8248

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

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. PBS-2355 *Office No.* H-8248

LOCALITY

State NORTH CAROLINA

General locality CAPE LOOKOUT

Locality CAPE LOOKOUT SHOALS

19 55

CHIEF OF PARTY

JOHN C. MATHISSON

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COMM-DC 61300

8248

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8248

Field No. PBS-2355

State NORTH CAROLINA

General locality CAPE LOOKOUT

Locality CAPE LOOKOUT SHOALS

Scale 1:20,000 Date of survey 18 Apr. to 30 Sept. 1955

Instructions dated 28 January 1955

Vessel SHIPS PARKER, BOWEN & STIRNI

Chief of party JOHN C. MATHISSON

Surveyed by K.S. ULM, J.R. PLAGGMIER, H.J. SEABORG, D.G. RUSHFORD, C.R. REED & W.R. KACHEL

Soundings taken by ~~echometer~~ graphic recorder, hand lead, ~~wire~~

Fathograms scaled by SHIP PERSONNEL

Fathograms checked by NORFOLK PROCESSING OFFICE

Protracted by SHIP PERSONNEL & W.L. JONNS

Soundings penciled by W.L. JONNS

DRAG STRIPS INKED & SUBDIVIDED BY: W.W. FEAZEL

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

REMARKS:

U. S. GOVERNMENT PRINTING OFFICE 16—66520-1

Field Notes for Descriptive Reports to Accompany 1955
Wire Drag and Hydrographic Sheets - Ships PARKER, BOWEN, STIRNI -
Cdr. John C. Mathiesen, Chief of Party

A. PROJECT - Original instructions for Project No. CS-377 addressed to the Commanding Officer of the Ships PARKER, BOWEN, and STIRNI are dated 28 January 1955. Project number was later changed to 1377.

B. SURVEY LIMITS AND DATES - The following sheets are included in the 1955 seasons work of the Ships PARKER, BOWEN, and STIRNI.

(a.) Hydrography and Wire Drag: PBS2255 (H-8247) Cape Lookout Shoals - North End
PBS 2355 (H-8248) Cape Lookout Shoals - South End

(b.) Hydrography: PBS 2455 (H-8249) Diamond Shoals

(c.) Wire Drag:
PBS-4155 W.D. South of Cape Lookout, N. C.
PBS-4255 W.D. East of Cape Lookout, N.C.
PBS-4355 W.D. Off Ocracoke Inlet, N.C.
PBS-4455 W.D. Cape Hatteras, N.C.
PBS-4555 W.D. Northeast of Cape Hatteras, N.C.
PBS-4655 W.D. Offshore - East of Cape Fear, N.C.
PBS-4755 W.D. Inshore - East of Cape Fear, N.C.

(d.) Reconnaissance Hydrography: PBS-4855 - Offshore - Southeast of Cape Lookout, N.C.

No work was accomplished on sheet PBS-2155 W.D. - Northwest of Cape Henry, Virginia.

A special hydrographic investigation was made in Core Sound, north of Ocracoke Inlet. It is the subject of a special report previously submitted.

A special wire drag investigation was made in the Pasquetank River, Virginia. This is also the subject of a special report already forwarded. N.C.

Plotting of the wire drag boat sheets was not completed in the field. Shoalest hangs and deepest clearances on wrecks will have to be determined after plotting has been completed. Wreck letters submitted during the field season give preliminary values based on predicted tides and approximate lifts.

A comparison of boat sheet depths with charted depths in the case of hydrographic sheets serves no useful purpose at this time. The comparison should be made after the completion of the smooth sheets.

SHORAN CORRECTIONS:

The shoran equipment in all three vessels was calibrated at frequent intervals during the season. Three "Dinoplex" calibration sheets were used. One each in the vicinities of Cape Hatteras, Cape Lookout, and Cape Fear. Calibrations were taken each time the shoran stations were moved and at other intervals when thought necessary.

Once a shoran correction was determined, this correction was applied to all shoran readings until a new calibration was taken. The new correction was then applied to all subsequent shoran readings. Zero checks were made at the time of each calibration and at frequent intervals while using shoran control. No abnormal deviation from the zero set was found.

A tabulation of the shoran corrections used for the through ships follows: Shoran corrections were rounded off to the nearest 0.005 mile when entering corrections in volumes.

