

8091

Diag. Cht. No. 78-4

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic Shoreline

Field No. Office No. T-8091

LOCALITY

State Virginia

1e

DATA RECORD

Form T-1

T-8091

Quadrangle (II): Hopewell, Va. 7 $\frac{1}{2}$ min (U.S.G.S.) Project No. (II): CS 283

Field Office: Air Photographic Party No. 2 Chief of Party: ^{Henry O. Fortin}~~Fred. L. Peacock~~

Compilation Office:
Baltimore Photogrammetric Office

Chief of Party: Fred. L. Peacock

Div. of Photogrammetry
Office Files

Instructions dated (II III):

Copy filed in Descriptive
Report No. T- (VI)

March 26, 1942-July 15, 1942, Sept. 30, 1942
Nov. 14, 1942, and Nov. 24, 1942

Completed survey received in office: 10-17-44

Reported to Nautical Chart Section: Oct. 1944

Reviewed: 12-13-48

Applied to chart No. 531

Partially
Date: 11-23-44
Completely
2-4-47

Redrafting Completed:

Registered: 6-1-50

Published:

Compilation Scale: 1:10,000

Published Scale:

Scale Factor (III): none

Geographic Datum (III): N.A. 1927

Datum Plane (III): ^{MHW}~~Mean Sea Level~~

Reference Station (III): Palmer, Ecc. 1932, 1942, n. 1943

Lat.: 37° 18' 54.388"
1676.7(173.0)m

Long.: 77° 16' 25.683"
632.4 (845.0)m

Adjusted
~~Unadjusted~~

State Plane Coordinates (VI): Virginia South Zone

X = 2,356,586.26 FT

Y = 359,760.79 FT

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
7492 to 7497 incl.	11-25-41	10:45 a.m.	1:10,000	1.6' above M.L.W.
7520 to 7525 incl.	11-25-41	11:12 a.m.	1:10,000	1.4' above M.L.W.
7551 to 7556 incl.	11-25-41	11:34 a.m.	1:10,000	1.2' above M.L.W.
7653	11-25-41	1:33 p.m.	1:10,000	0.1' above M.L.W.

Tide from (III); Predicted Tables, Reference Station, Washington, D.C. with corrections for City Point, Virginia

Mean Range: 2.8'

Spring Range: 3.3'

Camera: (Kind or source) U.S.C.&G.S. 9 lens Camera (focal length $8\frac{1}{4}$ ")
All negatives are on file in the Washington Office

Field Inspection by: Lieut. Comdr. Henry O. Fortin

date: Winter 1942-1943

Field Edit by: None

date:

Date of Mean High-Water Line Location (III): Date of photographs supplemented by field inspection data obtained in 1942, 1943. Season's field inspection reports previously submitted.

Projection and Grids ruled by (III) J.T.B. (Washington Office) date: May 4, 1944.

" " " checked by B.R.C. (Washington Office) date: May 4, 1944

Control plotted by: James E. Sunderland & Albert C. Rauck, Jr. date: May 10/44; Aug. 7-14/44

Control checked by: W.E. Schmidt, J.E. Deal, Jr. date: May 17/44; Aug. 7-14/44

Radial Plot by: J.E. Deal, Jr., & A. C. Rauck, Jr.

date: Aug. 7-14, 1944

Detailed by: Raymond Glaser

date: 8-18-44 to 10-5-44

Reviewed in compilation office by: Henry P. Eichert

date: 10/9/44 to 10/12/44

Elevations on Field Edit Sheet

checked by: None

date:

Field Inspection

Field inspection data for the area of ~~T-111~~⁸⁰⁹¹ are contained in the "Report on Field Inspection of Air Photographs, James River and Tributaries, Virginia" by Henry C. Fortin, dated April 20, 1943. Filed in Division of Photogrammetry, General Files

26. CONTROL:

This map drawing includes that portion of the Southwest shoreline and adjacent planimetry of the James River and its tributaries falling between Bailey Creek and City Point at Hopewell, Virginia. Also included, is that portion of the shoreline and adjacent planimetry of the Appomattox River and its tributaries falling between Hopewell, Virginia and Halls Island.

