DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R.S. Patten, Director

State: Virginia

DESCRIPTIVE REPORT
Topographic | Sheet No. 4525
Hydrographic

LOCALITY
Norfolk:
Lafayette River, Naval Base
and Mason Creek

CHIEF OF PARTY
R.F. A. Studds, H. E. Finnegan
DESCRIPTIVE REPORT

to accompany the
Topographic Sheet "A"

Project No. 43

Introduction.

Original instructions dated July 20, 1929, and supplemental instructions dated September 30, 1929, which covered this work, were altered verbally from time to time as a result of conferences between the Division of Charts, the cartographer compiling the chart and the Chief of Party in charge of this survey.

This sheet comprises that part of Norfolk Harbor between Latitudes 36°51'30" and 36° 57'15" and Longitudes 76° 14'30" and 76° 20'15". This area includes the Lafayette River, Mason and Boush Creeks and their leads.

Because of the many improvements found along the Elizabeth River and the entrance to the Lafayette River, these were resurveyed. Portions where no changes had been made since the last survey (1919) were found to check satisfactorily.

This report covers the topographic work done in the above mentioned area. It is largely a description of changes found since the last survey and will assist in bringing the chart to date.

Shoreline, Wharves, Etc.

(1) In approximate Latitude 36° 56' 30", the Newport News ferry slip has been remodeled and improved.

(2) In approximate Latitude 36° 55' 50", the Municipal Terminals have been built. The grain elevator on this property is a tall prominent building.

(3) Just to the south of the Municipal Terminal the Standard Oil Company has constructed a fuel dock.

(4) In approximate Latitude 36° 55' 15" to the north of the U.S. S.B. Terminal (Army Base), a wooden breakwater has been constructed.

The above changes were shown on Chart 400 with the exception of No. 4. Other minor changes will be noted on the topographic sheet.
The Lafayette River, Mason and Boush Creeks were surveyed to their leads and satisfactory junction was made with T3773.

In approximate Longitude 76° 16' 30" and Latitude 36° 53' 15", the southerly arm of the Lafayette River, from Granby Street bridge to Cottage Toll Road bridge, was not surveyed according to supplemental instructions dated September 30, 1929. This shoreline is shown in pencil and was taken from U.S.E.D. surveys, in accordance with verbal instructions to the Chief of Party.

The area from Cottage Toll Road bridge to the lead of this arm was surveyed by the topographer.

Character of Control.

The control for the Lafayette River was a scheme of third order triangulation determined by the party of R. F. A. Studds. Control for that portion fronting the Elizabeth River was furnished from previous triangulation in this locality.

Mason and Boush Creeks were largely run by traverse having little control.

In the Lafayette River a traverse was run from \( \angle \) Bridge (1929) to the leads of the northerly arm, checking on \( \angle \) Black Stack (1929) on the northerly slough of the two branching from this arm of the river.

The southerly slough of the arm of the river was run by a closed traverse from Topographic Signal "Wb" to the lead of the slough. The extreme end of the slough is shown in the Sub Plan. This traverse closed five meters short in distance and three meters in azimuth. This error was not adjusted.

A number of short closed traverses were run up the various sloughs each checking well within the allowable limit.

On the southern arm of the Lafayette River three U.S.E.D. triangulation stations (L.E.G., L.E.H., & L.E.J.) were recovered and their positions transferred to our coordinates. With these as control stations that portion of the Lafayette River from Cottage Toll Road bridge to the lead was surveyed by a closed traverse from \( \angle \) L.E.G. checking in both distance and azimuth.

Mason Creek was surveyed by a closed traverse, from a three point fix near signal "Ats" to the leads of the Creek, closing seven meters in azimuth and checking in distance. This error was not adjusted. Two closed offset traverses were run up the two main sloughs joining this Creek, each checking in both distance and azimuth.
Boush Creek was run by resecting on the prominent objects at the U. S. Naval Operating Base.

In order to tie the Norfolk City Planning Commission's map to this sheet, parts of various roads were surveyed by the topographer. A traverse was run from a three point fix in approximate Latitude 38° 58' 45" and Longitude 76° 19' 15" to Powhatan Avenue and north on Powhatan to its end, closing on a three point fix. This was found to be off 21 meters in azimuth, checking in distance. This error was adjusted.

A traverse was run from Hampton Boulevard Bridge to Bolling Avenue and west on Bolling Avenue to Powhatan Avenue, checking on the adjusted position of this intersection in both distance and azimuth.

An offset traverse from Hampton Boulevard was run over Jamestown Crescent to Colley Avenue and down Colley Avenue to Babe (1929), checking in both distance and azimuth. Portions of Mason Creek Road and North Shore Drive were also run.

**General.**

/ Bachus Watch House No. 1 (1919) and Bachus Watch House No. 2 (1919) have been removed. Piling upon which the houses were built are all that remain of them.

/ Lowenberg Hotel Stack (1906), this iron stack has been removed, a small brick chimney replaces it. It is not a prominent object.

/ Yacht Club Capped Chimney (1906) and Willoughby Spit Hotel Flagstaff (1906) were not recovered by the topographer.

In the vicinity of the Lafayette River the Yacht Club and the U. S. Marine Hospital are shown on the topographic sheet. It was thought desirable to have these shown on the chart of this area.

A list of plane table positions of prominent objects is attached to this report.

The form Land Marks for Charts, showing new prominent objects located by plane table, is also submitted.

Submitted,

[Signature]

Lawrence W. Swanson,

Forwarded:

[Signature]

Henry E. Finnegan,
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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 Letter: A

REGISTER NO. 4525

State: VIRGINIA

General locality: NORFOLK

Locality: LAFAYETTE RIVER, NAVAL OPERATING BASE AND MASON CREEK

Scale: 1:10000 Date of survey: Aug 4-Dec 26, 1929

Vessel: NORFOLK SHORE PARTY

Chief of Party: R. E. ST. GEORGE H. E. FINNEGAN

Surveyed by: L. W. SWANSON

Inked by: L. W. SWANSON

Heights in feet above M. H. W. to ground to tops of trees

Contour Approximate contour Form line interval: 3 feet

Instructions dated: July 20, 1929 and Sept. 30, 1929

Remarks:

C. S. BROWN

U. S. CORPS OF ENGINEERS, 1929