7964

Diag. Cht. No. 1234-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hyrdrographic

Field No. ECSP-1252 Office No. H-7964

LOCALITY

State North Carolina

General locality Vicinity of Beaufort Inlet

Locality Harker Island & Barden Inlet

19~~4~~53-55

CHIEF OF PARTY

Clarence R. Reed & M. T. Paulson

LIBRARY & ARCHIVES

DATE Dec. 17, 1956

B-1870-1 (1)

7964

Form 537
(Ed. June 1940)

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-7964

Field No. ECSP-1252

State NORTH CAROLINA

General locality VICINITY OF BEAUFORT INLET

Locality HARKERS ISLAND & BARDEN INLET

Scale 1:10,000 Date of survey 10Feb 1953 to 3 April 1953

Instructions dated 25 Sept. 1952 & 15 Jan. 1953

Vessel EAST COAST SHORE PARTY

Chief of party CLARENCE R. REED

Surveyed by R.B. NOBLE, R.H. HOULDER & L.D. KELLY

Soundings taken by ~~fathometer~~, graphic recorder, hand lead, ~~wire~~ POLE

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by R.B. NOBLE, R.H. HOULDER & L.D. KELLEY

Protracted by W.L. JONNS

Soundings penciled by W.L. JONNS

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

REMARKS: and are true depths This survey was smooth plotted in the Hydrographic Section of the Norfolk rrocessing Office.

U. S. GOVERNMENT PRINTING OFFICE 777032

NOTES FOR DESCRIPTIVE
REPORT TO ACCOMPANY
HYDROGRAPHIC SHEETS H -7963 & H -7964 (FIELD NOS. ECSP HI-1152 & ECSP-1252)

Beaufort Inlet, Harkers Island & Barden Inlet, North Carolina

EAST COAST SHORE PARTY CLARENCE R. REED, CHIEF OF PARTY

PROJECT CS-352 1952-53 SCALE 1:10,000

* * * * * * * * * * * * *

PROJECT This survey was accomplished under instrutions dated 25 September 1952 and supplemental instrutions dated 15 January 1953, calling for basic hydrographic surveys in the vicinity of Beaufort Inlet and Barden Inlet, except in the dredged channels regularly surveyed by the United States Army Corps of Engineers.

SURVEY LIMITS AND DATES The survey on sheet H-7963 (Field No. ECSP HI-1152) covers the area on chart 420 bounded on the north by Latitude 34-44', on the West by the western limit of the chart, on the south by a contemporary hydrography executed by the USC&GSS Hilgard (an irregular junction line in depths of 18 to 30 feet) and on the east by Longitude 76- 37' on the outer coast and a junction with sheet H-7964 (Field No. ECSP 1252) in the vicinity of Middle Marshes southeast of Beaufort, N.C. The field work began on the 25 November 1952 and was concluded on 17 March 1953.

The survey on sheet H-7964 (Field No. ECSP 1252) covers Barden Inlet from the 18 foot curve in Lookout Bight to the dredged channel in Back Sound, the west end of Back Sound from Longitude 76- 35' to a junction with sheet H-7963 in approx Longitude 76- 37', North River south of Latitude 34- 44' and the Straits north of Harkers Island and Browns Island east to Marshallberg, N.C. with the exception of flats in Westmouth Bay and lesser tributories. The field work began on 10 Febuary 1953 and was concluded on 3 April 1953.

VESSELS AND EQUIPMENT Aluminum Launch No. 168 was used for nearly all the hydrography. The Launch was operated from a mooring at The U.S. Fish and Wildlife Biological Station on Pivers Island, Beaufort, N.C.

The launch has a turning radius of 15 meters while running at sounding speed of 6 knots at 1800 R.P.M.

A Hydrographic Skiff was used on occasions when sounding in shoal water. The skiff was powered by two 10 HP Johnson outboard motors. Only one outboard motor was used while sounding.

Launch No. CS 82 was also used in running sounding lines in the channel north of Harkers Island, from the Harkers Island bridge to Core Sound Light No. 42A. In all three boats, Graphic Recorders No. 138 SPX and 150 SPX were used with their transducers mounted inboard.

TIDES ANDS CURRENTS The tide note is attached to this report. No currants were observed by this party, however, currants

were observed by the ship Hilgard in this area during the time this survey was in progress.

SMOOTH SHEETS The smooth sheets are to be plotted by the Norfolk Processing Office.

Control Stations The control consisted mainly of triangulation stations and topographic stations located by planetable. Only two hydrographic stations were necessary, one on sheet 1152, H-7963 and one on 1252. H-7964 Review, par. 1

SHORELINE AND TOPOGRAPHY The shoreline and topograpic details were transferred from Air Photo Compilation sheets T-8744n/2, T8745n/2, T8744s/2, T8745s/2 and T8818n/2. (1946-49)

Because of continuous eroding on either side of Beaufort Inlet, a planetable survey was made to determine the present mean high water line. Portions of the mean high water line at Barden Inlet was also determined by planetable. The mean low water line was determined by planetable on a shoal located just west of the Morehead City Channel Rear Range Light. Other descrepancies in the shoreline noticed on the Air Photo Compilation were resolved in the field by planetable and are shown on the topographic sheets.

SOUNDINGS The depths were measured with graphic recorders, sounding poles and hand leads. Bottom samples were obtained with armed hand leads.

CONTROL OF HYDROGRAPHY The sounding lines of this survey were controlled by three point fixes taken with sextants at 1 to 2 minute intervals. No unusual jumps were noted when changing control stations.

ADEQUACY OF SURVEY This survey is complete except for unimportant flats in Westmouth Bay and lesser tributaries to The Straits ~~to the~~ north of Harkers Island and Browns Island. It is considered adequate to supersede prior surveys. Review, pars. 7 & 9

CROSSLINES Prescribed crosslines were run with satisfactory crossings.

COMPARISON WITH PRIOR SURVEYS Junctions with hydrographic survey H-6798 are satisfactory. Other hydrographic surveys in the area are old and a detailed comparison would be less useful than a comparison with charted soundings. Soundings were transferred from chart No. 420 to the boat sheets before beginning field work. They are shown in green ink. Present soundings which differed materially from the charted soundings are listed below in tabular form. Review, par. 5.

COMPARISON WITH CHART Review, par. 6.
SHEET NO. H-7964 (Field No. 1252)

LATITUDE	LONGITUDE	CHART NO. 420	1952-53 SUR.
34-42.69'	76-36.94'	17'	13'
34-43.12	76-37.07	10	7
34-43.28	76-37.08	19	9
34-42.55	76-36.79	2	7
34-42.42	76-36.36	12	0
34-42.23	76-35.80	30	8
34-42.33	76-35.69	23	12
34-42.58	76-35.61	17	9
34-42.90	76-35.32	10	4
34-42.94	76-34.78	13	9
34-43.07	76-34.71	8	2
34-43.05	76-33.60	13	10
34-43.67	76-35.70	10	4
34-43.78	76-35.89	10	4
34-43.89	76-36.00	7	3

Differences apparently caused by shifting channels

PRELIMINARY REVIEW BY CHART DIVISION

The following items of the preliminary review by the Division of Charts were investigated with result as indicated.

Item No. 1 Wreck charted in Latitude 34-41'09" Longitude 76-43'18" was investigated intensively by depth recorder by this party and ship HILGARD. No indication was found. For recommendation see item 2.