Tabulation of Shoran Calibrations - STIRNI:

Date	Recorded in Vol. Sheet No.	Monitor No.	Sta. 36	Corr'n	Sta. 37	Corr'n
4-26-55	2255	1	SAM	-0.021	KNOL	+0.012
5-9-55	8155	1	SAM	+0.001	KNOL	+0.010
5-25-55	8155	1	SAM	+0.002	KNOL	-0.009
6-3-55	4455	1	CLUB	+0.007	PEA	-0.045
6-6-55	4455	2	CLUB	+0.008	PEA	-0.016
7-22-55	2455	2	CLUB	+0.061 (r)	PEA	+0.021 (r)
7-29-55	4355	2	CLUB	-0.031	LOLA	-0.029
8-31-55	4255	2	SAM	+0.004	LOLA	-0.019
9-26-55	4155	2	DEY	-0.040	KNOL	-0.030
10-20-55	4755	2	SURF	-0.008	OAK	-0.034
		PARKER:				
		1	SAM	-0.003	KNOL	-0.026
4-18-55	2355	2	SAM	-0.016	KNOL	-0.008
4-27-55	2355	1	SAM	-0.009	KNOL	-0.011
5-25-55	4155	1	SAM	-0.008	KNOL	-0.016
5-31-55	2455	1	CLUB	-0.020	PEA	-0.055
6-6-55	4555	2	CLUB	-0.001	PEA	-0.032
7-22-55	4455	2	CLUB	-0.023	PEA	-0.032
7-28-55	4455	2	CLUB	-0.004	LOLA	-0.034
8-31-55	4255	2	SAM	-0.001	LOLA	-0.042
9-28-55	4155	2	DEY	-0.015	KNOL	-0.043
10-18-55	4755	2	SURF	-0.061	OAK	-0.022

Tabulation of Shoran Corrections Entered in Volumes - STIRNI:

		Sta. 36	Sta. 37
Begin season thru 5-8-55		-0.020 (SAM) (Set #1)	+0.010 (KNOL) (Set #1)
5-9-55 - 6-1-55		0.000 (SAM) "	+0.010 (KNOL) "
6-2-55 - 6-5-55		+0.005(CLUB) "	-0.045(PEA) "
6-6-55 - 7-28-55		+0.010 (CLUB) Set #2	-0.015 (PEA) Set #2
7-29-55 - 8-5-55		-0.030 (CLUB) "	-0.030 (LOLA) "
8-6-55 - 9-25-55		+0.005 (SAM) "	-0.020 (LOLA) "
9-26-55 - 10-5-55		-0.040 (DEY) "	-0.030 (KNOL) "
10-6-55 - Season End		-0.010 (SURF) "	-0.035 (OAK) "
		PARKER:	
4-18-55	0900 - 1130	-0.005 (SAM)(Set #1)	-0.015(KNOL) (SET #1)
	1401 - 1520	-0.015 (SAM)(Set #2)	-0.010 (KNOL)(Set #2)
	1520 - 1650	-0.005 (SAM)(Set #1)	-0.015 (KNOL)(Set #1)
	1650 - end	-0.015 (SAM)(Set #2)	-0.010 (KNOL) (Set #2)
4-19-55 -	5-2-55 at 10:55	-0.005 (SAM) (Set #1)	
5-2-55	1055-1115	-0.015 (SAM) (Set #2)	
	1115-end	-0.005 (SAM) (Set #1)	
4-19-55 -	1600 4-26-55		-0.015 (KNOL (Set #1)
4-26-55	1600 - 1650		-0.010 (KNOL)(Set #2)
	1650 - End		-0.015 (KNOL)(Set #1)

	Sta. 36	Sta. 37
-3-55 - 5-25-55	-0.005 (SAM)(Set #1)	
4-27-55 - 5-25-55		-0.015 (KNOL)(Set #1)
5-31-55 - 6-5-55 1300	-0.020 (CLUB)(Set #1)	
6-5-55 1300-1945	-0.015 (CLUB)(Set #2)	
5-31-55- 6-7-55		-0.045 (PEA)(Set #1)
6-13-55 - 7-23-55		-0.040 (PEA)(Set #2)
6-6-55 - 6-14-55 1400	-0.015 (CLUB)(Set #2)	
6-14-55 1400 to end	-0.020 (CLUB)(Set #1)	
7-26-55 - 9-2-55		-0.040 (LOLA)(Set #2)
6-15-55 - 8-4-55	-0.015 (CLUB)(Set #2)	
9-7-55 - 10-5-55		-0.045 (KNOL)(Set #2)
8-8-55 - 9-18-55	0.000 (SAM)(Set #2)	
9-21-55 - 10-4-55	-0.015 (DEY)(Set #2)	
10-5-55 - 10-27-55	-0.060 (SURF)(Set #2)	
10-6-55 - 10-25-55		-0.020 (OAK)(Set #2)
8,12,&28 July 1955	STIRNI as Shore Station (STIR I, STIR II, STIR III)	-0.020