The following horizontal control stations fall within the limits of the Map Drawing:

U. S. COAST AND GEODETIC SURVEY INTERSECTION, TRIANGULATION STATIONS:

- ✓ CAMP LEE, ALUMINUM TANK, 1932, 1942, r 1943
- ✓ TUBIZE ARTIFICIAL SILK CO. STACK, CENTER, 1942, r 1943
- ✓ * HOPEWELL, SOLVAY PROCESS CO. POLE, HIGHEST PART OF ELEVATOR, 1942
(New Station, does not appear on photographs)
- ✓ HOPEWELL, SOLVAY PROCESS CO. INTAKE CHLORINE TOWER CUPOLA, 1942, r 1943
- ✓ HOPEWELL, SOLVAY PROCESS CO. JAMES RIVER LIGHT No. 111, 1942 r 1943
- ✓ HOPEWELL, HUMMEL-ROSS CO., HIGHER OF 2 STACKS, 1932 r 1942
- ✓ HOPEWELL, HUMMEL-ROSS CO., LOWER OF 2 STACKS, 1932, r 1942

U. S. GEOLOGICAL SURVEY MONUMENTED STATIONS:

- ✓ TT 17 T, 1937, r 1943
- ✓ TT 18 1937, r 1943

U. S. GEOLOGICAL SURVEY TEMPORARY TRAVERSE STATIONS: *Removed from map manuscript*
(All established in 1937, r 1943)

- 1027 ±
- 1029 +
- 1012 †
- 1011 +
- 1173 +
- 985 +
- 1006 +
- 1114 +
- 1161 +
- 991 +
- 992A-1000A
- 1129 +
- 1167 A

26. CONTROL:

~~RECOVERABLE TOPOGRAPHIC STATION~~ *Triangulation Station*

ATMOSPHERIC NITROGEN LIGHT #1, 1938, r 1942
(Formerly Intersection, Triangulation Station;
now Solvay Process Co. Channel 1, F.W.)
See Review Report

The following horizontal control stations fall just outside the limits of the map drawing:

U. S. COAST AND GEODETIC SURVEY SECOND ORDER TRIANGULATION STATIONS:

BERM, 1942, r 1943
J.E.C. (U.S.E.) 1942, r 1943
* PALMER (old sta.) 1910, 1932, 1942, r 1943
* PALMER ECC. 1932, 1942, r 1943
PACK 2, 1942 r 1943 (F.I.P. PAC)
J.E.A. (U.S.E.) 1942 (Island R.M. #1, 1910, 1938, r 1943)

U.S. COAST AND GEODETIC SURVEY INTERSECTION, TRIANGULATION STATIONS:

HOPEWELL, YELLOW HO. N.E. CHIM., 1942, r 1943
APPOMATTOX RIVER LT., 1938, 1942, r 1943
- CITY POINT LT., 1938, 1942, r 1943
HOPEWELL CITY PT. OLD WINDMILL TOP, 1942, r 1943
HOPEWELL N. & W. R. R. DEPOT, S.E. END CHIM., 1942, r 1943
EPPE'S IS. LARGE WH. HO. CHIM. ON CENTER, 1942, r 1943
BAILEY CREEK LIGHT, 1938, r 1942

U. S. GEOLOGICAL SURVEY MONUMENTED STATIONS:

567 also TT7T, 1937 r 1943

U. S. GEOLOGICAL SURVEY TEMPORARY TRAVERSE STATIONS
(All established in 1937, r. 1943)

558 +
975 A
976 +
601 A
593 A
597
634
641 A
621 A
1081 +
143 A
1040 +

26. CONTROL:

All of the above mentioned horizontal control stations, except the three marked with an asterisk, have been used for the establishment of photograph centers, secondary control points and detail points.

Those stations marked with an asterisk were recovered but not identified.

27. RADIAL PLOT:

The Radial Plot for this Map Drawing is part of the combined Radial Plot for Surveys Nos. T-8089, T-8090, T-8091, T-8094, T-8095, and T-8096, the descriptive report for which was submitted to the Washington Office on September 1, 1944. *Filed in Photogrammetric Section, General Files*

28. DETAILING:

The shoreline and immediate adjacent planimetric detail of the parts of the James River, the Appomattox River and their tributaries, shown on this Map Drawing have been detailed in accordance with the original instructions dated March 26, 1942, and the Director's letters dated July 15, 1942, and September 30, 1942, pertaining to Project No. CS-283.
Filed in Div. of Photogrammetry - Office Files

Positions of minor detail points, temporary hydrographic stations, and recoverable topographic stations were determined by the usual radial line method.

