

4679

U S COAST & GEODETIC SURVEY
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COAST AND GEODETIC SURVEY
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton *Director*

State: Maryland

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. 4679

LOCALITY

Chesapeake Bay

Sandy Point & ~~South River~~

Thomas Pt. and Vicinity

19 32

CHIEF OF PARTY:

L. O. Colbert

U. S. GOVERNMENT PRINTING OFFICE: 1921

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET (C)

Project No. 96

Instructions: February 24, 1932.

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LIMITS AND SCALE:

This sheet was surveyed on a scale of 1:20,000.

It is a continuation of the shore-line surveyed on Sheet (B)⁴⁷⁸, scale 1:10,000. The shore-line at the north connects at \odot PIN, Latitude $39^{\circ} 00.2'$, Longitude $76^{\circ} 24.7'$ and extends 1-1/2 miles north of Sandy Point Lighthouse to the north side of the summer colony of "Tydings on the Bay".

The work at the south end of the sheet joins the 10,000 sheet about one mile south of Tolly Point at \odot PEGGY (This signal is called Toy on the Hydrographic Sheet) and extends up South River to a point 500 meters beyond Hill Point on the north shore and to a point 300 meters west of Ramsays Gut on the south Shore (Latitude $38^{\circ} 54.1'$, Longitude $76^{\circ} 30.4'$) thence south to Latitude $38^{\circ} 52.4'$, Longitude $76^{\circ} 30.3'$, 1-1/4 miles south of Saunders Point.

SURVEY METHODS:

Work was started at \triangle SAND. The table was oriented on Sandy Point Lighthouse with a check on \triangle GATE. A traverse was run south to connect with the 1:10,000 Sheet at \odot PIN. This traverse consisted of three set-ups and checked in distance and azimuth with the location of \odot PIN obtained from the 1:10,000 Sheet.

After making this connection, work was continued from \triangle SAND to the north, traversing with resections (for checks) on \triangle SANDY POINT LIGHTHOUSE, \triangle GATE, and \triangle RADIO TOWER # 5. The traverse was tied in at \triangle TYDING with no error in distance but eight meters in azimuth. This error was adjusted in the field.

When work was started at the southern part of the sheet the only triangulation stations computed were: \triangle THOMAS POINT LIGHTHOUSE, \triangle RIDGE, and \triangle GREEN. \triangle PEGGY was built before the work started in this area. \triangle RIDGE and \triangle THOMAS POINT LIGHTHOUSE were occupied with the plane table and cuts were taken to PEGGY. From this point a traverse was run to ARUNDEL by way of the north shore of Fishing Creek. This closed without error. PEGGY was later located by triangulation

cuts and computed. It checked the plan table location. Before work was continued in this area, the triangulation was completed and additional signals SAUNDERS, TURK, SAMOHT and HIPT were plotted in South River.

△ SAMOHT was occupied and a short traverse was run to △ ARUNDEL by way of the south shore of the peninsula, closing without error.

From △ ARUNDEL to the limit of the work on the north shore of South River a combination of traverse, resection and three-point fix was used, checking at the end of the work with a rod reading on △ HIPT.

On the south side of the river, a traverse was started at △ SAUNDERS and run to @ POND. There was no check on this work. Numerous resections were taken on △ THOMAS POINT LIGHTHOUSE but the angle was too small to check more than the azimuth.

From △ SAUNDERS to △ TURK and on to the limit of the work on the south side of South River, numerous signals gave enough control to check orientation and distance frequently.

Ramsays Gut was surveyed by a traverse from △ TURK with only two set-ups. This traverse was closed back on the shore-line run from SAUNDERS to TURK.

GENERAL CHARACTER OF SHORE-LINE:

The shore consists of a series of steeply eroded bluffs, ranging from 15 to 20 feet high, interspersed by stretches of low sandy beaches. These beaches are narrow with marshy ground in back. Practically all cleared ground is under cultivation. Numerous clumps of woods separate the cultivated areas. These woods are a mixture of scrub pine and hard woods. The pines seem to be more numerous near the coast. Numerous small lakes and ponds with marshy shore-lines are found near the shore.

At @ PIN the shore-line is a low grass-covered bank increasing sharply to a steep bluff 18' high. This bluff extends to the small stream near △ SAND. It is light yellowish-brown in color and from a distance appears to be sandy. A series of small stone jetties have been placed along the face to arrest erosion.

Two shallow marsh-lined ponds lie immediately in back of △ SAND.