BOWEN:

4-18-55 0900 - 1130	-0.020 (SAM)(Set #1)	∕0.005 (KNOL)(Set #1)
1130 - 1345	-0.015 (SAM)(Set #2)	∕0.005 (KNOL)(Set #2)
1345 - End	-0.020 (SAM)(Set #1)	∕0.005 (KNOL)(Set #1)
4-19-55 - 4-20-55	-0.020(SAM)(Set #1)	∕0.005 (KNOL)(Set #1)
4-21-55 - 5-2-55 1055	∕0.010(SAM(Set #1)	
1055-1115	∕0.005 (SAM)(Set #2)	
5-2-55 1115-end	∕0.010 (SAM)(Set #1)	
4-19-55 - 4-26-55 at 1600		-0.005 (KNOL)(Set #1)
1600 - 1650		∕0.005 (KNOL)(Set #2)
4-26-55 1650 - end		-0.005 (KNOL)(Set #1)
4-27-55 - 5-25-55		-0.005 (KNOL)(Set #1)
5-3-55 - 5-25-55	∕0.010 (SAM)(Set #1)	
5-31-55 - 1300 6-5-55	-0.010 (CLUB)(Set #1)	
6-5-55 - 1300 - end	-0.010 (CLUB)(Set #2)	
5-31-55 - 6-7-55		-0.040 (PEA)(Set #1)
6-13-55 - 7-23-55		-0.015 (PEA)(Set #2)
6-6-55 - 1400 6-14-55	-0.010 (CLUB)(Set #2)	
6-14-55	-0.010 (CLUB)(Set #1)	
6-15-55 - 8-4-55	-0.010 (CLUB)(Set #2)	
7-26-55 - 9-2-55		-0.025 (LOLA(Set #2)
8-8-55 - 9-18-55	∕0.010 (SAM)(Set #2)	
9-7-55 - 10-04-55		-0.015 (KNOL)(Set #2)
9-21-55 - 10-4-55	-0.005 (DEY)(Set #2)	
10-5-55 - 10-27-55	-0.035 (SURF)(Set #2)	-0.015 (OAK)(Set #2)

Settlement and Squat Corrections:

The settlment and squat corrections were the same as used in previous years for all three ships. The correction depending upon the speed and the water depth. Tabulation of corrections follows:

(Next Page)

SETTLEMENT & SQUAT CORRECTIONS (ALL ∕)

PBS

SPEED (RPM)	CORRECTION (FEET)	FROM DEPTH TO DEPTH (FEET)
400	0.2	all depths
450	0.2	all depths
500	0.2	all depths
600	0.4	6.0 to 14.5
	0.2	15.0 and over
650	0.4	11.5 to 17.0
	0.2	17.5 and over
700	0.6	12.5 to 15.0
	0.4	15.5 to 19.5
	0.2	20.0 and over
750	0.8	12.5 to 14.0
	0.6	14.5 to 16.5
	0.4	17.0 to 21.5
	0.2	22.0 to 31.5
	0.4	32.0 and over
800	1.0	12.5 to 13.0
	0.8	13.5 to 15.5
	0.6	16.0 to 19.0
	0.4	19.5 and over
850	1.0	12.5 to 13.5
	0.8	14.0 to 16.5
	0.6	17.0 to 22.5
	0.4	23.0 and over
900	1.0	12.5 to 14.5
	0.8	15.0 to 20.5
	0.6	21.0 to 34.0
	0.4	34.5 and over
1000	1.0	6.0 to 21.5
	0.8	22.0 to 31.5
	0.6	32.0 and over

TIDES:

Final tides were either furnished by the Washington Office for the periods needed, or were tabulated in the field from observed tides.

Tide reducers for the Cape Hatteras Area were based on tide staff readings for Hatteras Inlet (Outside).

Tide reducers for the Cape Lookout Area were based on the portable gage installed at Lookout Bight.