The shoreline data furnished the Compilation Office by the Field Inspection Unit, after being verified by careful stereoscopic examination, were transferred to the office photographs. These data were then detailed on the Map Drawing.

Portions of the shoreline along the Appomattox River, which could not be definitely identified by the Field Inspection Unit were shown on the field inspection photographs by dashed red lines for Mean High-Water Line and by dashed green lines for the outer limits of marsh. The portions of these undetermined sections of shoreline which could be accurately determined by the compiler through careful stereoscopic examination of the photographs have been shown on the Map Drawing with the usual full, acid ink line. The portions of these undetermined sections of shoreline which could not be accurately determined by stereoscopic examination of the photographs have been shown on the Map Drawing with a dashed acid ink line.

All drainage within the limits of the Map Drawing flowing into the James River, the Appomattox River and their tributaries has been detailed. In instances where the drainage was obscured by overhanging trees or brush, and it could not be accurately determined by stereoscopic examination of the photographs, this indefinite drainage was shown on the Map Drawing with a light-weight, dashed acid ink line.

A considerable portion of shoreline and adjacent planimetric detail on the Southwest side of the James River from Bailey Creek to City Point,

28. DETAILING (Continued)

Hopewell, Va., for which there was no field inspection data, was delineated from the nine lens photographs with the aid of the stereoscope. Smoke, emanating from the stack of a factory in this area obscured some portion of the shoreline and adjacent planimetric detail on all photographs on which this area was visible. This smoke did not appear in the same location on all the photographs, but prevented good identification and was a hindrance in securing good stereopsis. Despite this difficulty, it is believed that this area has been accurately compiled by means of selecting the clearest portion of the planimetric detail from each of the photographs.

Roads not classified by the Field Inspection Unit, were classified and shown according to the Compiler's interpretation from the nine lens photographs after comparison with available topographic quadrangles.

Tree areas not classified in the field were interpreted by the Compiler from the nine lens photographs. These unclassified areas have been detailed and shown with conventional symbols.

All buildings immediately adjacent to the shoreline have been detailed.

The number of nine lens photographs covering the area of this survey was sufficient to adequately compile this Map Drawing. Their scale was in good agreement with the scale of the Map Drawing Projection. The spacing of the photographs in each flight strip provided satisfactory center chamber coverage for the area of this Map Drawing.

A list of abbreviations used on this Map Drawing, accompanied by explanatory notes, has been shown in the right hand margin.

29. SUPPLEMENTAL DATA

No supplemental data were furnished the Compilation Office for use in detailing the Map Drawing.

30. MEAN HIGH-WATER LINE:

The conventional full, heavy weight and light weight black, acid ink lines have been used to differentiate between the Mean High-Water Line and the outer limits of marsh bordering the Mean High-Water Line respectively. The light weight line is an indication of low wet land at Mean High-Water, and is not considered to be the Mean High-Water Line.

(Also see paragraphs 3 and 4 of section #28, Detailing, of this descriptive report)

31. LOW-WATER AND SHOAL LINES:

No Mean Low-Water Line has been shown on the Map Drawing, and none was indicated by the field inspection data, or was visible on the nine lens photographs.

^{Shallow}
Shoal lines were identified by the Field Inspection Unit and have been shown on the Map Drawing by a short dash, lightweight, black acid ink line, with the word "^{Shallow}shoal" lettered inside the area.

Several mud areas, identified by the Field Inspection Unit, are outlined on the Map Drawing with a lightweight, dotted, black acid ink line with the word "MUD" lettered inside the area.

There are a number of alongshore areas inside the field identified shoal lines, to which the Field Inspection Unit has applied the word "Tufting". This term is not explained and is not entirely clear to the Compiler. From a close inspection of these areas, on the photographs, it appears likely that they are marshy spots interspersed with grass in water areas and open water areas at high-water. Such areas have been interpreted as similar to "A" of "Figure 1, Field Memorandum No. 1, 1938", but backed by a definite berm of firm ground or high marsh as in "C" of the same memorandum. They have been shown symbolized similarly to area "C". Most of these areas have been shown with the "grass in water" symbol.

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

Piling areas, jetties, dolphins, stake areas, and logs or trees in water, were identified by the Field Inspection Unit and have been detailed accordingly. Pertinent notes are shown near each of these offshore details.

33. WHARVES AND SHORELINE STRUCTURES

Numerous piers, wharves, catwalks, retaining walls, piling and stakes were identified by the Field Inspection Unit, on the field photographs. These were detailed on the Map Drawing, accompanied by appropriate notes. Other shoreline structures, in areas where there was no field inspection data, were interpreted according to stereoscopic examination of the photographs and noted accordingly.

