

6813

6813

<p>Form 504</p> <p>U. S. COAST AND GEODETIC SURVEY</p> <p>DEPARTMENT OF COMMERCE</p> <p>DESCRIPTIVE REPORT</p>	
Type of Survey	Hydrographic
Field No.	F-1143
Office No.	H 6813
<p>LOCALITY</p>	
State	North Carolina
General locality	Coast of North Carolina
Locality	Roanoke Sound
	North of Roanoke Island
	194 ____ 3
<p>CHIEF OF PARTY</p>	
	W.F. Deane
<p>LIBRARY & ARCHIVES</p>	
DATE	June 9, 1943

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. H6813

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. 1113

REGISTER NO. H-6813

H6813

State North Carolina

General locality Roanoke Sound
~~Coast of North Carolina~~

Locality Roanoke Sound North of Roanoke Island

Scale 1:10000 Date of survey March, 1943

Vessel Laund FARIS

Chief of Party William F. Deane

Surveyed by William F. Deane and Robert H. Randall, Jr.

Protracted by L. J. Walter

Soundings penciled by L.J. Walter

Soundings in ~~fathoms~~ feet

Plane of reference M L W

Subdivision of wire dragged areas by

Inked by R. J. Christman Nov. 30 1943

Verified by R. J. Christman Nov. 30 1943

Instructions dated Sept. 29
~~October 22~~, 1942

Remarks: This sheet was processed at the Norfolk Processing Office.

H6813

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SHEET NO. 1113 (FIELD)

LAUNCH FARIS

WILLIAM F. DEANE, CHIEF OF PARTY

PROJECT CS-296

1943

AUTHORITY:

This survey was executed in accordance with the Director's Instructions dated ~~October 22~~, 1942. ✓
Sept. 29,

SURVEY METHODS:

Standard survey methods were used, sounding lines being controlled by sextant fixes on shore objects whose positions were determined by sextant cuts with triangulation stations as control. A portable 808-D recorder was used for sounding from Launch 81. ✓

GENERAL:

Because of time limitations, the project was not completed to the inshore limits, priority being given to the offshore area as authorized by the Director's letter of March 16, 1943. However, sounding lines were carried inshore to the boundary defined by the many existing fish pounds that make out from Reaneke Island and which, together with the submerged remains of stakes from former traps, make progress in this area hazardous. ✓

Bar checks were made at least three times during each working day, there being at no time any initial or echo corrections indicated. Lack of time prevented the taking of serial temperatures, though it is thought that the absence of any water deeper than two fathoms would have kept velocity corrections to a negligible amount. ✓

The gain control of the fathometer was not kept at its maximum setting because of interference, at higher settings, from the launch hull, the fish having been raised somewhat to avoid damaging it on sheals. The consistent accuracy of bar checks indicates that the gain control setting used for hydrography provided an exact profile of the bottom throughout. ✓ 28

The only aid to navigation present in the area, a red third class nun, was located. The fish pounds were not located since their stakes are too insubstantial to indicate that the present positions are permanent. ✓

DANGERS:

There were no dangers to navigation found in the area surveyed. ✓

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DISCREPANCIES AND CROSSINGS:

On only one of the days during which hydrography was carried on was sea sufficiently rough to allow question as to depths scaled from the fathograms. Since no crossing revealed a discrepancy of depth greater than one half foot, scaled soundings and tide reductions seem to be satisfactory.

ANCHORAGES:

Bottom characteristics reveal that nearly the entire area consists of broken shell and fine sand. The exception, an area of soft mud appearing in the extreme southwest corner of the area, would provide good holding and depth sufficient to take advantage of the lee of the nearby bluffs on Reaneke Island which offer protection from southeasterly winds.

CHANNELS:

There are no defined channels in the area, the waters to a considerable distance north of the red nun buoy giving a vessel rounding it uniform depths of nine feet and greater.

COMPARISON WITH PREVIOUS SURVEYS:

Except for indications of possible modifications in the delineation of the shoal area in the northwest section and the failure to check the seven foot shoal in the southeast section (Lat. 35° 57.18', Long. 75° 40.57'), the depths appearing on corresponding areas of Hydrographic Survey H 3772 (1915) were closely substantiated. Lack of time prevented investigation of the seven foot shoal, though a sounding line passed directly over the shoaled position on H 3772 without showing any shoal indications. Present survey shows 8 ft. Old Records for H-3772 show 7.7 ft. Disregard 7 on H-3772.

Comparison with the Army Engineers' survey of August, 1942, reveals a fairly uniform increase in depth of a half foot to a foot where sounding lines cross boundary between surveys, indicating the possibility of a difference in datums. B.P. 36506 of Aug. 1942. Engineer's datum was about 0.2 foot lower than C.+G. S. plane.

STATISTICS:

Statute miles of sounding lines (continuous profile) 111.8
Number of positions 429
Area in square statute miles 5.4

Respectfully submitted,

William F. Deane
William F. Deane,
H. & G. E.

APPROVED AND FORWARDED:

William F. Deane
William F. Deane, H. & G. E.,
Chief of Party.


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ADDENDUM

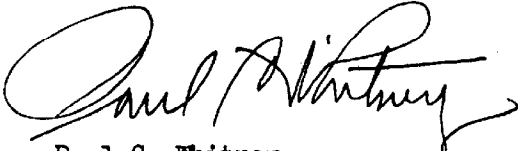
HYDROGRAPHIC SHEET NO. H-6813

This sheet was processed at the Norfolk Processing Office.