Sandy Point is a broad, low sandy point sparsely covered with a growth of grass. The shore-line from △ SAND to @ DO consists of low, flat sandy beaches with occasional marshes inshore. In many places the beach is so narrow and

low that the storm high water goes completely over and into the marsh.

Approximately one-third of a mile northwest of Sandy Point is a group of farm buildings known as "Bayside Farm", part of an estate that includes all the shore-line as far as Hackett's Point.

At @ DO, @ POLE, and △ TYDING, bluffs twenty feet high, showing signs of recent erosion, are separated by small strips of sandy beach, with marsh inshore.

South Section of the Sheet

At @ PEGGY (TOY) the beach is sandy and flat with a marsh-lined lake directly inshore. At a point 50 meters north of @ NEAR a small stream leads from the bay into the lake. A pulling boat could be taken in this stream. About 100 meters south of @ NEAR the shore-line begins to rise until at @ POLE the bluff is 18 feet high. Substantial concrete bulkheads protect this section of shore from further erosion. The bluff is terraced and covered with grass. There is a well-built dock at this point with steps leading up to the road along the top of the bluff. At low water there is only three feet of water at the end of the dock.

From @ POLE to the south the height of the bluff gradually decreases until at @ GOLD the shore is flat again. At several places along this shore where there is no bulkheading, the bank is being cut away. Unless steps are taken soon, the houses along the waterfront will be in danger of being undermined.

The settlement, "Arundel by the Sea" is a summer colony. The section is heavily wooded, so that only the houses along the beach show from the water. All the main streets of the village were surveyed and as many of the houses as could be located without additional set-ups.

The narrow strip of land from @ GOLD to @ PIN is marshy and practically awash at high water.

Fishing Creek has a narrow strip of marsh for most of its shore-line. At the head of the creek the strip widens out and extends in a northerly direction. The extreme limits of this swamp were not considered important enough to warrant the additional time necessary in obtaining them. Several docks are built around the shore of Fishing Creek. The small dock on the point just west of @ CON had several small fishing launches alongside. The remainder of the docks belong to summer people and were not in use at the time of this survey.

The small island at Thomas Point is fast washing away. The north and south sides are vertical banks of bare soil. The highest point, 25 feet high, on the island is at Δ SAMOHT. From this point the height decreases to sea level at the western end. A sandbar extends from the island to a point between \odot DUCK and \odot BEN, awash at low water. The point, 1/4 mile west of the small island, is a bluff 14 feet high. This bluff extends back 400 meters on either side of the point. On the north side is a sand beach extending 30 to 50 meters from the base of the bluff, built of the material washed from the bar between this point and the island. On the south side the bluff is sheer to the water and is lined with numerous tree roots washed out by recent storms. This type of shore continues to 100 meters beyond \odot STUMP. Sand beach from 3 to 10 meters wide extends from this point up South River as far as \odot EX.

Marshy Point probably derives its name from a small marshy area lying between the sand beach and the tree line.

From \odot EX around the shore of the next bight and on into the head of Duvall Creek, the shore-line is marshy.

The northwest side of the creek slopes up to a group of barns and a large house northeast of Hill Point. The barns and farm buildings are very prominent on entering South River. The west end of the most prominent barn was located for a land mark. Hill Point is protected from erosion by a concrete sea wall. The rest of the shore is lined with jetties of broken rock. The three duck blinds noted on the topographic sheet in this creek are permanent structures, built on creosoted pilings and large enough to shelter a small launch. Two cabin cruisers, about 50 feet long, were tied up at the dock named \odot PIT. The other docks shown in the creek are permanent structures.

Turkey Point is a low, sandy, grass-covered point. The bluff shown immediately inshore extends westward for 1/3 of a mile and rises vertically 25 feet. On the east side of the point the bluff extends only 20 meters and is terraced and covered with grass. The house shown on the tip of this bluff can be seen on entering the river. The center chimney was located by triangulation.

From Turkey Point to the southern end of the work the shore-line consists of alternate steep banks and low beaches. Several small lakes are located close to the shore-line, but time did not permit a complete survey of them. Most of the ground that is cleared is under cultivation.

Ramsays Gut has an outlet on the north side at about the middle part. A privately-owned drawbridge allows entrance to the farm on Turkey Point. The current is very swift through this entrance. The width of the draw is approximately 29 feet, clearance 5 feet.