34. LANDMARKS AND AIDS TO NAVIGATION

One object, namely: "CHIMNEY ON E. END OF 2 STORY HOUSE" (Recoverable Topographic Station No. 532) was recommended for charting as a Landmark by the Field Inspection Unit, and is shown on the map drawing with 2.5mm black acid ink circle. Form 567 is being submitted for this recommended Landmark.

Chart Letter 751(44)

The Field Inspection Unit furnished the Compilation Office the identified location of one fixed aid to navigation, namely "COBBS ISLAND, Fl.R., 5 sec.," which was radially plotted, and its position was not found to be in good agreement with its respective position as shown on U.S.C.&G.S. Nautical Chart No. 531. Form No. 567 is being submitted for the radially plotted position of this fixed aid to navigation. *Chart Letter 751(44)*

34. LANDMARKS AND AIDS TO NAVIGATION: (Continued)

Also falling within the limits of the Map Drawing is a fixed aid to navigation, namely, "JAMES RIVER lll, F.G.", which is also an Intersection Triangulation Station.

Another fixed aid to navigation, namely, "SOLVAY PROCESS COMPANY CHANNEL l. F.W." was originally the Triangulation Station "ATMOSPHERIC NITROGEN LT. #1, 1938, 1942", also a fixed aid to navigation. The original station was reported destroyed but the light was subsequently rebuilt in the same location. The original station appears on the photographs and therefore, the plotted geographic position of "ATMOSPHERIC NITROGEN LT. #1, 1938, 1942" held in the radial plot. This fixed aid to navigation is shown on the Map Drawing with a 2.5mm black acid ink circle accompanied by an appropriate note.

Form 567 submitted for these aids. See Review Report.

35. HYDROGRAPHIC CONTROL:

The Compilation Office was furnished the identification of eighty-~~one~~ (80) temporary hydrographic stations and nine (9) recoverable topographic stations. These were identified on the 1:10,000 field photographs by number, and their descriptions listed in field sketch books (Form 274) by corresponding numbers. These stations were transferred to the office photographs, and radially plotted on the Map Drawing. The numbers of these stations have been noted on the Map Drawing near the station to which they refer. The descriptions of the nine (9) recoverable topographic stations have been lettered directly on the Map Drawing near their corresponding numbers. Attached to this descriptive report is a list of the descriptions of both the eighty-~~one~~ (80) temporary hydrographic stations and the nine (9) recoverable topographic stations. Two extra copies of this list are being submitted for use of the Hydrographic Party.

Form 524 is being submitted for the nine (9) recoverable topographic stations. They are:

General files, Div. Photogr.

~~CHY. on E. END of 2 STORY HOUSE, 1943~~
~~COBBS ISLAND FL. R 5 sec. (RED TRIANGULAR BEACON) Light, 1943~~
~~SYCAMORE TREE ON POINT, 1943~~
~~N. GAB. OF RED BARN, METAL ROOF, 1943~~
~~BRICK CHIMNEY ON E. END OF WHITE HO, 1943~~
~~W. GAB. OF WHITE HOUSE IN PINES, 1943~~
~~S.W. CORNER, GALVANIZED HOUSE, 1943~~
~~NORTHERLY OF GABLES OF WHITE HO. N. Gable, 1943~~
~~N. GAB. WHITE HOUSE, DARK ROOF, 1943~~

36. LANDING FIELDS AND AERONAUTICAL AIDS:

The Compilation Office has not been furnished any data for landing fields or aeronautical aid within the limits of the Map Drawing, and none was visible on the nine-lens office photographs.

37. JUNCTIONS:

To the north, satisfactory and complete junctions has been made with the Map Drawing for Survey No. T-8090.

To the east, the junction with Map Drawing for Survey No. T-8094 is in satisfactory agreement.

To the west, satisfactory junction has been made with the Map Drawing for Survey No. T-8086.

To the south, there is no shoreline detail at the junction between Map Drawing for Survey No. T-8091 and the Map Drawing for Survey No. T-8092. A junction of planimetric detail will be made at a later date with the Map Drawing for Survey No. T-8092 which will be combined with the Map Drawing for Survey No. T-8093. Junction checked during review.

