Diag. Cht. No. 78-4

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Air Photographic (Shoreline)</th>
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<tbody>
<tr>
<td>Field No.</td>
<td>Office No.</td>
</tr>
<tr>
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<td>T-8089</td>
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</table>

LOCALITY

State: Virginia
General locality: James River
Locality: Turkey Island - Hatcher Island

1941-1943

CHIEF OF PARTY
H.O. Fortin, Chief of Field Party
F.L. Peacock, Balto. Photo. Office

LIBRARY & ARCHIVES

DATE: July 17, 1950
DATA RECORD

Quadrangle (II); Dutch Gap, Va. 7 1/2 minute (U.S.G.S.)

Field Office: Air Photographic Party #2

Compilation Office: Baltimore Photogrammetric Office

Instructions dated (II III):
March 26, 1942—July 15, 1942—Sept. 30, 1942
Nov. 14, 1942 and Nov. 24, 1942

Completed survey received in office: 9-19-44

Reported to Nautical Chart Section:

Reviewed: 12-27-44

Redrafting Completed: 2-10-45

Registered: 6-20-50

Compilation Scale: 1:10,000

Scale Factor (III): None

Geographic Datum (III): N.A. 1927

Reference Station (III): BOTTOM 1942, r. 1943

Lat.: 37°24' - 34°47' 0"
Long.: 77°18' - 20°30' 4"

State Plane Coordinates (VI): Virginia South Zone

X = 2346,852.64 ft.  Y = 394,003.37 ft.

Military Grid Zone (VI)

Project No. (II): CS-283

Chief of Party: Henry O. Fortin

Copy filed in Descriptive Report No. T-VI

Chief of Party: Fred. L. Peacock

Date: Partially 11-21-44

Published Scale:

Datum Plane (III): Mean Sea Level

 publication date: 2-4-47
PHOTOGRAPHS (III)

Eastern Standard Time

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<th>Scale</th>
<th>Stage of Tide</th>
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<td>11-25-41</td>
<td>1:04 p.m.</td>
<td>1:10,000</td>
<td>1.0' above M.L.W.</td>
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<td>7626 to 7627 inc.</td>
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<td>1:12 p.m.</td>
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<td>7628 to 7631 inc.</td>
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Mean Range: 3.2'  Spring Range: 3.7

Camera: (Kind or source) U.S.C.&G.S. 9 lens camera (focal length-8½")

All negatives are on file in the Washington Office

Field Inspection by: Lt. 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)  B.R.C. - J.T.B.

Washington Office checked by: B.R.C.

date: May 4, 1944

date: May 4, 1944

Control plotted by: James E. Sunderland, A.C. Rauck, Jr.

Control checked by: W. E. Schmidt, J. E. Deal, Jr.

date: May 13, 1944 & Aug. 7/44

May 13, 1944 & Aug. 7/44

date:

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

date: Aug. 7, 1944 to Aug. 14, 1944.

Detailed by: A. C. Rauck, Jr.

date: Aug. 17, 1944 to September 12, 1944.

date: Sept. 12, 1944 to Sept. 18, 1944

Reviewed in compilation office by: Henry P. Eicher

date:

Elevations on Field Edit Sheet checked by: None
STATISTICS (III)

Land Area (Sq. Statute Miles): Shore line only

Shoreline (More than 200 meters to opposite shore): 21 statute miles

Shoreline (Less than 200 meters to opposite shore): 7 statute miles
Measured along approx. centerline of stream

Number of Recoverable Topographic Stations established: 11

Number of Temporary Hydrographic Stations located by radial plot: 57

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by,

(II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname

and initials (not initials only).

Remarks:
Field Inspection

Field inspection data for the area of T-8689 are contained in the "Report on Field Inspection of Air Photographs, James River and Tributaries, Virginia" by Henry O. Fortin, dated April 20, 1943.

Filed in the Division of Photogrammetry, General Files.
26. **CONTROL:**

This Map Drawing includes that portion of the shoreline and adjacent planimetry of the James River and its tributaries falling within the area of Surveys Nos. T-309 and T-3088.

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

**UNITED STATES COAST AND GEODETIC SURVEY SECOND ORDER TRIANGULATION STATIONS**

- BRADY, 1942, 1943
- BREM, 1942
- BETHEL, 1942, 1943, r. 1943
- BOTTOM, 1942, r. 1943
- CURL, 1943, r. 1943
- DUTCH, 1942, **lost**
- HARR, 1942, 1943
- HAYAIL, 1942, 1943
- MEADOW, 1932
- STONEMAN, 1943, r. 1943