Item No. 2 Wreck charted in Latitude 34-41'18" Longitude 76-43'45" was investigated the same as item No. 1. No indication was found. It is probable that only one wreck existed in the first place and that the two positionsare both the same wreck on different dates. Local fishermen say there is nothing left of the wreck but its engine nearly buried on the bottom. It is questionable whether an accurate location could be obtained even with wire drag equipment. However until cleared with such equipment it should be continue to be charted. (See H-7963)

Item No. 3 No evidence of either wreck charted in Latitude 34-42'31" Longitude 76-40'15" could be found. It is recommended that both wrecks be removed from the chart.

All items in Ecpt 1152

Item No. 4 The wreck charted in Latitude 34- 43'06" Longitude 76-41'30" was found in 11 feet of water covered by 6½ feet at low water. It is marked by a black can buoy No. 41 approximately 30 meters southwest of the wreck.

Item No. 5 At Latitude 34- 41'29" Longitude 76-40'13" a search at low water for the charted submerged piles proved fruitless. Their existence is doubtful. The source from which these piles were charted should be re-examined.

Item No. 6 There are no longer any dolphins in any of the three areas indicated and they should be deleted from the charts.

Item No. 7 This channel was closely developed as instructed.

Item No. 8 At the present time there are no radio towers at Camp Glenn. The only visible radio equipment is a group of short wooden masts on top of the buildings at the camp. These are not conspicuous and should not be charted as land marks.

Not applicable to H-7964

The reported shoales in the vicinity of Latitude 34-43'20" Longitude 76-45'20" were found and developed. This shoal runs almost due east and west and has an area approximately 900 meters long and 150 meters wide which bares at low water.

COAST PILOT INFORMATION Information pretaining to Coast Pilot was turned over to Mr. E.W.Smith of the Coast Pilot Section during his stay in Morehead City, N.C.

LANDMARKS FOR CHARTS The following additional landmarks should be charted on charts 420 and 423. (See form 567)

Fort Macon State Park, Chimney on picnic shelter.

Morehead City, orange elevated water tank- Lloyd A.Fry Roofing Company. OTAW

H-7963

Beaufort, First Baptist Church, Spire (this is a new church should be charted

replacing the old one which is next door to the east.)

Morehead City, First Methodist Church, spire and Morehead City, First Baptist Church, spire should be charted as they are conspicuous. Both churches are new.

The stack indexed on air photo topo sheet T8744 H/2 as No. 24 - "Stack - tallest of 3" has been replaced by a brick stack 10 feet in diameter at its base and with its top 110 feet above high water. No objects were visible at the stack for a sextant location. However the following data will serve to plot the stack on the smooth sheet. A sextant fix was taken at Morehead City Port Terminal with a cut to the stack:

MOR	73° 05'	Listed in Chart Letter 681(1953)
TAN		
WAT	98° 26'	
Brick stack		
to MOR	35° 26'	

H-7963

The distance of the stack from the high water line is 21.3 meters and from the building to the south east is 1.2 meters. It is 19.7 meters from an inshore continuation of the edge of the wharf to the south. This stack should be plotted on the smooth sheet and its position used for charting as a landmark. It is recommended that the distinguishing name "BRICK STACK" be charted as there are countless black metal stacks in the vicinity which rise and fall with the fortunes of the fertilizer industry.

The "LOOKOUT TOWER" shown on chart 420 at Fort Macon Coast Guard Station should be deleted. It is not only erroneously charted southwest of the Coast Guard Station cupola instead of southeast but also it is inconspicuous.

GEOGRAPHIC NAMES

The island between Morehead City Port Terminal and Rivers Island is known locally as Radio Island. The tower of radio station WMBL is prominent. It is recommended that the name "Radio Island" be charted.

No other changes in charted names are indicated. On H-7963

MISCELLANEOUS

Morehead City Channel was thoroughly developed although it is in the area dredged by the U.S. Engineers. The reason was because of the difficulty experienced by the Chart Division in applying U.S. Engineers' surveys to our charts. The channel tends to shoal on its southern edge near Fort Macon. H-7963

Late on the night of 7 February 1953 the collier SEACONNET went aground southwest of the seaward end of Beaufort Inlet Channel. According to an oral report from the Commanding Officer of the U.S. Coast Guard Buoy Tender CONIFER, the Commanding Officer of the SEACONNET dropped anchor and the vessel immediately went aground. Light fog was present and it was quite apparent that the distance offshore was misjudged. The Coast Guard Cutter CONIFER immediately assisted the SEACONNET and attempted to free her and tow her to deeper water but was only successful in shifting her position slightly. The grounding occurred during the tugboat strike in Norfolk and New York and for that reason assistance had to be requested from Miami. H-7963

The vessel was freed on high tide 13 February. She had been inbound for fuel oil prior to a planned departure for Italy with her cargo of coal. The grounding was the direct result of the failure of the Commanding Officer of the SEACONNET to take proper precautions to assure himself of the ship's position and thus remain sufficiently distant from the shore to avoid stranding.

The wreck discovered by the hydrographic party in the vicinity of Latitude 34-43.6' Longitude 76° 40.1' should be charted. H-7963

It will be necessary to obtain the shoreline for the west end of Bogue Sound from air photo topographic sheets available from the Washington office. H-7963

A new railroad pier on Radio Island for military use was not located by this survey as construction was incomplete at the closing of the field season. H-7963

A close development was not made in Barden Inlet in the area covered by recent U.S. Engineers' surveys. These surveys on a larger scale can be properly coordinated by using the positions of fixed aids to navigation as located by this party by planetable. It should be noted that the U.S. Engineers' survey bases tide reduction on a datum sloping from Lookout Bight to Lighthouse Bay. The present survey of Barden Inlet is based on tides observed in Lookout Bight.

The new highway bridge from Morehead City to Atlantic Beach will have two 90 foot channels, one on either side of the center pier on which the draw span swings. The vertical clearance closed will be 12 feet at high water. The overall width of the bridge is 32 feet. Angles taken to locate the center of the bridge are as follows: H-7963

At ⊙ TOP - North side of draw to ⊙ KIN		66° 51'
At ⊙ TOP - Center pier to ⊙ KIN	63° 13'	
At ⊙ TOP - South side of draw to ⊙ KIN		59° 22'

The angles were taken after the sounding volumes were packed for shipment and are not recorded therein.

The above report was re-written from notes left by Ensign Richard H. Moulder upon his detachment and from additional notes by Ensigns Robert B. Noble and Lionel B. Kelley.

Approved and forwarded;

Clarence R. Reed
CDR, USCGS
OinC, East Coast Shore Party

TIDE NOTE TO ACCOMPANY

HYDROGRAPHIC SURVEY SHEETS: (FIELD NOS. HCSP 1152 & 1252)

Register Nos. H-7963 & H-7964

Observations were obtained at three tide stations. A portable automatic tide gage was maintained at Atlantic Beach. A standard automatic gage was maintained at the Morehead City Port Terminal. Visual observations were taken at Cape Lookout. No difference of time and height was applied to the observed tides. Planes of reference were furnished by the Washington Office or computed from elevations of previous tidal bench marks.