38. GEOGRAPHIC NAMES: Approved list filed in Geographic Names Section.

As instructed, no geographic name investigation was furnished the Compilation Office by the Field Inspection Unit. The geographic names shown on this map drawing were taken from the following available sources:

U. S. Coast and Geodetic Survey Chart No. 531 dated March 6, 1944
U. S. Geological Survey, Hopewell, Va., 7½ min. Quad. Surveyed
in 1940

A list of these names, which are believed by the Compilation Office to be undisputed, is attached to this descriptive report.

39. HORIZONTAL ACCURACY

The probable error in the positions of detail points, the Mean High-Water Line, and well-defined objects is believed to be within the limits of satisfactory accuracy.

40. RECOMMENDATIONS FOR FUTURE SURVEYS:

This rough draft, shoreline survey for the Map Drawing for Survey No. T-8091 is believed to be complete in all details for charting and no other surveys are deemed necessary.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Comparison was made with the United States Geological Survey, Hopewell, Va. 7½ min. quadrangle, Scale 1:31680, surveyed in 1940, edition of 1943, by use of the vertical projector. All common planimetric detail was in good agreement, except a few differences noticed in the location of the Mean High-Water Line and Marsh Line. This is probably due to a matter of topographers choice or natural changes occurring since the survey was made for the quadrangle.

45. COMPARISON WITH NAUTICAL CHARTS:

A detailed comparison was made with U. S. Coast and Geodetic Survey Chart No. 531, scale of 1:20,000, dated August 1940 and revised March 6, 1944 by use of the vertical projector. The following major differences in the location of the Mean High-Water Line and the Marsh Line, between the Chart and Map Drawing, were noted:

Along the southwestern shore of James River from Bailey Creek to City Point, the difference in location of the Mean High-Water line reaches a maximum of approximately 60 meters.

On the southern shore of the Appomattox River between longitude $77^{\circ} 16.9'$ and $77^{\circ} 17.5'$, three piers are shown on the chart which are not visible on the office photographs.

On the southern shore of the Appomattox River, approximately at latitude $37^{\circ} 18.6'$; longitude $77^{\circ} 17.6'$ a sizeable area of grass in water is shown on the Map Drawing. On the chart, the Mean High-Water Line is shown at the outer limits of this area.

Along the northern shore of the Appomattox River from longitude $77^{\circ} 18'$ to $77^{\circ} 20'$, the marsh line is in disagreement from 20 to 50 meters.

On the southern shore of the Appomattox River, directly to the west of the Seaboard Air Line R. R. Bridge, a creek empties into the river. The location of this creek is in disagreement a maximum of 110 meters.

There is a difference in the location of the Mean High-Water Line on the eastern shore of City Point. Since the data were obtained for compiling the chart, this area has probably been filled in. Along the southeastern shore of the mainland directly northwest of Cat Island between longitude $77^{\circ} 21.6'$ and $77^{\circ} 22.2'$, the marsh line is in disagreement a maximum of 40 meters.

At the northeastern shore of Cat Island the marsh line is in disagreement about 20 meters. A small island shown on the chart as lying off Cat Island to the northeast, has been included within the limits of Cat Island on the Map Drawing.

Along the northwestern shore of Cobbs Island from latitude $37^{\circ} 18'$ to $37^{\circ} 18.6'$, the marsh line is in disagreement about 30 meters. The location of "Rosemary Lane", a creek which runs through Cobbs Island is also in disagreement about 30 meters.

To the southwest of Cobbs Island approximately at Latitude $37^{\circ} 17.5'$, Longitude $77^{\circ} 22.2'$, a sizeable sand and gravel pit, now abandoned, has been cut into the peninsula of the mainland. This considerably changes the character of the shoreline at this point.

45. COMPARISON WITH NAUTICAL CHARTS: (Continued)

The location of the northwestern part of "Pye Alley" is in disagreement about 30 meters.

Numerous piling areas, stakes, logs and trees offshore, dolphins and jetties, not shown on the chart have been detailed on the Map Drawing.

There were other differences noted on comparison, but these are considered of minor importance.

Respectfully submitted
October 11, 1944

Raymond Glaser
Raymond Glaser
Sr. Engineering Draftsman

Compilation and Descriptive
Report Reviewed by:

Henry P. Eichert
Henry P. Eichert
Jr. Photogrammetric Engineer

Compilation of Map Drawing
Supervised by:

J. Edward Deal Jr.
J. Edward Deal, Jr.
Asst. Photogrammetric Engineer

Approved and Forwarded
October 17, 1944.