CHANGES NOTED:

Comparing the shore-line as shown on photostat copy of Topographic Sheets, Register Nos 2325, (1898) and 2394, (1899) and the shore-line as shown on the present sheet, the following changes are noted:

Sandy Point has built out to the southeast approximately 100 meters, while all the rest of the shore-line in this area has eroded.

Near @ TWIST the erosion is from 60 to 90 meters. This bluff is now protected by a number of small concrete jetties running 10 to 15 meters from the face of the bluff. Many of these are undermined and are breaking up; so unless more protection is furnished the bluff will keep washing away with successive storms.

The shape and character of the Mezicke Ponds has not changed. The shores are very marshy and the ponds are so shallow that much difficulty was experienced in getting around them in a skiff. The limits of the swamp land to the northwest of the ponds were not determined by this party.

Additional houses and buildings have been built on the farm immediately northeast of the ponds. The houses shown on this sheet were located by plane table cuts and sketching. The farm house is the same as shown on the old survey. It is two hundred years old. The road running in to the farm, shown on the old survey, is in the same location today. The north side of the road is located near GATE. A section of this road is shown on Topographic Sheet (B).

Erosion at various places along the shore is as follows:

@ BAD, 60 meters; @ TREE, 16 meters; @ STAND, 80 meters; @ POLE, 40 meters. From this latter point to the northern limits of the work the erosion averages 30 meters. Property owners in this area have protected the shore-line in recent years by building bulkheads and stone jetties.

The large L-shaped building near @ POLE is a hotel known as LOG INN.

The southern half of the outer coast at Arundel on the Bay is eroding dangerously close to the houses. In the vicinity of @ POLE, concrete bulkheads have retained the original location.

The island at Thomas Point is fast disappearing. The west side of the island has retained its original location. This side has been sheltered from strong wind and wave action.

The sandy point 300 meters west of G FIRE has built out 130 meters to the northwest while the next point at G EX has washed away about 70 meters.

Turkey Point has moved 60 meters to the west. The bluff to the west of the point has eroded 40 meters.

Saunders Point has washed away 110 meters, but the sandy beach just north has built out 20 to 30 meters. It would appear that all the steep banks on the sheet are washing away and the material is being deposited along the shores nearby.

Respectfully submitted:

Benjamin H. Rigg
Benjamin H. Rigg, Lt., C&GS.,
Ship OCEANOGRAPHER

Approved and forwarded:

L. O. Colbert
L. O. Colbert, Comdr., C&GS.,
Commanding Ship OCEANOGRAPHER.

*Applied to new chart 350
Oct 1934 HRE.*

PLANE TABLE POSITIONS

Name of Signal on Sheet	Latitude	Meters	Longitude	Meters	General location and description
Flag	39 01 ²	171	76 24	695	White flag pole, on the top and near the edge of the bluff at "Tydings on the Bay", Anne Arundel County, Maryland.
Pole	39 01	1393	76 24	244	White flag pole on the top and near the edge of the bluff in front of a large log house, known as LOG INN, located 1.1 miles north of Sandy Point.
Pole	38 55	647	76 27	1011	White flag pole between the road paralleling the shore and the edge of the bluff, at Arundel on the Bay. Pole is located about 1.0 mile north of Thomas Point.
Red	38 55	278	76 27	933	Chimney in the center of a red-roofed house, situated near the shore. Located 0.6 mile north of Thomas Point.
Gold	38 54	1709	76 27	783	White flag pole with a gold ball on the top. Located at the southern end of Arundel on the Bay, 0.4 mile north of Thomas Point.
Pier	38 54	1652	76 27	1062	Center of the end of a long dock. Located on the north shore of Fishing Creek, 0.2 mile west of the shore of Chesapeake Bay.
Cud	38 55	617	76 29	470	A large duck blind, frame and house painted green. Located at mouth of Duvall Creek in South River, 0.6 mile east south east of Hill Point.
Pit	38 55	1275	76 28	1251	The center of the end of a dock. Located on the west side of Duvall Creek, near the head.
Slide	38 52	1067	76 30	176	Northeast corner of a tall white structure, toboggan slide. This point is at outer end of tall part of slide. Located 1 mile south of Saunders Point.

POINTS FOR CONTROL OF AIRPLANE PHOTOGRAPHS.

Road intersection at "Tyding on the Bay".

