## 6833

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. 4 Office No.

LOCALITY

State\_\_\_\_VIRGINIA

General locality Norfolk, Virginia

Locality Naval Operating Base Becks

194 3....

CHIEF OF PARTY

Wilbur R. Porter

LIBRARY & ARCHIVES

DATE AUG 4 1943

B-1870-1 (1

#### 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 possiole, when the sheet is forwarded to the Office.

> REGISTER No. 4 Field No.

StateVirginia	
General locality Norfolk, Virginia	
Locality Off Naval Operating Base Books	
Scale 1:2500 Date of survey June & July 1943	
Instructions dated March 29, 1943	
VesselLaunch FARIS	
Chief of party Wilbur R. Porter	
Surveyed by Wilbur R. Porter	
Soundings taken by fathometer, graphic recorder, hand lead, wire	
Protracted by W. W. Feazel and L. L. Lawrence	
Soundings penciled by L. L. Lawrence	
Soundings in XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
REMARKS: This sheet was processed at the Norfolk Processing Office.	
	-

#### DESCRIPTIVE REPORT

#### TO ACCOMPANY

Sheet No. 4 (Field)

Project C.S.-305 1943

#### AUTHORITY:

This survey was executed under Instructions dated March 29, 1943.

#### SCOPE:

The area in the vicinity of the Naval Operating Base docks from the Virginia Coal Pier north to the northern limits of the Base and westward to the aredged channel.

#### SURVEY METHODS:

Standard procedure was employed thrucut this survey. The hydrography was done on a scale of 1/2500. Control was established by three point fixes with a theodolite and supplemented by an accurate plane table survey. (See report sheet No. 2). All sounding lines were accurately controlled by sextant fixes taken from a point close to the fish. All soundings were made with an 808 depth recorder.

A portable tide gage was operated near Pier No. 2 at the Naval Operating Base.

From two to three bar checks were taken daily.

Constant ship and small boat traffic interferred greatly with the work. Due to the large scale it was necessary in order to control the lines, to run at as slow a speed as possible; the swells set up by passing ships, ferries, and small craft caused great difficulty in running straight lines and maintaining a uniform speed. The necessity of taking fixes a minute to a minute and a quarter apart without an extra angleman left little time for close supervision by the chief of Party.

It was found impossible during the period this work was carried on to make surveys of but one slip. Ships, barges, tugs, and smaller craft were either alongside or in movement at all times. The slip surveyed was not completed for the same reason. After consulting with the Supervisor of the Southeastern District it was decided not to attempt to complete the slips at this time. However, these slips can be surveyed at a more quiet time without additional control by using the latest topographic sheet and a tape to locate signals.

#### DANGERS:

Lighted buoy No. 7 charted as at edge of the 39 foot dredged channel is 50 meters east of the channel in 32 feet of water. There is 23 feet about 150 meters south and west of the buoy.

#### DESCREPANCIES AND CROSSINGS:

There were no discrepancies and crossings were mostly good.

#### COMPARISON:

About a 12 foot general shoaling is indicated north of the Virginia Coal Pier. There has been considerable dredging and building in all areas in vicinity of the Naval Operating Base since the last survey and consequently this survey varies considerably from present charted depths.

## 83 25

#### STATISTICS:

Statute miles of sounding lines	56.5
Number of positions	795
Area in square statute miles	0.5
Continuous profile	

Respectfully,

Wilbur R. Porter,

In charge Launch FARIS.

WRP/r

H6833

SHEET F-4 (Field)

PROJECT CS-305, M.V. FARIS

#### DISCREPANCIES:

Latitude 36°56'44" and Longitude 76°20'12", 8-11 c (Red).

Line omitted because area is adequately covered by other

This line does not agree with the adjacent hydrography. The soundings appear to be about 6 ft. too deep in some instances.

Respectfully submitted,

Isadore M. Zeskind

Associate Cartographic Engineer

Norfolk, Va. July 31, 1943

Approved and forwarded.

Paul C. Whitney

Supervisor, S. E. District

# Surveys Section (Chart Division) 1000 H6833

Records accompanying survey:
Boat sheets 1; sounding vols. 3; wire drag volsQ;
bomb vols; graphic recorder rolls .5;
special reports, etc. none
***************************************
The following statistics will be submitted with the content
The following statistics will be submitted with the cartog- rapher's report on the sheet:
Number of positions on sheet
Number of positions checked
Number of positions revised
Number of soundings recorded 6155
Number of soundings revised 3 (refers to depth only)
Number of soundings erroneously 5 / spaced
Number of signals erroneously plotted or transferred
Topographic details Time
Junctions Timehr
Verification of soundings from graphic record Time
Verification by P.J. Cohnistman. Total time 73.45 Date Mov. 4.1943
Review by F.H. Caroleus Time 232. Date Nov. 9/1943

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## MEMORANDUM IMMEDIATE ATTENTION

,			received Aug	• 4, 1943	
SURVEY DESCRIPTIVE REPORT PHOTOSTAT OF	No. H No. T	H\$833	registered verified reviewed approved	August 5, 1	943
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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
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#### TIDE NOTE FOR HYDROGRAPHIC SHEET

August 10, 1943.