STATION	LATITUDE	LONGITUDE	MLW ON STAFF
Morehead City Port Terminal	34-43.13	76-41.72	3.2
Atlantic Beach	34-41.65	76-42.70	
25 Nov. 1952 - 8 Dec. 1952			2.5
15 Dec. 1952 - 5 Jan. 1953			1.7
6 Jan. - End of Project			3.6
Cape Lookout	34-36.68	76-32.13	2.2

FATHOMETER CORRECTIONS
PROJECT CS-352

HYDROGRAPHIC SURVEY SHEETS (FIELD NO. ECSP 1152, 1252)
Register Nos. H-7963 & H-7964

The corrections tabulated below are based on an initial set at one foot. Where the initial on the fathogram varies from the correct setting, INDEX CORRECTIONS must be entered in the sounding volumes. All soundings were obtained on the (A) Range, Foot Scale.

FATHOMETER NO. 138 SPX
Launch No. 168

25 November 1952 - 28 January 1953

Correction	Depth From	To
-1.6	3.0	3.3
-1.4	3.4	3.5
-1.2	3.6	3.7
-1.0	3.8	4.0
-0.8	4.1	4.6
-0.6	4.7	15.2
-0.8	15.3	28.5
-1.0	28.6	38.0
-1.2	38.1	46.9
-1.4	47.0	Sdg. Limit

The corrections tabulated below are based on an initial set at zero on the fathogram. Where the initial varies from the correct setting, INDEX CORRECTIONS must be entered in the sounding volumes. All soundings were obtained on the (A) Range, Foot Scale

FATHOMETER NO. 150 SPX
Launch No. 168

29 January - 1 March 1953

Correction	Depth from	To
-0.2	2.4	3.0
0.0	3.1	19.0
-0.2	19.1	30.0
-0.4	30.1	36.0
-0.6	36.1	40.0
-0.8	40.1	45.0
-1.0	45.1	Sdg. Limit

(Cont. From Page 1)

FATHOMETER NO. 138 SPX
Launch No. 168

3 March - 19 March 1953

Correction	Depth From	To
-0.6	3.0	3.2
-0.4	3.3	3.4
-0.2	3.5	4.0
0.0	4.1	6.0
0.2	6.1	17.5
0.0	17.6	25.2
-0.2	25.3	32.5
-0.4	32.6	40.0
-0.6	40.1	47.5
-0.8	47.6	Sdg. Limit

FATHOMETER NO. 150 SPX
Hydrographic Skiff No.736

12 January and 13 January 1953

Correction	Depth From	To
0.0	3.0	13.0
-0.2	13.1	18.0
-0.4	18.1	23.0

20 February 1953

Correction	Depth From	To
-1.0	4.8	5.2
-0.8	5.3	5.4
-0.6	5.5	6.4
-0.4	6.5	10.0
-0.6	10.1	15.0
-0.8	15.1	19.0
-1.0	19.1	Sdg. Limit

(Fathometer Corrections Cont.)

FATHOMETER NO. 150 SPX
Launch No. 168

18 and 19 March 1953

No bar checks were obtained on these days, due to poor weather conditions on 18 March and fathometer breakdown on 19 March, however depth comparisons were made between the fathometer and sounding pole. A correction of zero was indicated by these comparisons.

FATHOMETER NO. 138 SPX
Launch No. 82

The corrections tabulated below are based on an initial set at zero on the fathogram. Where the initial varies from the correct setting, INDEX CORRECTIONS must be entered in the sounding volumes. All soundings were obtained on the (A) Range, Foot Scale.

20 and 25 March 1953

Correction	Depth From	To
0.4	3.0	3.5
0.6	3.6	5.5
0.8	5.6	Sdg. Limit

3 April 1953

Correction	Depth From	To
0.0	3.0	3.6
0.2	3.7	5.0
0.4	5.1	7.5
0.6	7.6	14.0
0.8	14.1	16.5
1.0	16.6	Sdg. Limit

FATHOMETER NO. 138 SPX
Skiff No. 736

31 March and 1 April 1953

The bar check gave correction of zero for these days.

STATISTICS TO ACCOMPANY HYDROGRAPHIC SHEET H- 7964

Launch No. 168
(FIELD NO. ECSP 1252)

Date 1953	Day Ltr.	Vol. No.	Sdg. Poles Lead Lines	No. of Positions	Statue Mi. of Sdgs.
10 Feb.	a	1	83	138	13.6
6 Mar.	b	2	175	134	12.6
9 "	c	2&3	201	139	13.8
10 "	d	3	232	101	11.0
12 "	e	3	102	63	6.3
13 "	f	3&4	367	118	14.4
18 "	g	4	285	82	11.1
19 "	h	4&5	196	120	13.5
		TOTALS	1641	895	96.3

Hydro. Skiff No. 736
(FIELD NO. ECSP 1252)

Date 1953	Day Ltr.	Vol. No.	Sdg.Poles Lead Lines	No. of Positions	Statue Mi. of Sdgs.
16 Mar.	a	1	201	55	3.7
17 "	b	1	434	94	7.7
18 "	c	1	145	52	6.4
19 "	d	1	143	56	5.7
20 "	e	2	116	42	4.8
31 "	f	2	28	21	2.3
1 Apr.	g	2	126	71	7.2
2 "	h	2	243	95	9.5

488

Launch No. 82
(FIELD NO. ECSP 1252

Date 1953	Day Ltr.	Vol. No.	Sdg.Poles Lead Lines	No. of Positions	Statue Mi. of Sdgs.
18 Mar.	a	1	0	7	0.9
19 "	b	1	0	43	4.8
20 "	c	1	2	28	3.4
25 "	d	1	1	7	0.9
3 Apr.	e	1&2	134	107	9.8

192

Total 1573

APPROVAL SHEET

HYDROGRAPHIC SURVEYS H7963 & H7964

The records and boat sheets for hydrographic survey H7964 and for that part of hydrographic survey H7963 accomplished by the East Coast Shore Party have been inspected by me and are approved.

Clarence R. Reed
CDR, USC&GS
OinC, East Coast Shore Party

FLOATING AIDS TO NAVIGATION
H-7964

BUOY	POSITION	DEPTH	POS. NO.	VESSEL	DATE
Barden Inlet Buoy 5	34-37.61 76-31.76	8'	57&137a	168	2/10/53
Barden Inlet Buoy 3	34-37.62 76-32.08	7'	135a	168	"
*Barden Inlet Buoy C Not plotted believe to be Uncharted Aid.	34-37.60 76-32.06	6'	136a	168	"
Core Sound Chan. Buoy 48	34-42.93 76-34.89	10'	43b	736	3/17/53
Core Sound Chan Buoy 51	34-42.90 76-35.02	8'	44b	736	"

LIST OF SIGNALS
H-7964

TRIANGULATION STATIONS

ARK	HARK 2, 1949
BUR	MARSHALLBURG METHODIST CHURCH SPIRE, 1913
DEEP	DEEP, 1913-27
END	MIDDLE, 1933-47
KILL	GASKILL, 1933
LEW	LEWIS R.M. NO. 1, 1933-47
LOST	LOST, 1913-27
MAR	MARSHALLBURG BAPTIST CHURCH SPIRE, 1913
STEP	STEEP, 1913-33
LOOK	CAPE LOOKOUT LIGHTHOUSE, 1933
HANK	HANK, 1952

*DESCRIBED TOPOGRAPHIC STATIONS

CIL	CECIL, 1947	T-8745
FOR	CORE SOUND LT. 47, 1947	T-8745
JEER	JEER, 1947	T-8745
LIG	CORE SOUND LT. 44, 1947	T-8745
MUST	MUST, 1947	T-8745
SIX	CORE SOUND LT. 46, 1947	T-8745
TAB	SPIRE, 1947	T-8745
TWO	CORE SOUND LT. 42, 1947	T-8745
USE	FERRY, 1947	T-8745
TOW	TOWER, 1947	T-8818

* Descriptive cards were not on hand for these stations.

