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3913

Diag. Cht. No. 78-3 Form 504  
1222-2

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. 3 Office No. T6913  
a-b

LOCALITY

State VIRGINIA

General locality ~~WILLOUGHBY BAY~~, NORFOLK

Locality WILLOUGHBY BAY

1943

CHIEF OF PARTY

Wilbur R. Porter

LIBRARY & ARCHIVES

DATE August 4, 1943

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

T6913 a

TOPOGRAPHIC TITLE SHEET

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

Field No. 3

REGISTER NO. **T6913 a**

State Virginia

General Locality ~~Willoughby Bay~~, Norfolk

Locality Willoughby Bay

Scale 1:10,000 Date of survey June, 1943

Vessel Launch FARIS

Chief of party Wilbur R. Porter

Surveyed by Robert D. Singel

Inked by Robert D. Singel

Heights in feet above \_\_\_\_\_ to ground ~~to tops of trees~~

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated March 29, 1943

Remarks: \_\_\_\_\_

DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY

REG. NO.

16913

TOPOGRAPHIC TITLE SHEET

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

Field No. ....

REGISTER NO. **T 6913 b**

State.....**Virginia**.....

General locality.....**Willoughby Bay, Norfolk**.....

Locality.....*Vicinity of* **Municipal Piers (shore line) S. of Naval Operating Base**.....

Scale.....**1:2500**..... Date of survey.....**June**....., 19**43**..

Vessel.....**Launch Faris**.....

Chief of party.....**Wilber R. Porter**.....

Surveyed by.....**Robert D. Singel**.....

Inked by.....**Robert D. Singel**.....

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated.....**March 9, 1943**....., 19.....

Remarks:.....

.....**No descriptive report**.....

DESCRIPTIVE REPORT

T6913

To accompany Topographic Sheet 3

Project CS-305

1943

AUTHORITY:

The work on this sheet was done under authority of The Director's Instructions dated March 29, 1943 and in accordance with suggestions of The Supervisor of the Southeastern District. ✓

SCOPE:

The survey was done by a party from the Launch FARIS during June, 1943 to establish hydrographic signals around Willoughby Bay, Norfolk, Virginia. Detail of the shore line was tied in with the second order triangulation which was recently done by this party, in this area. ✓

CONTROL:

Topography was begun at triangulation station WILL and throughout the survey triangulation stations WILL, SUB, LAGOON, FLEET, CHAMBERS, AERO, MOORE, and SCHOOL were used for locating and orienting the table. ✓

METHODS:

Standard plane-table methods were used thruout. ✓

GENERAL:

As there were many triangulation stations of second order accuracy visible from the entire area, it was considered more accurate and expeditious to use stations located by three point problems thruout. This procedure limited all traverse to very short lines. ✓

The shoreline has changed very noticeably since the previous survey. ✓

All signals were located by two or more intersections or a single intersection and rod reading. ✓

MAGNETIC OBSERVATIONS:

As there were no stations established which were free of magnetic attraction, a point was located on the mud flat east of Willoughby Bay by a three point problem and duly checked for orientation. At this point a magnetic meridian was established. ✓

STATISTICS:

|                            |      |
|----------------------------|------|
| Statute miles of shoreline | 11.1 |
| Number of stations located | 23   |
| Square statute miles       | 3.5  |

Approved and Forwarded:  
*Wilbur R. Porter*  
Wilbur R. Porter,  
Commanding FARIS.

Respectfully Submitted:  
*Robert D. Singel*  
Robert D. Singel,  
Ensign, C&GS.

## Remarks

## Decisions

|    |  |                 |
|----|--|-----------------|
| 1  |  |                 |
| 2  |  | 368 762 U.S.G.B |
| 3  |  | 369 762 "       |
| 4  |  | " "             |
| 5  |  | 369 763         |
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# GEOGRAPHIC NAMES