The center of the intersection of the road leading to the colony from the main highway and the beach road. The roads intersect at right angles. Roads are light sand color at the time of this survey. Position: Lat. $39^{\circ}-02'$ -- 145 meters, Long. $76^{\circ}-24'$ -- 780 meters. Located by plane table rod reading. ✓

The northeast corner of "Log Inn".

The northeast corner of a low L-shaped building on top and near the edge of the bluff, 1.2 miles north of Sandy Point. Position: Lat. $39^{\circ}-01'$ -- 1379 meters, Long. $76^{\circ}-24'$ -- 296 meters. Located by plane table taped distance from set up.

Windmill tower.

A metal windmill tower close to a farm house on "Bayside Farm" .3 mile northwest of Sandy Point. Position: Lat. $39^{\circ}-00'$ 1602 meters, Long. $76^{\circ}-23'$ -- 1367 meters. Located by triangulation.

Silo.

The northernmost of two connected silos built along the east side of a prominent barn. Silos are circular with conical tops. The point is the center of the top. The silo is .2 of a mile west of the shore line and 1 mile southwest of Sandy Point. Position: Lat. $39^{\circ}-00'$ -- 638 meters, Long. $76^{\circ}-24'$ -- 1087 meters. Located by plane table cuts.

Red.

The chimney in the center of a square red roofed house, near the shore at Arundel on the Bay. Located .4 of a mile north of Thomas Point. Position: Lat. $38^{\circ}-55'$ --278 meters, Long. $76^{\circ}-27'$ -- 933 meters. Located by plane table resection.

Pier.

The center of the end of a dock located on the north shore of Fishing Creek, .2 of a mile west of the shore line of Chesapeake Bay. Position: Lat. $38^{\circ}-54'$ -- 1652 meters. Long. $76^{\circ}-27'$ -- 1062 meters. Located by plane table rod reading.

Dill.

The center of a duck blind located at the mouth of Duvall Creek in South River, .7 of a mile east of Hill Point. Position: Lat. $38^{\circ}-55'$ -- 456 meters, Long. $76^{\circ}-29'$ -- 342 meters. Located by plane table cuts.

Cud.

The center of a duck blind located at the mouth of Duvall Creek in South River, .6 of a mile east south east of Hill Point. Position: Lat. $38^{\circ}-55'$ -- 618 meters, Long. $76^{\circ}-29'$ -- 470 meters. Located by plane table cuts.

Duck Blind.

The center of a duck blind located at the mouth of Duvall Creek in South River, .3 of a mile east of Hull Point. Position: Lat. $38^{\circ}-55'$ --866 meters, Long. $76^{\circ}-29'$ -- 904 meters. Located by plane table cuts.

The following points were located by triangulation, Descriptions were forwarded with the triangulation data for this project.

Fire Lookout Tower $38^{\circ}-56'$ --- 183.8 meters, $76^{\circ}-30'$ --119.7 M.
Tall Windmill (near tank) $38^{\circ}-55'$ -- 1804.0 M., $76^{\circ}-29'$ -- 1015.2 M.
White Water Tank (near windmill) $38^{\circ}-55'$ --1540.9 M., $76^{\circ}-29'$ --1267.7 M.
Tallest White Windmill $38^{\circ}-55'$ --1517.5 M., $76^{\circ}-29'$ --757.3 M.
White Cupola, Large Red
Roofed Barn $38^{\circ}-55'$ --1591.5 M., $76^{\circ}-29'$ --1168.2 M.
Water Tank (finial) $38^{\circ}-54'$ --400.0 M. $76^{\circ}-29'$ --1441.4 M.
Shumney Clearing large gray house, $38^{\circ}-54'$ --925.4 M., $76^{\circ}-29'$ --1031.9 M.
Turkey Point
Center Cupola, large White
Barn, Saunders Point $38^{\circ}-53'$ --646.3 M., $76^{\circ}-29'$ --709.8 M.

STATISTICS:

Statue miles of shore line	27.3
Statue miles of Roads	2.6
Area in square miles	10.5

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4679

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 CREGISTER NO. **4679** *Graphic Control*State MarylandGeneral locality Chesapeake Bay (~~west shore~~)Locality Sandy Point and ~~South River~~ Thomas Pt. and VicinityScale 1-20000 Date of survey April-May, 1932Vessel OCEANOGRAPHERChief of Party L.O. ColbertSurveyed by B.H. RiggInked by B.H. RiggHeights in feet above MHW to ground ~~to tops of trees~~Contour ~~Approximate contour of ground indicated by dots~~Instructions dated February 24, 1932

Remarks: