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Form 504 Ed. June, 1928 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R.S. Patton, Director
State: Naryland
DESCRIPTIVE REPORT
Topographic Sheet No.A 4677
LOCALITY
Chesapeake Bay
Severn River
Annapolis and Vicinity
19 <u>32</u>
CHIEF OF PARTY
L.O. Colbert

DESCRIPTIVE REPORT TOPOGRAPHIC SHEET (field letter A) SEVERN RIVER VICINITY OF ANNAPOLIS

PROJECT NO. H.T. 96

The descriptive report for Topographic Sheet (field letter A) which covers the Severn River in the vicinity of Annapolis is herewith submitted.

INSTRUCTIONS:

The topography on Sheet A is a part of Project No. H.T. 96, the instructions for which were dated February 24, 1932.

LIMITS AND SCALE:

This sheet was surveyed on a scale of 1:5000 and covers the shore line of Severn River from a point on the east bank of Weems Creek, Latitude 38°-59'-55"; Longitude 76°-30'-05" and a point on the north bank of Severn River north of the mouth of Weems Creek, Latitude 39°-00'-34"; longitude 76°-30'-15" to a junction with Sheet B'670 the east at triangulation station Fort just west of Carrs Point, Latitude 38°-58-'58"; Longitude 76°-27'-48" and at Horn Point, Latitude 38°-58'-18"; Longitude 76°-28'-27". It includes all of College Creek and all of Spa Creek except a small portion which falls off the sheet.

No attempt was made to go inshore for details beyond the shore line with the exception of road intersections or prominent features which could be readily obtained. Instructions were interpreted to limit work to that shown on the sheet. Aerial photographs are available for all detail work on the south shore of Severn River. Time did not permit a field investigation of changes from the prior survey on the north shore but from casual observation during the progress of the work, there are no changes of importance. Improvements are being made in the way of new roads but these are in the process of projection and development.

CONTROL AND SURVEY METHODS:

The usual plane table survey methods were used. The plane table positions were obtained by three point fix and resection methods. There was one traverse on the west end of Spa Creek. The traverse closed back exactly in azimuth and was out

a meter in distance. The traverse began at the topographic signal Fun and closed back on the same signal.

The control consisted of nine triangulation stations spaced along the banks of Severn River and ten intersection stations obtained by triangulation. The Location of triangulation station Hospital is Latitude $38^{\circ}-59^{\circ}$ -- 648.8 M; Longitude $76^{\circ}29^{\circ}$ 712.5 M.

A series of aerial photographs of the south side of Severn River from Weems Creek to Lake Ogleton may be borrowed from Mr. Robert L. Burwell, Chief Engineer, Annapolis Metropolitan Sewerage District. There are local coordinate points noted on each photograph which were determined by the alocal office of the District and a list of these may also be obtained from Mr. Burwell.

Blue prints of the town of Annapolis and the U.S. Naval Academy will be forwarded under separate cover.

Elevations were determined on the bluff at the triangulation station Cliff which checked the old survey. No contours were run out at any place on the sheet and the vegetation line was determined on the shore side only.

GENERAL DESCRIPTION OF TOPOGRAPHIC FEATURES:

There are bluff banks in several places on the river with higher ground extending inshore from the tip of the bluffs. The one at the triangulation station Cliff is vertical and bare of vegetation. Another at topographic station Beach also is bare and vertical. The land is high on the north bank between the bridges. It rises quickly from topographic signal Or and there is a steep slope to topographic signal Bunk where it dips inshore for approximately 100 meters. It follows the water line around the small boat harbor where it flattens out to a gentle slope. This bank is high and steep but it is covered, for the most part, by trees. Just below topographic signal Crow the bank rises well above the shore line. It is steep and is wooded except at the concrete bulkhead between topographic signals Pine and Fur. Low points have formed on the shore at the base of the banks; at the entrance to the small lagoons and at the point where triangulation station Jacqueline is located. The latter point has been raised by pumping sand from the river on to the former low land. This was part of a development project for this section.

The south side of the river is much lower than the north side. There are no prominent bluffs along this side.