TOPOGRAPHIC STATIONS

(SOURCE ECSP-AB-53)

Dog Hot Fig

(SOURCE ECSP-CA-53)

Ale	Box	Chu	Egg	Gab	Gus	Him	Hug	Joe	Jut	Mac
Pad	Pat	Red	Rub	Rum	Sue	Tom	Wag	Yel	Zip	

(SOURCE ECSP-BB-53)

Abe	Bag	Dog	Dud	Fry	Kin	Pol	Ski	Tax	Til

HYDROGRAPHIC STATIONS

Hid	Vol. 8, pgs. 63
	Vol. 9, pg. 9
	Vol. 6, pg. 21

PHOTOGRAMMETRIC STATIONS

Doc	T-8745
Quo	T-8818

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7964 (Field No. ECSP-1252)

CONTROL

A great many weak fixes were used on this survey. Positions 1 thru 79c (lch. 168) in Steep Pt. Channel, are being submitted on an overlay as the entire area had to be plotted on swingers. (plotted on smooth sheet during prelim. verification)

Crossline 19 thru 23f (skiff), Lat. 34-40.7' Long. 76-37.0, is apparently displaced as the line is controlled by very slender angles. (positions adjusted)

DEPTH CURVES

In most instances the depth curves are only approximate as much additional developement is needed to obtain adequate delineation in this area of irregular bottom configurations and shifting shoals and channels.

CHART COMPARISONS

The following objects, shown on chart 420 or on aim-photo compilations, were neither confirmed or disproved on the hydrographic survey:

*Piling	(Chart 420)	Lat. 34-37.71	Long. 76-31.65	Review, par. 6.
Wreck	" "	Lat. 34-37.29	Long. 76-31.92	
* Boat lift	(T-8745) (1946-49)	Lat. 34-42.20	Long. 76-35.15	*
Piling	"	Lat. 34-42.55	Long. 76-35.31	

*Approx. position of beacon #7 (about 68 meters west of beacon #7)

* Transferred to smooth sheet from T-8745

Respectfully submitted,

Hugh L. Proffitt

Hugh L. Proffitt
Cartographer.

GEOGRAPHIC NAMES

Survey No. H-7964

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H		K	
North Carolina			(for title)							BGN	1
Beaufort Inlet			"	"							2
Barden Inlet ✓										BGN	3
Lookout Bight ✓											4
Core Sound ✓											5
Marshallberg ✓										BGN	6
The Straits ✓											7
Chadwick Creek ✓											8
Browns Island ✓										BGN	9
Harkers Island ✓										"	10
Westmouth Bay ✓											11
Back Sound ✓											12
Middle Marshes ✓											13
North River											14
North River Thorofare ✓											15
Lenoxville Point ✓											16
Steep Point Thorofare ✓											17
											18
Tide Stations:				Names approved 5-6-54							19
Point Lookout				All are on chart 420.							20
Morehead City Port Terminal				L. Heck							21
Atlantic Beach											22
											23
											24
											25
											26
											27

M 234

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H- 7964

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. *For H-7963 only*

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. *by W.W. Frazel*

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:
Note to Verifier: See review of this survey, particularly # 7.

Prelim. Verif. by: J A Dinsmore 7/20/54

Verified by Harry R. Smith Date 2/29/72

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7964 FIELD NO. ECSP-1252

North Carolina, Beaufort Inlet, Harkers Island and Barden Inlet

Project No. CS-352

Surveyed - Feb. - April, 1953 Scale 1:10,000

Soundings: Control:

808 Fathometer
Hand lead
Pole

Sextant fixes on shore signals

Chief of Party - C. R. Reed
Surveyed by - R. B. Noble, R. H. Houlder and L. D. Kelley
Protracted by - W. L. Jonns
Soundings plotted by - W. L. Jonns
Preliminary Verification by - T. A. Dinsmore
Verified and inked by - Harry R. Smith
Reviewed by - T. A. Dinsmore 22 July 1954
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with air-photographic surveys T-8744 N/2, T-8745 N/2, T-8744 S/2, T-8745 S/2 and T-8818 N/2 of 1946-49. The shoreline shown in red at Barden Inlet is from present survey information transferred from graphic control sheet ECSP-Bb-53.

The signals originate with the above air-photographic surveys supplemented by topographic stations located on graphic control sheets ECSP-Bb-53 and ECSP-CA-53. The latter sheets are designated for destruction as allthe survey information has been transferred to the present survey.

2. Sounding Line Crossings

Considering the bottom irregularities in much of the area, depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The depth curves are only approximately delineated in many localities because of incomplete survey coverage or inadequate development.

Except for the inshore flats, the bottom is generally uneven. Detached shoals, depressions and sloughs together with abrupt changes at the banks of the channels contribute to the uneveness of the bottom.

4. Adjoining Surveys

The present survey junctions adequately with H-7963 (1952-53) on the west. In Lookout Bight, the present survey overlaps H-6798 (1943). In this locality, prior and present depths at the limits of the present survey are in good agreement except in lat. 34°37.1', long. 76°32.0', where present depths of 2 ft. fall in prior depths of 6-10 ft. In the overlapping area, present depths supersede the depths on H-6798.

The transfer of junctional soundings between H-7963 and the present survey is deferred pending the complete verification of the two surveys.

5. Comparison with Prior Surveys

H-419 (1854) 1:10,000
H-854 (1864) 1:20,000
H-1219 (1874) 1:20,000
H-1316a (1876) 1:20,000
H-1848 (1886) 1:10,000
H-1849 (1886) 1:10,000
H-1850 (1886) 1:10,000
H-3374 (1912) 1:10,000
H-3436 (1913) 1:10,000
H-3529 (1913) 1:20,000
H-3530 (1913) 1:10,000

These prior surveys taken together covered the area of the present survey during the periods indicated. A comparison of the prior and present surveys reveals numerous bottom changes. Barden Inlet did not exist at the time of the prior surveys. Other less conspicuous changes in bottom are indicated in the following localities:

Latitude	Longitude	Prior Depths	Present Depths
34°43.13'	76°33.31'	8	4
42.91'	34.33'	15	10
42.96'	35.05'	2	9
42.15'	36.16'	23	1
40.66'	36.30'	15	1
40.65'	36.52'	9	-1

The above bottom changes apparently resulted from the shifting of shoals and channels.

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

6. Comparison with Chart 420 (Latest print date 3/8/54)

A. Hydrography

Charted hydrography originates principally with the prior surveys of 1912-13 supplemented by numerous surveys by the Corps of Engineers, the latest of which are blueprints 50213, 50214, 50215 and 50827 of 1953. These Corps of Engineers surveys supersede the present survey in the channel areas covered.

Specific mention is made of the following charted objects:

(1) The pile charted in lat. 34°37.71', long. 76°31.65', since 1945 from a source not readily ascertainable was not confirmed nor disproved on the present survey. Charted about 70 meters west of the present survey position of beacon No. 7, the pile is probably the remains of a previous beacon location. In view of the continual change in the area resulting from the shifting of shoals and dredging, the pile is probably now nonexistent.