Respectfully submitted,


Isadore M. Zeskind
Associate Cartographic Engineer

Norfolk, Va.
June 7, 1943


Paul C. Whitney
Supervisor, S. E. District

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Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. ⁶⁸H. 6813..

Records accompanying survey:

Boat sheets ..1; sounding vols. ..2.; wire drag vols. ..0.;
bomb vols. ..0...; graphic recorder rolls .4...;
special reports, etc.
.....

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

Number of positions on sheet	.....	429
Number of positions checked	.....	35
Number of positions revised	.....	4
Number of soundings recorded	.....	continuous profile approx 1200 depths recorded
Number of soundings revised (refers to depth only)	.....	13
Number of soundings erroneously spaced	.....	—
Number of signals erroneously plotted or transferred	.....	—
Topographic details	Time	—
Junctions	Time	—
Verification of soundings from graphic record	Time	8

Verification by *R. J. Christman* Total time .42. Date *Nov. 29, 1943*

Review by *J. A. McCormick* Time .5 hrs. Date *12/2/43.*

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Remarks

Decisions

	Remarks	Decisions
1		U.S.G.B.
2		358755
3		358756
4		
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9	Location of tide staff.	359756 U.S.G.B.
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GEOGRAPHIC NAMES

Survey No. **H6813**

Name on Survey	A.	B.	C.	D.	E.	F.	G.	H.	K.	
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
North Carolina										1
Roanoke Sound										2
Roanoke Island										3
										4
										5
										6
										7
										8
Nags Head										9
										10
										11
										12
				L. HECK	12/17/43					13
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MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
 PHOTOSTAT OF

} No. H **H6813**
 } No. T

{ received June 10, 1943
 { registered June 10, 1943
 { verified
 { reviewed
 { approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
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✓ 26 28 30	Page 1	KTA	
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62			
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83			
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90			

RETURN TO

82	R.W.Knox
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VBWk

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HNE

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 17, 1943

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 6813

Locality Roanoke Sound, North Carolina Coast

Chief of Party: William F. Deane in 1943
Plane of reference is mean low water reading
1.2 ft. on tide staff at Nags Head
3.9 ft. below B. M. 5

Condition of records satisfactory except as noted below:

E. K. Green
Chief, Division of Tides and Currents.

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6813

Field No. 1143

North Carolina; Roanoke Sound; North of Roanoke Island
Surveyed in March 1943; Scale 1:10,000
Instructions dated September 29, 1942 (Project C.S. 296)

Soundings:

Control:

808 Recorder

Three-point fix on shore signals

Chief of Party - W. F. Deane
Surveyed by - W. F. Deane; R. H. Randall
Protracted by - L. J. Walter
Soundings plotted by - L. J. Walter
Verified and inked by - R. J. Christman
Reviewed by - J. A. McCormick
Inspected by - H. R. Edmonston, December 2, 1943

1. Control

Triangulation stations in the area were supplemented by hydrographic signals located by sextant fixes and cuts. No topography was done.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

Satisfactory.

4. Adjoining Surveys

The Coast and Geodetic Survey has made no other surveys in this area in recent years. However, a survey by the U. S. Engineers in August 1942 (B.P. 36506), joins the present survey on the west and extends 1/2 mile beyond Collington Island Shoal Light. Differences do not exceed 1/2 foot where the two surveys overlap.

5. Previous Surveys

H-257 (1850-51), 1:20,000; H-3772 (1915), 1:20,000

A comparison of H-3772 with the present survey shows a shoaling of about 2 feet in Lat. $35^{\circ}57.4'$, Long. $75^{\circ}43.8'$. The 6-foot curve now extends 1/2 mile farther south than it did in 1915. The U. S. Engineers' survey on the west shows similar shoaling in the vicinity of Collington Island Shoal Light. East of Long. $75^{\circ}43'$ differences between H-3772 and the present survey do not exceed one foot, H-3772 being the deeper in some places and shoaler in others. The older surveys can be considered superseded in the common area.

6. Comparison with Chart 1229 (Print of Oct. 19, 1943)

Critical depths have been added to the chart from B.P. 36506 and from the present survey (before inking). All other depths charted in the area are from H-3772 (1915). The 7-ft. depth charted in Lat. $35^{\circ}57.1'$, Long. $75^{\circ}40.5'$ is 200 meters south of the sounding with which it originated on H-3772. As the sounding actually reduced to 7.7 feet in the old records, it can be disregarded in favor of the 8-ft. depths on the present survey. The reviewed survey supersedes all of the depths now charted in this area.

Survey positions of navigational aids in the area agree closely with those on the chart.

7. Compliance with Project Instructions

Satisfactory.


8. Additional Field Work Recommended

None.

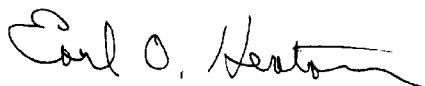
Examined and approved:



Chief, Surveys Branch



Chief, Division of Charts



Chief, Section of Hydrography



Chief, Division of
Coastal Surveys

applied to chart 1229 drawing, before verification of sheet. Oct 13, 1943 W.D.B.
" " " " C.P. after " " " July 13, 1946 G.C.M.G.