Tide reducers for the Cape Fear Area were interplated by the Washington Office, Division of Tides and Currents.

All tide reducers were referred to the plane of mean low water.

On the hydrographic surveys, tide reducers were entered to 0.2 ft. On the wire drag surveys, tide reducers were intered to 0.5 feet.

ECHO CORRECTIONS:

The echo corrections for all three ships were determined by bar checks at intervals during the season. Standard methods were used and the leadlines on the bars were checked and found to be the correct length so no correction was necessary to leadline lengths.

Bar checks were not taken as often as would be expected for a hydrographic party due to the nature of operations and lack of suitable weather along the open coast. However, sufficient tests were made to provide accurate corrections for the various fathometers and scales.

The Edo fathometer on the STIRNI was not used for hydrographic work, but was tested and separate reports submitted to the Washington Office on 30 September 1955 and 20 June 1956.

On the BOWEN and STIRNI fathometers No. 160SPX, 100S and 161SPX the corrections on the A scale varied with the depths and were so entered. On the PARKER fathometer No. 1175, the A scale corrections were uniform regardless of depth so one correction for the entire A scale was determined and used. On the B, C, and D scales of all fathometers, a single correction was determined for each scale.

On the PARKER, fathometer No. 1175 no D scale correction could be determined as no return could be gotten from the bar at that depth in D scale. On the PARKER, the D scale was used only for a few soundings during the following periods:

6 June 1955 Sheet PBS-4455 Vol. I Position 8 on B day
12 July 1955 Sheet PBS-4455 Vol. II Pos. 46 to 49 on D day
12 July 1955 Sheet PBS-4455 Vol. II Pos. 57 to 62 on D day

On 11 June 1956, a bar check was obtained under ideal conditions and one check on the D scale at 110 feet was obtained. The correction was -2.0 feet. It is suggested that this correction be used in the above few positions. These positions had no correction entered in the Volumes at the time the volumes were transferred to the Norfolk District Office.

A tabulation of the corrections applied to the fathometer soundings follows:

TABLE I

A. PARKER — Fath. No. 1175 Type 808

A scale	-0.2 feet	0-50
B scale	-0.6 feet	35-85
C scale	-0.2 feet	75-125
D scale	See Report*	105-160

B. BOWEN — Fath. No. 160SPX Type 808 — TABLE 2

A scale	-0.2 feet.	0 to 16.9 ft.	0-55
	0.0 ft.	to 27.2 ft.	
	∮0.2 ft.	to 33.8 ft.	
	∮0.4 ft.	to 39.4 ft.	
	∮0.6 ft.	to 45.2 ft.	
	∮0.8 ft.	to 50.9 ft.	
	∮1.0 ft.	to 55.0 ft.	
B Scale	∮1.5 ft.	to 57.8 ft.	35-90
	∮2.0 ft.	to 90.0 ft.	
C Scale	∮2.5 ft.		75-125
D Scale	∮2.5 ft.		105-160

Fath. No. 100S Type 808 — TABLE 3

A Scale	0.0 ft.	to 22.0 ft.
	∮0.2 ft.	to 35.5 ft.
	∮0.4 ft.	to 48.9 ft.
	∮0.6 ft.	to 55.0 ft.
B Scale	∮1.0	
C Scale	∮1.5	

C. STIRNI — Fath. No. 161 SPI Type 808 — TABLE 4

A Scale	0.0 ft.	0 to 13.5 ft.
	∮0.2 ft.	to 24.0 ft.
	∮0.4 ft.	to 33.0 ft.
	∮0.6 ft.	to 42.5 ft.
	∮0.8 ft.	to 49.0 ft.
	∮1.0 ft.	to 55.0 ft.
B Scale	0.0 ft.	
C Scale	-2.5 ft.	
D Scale	-4.5 ft.	