There are four small boat harbors on the river; three on the north side and one on the south side. The channel of the small boat basin on the north side of the river and east of the highway bridge has filled with sand and is now useless. The other three are able to accommodate small boats and serve as a shelter for them in stormy weather. The basin just west of the highway bridge on the north bank of the river has been developed as a swimming pool. A public bath house, a restuarant and a dance hall are included in this development. They operate under the name of Severn Bridge Beach.

The U.S. Naval Academy and the towns Eastport and Annapolis are on the south bank of the river. The small circle shown about one corner of several of the houses on the sheetlindicates the point determined for possible use in the reduction of aerial photographs.

There are two bridges over the river. The easternmost is a concrete highway bridge of the Annapolis-Baltimore highway. It has a double-acting Bascule draw, which has an opening 72 feet in the clear and headroom of 15 feet above M.H.W. when closed. The westernmost bridge is a wooden railroad bridge of the V.B. & A. RR. It has a center swing draw. Each opening is 58 feet wide. It has headroom 5 feet at M.H.W. when closed. There are four bents in this bridge. Each opening is 10.5 feet in the clear and the headroom on each is 7.9 feet above M.H.W.

The docks on the river are privately owned. Gasoline and cil may be obtained at the first dock on the north bank, east of Severn River bridge. The other docks below the bridge are small, temporary affairs marked "Private" except the ones at the Naval Academy and the Lighthouse Station Depot. The one at the depot has a small, narrow gauge railroad on it for the handling of buoys and is a comparatively new structure. The docks north of Severn River Highway Bridge are good substantial structures except the one at Horseshoe Point. They are all posted with "No Trespassing" notices. Those north of the railroad bridge are in good condition except the one at topographic signal Jan. These are also posted. The docks in the small boat basins are small, temporary structures.

There are four ranges indicated on the sheet. One is at topographic signal Rot, one at topographic signal Feb, and one between triangulation station Cliff and topographic signal Al. The topographic signals at the first two ranges serve as the front range. These three ranges serve as markers for the boat races. The fourth range is at the Lighthouse Station Depot and serves as a rangesfor 50 foot motor launches used in transporting midshipmen to the rifle range.

Comparison of the existing topography has been made with topographic sheet No. 3084. The dock on the north upstream side of the river, at the railroad bridge, has been removed. The one on the downstream side is in poor condition and the spur track leading to it has been torn up. The shore line of Shady Lake was changed in building the Navy Golf Course. The old county highway bridge across Severn River has been replaced by a new bridge upstream from the old one and parallel to it. ments of the old bridge remain as shown on the sheet. The dock about $\frac{1}{2}$ mile above the Experimental Station has been removed. The bank at triangulation station Cliff (triangulation station Bluff was located here) has eroded about 40 feet and the triangulation station Bluff is lost. Attention is called to the improvements at the Experimental Station, Lighthouse Station Depot and the U.S. Naval Academy, which alter the shore line as shown on the sheet. The house at the Lighthouse Station Depot'is the same as on the old sheet. Topographic signal Gable is the front gable of this house.

The Navy has built a new boat house for rowing shells and has made general improvements along part of the creek which alters the shore line from the previous survey.

There have been several changes in the general shape of the waterfront on the northwest side of Spa Creek. The ferry landing has been altered. The dock just west of the ferry landing has been enlarged. The bulkhead on the northest side of Market Slip near the entrance has been rebuilt. There has been a new concrete bulkhead built from the bridge, down stream to the entrance to Market Slip. Improvements along the shore, from Horn Point to Spa Creek, have greatly changed the shore line. The shore line of Spa Creek has been changed by the building of bulkheads and the filling in back of them.

The docks on the southeast side of the creek, below the bridge, are old and in poor repair. They belong to the Chance Marine Construction Co. There are also several small marine railways in this area. The largest of these railways can handle a vessel of 200 tons. They are shown on the sheet as narrow guage railroads. Upstream from the bridge, and on the southeast side of the river is Mason & Sons, Boat Builders. This firm has a small marine railway which is shown as a small narrow guage railway. The marine railways at topographic signal Rah, are also capable of handling light cabin cruisers. Gasoline and oil may be obtained here. The docks shown on this creek above the bridge, are small, temporary affairs.

