydrography

The charted hydrography originates with the previously discussed surveys which require no further consideration, supplemented by partial application of depths from the boat sheet and verified smooth sheet of the present survey. A few charted soundings which fall within the limits of the present survey originate with the junctional survey H-7963 (1952-53) and prior and subsequent Corps of Engineers surveys of 1966 and 1970 (Bps-70300, 78069, 78439, and 78969).

Attention is directed to the following:

The 40-foot effective cleared depth and wreck charted at latitude 34°33.08', longitude 76°36.00' from Chart Letter 436 of 1944 were not verified or disproved on the present survey. It is recommended that the sounding and wreck 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 present survey positions of the aids to navigation are in substantial agreement with their charted positions and adequately mark the features intended.

8. Compliance with Instructions

The survey adequately complies with the project instructions.

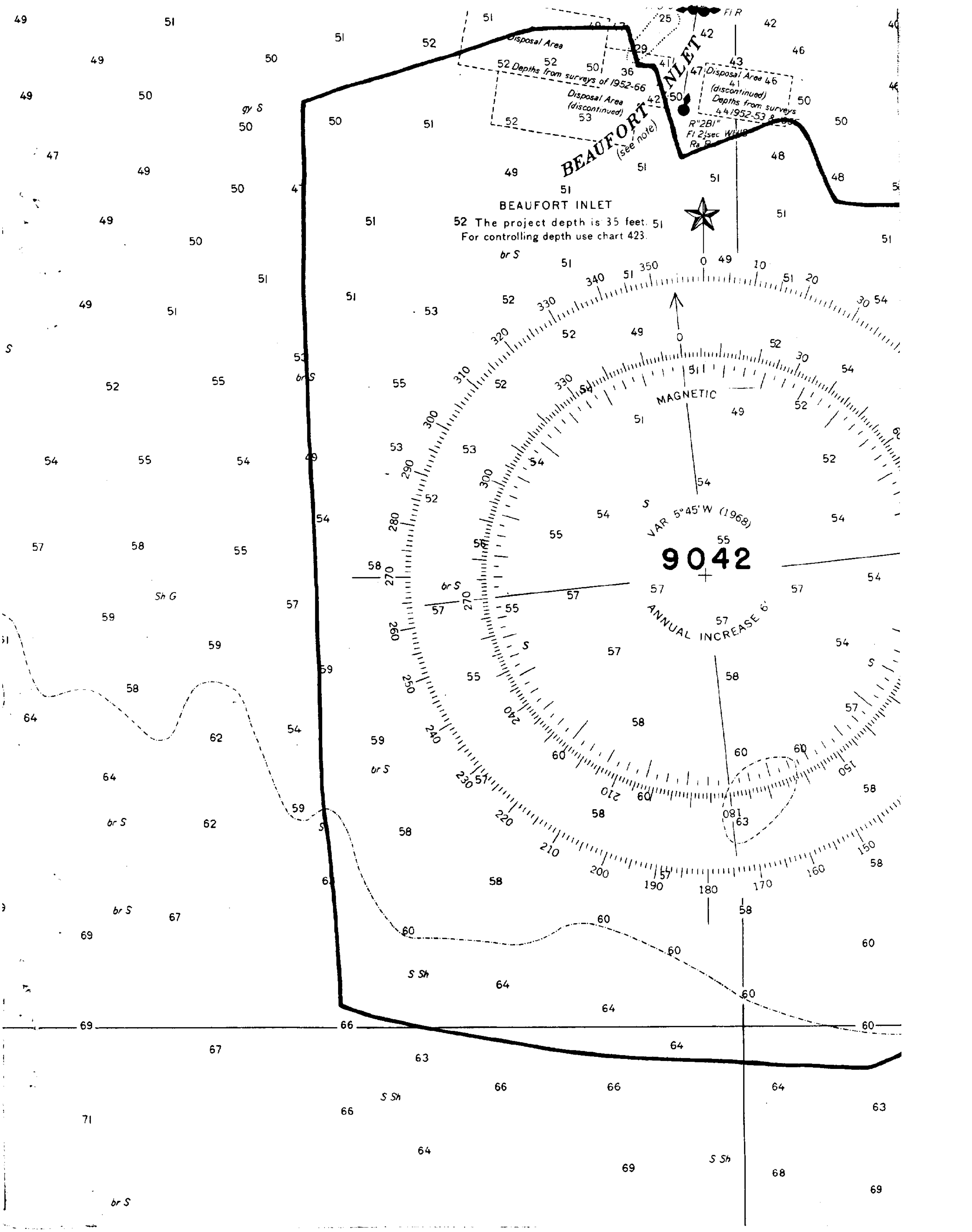
9. Additional Field Work

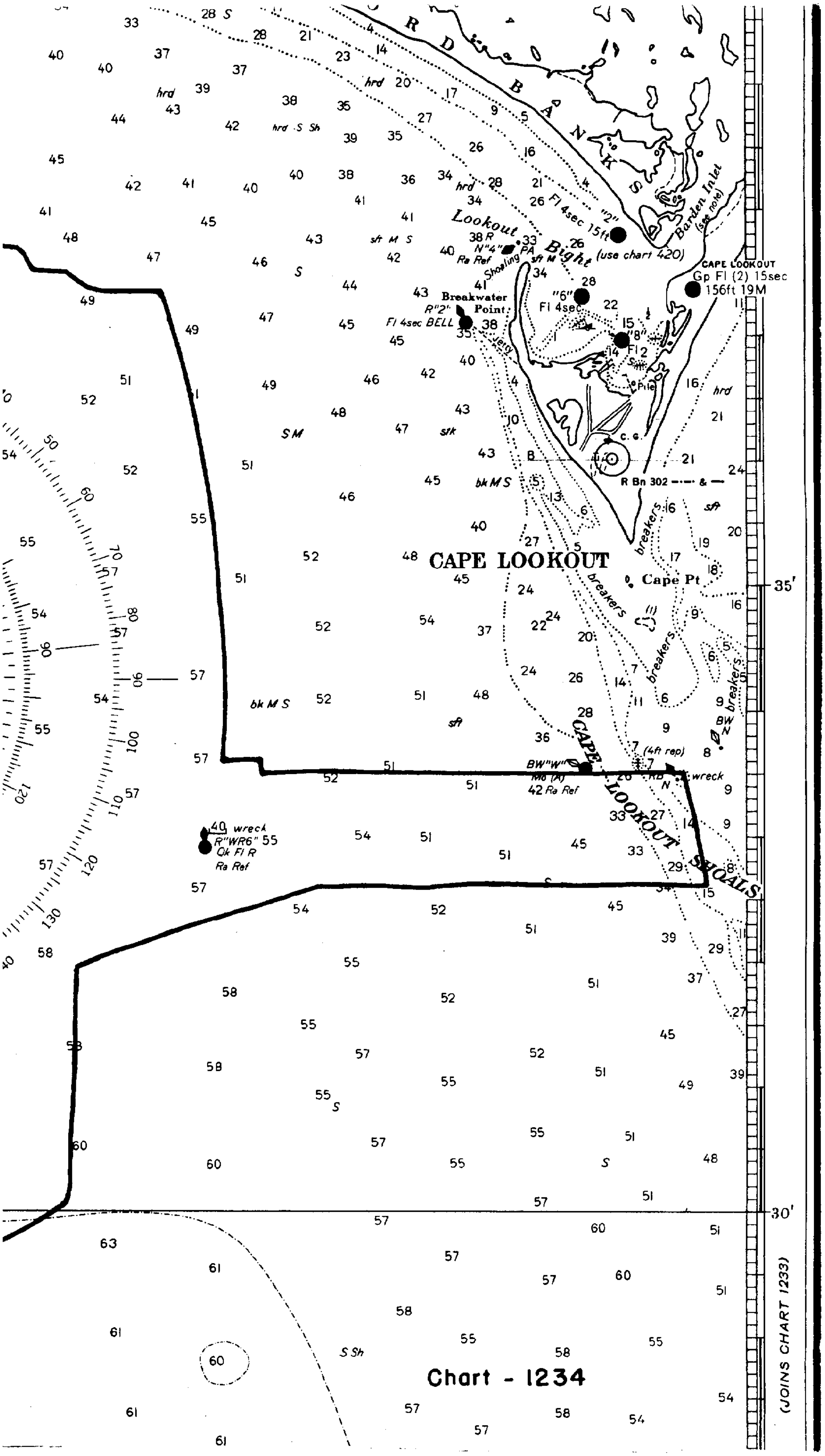
This is an excellent basic survey and no additional hydrography is recommended.

Examined and Approved:

Glen R. Schaefer
Chief
Hydrographic Surveys Division

F/ [signature]
Associate Director
Office of Marine Surveys
and Maps


BEAUFORT INLET
(see note)
Disposal Area
Depths from surveys of 1952-66
Disposal Area (discontinued)
Disposal Area (discontinued)
Depths from surveys 1952-53 & 1965
Fl R
R "2BI" Fl 2½sec WHIS Ra Ref
BEAUFORT INLET
52 The project depth is 35 feet.
For controlling depth use chart 423.
MAGNETIC
VAR 5°45' W (1968)
ANNUAL INCREASE 6'
9042
gy S
br S
Sh G
S Sh



CAPE LOOKOUT
Lookout Bight
(use chart 420)
Breakwater Point
R"2" Fl 4sec BELL
Jetty
Shoaling
"6" Fl 4sec
"8" Fl
"2" Fl 4sec 15ft
N"4" PA Ra Ref
Barden Inlet (see note)
CAPE LOOKOUT
Gp Fl (2) 15sec
156ft 19M
C. G.
R Bn 302
Pile
Cape Pt
breakers
CAPE LOOKOUT SHOALS
BW"W" Mo (A) 42 Ra Ref
(4ft rep)
wreck
wreck R"WR6" Qk Fl R Ra Ref
35'
30'
(JOINS CHART 1233)

Chart - 1234

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-9042

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
423	3-10-70	Cynthia Kessmith	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via Drawing No. ~~Examined No Correction~~ revised 3 sdgs. GRJ
1110	3-17-70	Irene Beeler	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via Drawing No. 28 Exam No Correction
420	6-29-70	O. Svendsen	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via Drawing No. 33 & 33M Revised 3 sdgs thru Ch 423
1233	7-2-70	O. Svendsen	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via Drawing No. 22 & 22M App. thru 420
833	1-5-71	R. G. Lillis	~~Full~~ Part ~~Before~~ After Verification before Review Inspection Signed Via Drawing No. 8a Applied thru 420
423 (11547)	10-6-80	JOC Marguerite S. Moore	After Full [redacted] Verification Review Inspection Signed Via Drawing No. 28 Exam No Corr (Superseded by H9421)
420 (11545)	10-6-80	JOC Marguerite S. Moore	After Full [redacted] Verification Review Inspection Signed Via Drawing No. 44 Revised sndgs
1233 (11544)	10-7-80	JO'C Marguerite S. Moore	After Full [redacted] Verification Review Inspection Signed Via Drawing No. 39 Revised sndgs & curves
833 (11541)	10-7-80	JO'C Marguerite S. Moore	After Full [redacted] Verification Review Inspection Signed Via Drawing No. 18 (Superseded by H9421)
1233 (11543)	10-20-80	JO'C Russell P. Kennard	Full [redacted] ~~After~~ Verification Review Inspection Signed Via Drawing No. 39
16520		Mark J. Green	FULL AFTER REVIEW DWG NO. 41
~~H9009~~	~~3-17-83~~	~~BF Corrections~~	~~Full After Review, through Ch 16520~~ ~~Dwg. No. 41~~

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975.

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