NORFOLK PROCESSING OFFICE
STATISTICS
H-8248

SHIP PARKER

VOLUME	DAY	DATE	NO. POS.	NAUT. MI. SDGS.
1	A(blue)	4-18-55	39	12.5
1-2	B	4-19-55	190	59.5
2	C	4-20-55	20	5.5
2-3	D	4-21-55	226	64.0
3-4	E	4-22-55	65	8.0
4	F	4-26-55	166	50.5
5	G	4-27-55	35	10.5
5	H	4-28-55	47	12.5
5-6	J	4-29-55	123	39.5
6	K	5-19-55	90	20.5
6-7	L	9-29-55	79	14.8
7	M	9-30-55	124	23.0
		TOTALS	1204	320.8

SHIP BOWEN

8	A(pur)	4-20-55	12	3.8
8	B	4-21-55	26	7.5
8	C	4-22-55	18	3.9
8	D	4-26-55	94	16.1
8	E	4-27-55	17	3.8
8	F	4-28-55	96	17.5
9	G	4-29-55	129	21.1
9	H	9-30-55	165	21.6
		TOTALS	567	129.0

SHIP STIRNI

10	A(gr)	9-30-55	16	0.0

GRAND TOTAL	1787	449.8

WIRE DRAG --- SHIPS PARKER, BOWEN & STIRNI

VOLUME	DAY	DATE	NO. POS.	NAUT. MI. DRAG
1 (G.L.)	A	9-30-55	17	1.2

NORFOLK PROCESSING OFFICE
FLOATING AIDS TO NAVIGATION
H-8248

BUOY	LATITUDE	LONGITUDE	DEPTH	POS. NO.	DATE
Cape Lookout Shoals Lighted Buoy 4	34-26.81	76-28.40	41'	105F 108F	4-26-55 "
*Cape Lookout Shoals Lighted Buoy P	34-29.	76-26.	18'	1A' 3A	9- 7-55 9-30-55
**Red & Black Nun	34-29.23	76-32.45	58'	7E	4-27-55

*See notes on smooth sheet
**No longer charted

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8248 (PBS-2355)

GENERAL

The plot of this survey was started in the Field as a smooth boat sheet. When the sheet was received at this Office all Parker positions had been plotted. This Office plotted the remaining Bowen and Stirni positions.

Sixteen detached positions, observed by Ship Stirni and falling off the limits of adjoining survey PBS-2255, were transferred to volume number 10 and assigned position numbers 1 thru 16 A (green). They were originally recorded on "G" day.

SOUNDINGS

All fathograms were checked scanned in the Processing Office at 20 second intervals and the soundings reduced with templates. Agreement of soundings at crossings is good considering the irregular nature of the bottom and the prevalence of wave action in this exposed area.

Lat. 34-27.6' and Long. 76-28.7 --- The shoal trace appearing on the fathogram between positions 134 and 135F (blue) was not smooth plotted. This trace should be given further consideration as it shows many of the characteristics of wreckage.

CHART COMPARISONS

See attached section of chart 1233 showing comparative smooth sheet depths in red ink.

Norfolk, Va.
16 March 1960

Respectfully submitted,

Hugh L. Proffitt
Cartographer

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8248 & W.D.

Name on Survey	A: On Chart No. 1233	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
										3
										4
										5
										6
										7
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George M. Bond
Geographic Names Section
8 April 1960

ABSTRACT FOR SURVEY # 08248

Volume #	Vessel	Position #s
1-7	Parker	0001-1178
8-9	Bowen	2101-2657
10	Stirni	2801-2816

PARKER

	Manual		Automated	
Day		Position #s	Julian Day	Position #s
"A" Day	04/18/55	1-39	108	0001-0039
"B" Day	04/19/55	1-190	109	0040-0230
"C" Day	04/20/55	1-20	110	0231-0250
"D" Day	04/21/55	1-226	111	0251-0473
"E" Day	04/22/55	1-65	112	0474-0514
"F" Day	04/26/55	1-166	116	0515-0680
"G" Day	04/27/55	1-35	117	0681-0715
"H" Day	04/28/55	1-47	118	0716-0762
"J" Day	04/29/55	1-123	119	0763-0885
"K" Day	05/19/55	1-90	139	0886-0975
"L" Day	09/29/55	1-79	272	0976-1054
"M" Day	09/30/55	1-124	273	1055-1178

BOWEN

"A" Day	04/20/55	1-12	110	2101-2112
"B" Day	04/21/55	1-26	111	2113-2138
"C" Day	04/22/55	1-18	112	2139-2156
"D" Day	04/26/55	1-94	116	2157-2250
"E" Day	04/27/55	1-17	117	2251-2267
"F" Day	04/28/55	1-96	118	2268-2363
"G" Day	04/29/55	1-129	119	2364-2492
"H" Day	09/30/55	1-165	273	2493-2657