(2) The sunken wreck charted in lat. 34°37.30', long. 76° 31.95', from Bp. 45205 (1949) was not investigated on the present survey. Until the existence of the remains of the wreck is confirmed or disproved, the sunken wreck symbol should be retained on the chart.

Except as noted in the preceding paragraphs, the present survey supersedes the charted information.

B. Aids to Navigation

The light charted in lat. 34°42.13', long. 76°36.66', is about 135 meters east of the present survey position. The charted position originates with H.O. Notices to Mariners No. 6 (1954) and adequately serves the purpose intended.

The buoy charted in lat. 34°42.15', long. 76°36.18', was established subsequent to the present survey from H.O. Notices to Mariners No. 52 (1953).

The lights charted in lat. 34°42.67', long. 76°35.40', and lat. 34°42.84', long. 76°35.32', are about 80 meters southward and 200 meters southwestward, respectively, from the present survey positions. The charted positions apparently originate with sources prior to 1953 and should be revised to agree with the present survey positions.

Except as noted above, the aids to navigation located on

the present survey are in substantial agreement with the charted aids and adequately mark the features intended.

C. Dredged Channels

The present survey depths are in harmony with the charted controlling depths in the dredged channels.

7. Condition of Survey

a. The sounding records and Descriptive Report are complete and comprehensive.

b. The preliminary verification and inspection indicates that the smooth plotting was generally accurate. Positions 1-74c covering the hydrography in Steep Point Channel were smooth plotted in the Washington Office.

c. The preliminary verification of the survey was generally confined to sounding-line crossings and unnatural bottom configuration. A pattern of sounding lines covering the general area have been verified and inked. Completion of the verification and inking is deferred until some future date at which time the shoreline will be checked and a further inspection of the depth curves will be made. > Shoreline verified at AMC

d. The following areas remain unsurveyed:

(1) In the vicinity of lat. 34°41', long. 76°35.5' and lat. 34°40.43', long. 76°35.80'. ✓Also ϕ 34°41.8' λ 31°37.2

(2) Westmouth Bay and Chadwick Creek.

(3) Inlet west of Marshallberg and flats north of Browns Island. ✓

e. Development is considered incomplete in the following localities:

✓(1) The few sounding lines in Barden Inlet are insufficient to adequately delineate the bottom configuration and to determine the controlling channel depths. ✓

✓(2) In Steep Point Channel, a few additional soundings lines would aid in defining the natural channel and determine the controlling channel depth. ✓

✓(3) In the vicinity of lat. 34°42.25', long. 76°35.30', additional soundings should be obtained to determine the eastward extent of the shoal area on the west as

well as the width of the narrow channel closeby.

(4) Because of the lack of cross-channel soundings in lat. 34°43.16', long. 76°32.13', the width of the natural channel in the vicinity cannot be defined with certainty.

(5) In lat. 34°40.67', long. 76°36.72', additional soundings should be obtained to determine whether or not a 2 to 5-ft. bar blocks the passage. The shoal on the east has extended westward since the prior surveys of 1913.

(6) In lat. 34°40.7', long. 76°36.9', the channel limits can only be approximated because of the widely-spaced sounding lines.

Because of the changeable character of the bottom, it is not deemed advisable to carry forward prior soundings in the unsurveyed and undeveloped areas.

f. The charted pile and wreck described in paragraphs 6A, (1) and (2) were not investigated on the present survey.

8. Compliance with Project Instructions

The survey complies with the Project Instructions except as noted in paragraphs 7 d, e, and f.

9. Additional Field Work

At an opportune time, additional work to complete the coverage in the areas noted in paragraph 7 d, and e, and to investigate the items in paragraph 7 f, should be accomplished.

Examined and approved

H. R. Edmonston
Chief, Nautical Chart Branch

E. R. McCarthy
Acting Chief, Division of Charts

G. R. Fish
Chief, Hydrography Branch

Earl O. Heaton
Chief, Division of Coastal Surveys

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7964

Records accompanying survey:

Boat sheets 1(3 Parts)bunding vols. 4.t9.; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 6.Env..; + 4-Env.

special reports, etc. 1.Smooth.Sheet; 1 Descriptive Report; 1.Overlay.Tracing;

1-Overlay.tracing.(Filed.with.the.Descriptive.report).....

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

			Totals
		687 (1955)	Totals
Number of positions on sheet		1573 (1953)	2260 Total
Number of positions checked & plotted		84 AMC 50	134
Number of positions revised		10 3	13
Number of soundings revised (refers to depth only)		6 6	12
Number of soundings erroneously spaced		0 12	12
Number of signals erroneously plotted or transferred		— 1 added	1
Topographic details	Time	— 8	8
Junctions	Time	— 4	4
Verification of soundings from graphic record	Time	4 50	54

Prelim. Verif. by: T.A.Dinsmore 60 7-16-54

Add'l. Plotting H.R. SMITH 16 7-20-54

Verification by H.R. SMITH Total time 314 392 Total Date 2-27-72

Reviewed by T.A.Dinsmore Time 40 Date 7/22/54

M-2232-1

RH C

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography 11 January 1957

Division of Charts: R. H. Carstens

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 7964

Locality Core Sound, N. C.

Chief of Party: M. T. Paulson in 1955
Plane of reference is mean low water, reading
0.9 ft. on tide staff at Harkers Island
6.7 ft. below B. M. 1 (1955)

Height of mean high water above plane of reference is 1.4 feet

Condition of records satisfactory except as noted below:

William Shofner

Chief, Division of Tides Branch

U. S. GOVERNMENT PRINTING OFFICE 756675

SUPPLEMENTARY
DESCRIPTIVE REPORT
TO ACCOMPANY

Hydrographis Survey H-7964

EAST COAST FIELD PARTY — M. T. PAULSON - CHIEF OF PARTY

PROJECT CS-352 — SCALE 1:10,000

PROJECT: This survey was accomplished under instructions 222/MEK S-2-HI; F.P.-East Coast dated 25 September 1952 and supplemental instructions 22-rct FP-East Coast dated 12 April 1955. Supplementary instructiohs were contained in a letter, 22/MEK of 11 May 1955 to Ens. Edwin K. McCaffrey.

SURVEY LIMITS AND DATES: The general area of the survey on sheet H-7964 is the natural channel and adjacent areas immediately west and south of Harkers Id., N.C. Hydrography south of the island did not progress past meridian 76°-31'-20" W. Field work on this project began 20 April 1955 and ended 23 May 1955. Hydrography was run on this sheet when adverse weather conditions prevented field work on the special Cape Lookout Shoals project. At the close of the Cape Lookout project, and in compliance with the supplemental instructions boat sheet H-7964, andaccompanying project data was turned over to the commanding officer ships PARKER-BOWEN-STIRNI on 31 May 1955.

VESSELS AND EQUIPMENT: Launch CS-175 was used entirely during this survey. It operated from a mooring, out of the party base at Marshallberg, North Carolina.

Echo soundings were obtained with 808 type fathometer number 77, operated with transducers mounted in board in the launch bilges. All soundings are in feet.

There was no length correction applied to handlead soundings.

TIDES AND CURRENTS: The tide station was maintained at Davis' wharf, Harkers Id., N. C. The tide note is appended to this report. No current observations were made on this project.

SMOOTH SHEET: The smooth sheet is to be plotted by the Norfolk Processing Office.