Division-of-Hydrography-and-Topography:

Division of Charts: Attention: H? R. EDMONSTON

Plane of reference approved in 3 volumes of sounding records for

HYDROGRAPHIC SHEET 6833

Locality Naval Operating Base, Norfolk, Va.

Chief of Party: Wilbur R. Porter in 1943 Plane of reference is mean low water reading 3.8 ft. on tide staff at Naval Operating Base 13.4 ft. below B. M. 6

Height of mean high water above plane of reference is 2.5 ft.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

сотвенныму различе сурков 1548

#### DIVISION OF CHARTS

#### REVIEW SECTION - SURVEYS BRANCH

#### REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6833

Field No. 4

Virginia, Norfolk, Naval Operating Base Surveyed June - July 1943; Scale 1:2,500 Instructions dated March 29, 1943

#### Soundings:

Control:

808 Fathometer

Three-point fix on shore signals

Chief of Party - W. R. Porter
Surveyed by - W. R. Porter
Protracted by - W. W. Feazel and L. L. Lawrence
Soundings plotted by - L. L. Lawrence
Verified and inked by - R. J. Christman
Reviewed by - R. H. Carstens
Inspected by - H. R. Edmonston, November 15, 1943

#### 1. Shoreline and Signals

The shoreline and signals originate with T-6914 (1943).

#### 2. Sounding Line Crossings

Satisfactory.

#### 3. Depth Curves

Satisfactory.

#### 4. Junctions with Contemporary Surveys

A satisfactory junction was effected with H-6832 (1943) on the northeast. On the south a holiday 185 meters wide separates the present survey from H-6815 (1943). There are no contemporary surveys to the west or north.

#### 5. Comparison with Prior Surveys

H- 447 (1854)	1:20,000;	H-1188 (1873)	1:20,000
H-2861 (1907)	1:10,000;	H-3923 (1916-17)	1:30,000
H-3982 (1917)	1: 5,000;	H-4084 (1919)	1:10,000
H-4104 (1919)	1: 5,000		

Dredging operations and new construction have altered depths by varying amounts since these prior surveys were accomplished. Original depths of 20-26 feet in 1854 have been increased in places to as much as 44 feet on the present survey. Since 1919 spoil dumped in the vicinity of Lat. 36°56.7', Long. 76°20.2' has decreased depths from a prior 34 feet to the present 21 feet. Because of the changes in the bottom the present survey should supersede these prior surveys within the common area.

## 6. Comparison with Chart 400 (Latest print date 6-2-43)

#### a. Hydrography

The charted hydrography within the limits of the present survey originates with the previously discussed surveys which need no further consideration and with blueprints 32872 (1938), 18964 (1924) and 17467 (1920). Since dredging and changes in the bottom have occurred subsequent to the dates of these blueprints the present survey should supersede them as the source of soundings within the common area. The 15- and 16-ft. soundings to the north of the pier in Lat. 36°56.5' are hand corrections from the present survey.

### b. Controlling Depths

The charted value of the controlling depth in the main ship channel is in agreement with the present survey value; the charted value of the dredged depth off Piers 2 - 7, originating with Chart Letter 610 (1942), differs by as much as 10 feet with the present survey value.

#### c. Aids to Navigation

The present survey positions of aids to navigation are in satisfactory agreement with the charted positions and adequately mark the features intended except that no survey positions were given for buoys S-2 in Lat. 36°56.7', Long. 76°20.1' and S-4 in Lat. 36°57.3', Long. 76°19.7'. The survey position of buoy 7 in Lat. 36°56.7', Long. 76°20.2' is 80 meters northeast of the charted position and no longer satisfactorily marks the edge of the 39-ft. channel. The spar buoys in the vicinity of Lat. 36°57.3', Long. 76°20.1' are probably temporary buoys used in dredging.

## 7. Condition of Survey

Satisfactory.

## 8. Compliance with Instructions for the Project

Satisfactory, except that as mentioned in the Descriptive Report the survey of the slips was not completed on the present survey.

### 9. Additional Field Work Recommended

At a convenient time it would be desirable to complete the survey of the slips and to accomplish hydrography in the holiday between the present survey and H-6815 (1943) on the south.

### 10. Superseded Surveys

H- 447	(1854)	in	part
H-1188	(1873)	tt	_ H
H-2861	(1907)	11	ŧţ
H-3923	(1916-17)	Ħ	11
H-3982	(1917)	11	et
H-4084	(1919)	#	11
H-4104	(1919)	11	11

Examined and approved:

Chief, Surveys Branch

Chief. Division of Charts

Chief, Section of Hydrography

Chief, Division of Coastal Surveys

applied to Charl 400 Dec. 24-27 1943 A.J. Stegman

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