Fred. L. Peacock
Fred. L. Peacock
Chief of Party, C&G Survey
Officer in Charge
Baltimore Field Office

DESCRIPTIONS OF
TEMPORARY HYDROGRAPHIC STATIONS AND NAMES AND
DESCRIPTIONS OF RECOVERABLE TOPOGRAPHIC STATIONS
LOCATED BY RADIAL PLOT FOR MAP DRAWING (

SURVEY NO. T-8091
PROJECT NO. C.S. 283

RECOVERABLE TOPOGRAPHIC STATIONS
ESTABLISHED IN 1943----- 9
TEMPORARY HYDROGRAPHIC STATIONS
ESTABLISHED IN 1943-----81
TOTAL STATIONS 90

LISTED BY: RAYMOND GLASER
COPY CHECKED BY: HENRY P. EICHERT

RECOVERABLE TOPOGRAPHIC STATIONS

- 532 "CHIMNEY ON E END OF 2 STORY HOUSE" unpainted and abandoned with red roof. House is 150m from water's edge. ALSO USED AS A LANDMARK.
- 539 "COBBS ISLAND FL. R., 5 SEC." Red triangular beacon on W side of E Channel 250m NNE of entrance to narrow gut.
- 559 "SYCAMORE TREE ON POINT" 15' high on point on S side of NW entrance to old gravel pit W of W Channel.
- 596 "N GAB. OF RED BARN METAL ROOF"-roof is rusty. 175m W of Appomattox River. 350m S of gravel pit.
- 604 "BRICK CHIMNEY ON E END OF WHITE HOUSE" one story house with dark roof and two dormers facing river. House is 140m from water's edge.
- 641-A "WEST GABLE OF WHITE HOUSE IN PINES" with dark roof. 190m E of river and 90m S of sand pit.
- 642-A "SW CORNER GALVANIZED HOUSE" with shed type roof on pier on SE side of river.
- 6 "NORTHERLY OF GABLES OF WHITE HOUSE". Northerly of 3 W gables of white house on top of 100ft. bluff on E side of river. House has green roof.
- 701-A "N GAB. WHITE HOUSE DARK ROOF" One story house with chimney on both ends. 150m E of creek (S branch) and 300m S of creek (W branch).

TEMPORARY HYDROGRAPHIC STATIONS

- 18 ✓ Tip of large grass patch.
- 519 ✓ Center of small grass patch, southerly of three patches.
- 521 ✓ East gable of light colored church with red roof.
- 523 ✓ Chimney on SW end of white 2-story house.
- 524 ✓ NW corner of yellow boat shed.
- 525 ✓ N gable of 2-story white tavern with dark roof. 3 dormers on either side.
- 526 ✓ NE chimney on white 2-story red roofed dwelling with 4 chimneys and small porch with 4 white columns on N side.
- 527 ✓ Mud point on W side of entrance to creek.
- 528 ✓ Center of small mud island covered at H.W.
- 529 ✓ Mud point on W side of entrance to old canal.
- 530 ✓ Dolphin on W end of swing support of railway turn bridge, (S.A.L.Ry.)
- 531 ✓ Point of brush and trees.
- 533 ✓ SE tip of detached grass patch.
- 538 ✓ Tip of brush at NE entrance to small bight.
- 540 ✓ Center of tall grass patch just S of entrance to gut.
- 541 ✓ Tip of island. Sign on tip, "DO NOT DRAG ANCHOR"
- 542 ✓ Center of round patch of grass-farthest from edge of marsh.
- 43 ✓ Center of detached grass patch 48 m. from end of jetty.
- 551 ✓ Dolphin on E end of swing support of turn bridge. (S.A.L.Ry.)
- 552 ✓ Tip of grass on E side of entrance to stream.
- 552A ✓ N gable of small house on bridge at S end of turn span.
- 553 ✓ Detached patch of grass and mud.
- 554 ✓ Detached patch of grass and mud. Sign "Posted" on patch.
- 555 ✓ Tip of grass on W side of entrance to Rosemary Lane.
- 556 ✓ Middle of entrance to narrow break in marsh.
- 557 ✓ Tip of bank on N side of entrance to small stream.
- 558 ✓ Point of grass on NW side of N entrance to Rosemary Lane.
- 560 ✓ 6 ft. pine on gravel bank.
- 561 ✓ Grass and brush point.
- 562 ✓ Patch of alders on point.
- 562A ✓ E tip of larger of two islands.
- 563 ✓ W tip of larger of two islands.
- 564 ✓ Center of small brush covered islet.
- 565 ✓ Center of patch of brush.
- 566 ✓ 8 ft. stub on point.
- 567 ✓ Tip of grass on point.
- 568 ✓ Point of mud and grass.
- 586 ✓ Tip of grass on SW side of entrance to stream.
- 588 ✓ Prominent tip of grass.

TEMPORARY HYDROGRAPHIC STATIONS

- 589 ✓ Tip of grass on E side of small stream entrance.
- 590 ✓ Tip of grass and mud at "Posted" sign.
- 591 ✓ N tip of detached mud islet.
- 592 ✓ Center of detached patch of mud and grass.
- 593 ✓ Dead stub- 15ft. high.
- 594 ✓ Mud point on W side of stream entrance.
- 595 ✓ Tip of grass on S side of entrance to small stream.
- 596 ✓ Tip of brush.
- 597 ✓ Detached tuft of grass off small bight.
- 599 ✓ End of bank at S entrance to wide ditch.
- 600 ✓ N tip of island - central of three.
- 601 ✓ Tip of trees & brush at SW end of island- most southerly of three.
- 602 ✓ Center of patch of grass in middle of entrance to large bight.
- 603 ✓ Tip of grass.
- 605 ✓ Tip of grass- southerly of two tips.
- 640 ✓ Tip of bank on NE side of ditch entrance.
- 641 ✓ 25ft. snag off SW tip of long narrow island.
- 642 ✓ NE tip of long narrow sand island with trees on it.
- 643 ✓ End of retaining wall.
- 644 ✓ End of 3rd jetty NE from 643.
- 645 ✓ End of 4th jetty N from 644.
- 646 ✓ End of 4th jetty N from 645.
- 647 ✓ End of short jetty S of entrance to Pye Alley.
- 648 ✓ Remains of dolphin off-shore from piling and between remains of two old jetties.
- 649 ✓ End of line of piling N of patch of marsh grass. (Off-shore end)
- 650 ✓ End of jetty with bushes and small tree.
- 652 ✓ End of 1st short jetty just N of long jetty.
- 692 ✓ Tip of tall grass on S. side of entrance to stream.
- 693 ✓ Center of patch of tall grass closest to bridge.
- 694 ✓ Tip of bank on S side of entrance to narrow break in marsh.
- 695 ✓ Middle of entrance to small break in bank.
- 696 ✓ Tip of mud bank on W side of entrance to break in marsh.
- 697 ✓ Tip of marsh grass.
- 698 ✓ Only bush on NE'ly of two islands.
- 699 ✓ Tip of grass
- 700 ✓ Tip of grass.

TEMPORARY HYDROGRAPHIC STATIONS

701 ✓ Tip of rounding point of grass.

551S ✓ Duck Blind N side near middle of marsh.

559S ✓ Duck Blind on N side of stretch of marsh.

560S ✓ Duck Blind at E end of marsh.

560¹~~S~~ ✓ Light on white slate over black framework at bend at NE end of pier.

1, 19 48

marks be

of Party.

CHARTS
AFFECTED

531

531

GEOGRAPHIC NAMES

Undisputed

- Appomattox River
- ✓ Bailey Creek
- Broad Street
- ✓ ~~Cabin Creek~~ Bull Hill Run
- ✓ Cat Island
- ✓ Cattail Creek
- City Point
- ✓ Cobbs Island (not reduced application, in agreement with nautical chart 531-1947 ed.)
- Federal Reformatory
- ✓ Gravelly Run
- ✓ Halls Island
- ✓ Harrison Branch
- ✓ Hopewell
- ✓ James River
- ✓ Norfolk and Western
- ✓ Pye Alley
- ✓ Rosemary Lane
- Seaboard Air Line
- Short Turn
- Swift Creek
- State No. 36
- ✓ Back Creek I.
- Long I.
- ✓ Williams I.
- State No. 10.

Names preceded by • are
approved. 12/16/48 L.Hack.

45 Comparison with Nautical Charts

Chart No. 531 1:20,000 1947

Many areas of "grass in water" along the Appomattox River are not shown on the chart.

Small grass islands in the mouth of Bailey Creek are not shown on the chart.

51 Application to Nautical Charts

The map manuscript has been applied to the nautical chart.

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