CONTROL STATIONS: The control consisted mainly of triangulation and recoverable typographic stations.

All necessary hydrographic stations were located by three or more sextant cuts , the station.

A list of control stations is appended to this report.

SHORELINE AND TOPOGRAPHY: Shoreline and typographic details were previously transferred tothis sheet from air-photo compilation sheets T-8744 & T-8745 by the prior survey on this sheet. There were no additions or revisions to shoreline made by this survey.

SOUNDINGS: All soundings were taken with graphic recorder number 77, sounding pole and hand lead. Bottom samples were obtained using an armed hand lead.

CONTROL OF HYDROGRAPHY: Sounding lines were controlled by the standard 3-point sextant fixes, method. No unusual position jumps were observed in changing control stations. Fixes were taken at 1½ minute intervals.

Check angles were taken to verify the location of all detached positions.

ADEQUACY OF SURVEY: This survey is a continuation of a prior survey on this sheet. An excellent junction was made with soundings at the prior survey, west of Harkers Id. The survey was not finished. That portion completed is considered adequate to supersede prior surveys.

CROSSLINES: Crosslines in the surveyed area had satisfactory crossings.

COMPARISON WITH PRIOR SURVEYS: The prior survey of April 1953 terminated to the west and south west of Harkers Id.; approximately along meridian 76°-35'-30". A satisfactory junction was made with this survey with good agreement of soundings.

No prior survey was available for comparison with the presently surveyed area.

COMPARISON WITH CHART: The boat sheet, as previously noted, is not presently available for detailed comparison with chart 420. Therefore the following comparison will necessarily be of a general nature.

The pile charted in lat. 34°-37.71'; longitude 76°-31.65' was not investigated.

Steep Point Channel, and the channel in Bardens Inlet were not investigated.

In the vicinity of 34°-42.25'; 76°-35.30' an investigation was made to determine the eastward extent of the shoal, and the width and depth of the channel adjacent. It was determined that the low water line in this vicinity extended eastward to longitude 76°-35.28'. The minimum width of the channel was ~~50~~ meters, its depth 6' feet; both occuring in latitude 34°-41.95', longitude 76°-35.~~23~~11'.

No other special investigations were made.

DANGERS AND SHOALS: There were no new dangers and shoals located by this survey.

COAST PILOT: The launch and party based out of Marshallberg, N. C. Coast Pilot notes for this area are deemed adequate, and no additions or revisions are recommended.

AIDS TO NAVIGATION: There were no fixed or floating aids to navigation located in this survey. The several beacons charted in this area were previously located by triangulation or topographic methods.

LANDMARKS: There are no new landmarks recommended for charting.

GEOGRAPHIC NAMES: There are no changes or additions to geographic names to report.

Respectfully submitted,

Edwin K. McCaffrey

Edwin K. McCaffrey
Ens. U.S.C. & GS

Approved & Forwarded
Marvin T. Paulson
LCDR USC & GS
Chief of Party

TIDE NOTE TO ACCOMPANY

Hydrographic Survey Sheet H-7964

Tide data for the reduction of soundings was obtained from a portable automatic tide gage at Davis' whaft, Harkers Id., N. C. The gage was maintained by party personnel. The mean low water place of reference, on the tide staff, was furnished by the Washington Office.

STATION	LATITUDE	LONGITUDE	MLW on STAFF
Davis' Whaft, Harkers Id.,N.C.	34°-41.16'	76°-32.08'	0.9'

APPENDIX A

APPROVAL SHEET

The records and boat sheet for the hydrography on sheet H-7964 have been inspected and approved.

This survey was accomplished in conjunction with the Cape Lookout Shoal survey when weather prevented hydrographic operations offshore. Field records were turned over to the Comdg Officer PARKER for completion when the party departed Cape Lookout area.

Marvin T. Paulson
LCdr., C&GS, OinC
East Coast Field Party

LIST OF SIGNALS
To Accompany

H-7964 (1955 add. work)

TRIANGULATION STATIONS

LUM	THE LUMPS BEACON (BOTTLE RUN PT. BN.), 1933
SAM	SAM 2, 1949
SHEL	SHELL POINT BEACON, 1933

TOPOGRAPHIC STATIONS — SOURCE T-8745

Dav

HYDROGRAPHIC STATIONS

Abe	Vol. 1, pg. 3-16
Day	Vol. 1, pg. 3
Mag	Vol. 1, pg. 3
Tin	Vol. 1, pg. 3-68
Tup	Vol. 1, pg. 3

STATISTICS TO ACCOMPANY HYDROGRAPHIC SHEET H-7964

DATE 1955	DAY LETTER	VOL.	NO. OF POS.	STAT. MI SOG LINES
20 April	a	1	89	14.8
26 April	b	1	114	19.1
27 April	c	2	36	6.4
28 "	d	2	83	13.8
11 May	e	2-3	96	15.4
12 "	f	3	81	11.9
16 "	g	3	77	12.2
17 "	h	3-4	68	11.9
23 "	j	4	43	6.2
TOTALS:		4	687	111.3

Area Survey 5.2 sq. st. mi.

PROJECT CS-352

HYDROGRAPHIC SHEET H-7964

VELOCITY CORRECTION ABSTRACT
containing;

SUMMARY OF BAR CHECKS and

VELOCITY CORRECTIONS for

Fathometer No. 77-Launch CS-175

20 April-23 May 1955, inclusive.

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-7964

Field No. ECFP-1252

State NORTH CAROLINA

General locality CORE SOUND

Locality HARKERS ISLAND

Scale 1:10,000 Date of survey 20 Apr. to 23 May 1955

Instructions dated 25 Sept. 1952; 12 April 1955; 11 May 1955

Vessel EAST COAST FIELD PARTY

Chief of party M. T. PAULSON

Surveyed by E.K. McCaffrey & C.W. Tupper

Soundings taken by ~~echo sounder~~, graphic recorder, hand lead, wire

Fathograms scaled by East Coast Field Party

Fathograms checked by Norfolk District Office

Protracted by W.W. Feazel

Soundings penciled by W.W. Feazel

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

REMARKS: This report covers additional work accomplished during the 1955 field season.

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

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7964 (Add.,Work 1955 Season)

GENERAL

This report covers additional work accomplished during the 1955 field season which is shown on the smooth sheet with purple position numbers.

OVERLAYS

All positions and soundings falling in the area covered by the title stamp and a few positions falling off the edge of the sheet, are being submitted on an overlay to accompany H-7964.

The following positions and soundings appear on the overlay: 38 to 42e; 60 to 64e; 81 to 93e; 12 to 71g and 64 to 68h.

SOUNDINGS

Soundings agree very well at crossings with the exception of some depths on j-day (purple), where disagreement occurrs with the 1952 work in the vicinity of Lat.34-43.25 and Long. 76-33.15.

All soundings were reduced with a template.

Respectfully submitted,

Hugh L. Proffitt
Cartographer.