MARSHES:

The marshes as shown on the sheet are small and covered at high water. The soil is soft and boggy and covered by small bushes and marsh grass.

MAGNETIC MERIDANS:

The magnetic meridans as indicated on the sheet were determined at triangulation stations Horn and Field. The declinatoire was not checked in the field because the magnetic declination was not known and no instruments were on hand to make the necessary observations. The declinatoire will be returned to the office for determination of the error.

NAMES:

The names shown on the sheet have been taken from chart 385 with the exception of those noted below.

- 1. West Annapolis is the name of a real estate development being made in this area.
- 2. Wardour is the name of a real estate development being made in this area.
- 3. Manresa is the name of the development in this area between the boat basin and the railroad.
- 4. Dewey Basin is the name given this basin by the Naval Authorities.
- 5. Santee Basin is the name given this basin by the Naval Authorites.
- 6. Ferry Slip is the dock used by the ferries serving Annapolis.
- 7. Experiment Station is the name used locally to designate this project of the Navy Department.

LANDMARKS:

There are six prominent objects that may serve as landmarks as you enter Severn River. (1) A large, black standpipe near the head of College Creek. (2) Catholic church spire near the bridge Crossing Spa Creek. (3) St. Annes church spire. (4) State House dome. (5) Academy Chapel dome. (6) The stack at the Naval Academy power house. The cross on the building at Manresa may be used as a landmark as you progress up the river.

Landmarks located by triangulation in previous surveys and published on pages 80, 81, 82, and 83 of special publication No.114 were investigated.

The following are definitely missing at the present time.

- 1. Windmill.
- 2. Signboard.
- 3. Colonial Mansion, Gable over column.
- 4. Flagstaff, Naval Academy boat house.
- 5. Naval Signal
- 6. Meterological Pole.

Respectfully submitted by:

Joe. E. Waugh, Aid, C&GS

Approved and forwarded.

L.O. Colbert, Comdr., C&GS,

Commanding Ship OCEANOGRAPHER.

Officed to new chart 550

PLANE TABLE POSITIONS

Gable ©(Gable)	Concrete light post O(Tom)	Concrete light post © (Nat)	Cupole © (Green)	Flag Pole	Object Statue
38°-59†	38°-59°	38°-59'	38°-59†	39°-00'	Latitude 39°-00*
E)	9 35	1246	1308	615	D M 560
760-27	76 ⁰ -29'	76°-29°	76°-28'	76°-291	Longitude 76 ⁶ -29'
1359	676	. 216	1433	672	D P 686
35*	35	35+	. 35 t	85	Height 10'
Top of front gable on house at Lighthouse Service Depot.	Point on top of light post, southwest end of upstream Severn River bridge.	Point on top of light post, northwest end of upstream Severn River bridge.	Center cupola, Severn BridgedDance Hall, Vane on top	Flag pole near large building at Manresa	Remarks Lower statue 40° from seawall at Manresa.

Elk Monument	Central peak of roof, Post Graduate School	Object Mast of the Main
38°-58*	380-5 9	Latitude 38°-58'
1577	546	D M 1654
76°-29*	76°-29'	Longitude 260-28
1366	1176	D P 1071
	known	Height
A monument in a circle of a road in the cemetery on College Creek.	Top of the highest part of the building known as the Post Graduate School.	Remarks Northeast corner Academy grounds

Form 587a

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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. 4677 Graphic Control
State Maryland
General locality <u>Chesapeake Bay</u>
Locality Severn River Annapolis and Vicinity
Scale 1:5000 Date of survey March - April 1932
Vessel U.S.C. & G.S.S. Oceanographer
Chief of Party L. O. Colbert
Surveyed by J. E. Waugh
Inked byJ. E. Waugh
Heights in feet above MHW to ground to tops of tree
Contour Approximate contour Form line interval fee
Instructions dated February 24 , 19 32
Remarks: