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Form 504 Ed. June, 1928

DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

R.S. Patton , Director

State: Maryland

DESCRIPTIVE REPORT

Topographic | Sheet No. F

4709

LOCALITY

Chesapeake Bay

Vicinity of Wicomico River Project

Project No. 88

19.32.

CHIEF OF PARTY

E. H. Bernstein, H. & G. Engr.

U. S. GOVERNMENT PRINTING OFFICE: 1928

## 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. 4709

State Maryland
General locality Chesapeake Bay
Locality Vicinity of Wicomico River
1:5,000 Scale 1:10,000 Date of survey Aug., 1932 , 192
Vessel
Chief of Party E. H. Bernstein
Surveyed by C. F. Chenworth
Inked by C. F. Chenworth
Heights in feet above to ground to tops of trees
Contour, Approximate contour, Form line intervalfeet
Instructions dated Aug., 17, 1931, 192 Supplemental Instructions: July 8, 1932
Remarks:

## DESCRIPTIVE REPORT

(To Accompany Topographic Sheet F.

Wicomico River

Instructions dated Augy 17, 1931. Supplemental Instructions dated July 8, 1932.

The small patches of topography on this sheet that are to the 1:5000 scale are the results of single set-ups at main scheme triangulation stations, the purpose being to show the triangulation stations with respect to prominent topographic features. \*

The patch of topography which is done on a 1:10,000 scale and on which a small projection is constructed is the result of running the shore line south-west from triangulation station. Hall2 too: a junction with shore line as shown by old survey. Much washing back of the shore line has taken place in the time between the old survey and the new as is evident by the difference in the pencil line denoting the old shore line and the inked one showing the shore line at the present time.

This shore line was run by traverse after setting up at station Hall and orienting on Hall Pt. Beacon. Set-ups were checked by resecting on Shark Fin Shoal Light (not shown on sheet) and proper connection was obtained at wooded point as shown.

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APPROVED: -

E. H. Bernstein.

Lieutenant, U. S. Coast & Geodetic Survey.

Chief of Party.

\* The intention was to show the nearest features to the triangulation stations which could be used for spotting the stations on air photographs. All features shown were accurately determined by plane table methods. The nearest road intersections are shown in all cases. A further use of the inserts would be in the compilation of airway maps and in the recovery of the stations.

The inserts at stations Green, Widgeon and Wimbrow are oriented by declinatione only and are subject to perhaps several degrees, of error.

E. H. Bernstein Chief of Party

## REVIEW OF TOPOGRAPHIC SHEET 4709

- 1. The survey satisfies the specific instructions.
- 2. The short traverse locating shore line as shown in one of the inserts was not closed on a triangulation station or on a three point fix but resections on triangulation stations "Hall Point Beacon" and "Shark Fin Shoal Light" furnished a fair check on the azimuth and distance. Station "Shark Fin Shoal Light" is not shown on the sheet but is in a direction normal to the line of traverse, (Lat. 38°-12.1', Long. 75°-59.2'). The rather large holes pricked for stations "Hall 2" and "Hall Point Beacon" may have caused a small error in orienting the planetable at station "Hall 2" but since the traverse is short and resections back on station "Hall Point Beacon" were available, the azimuth should not be in error to any considerable, amount.
- 3. The detail shown in the other inserts on this sheet is sufficient to establish the positions of the triangulation stations on air photographs. Where the planetable was oriented by the declinatoire the azimuth should be ignored and the triangulation station located on the photographs by using a tracing and distances scaled from the topographic sheet.
- 4. For this type of work aluminum mounted paper would be better than Whatman's paper because it does not shrink or distort to any appreciable extent, and because a more accurate drawing can be made on the hard surfaced paper than on the Whatman's. On this particular sheet T4709, the distances are too short to be seriously affected by paper distortion.
- 5. The most economical method of obtaining this information for use with air photographs would be to have the triangulation party observe directions and make tape measurements to corners of houses, wood intersections or any prominent detail close to the triangulation station at the same time that the reference marks are cut in. This information could be entered on the station description cards with a sketch where necessary. Sketches should not be made to replace a complete written description and, where necessary, could be made on an additional station description card. Form 525, and attached to the written description. This was done by R. W. Woodworth for some of his stations in the vicinity of New York City with excellent results.

Examined and approved:

Chief. Field Records.

Balun

Assistant Cartographic Engineer.

Chief, Section of Field Work

Chief, Div. of H. & T.

B. G. Jones.