STIRNI

"A" Day	09/30/55	1-16	273	2801-2816

CROSS REFERENCE OF VOLUME NUMBERS, VESSELS, AND POSITION NUMBERS
FOR SURVEY # 08248

Volume #	Vessel	Position #s
1	Parker	0001-0159
2	Parker	0160-0329
3	Parker	0330-0498
4	Parker	0499-0680
5	Parker	0681-0850
6	Parker	0851-1043
7	Parker	1044-1178
8	Bowen	2101-2363
9	Bowen	2364-2657
10	Stirni	2801-2816

Tape 1 R_1 & R_3

Volume #	Vessel	Position #s
1	Parker	0001-0159
2	Parker	0160-0329
3	Parker	0330-0498
4	Parker	0499-0680
5	Parker	0681-0850
6	Parker	0851-0975
8	Bowen	2101-2363
9	Bowen	2364-2492

Tape 2 R_2 & R_3

Volume #	Vessel	Position #s
6	Parker	0976-1043
7	Parker	1044-1178
9	Bowen	2493-2657
10	Stirni	2801-2816

Form 946

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8248 & W.D.

Records accompanying survey: Smooth sheets 1;

boat sheets 1; sounding vols. 11; wire drag vols. 2;

Descriptive Reports 1; graphic recorder envelopes 12;

special reports, etc. 1-Boat sheet overlay

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

Number of positions on sheet		
Number of positions checked		
Number of positions revised		
Number of soundings revised (refers to depth only)		
Number of soundings erroneously spaced		
Number of signals erroneously plotted or transferred		
Topographic details	Time	
Junctions	Time	
Verification of soundings from graphic record	Time	
Special adjustments	Time	

Verification by ..... Total time ..... Date .....

Reviewed by ..... Time ..... Date .....

US COMM C&GS DC

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H- 8248 & W.D.

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken.

2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.

3. All reference to survey sheets mentioned in the descriptive report include the registry number and year.

4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering.

5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.

6. All positions verified instrumentally were check marked in the sounding records.

7. All critical soundings are clear and legible and are a little larger than the adjacent soundings.

8. The metal protractor has been checked within the last three months.

9. The protracting and plotting of all bad crossings were verified.

10 All detached positions locating critical soundings, rocks or buoys were verified.

11. The boat sheet was compared with the smooth sheet.

12 The spacing of soundings as recorded in the records was closely followed.

13. The bottom characteristics were shown on outstanding shoals.

14. The reduction and plotting of doubtful soundings were checked.

15. The transfer of contemporary topographic information was carefully examined.

16. All junctions were transferred and overlapping curves made identical.

17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil.

18. The depth curves have been inspected before inking.

19. All triangulation stations and transfer of topographic and hydrographic signals were checked.

20. Heights of rocks were checked against range of tide.

21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.

22. Unnecessary pencil notes have been removed.

23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.

24. The low water line and delineation of shoal areas have been properly shown.

25. Degree and minutes values and symbols have been checked.

26. Questionable soundings have been checked on the fathograms.

27. Source of shoreline and signals (when not given in report).

28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual.

29. All aids located, with those on contemporary topographic sheets, have been shown on survey.

30. Depth curves were satisfactory except as follows:

31. Sounding line crossings were satisfactory except as follows:

32. Junctions with contemporary surveys were satisfactory except as follows:

33. Condition of sounding records was satisfactory except as follows:

34. The protracting was satisfactory except as follows:

35. The field plotting of soundings was satisfactory except as follows:

36. Notes to reviewer:

Verified by Date

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~ 9 May 1960

Division of Charts: R. H. Carstens

Plane of reference approved in
13 volumes of sounding records for

HYDROGRAPHIC SHEET 8248

Locality Cape Lookout, N.C.

Chief of Party: J. C. Mathisson in 1955
Plane of reference is mean low water, reading
2.6 ft. on tide staff at Lookout Bight
8.5 ft. below B. M. 5 (1926)