Norfolk, Va.
18 Dec. 1956

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. ECSP-Ba-53

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE: North Carolina

GENERAL LOCALITY: Beaufort Inlet and Vicinity

LOCALITY: Shackleford Banks and west of Morehead City

SCALE: 1/10,000

DATE OF SURVEY: Jan.-Feb., 19 53

VESSEL: East Coast Shore Party

CHIEF OF PARTY: Clarence R. Reed

SURVEYED BY: Robert B. Noble

INKED BY: Robert B. Noble

HEIGHTS IN FEET ABOVE MHW OR _____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR ——— APPROXIMATE CONTOUR ——— FORM LINE INTERVAL _____ FEET

PROJECT NUMBER CS-352

REMARKS

Report filed with 7964

12136

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. ECSP-Ca-53

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE: North Carolina

GENERAL LOCALITY: Beaufort Inlet and Vicinity

LOCALITY: North River and Harkers Island

SCALE: 1/10,000

DATE OF SURVEY: Feb., 1953

VESSEL: East Coast Shore Party

CHIEF OF PARTY: Clarence R. Reed

SURVEYED BY: Lionel D. Kelley

INKED BY: Lionel D. Kelley

HEIGHTS IN FEET ABOVE MHW OR _____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR ——— APPROXIMATE CONTOUR ——— FORM LINE INTERVAL _____ FEET

PROJECT NUMBER: CS-352

REMARKS

12136

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. ECSP-Bb-53

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE: North Carolina

GENERAL LOCALITY: Beaufort Inlet and Vicinity, N.C.

LOCALITY: Cape Lookout

SCALE: 1/10,000

DATE OF SURVEY: Jan.-Feb., 1953

VESSEL: East Coast Shore Party

CHIEF OF PARTY: Clarence R. Reed

SURVEYED BY: Robert B. Noble

INKED BY: Robert B. Noble

HEIGHTS IN FEET ABOVE MHW OR _____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR —·— APPROXIMATE CONTOUR ——— FORM LINE INTERVAL _____ FEET

PROJECT NUMBER: CS-352

REMARKS

12136

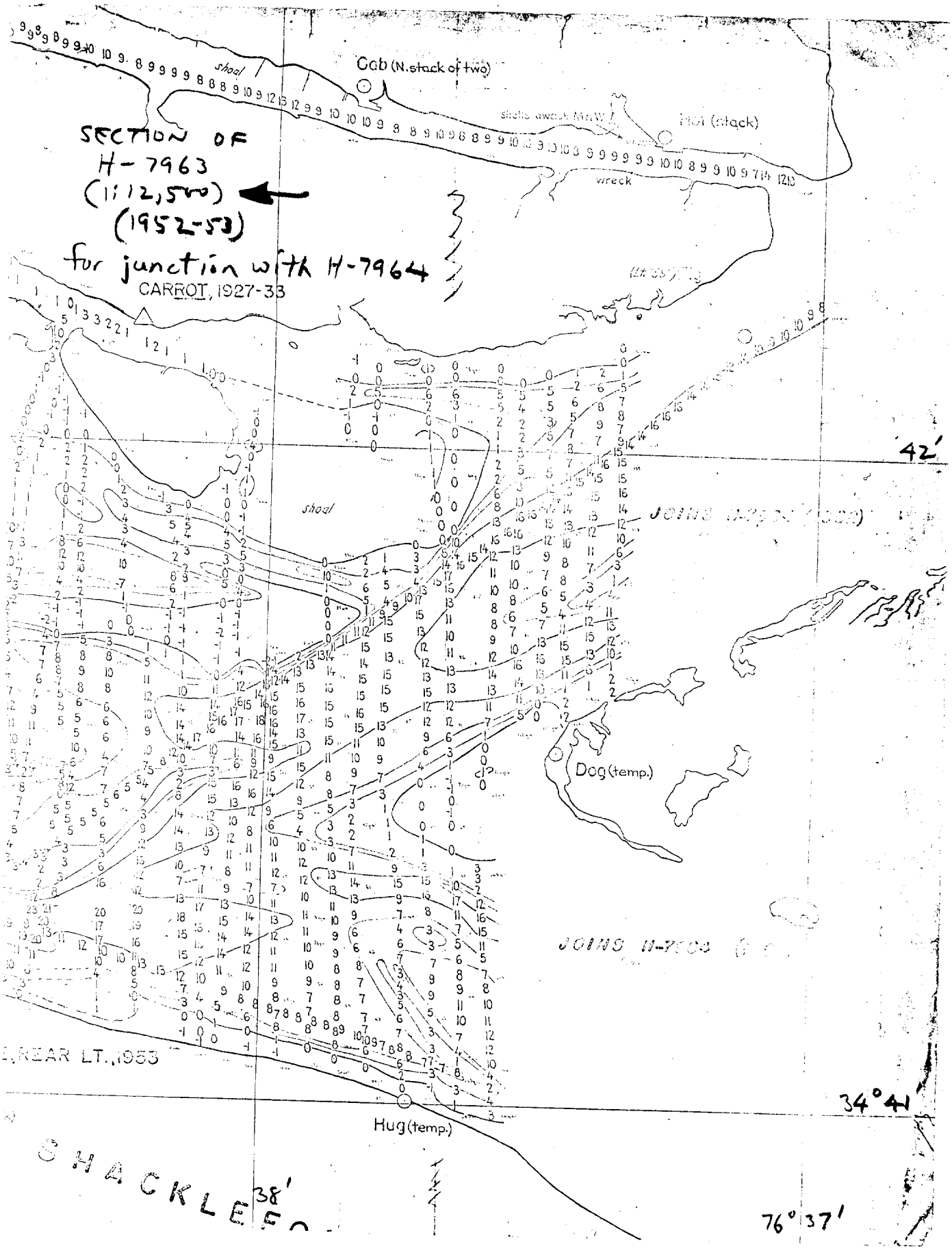
Summary of Bar Checks
Sheets H-7964 & ECFP-1155
Correction in Feet: Fath #77
A Scale

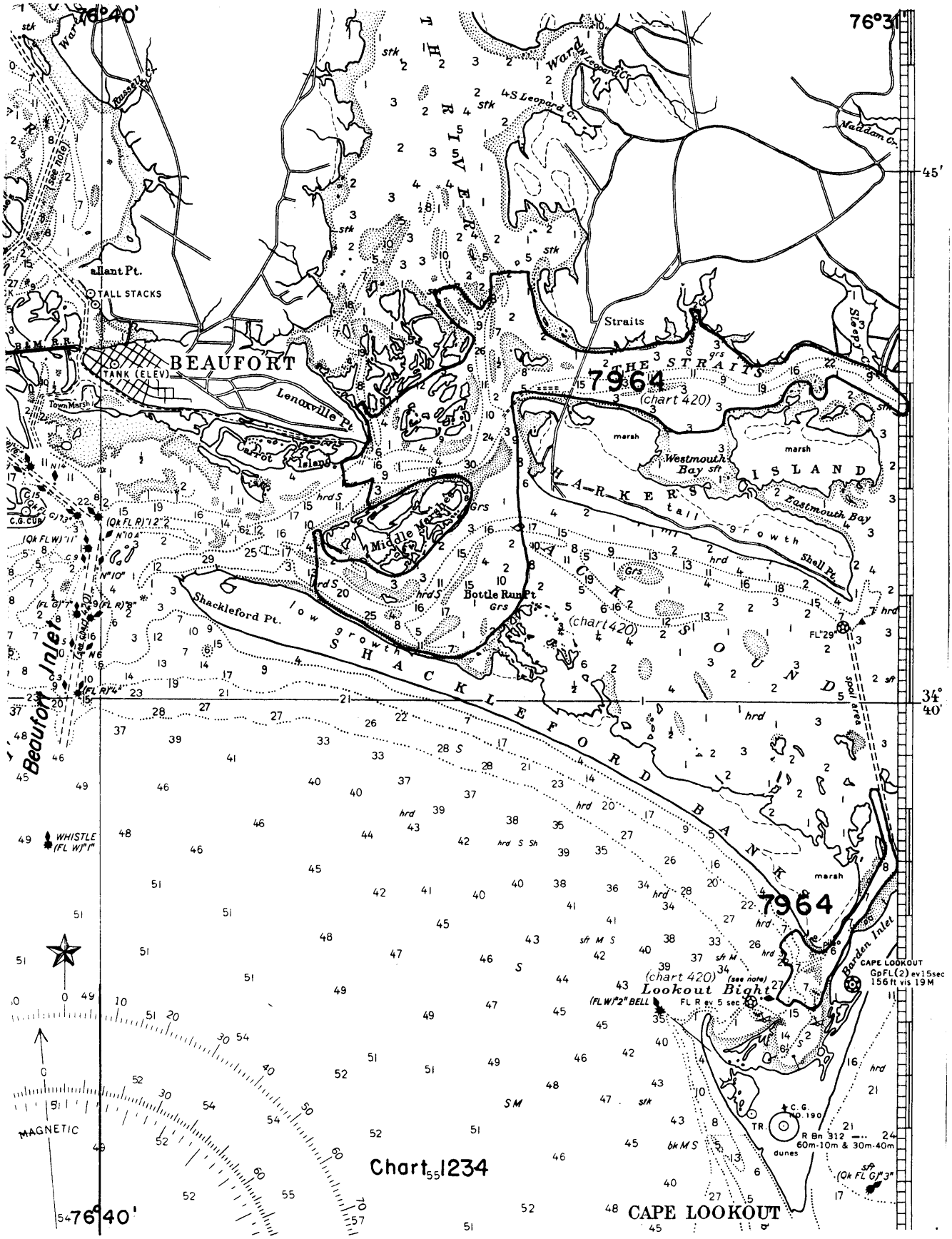
Date	Day Letter	6'	12'	18'	24'	30'
4-18-55	b	+0.2	+0.2			
		+0.2	+0.1	+0.2	—	—
4-19-55	c	0.0	+0.2	0.0	+0.2	
		0.0	+0.2	0.0	+0.2	0.0
5-4-55	f	0.0	+0.2	+0.2	0.0	
		0.0	0.0	—	0.0	—
5-5-55	g	-0.2	0.0	0.0	0.0	—
5-12-55	K	0.0	0.0	+0.2	+0.2	0.0
5-19-55	m	0.0	0.0	0.0	0.0	0.0
5-26-55	p	-0.2	0.0	0.0	-0.2	-0.2
4-26-55	b *	+0.1	+0.1	—	—	—
5-17-55	h *	0.0	0.0			
		0.0	0.0	—	—	—
	Sum	+0.1(13)	+1.0(13)	+0.6(8)	+0.4(8)	-0.2(4)
	Mean	+0.01	+0.08	+0.07	+0.05	-0.05

B-C-D Scales not used in this survey.

* From Back Sound - H-7964

Since the above mean values do not exceed ±0.10 ft.; no velocity corrections need be applied to soundings taken with this fathometer


SECTION OF
H-7963
(1:12,500)
(1952-53)
for junction with H-7964
CARROT, 1927-33
Cab (N. stack of two)
shoal
shoal
wreck
Dog (temp.)
Hug (temp.)
42'
34°41
76°37'
38'
SHACKLE
REAR LT., 1953


76°40'
76°31'
45'
34°40'
BEAUFORT
TALL STACKS
TANK (ELEV)
Lenoxville Pt.
Carrot Island
Middle Marshes
Bottle Run Pt.
Shackleford Pt.
Beaufort Inlet
THE STRAITS
Straits
Westmouth Bay
Eastmouth Bay
HARKERS ISLAND
Shell Pt.
SHACKLEFORD BANKS
Lookout Bight
(chart 420)
7964
CAPE LOOKOUT
GpFL(2) ev15sec
156ft vis 19M
Barden Inlet
WHISTLE
(FL W)"1"
(FL W)"2" BELL
FL R ev 5 sec
C.G. No. 190
R Bn 312
60m-10m & 30m-40m
dunes
MAGNETIC
Chart 1234
76°40'
CAPE LOOKOUT

VERIFICATION NOTE
FOR Survey H-7964

GENERAL

In this area of very irregular and changeable bottom soundings are in generally good agreement at crossings and, except for the unaccountable holidays and the many areas where sounding lines are sparce and developement lacking, depth curves adequately delineate the many channels, sloughs and shoals.

Limit lines from the air-photo compilations were used to supplement the hydrography, particularly in the areas of tidal flats. The compilations were compiled from 1946 photographs and there was naturally some disagreement with the 1952-55 hydrography in this changeable area.

JUNCTIONS

A junction was effected with H-7963 to the Westward. Junctional soundings for other adjoining surveys were not furnished.

Hugh L. Proffitt
Chief, Verification Branch, AMC

Norfolk, Va.
March 27, 1972

R/+ C

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

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~ 25 May 1954

Division of Charts: R. H. Carstens

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 7964

Locality Harkers Island, North Carolina

Chief of Party: C. R. Reed in 1953
Plane of reference is mean low water, reading
2.2 ft. on tide staff at Lookout Bight
8.5 ft. below B. M. 5 (1926)

3.2 ft. on tide staff at Morehead City
10.2 ft. below B. M. 1 (1927)

Height of mean high water above plane of reference is as follows:
Lookout Bight = 3.7 feet
Morehead City = 2.5 feet

NOTE: Tide reducers for positions 3a - 55a inclusive in Volume 8 have been revised in red, these revisions have been verified

Condition of records satisfactory except as noted below:

E.C. McKay
Tides Branch
Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 877033

7140

7820

7793

7932

7937

33'

41'

76° 32'

41'

34° 40'

34° 40'

39'

39'

33'

76° 32'

OVERLAY
TO ACCOMPANY
ECSP 1252 — H-7964

LAUNCH CS-175 (VIOLET)
VOL. NO. 2
POSITION 38e to POSITION 42e
POSITION 60e to POSITION 73e

VOL. NO. 3
POSITION 74e to POSITION 93e
POSITION 12g to POSITION 71g

VOL. NO. 4
POSITION 64h to 68h

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7964

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
May '54	1233	Eaton	Before [redacted] Verification and Review Partially
May '54	1234	Eaton	Before [redacted] Verification and Review Partially
Sept '54	420	J.A. McGann	~~Before~~ After Verification and Review
12-23-58	420	R.E. Elkins	add WK of 1955 in Jan 1967 this considered a complete application Before ~~After~~ Verification and Review
1-6-59	1233	R.E. Elkins	~~Before~~ After Prelim. Verification and Review 1953 work fully applied thru cht 420 dtg —.
1-6-59	1233	R.E. Elkins	Before ~~After~~ Verification and Review 1955 work partly applied - off thru cht 420 dtg —.
1/20/60	1234	W.E. MacEwen	Before verification of addl work [redacted] After Verification and Review of 1953 work. SMA
3/25/65	1234	O. Svendsen	No corr. (use chart 420) Before After Verification and Review
9-28-66	1233	J.T. Gallahan	Before After Verification and Review no corrections by drs deleted on cht in this area.
			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.