Survey No. T6913 ab

| GEOGRAPHIC NAMES            |              |                        |                          |                        |               |                    |                    |                  |  |    |
|-----------------------------|--------------|------------------------|--------------------------|------------------------|---------------|--------------------|--------------------|------------------|--|----|
| Survey No. T6913 ab         |              |                        |                          |                        |               |                    |                    |                  |  |    |
| Name on Survey              |              |                        |                          |                        |               |                    |                    |                  |  |    |
|                             | 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 |  |    |
| A                           | B            | C                      | D                        | E                      | F             | G                  | H                  | K                |  |    |
| <u>Virginia</u>             |              |                        |                          |                        |               |                    |                    |                  |  | 1  |
| <u>Norfolk</u>              |              |                        |                          |                        |               |                    |                    |                  |  | 2  |
| <u>Willoughby Bay</u>       |              |                        |                          |                        |               |                    |                    |                  |  | 3  |
| <u>Willoughby Spit</u>      |              |                        |                          |                        |               |                    |                    |                  |  | 4  |
| <u>Naval operating Base</u> |              |                        |                          |                        |               |                    |                    |                  |  | 5  |
| <u>Sewall Pt.</u>           |              |                        |                          |                        |               |                    |                    |                  |  | 6  |
| <u>Municipal Piers</u>      |              |                        |                          |                        |               |                    |                    |                  |  | 7  |
|                             |              |                        |                          |                        |               |                    |                    |                  |  | 8  |
|                             |              |                        |                          |                        |               |                    |                    |                  |  | 9  |
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Names underlined in red approved  
by L. Heck on 11/1/43

M 234

Names underlined in red approved  
by L. Heck on 6/17/43

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
PHOTOSTAT OF

No. H

No. T

T 691<sup>5</sup><sub>3</sub> A B

received August 4, 1943  
registered August 4, 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 |
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RETURN TO

|    |           |
|----|-----------|
| 82 | R.W. Knox |
|----|-----------|

*Reut*

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. 6913a&b

Field No. 3

Virginia, Norfolk, Municipal Piers and Willoughby Bay  
Surveyed June 1943; Scales 1:10,000 and 1:2,500  
Instructions dated March 29, 1943

Plane Table Survey

Aluminum Mounted

Chief of Party - W. R. Porter  
Surveyed by - R. D. Singel  
Inked by - R. D. Singel  
Reviewed by - R. H. Carstens  
Inspected by - H. R. Edmonston, November 27, 1943

1. The "a" sheet of the present survey joins T-6914 (1943) on the west; the "b" sheet joins T-6914 (1943) on the north. No contemporary surveys join the present survey on the south (on the "b" sheet) or on the north (on the "a" sheet). The present survey shoreline at these points, however, is in satisfactory agreement for charting purposes, with prior surveys and blue-prints from which the shoreline was charted.

2. Comparison with Prior Surveys

|                  |          |
|------------------|----------|
| T- 502 (1853-54) | 1:20,000 |
| T-2632 (1903)    | 1:20,000 |
| T-2771 (1906)    | 1:10,000 |
| T-3647 (1916)    | 1:30,000 |
| T-3773 (1919)    | 1:10,000 |
| T-4525 (1929)    | 1:10,000 |

Numerous shoreline improvements have been made since these prior surveys were accomplished. Some natural change has occurred, particularly in the southwest shore of Willoughby Spit where a recession of 100 meters, in spots, has taken place. Agreement is good with respect to those man made improvements which have not been changed. Because of the numerous changes in the shoreline the present survey should supersede these prior surveys within the common area.

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

a. Topography

Within the limits of the present survey the charted shoreline originates with the previously discussed surveys which need no further consideration, with chart letter 610 (1942) showing changes in chart 400 in the vicinity of the Naval Operating Base and with blueprint 37393 (1943), the Air Photo Unit Correction Sheet for chart 400. Within the common area the present survey is adequate to supersede these latter sources of topographic information except for the dashed lines at the end of the landings in Lat.  $36^{\circ}57'$ , Long.  $76^{\circ}17'$  to Long.  $76^{\circ}18'$ .

4. Condition of Survey

Satisfactory. It is noted that the field computation of triangulation station MOORE (1943), a no check station, differs from adjusted values by about 10 meters.


5. Compliance with Instructions for the Project


Satisfactory.

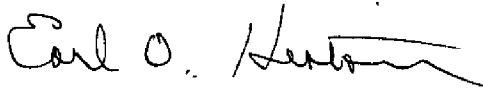
6. Superseded Surveys


|                  |         |
|------------------|---------|
| T- 502 (1853-54) | in part |
| T-2632 (1903)    | " "     |
| T-2771 (1906)    | " "     |
| T-3647 (1916)    | " "     |
| T-3773 (1919)    | " "     |
| T-4525 (1929)    | " "     |

Examined and approved

  
Chief, Surveys Branch

  
Chief, Division of Charts

  
Chief, Section of Hydrography

  
Chief, Division of  
Coastal Surveys