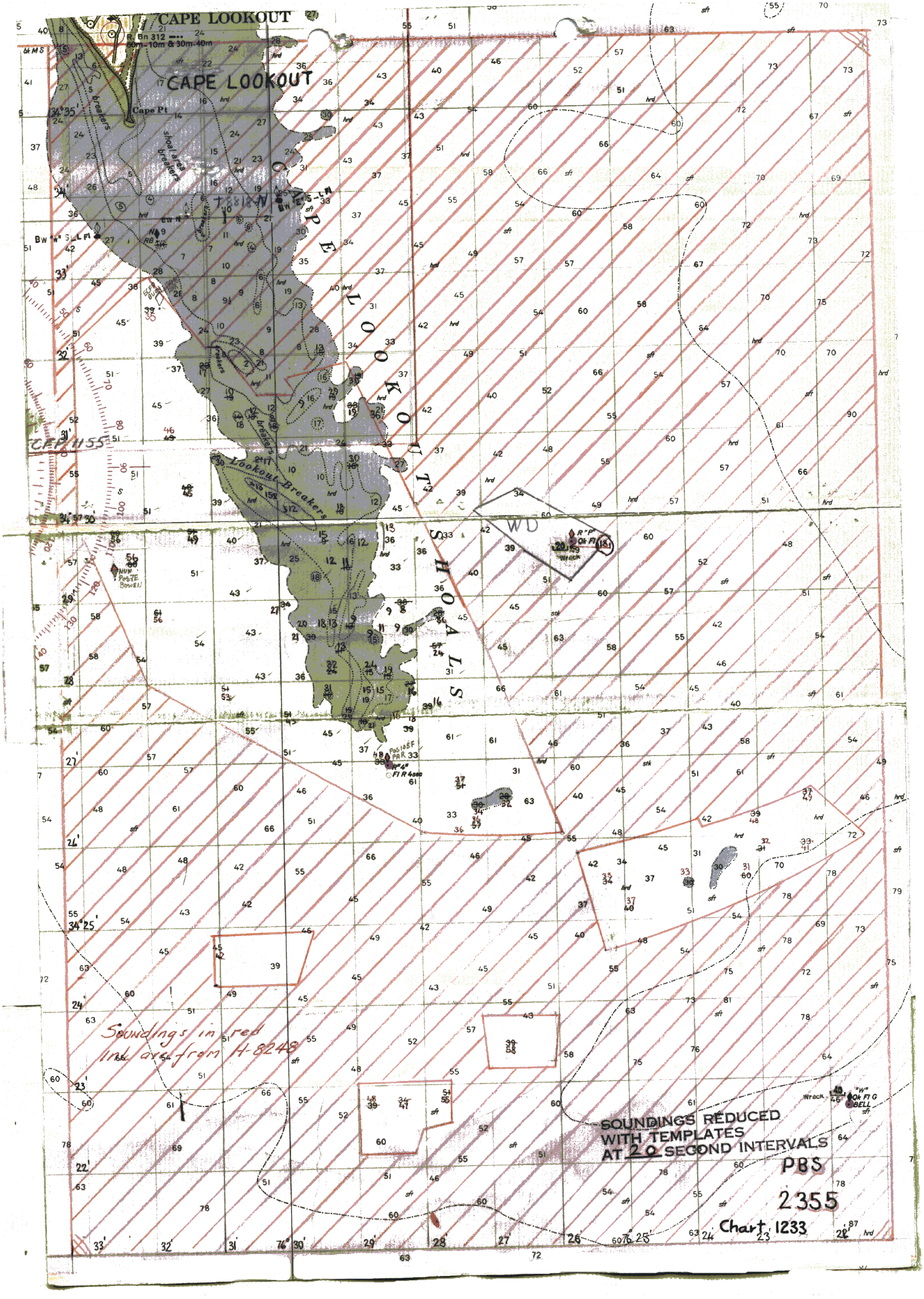
Height of mean high water above plane of reference is 3.7 feet.

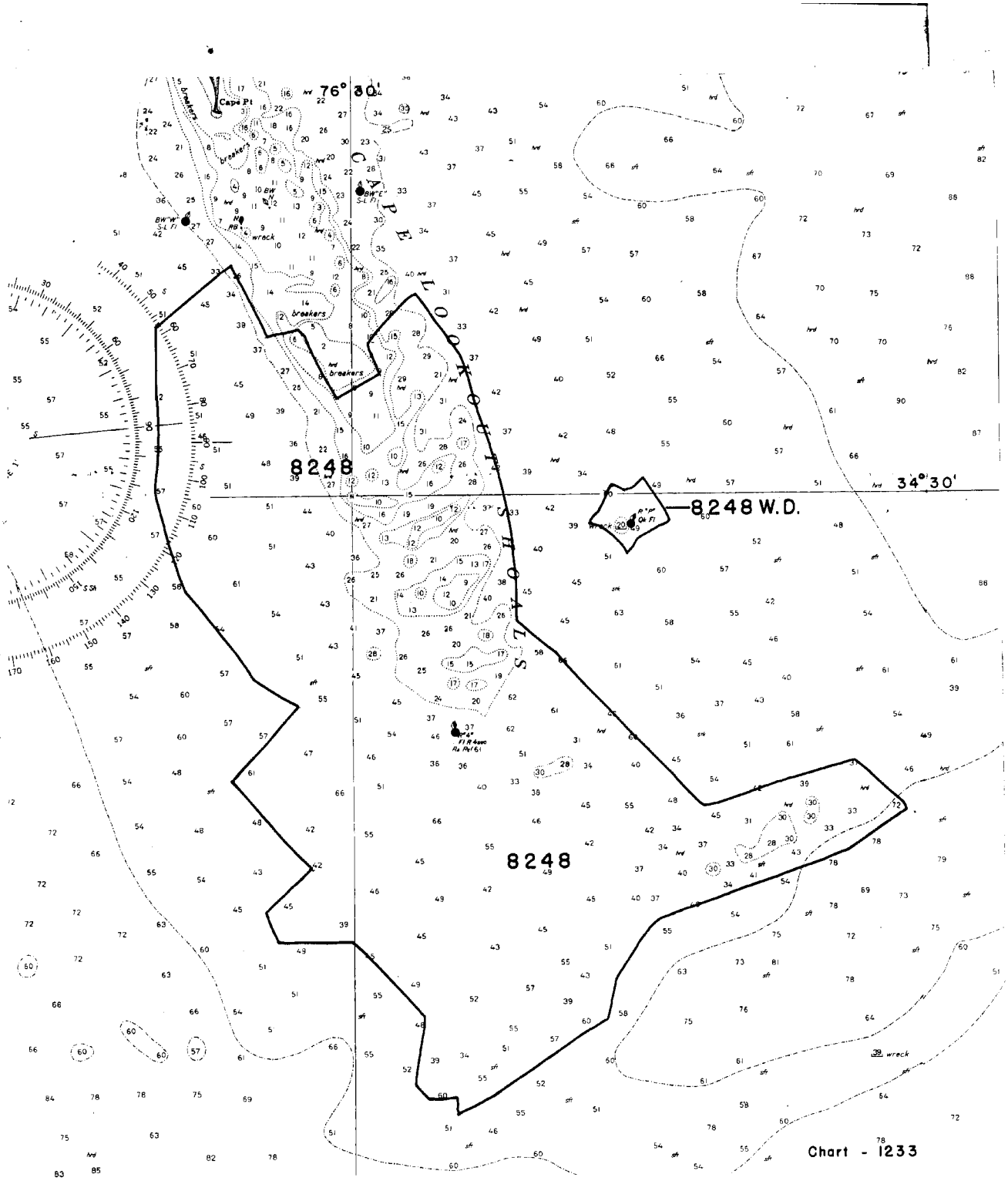
Condition of records satisfactory except as noted below:

William Shoup

~~Chief, Division of Tides and Currents~~
Chief, Tides Branch

U. S. GOVERNMENT PRINTING OFFICE 877932


CAPE LOOKOUT
CAPE LOOKOUT
Cape Pt
breakers
shoal area
breakers
Lookout Breakers
LOOKOUT SHOALS
WD
Wreck
Soundings in red
incl area from H-8248
SOUNDINGS REDUCED
WITH TEMPLATES
AT 20 SECOND INTERVALS
PBS
2355
Chart 1233


76° 30'
34° 30'
CAPE LOOKOUT SHOALS
8248
8248
8248 W.D.
Cape Pt
breakers
wreck
Chart - 1233

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8248 & W.D.

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5-19-60	1110	[illegible]	Before ~~After~~ Verification and Review Exam
			No Sig Corr
6/8/60	1234	E E Thomas	Before ~~After~~ Verification and Review
			Exam, no critical revisions, No Corr.
12/31/60	1233	E. Thomas	Before ~~After~~ Verification and Review
			Partial application, minor revisions.
11/30/82	11520	Kotac	Adequately applied thru 11544 Before After Verification and Review
			VIA 11520 #41
~~[illegible]~~	~~11609~~	~~[illegible]~~	~~Before After Verification and Review~~
			~~[illegible] Adequately applied through [illegible]~~
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.