**UNITED STATES COAST AND GEODETIC SURVEY, TRIANGULATION INTERSECTION STATIONS**

- CHIMNEY, RED BRICK HOUSE, GREEN GABLE, 1942, 1943, r. 1943
- CHIMNEY, WHITE HOUSE, RED ROOF, 1942, 1943, r. 1943
- DUTCH GAP LIGHT, 1942, 1943, r. 1943 *James River light 1192
- ELEVATED WHITE WATER TANK, 1942, 1943, r. 1943 **** Prob. Lost
- JONES NECK CUT LIGHT NO. 3, 1942, 1943, r. 1943 *James River light 146
- JONES NECK CUT LIGHT NO. 4, 1942, 1943, r. 1943 *James River light 146
- LIGHT FOR NAVY RADIO TOWER, 1942, 1943, r. 1943
- LIGHT, NAVY RADIO TOWER, 1942, 1943, r. 1943
- SOUTH GABLE, CUPOLA, WHITE GRAIN MILL, 1942, 1943, r. 1943
- VARINA WATER TANK, 1942, 1943, r. 1943
- WHITE CHIMNEY (N.E. CHIMNEY WHITE HOUSE), 1942, 1943, r. 1943
- WHITE SILO, GROUP OF WHITE BUILDINGS, 1942, 1943, r. 1943 *

* No check position

**** The Field Inspection Unit furnished the Compilation Office the identification of triangulation station ELEVATED WHITE WATER TANK, also listed WATER TANK, ELEVATED, WHITE, pricked direct on field photograph No. 7631.

This is an intersection station and was established under Project H.T. 226, James River, during the winter 1942-1943. This station could not be held to its geographic position during the running of this radial
plot. The directions listed in the field computations, Accession No. G 5488, James River, Hopewell to Richmond, Va. were verified. The description published in Supplement 327, James River, Claremont to Richmond to Gordonville, is not of sufficient detail to ascertain if the tank has been moved to a new location since it was established.

The radially plotted position of this ELEVATED WHITE WATER TANK is located 261.9 meters southwest of the listed geographic position.

UNITED STATES GEOLOGICAL SURVEY MONUMENTED STATIONS:

- RICHMOND B.M. NO. 39, 1932
- RICHMOND B.M. NO. 42, 1943 (also 184)
- RICHMOND B.M. NO. 50, 1932
- P.T.S. NO. 56, 1916, r. 1942, 1943
- TT-2T, 1937, r. 1942, 1943
- TT-3T, 1937, r. 1942, 1943

UNITED STATES GEOLOGICAL SURVEY TEMPORARY TRAVERSE STATIONS

MALVERN HILL P.O. ½ MILE S.E. T-ROAD INTERSECTION, 1916, 1918, r. 1942, 1943
MALVERN HILL P.O. 800 FEET N. INTERSECTION OF ROAD, 1916, 1918 r. 1942, 1943
RUNNIMede Stock Farm, T-ROAD S.E. AT MAILBOX, 1916, 1918, r. 1942, 1943
T-ROAD WEST, 25 FEET N. TO THREE MAILBOXES ON E. SIDE OF ROAD, 1916, 1918, r. 1942, 1943.

90 A, 1937, r. 1942, 1943
97 A, 1937, r. 1942, 1943
101 A, 1937, r. 1942, 1943
104 A, 1937, r. 1942, 1943
107 A, 1937, r. 1942, 1943
111 A, 1937, r. 1942, 1943
113 A, 1937, r. 1942, 1943

See Review Report
The following horizontal control stations fall with the areas adjacent to the north, south, and west limits of this Map Drawing.

UNITED STATES COAST AND GEODETIC SURVEY SECOND ORDER TRIANGULATION STATIONS

CREEK, 1942, 1943, r. 1943
CHAFFIN, 1942, 1943, r. 1943
WOOD (F.I.P. WOOD), 1943
MALVERN, 1932, r. 1943
26. **CONTROL**: (Continued)

**UNITED STATES COAST AND GEODETIC SURVEY TRIANGULATION INTERSECTION STATIONS**

- JONES NECK LOWER LIGHT, 1943, r.1943 *
- WOODEN TOWER, 1942, 1943
- SILO NO. 1, WHITE, N. END OF LARGE GRAY BARN, 1942, 1943, r.1943*
- SILO NO. 2, at S. CORNER OF GRAY ROOFED BARN, 1942, 1943, r.1943*
- SMALL BLACK STACK, 1942, 1943

* No check position

**UNITED STATES ENGINEERS STATION**

- JR 47, r. 1938, 1942, 1943 (Monumented station)

**UNITED STATES GEOLOGICAL SURVEY TEMPORARY TRAVERSE STATIONS**

- 14, 1937, r. 1942, 1943
- 20A, 1937, r. 1942, 1943
- 86A, 1937, r. 1942, 1943
- 33A, 1937, r. 1942, 1943
- 136A, 1937, r. 1942, 1943
- 283A, 1937, r. 1942, 1943

The above listed horizontal control stations, except otherwise noted, both inside and outside the limits of these combined surveys, were used to establish photograph centers, secondary control, and detail points for this Map Drawing.

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 Div. of Photogrammetry - General Files

28. **DETAILING**

The shoreline and immediate adjacent culture of the part of the James River shown on this Map Drawing has 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

In a few places, areas such as Jones Neck, Hatcher Island, and a portion of Turkey Island have been fully detailed on this Map Drawing. As these areas contained large marsh and swamp lands, and in some instances waterways or canals, it was deemed desirable to detail all planimetry in these vicinities.
28. **DETAILING:** (Continued)

The stereoscope was used to verify the shoreline field inspection data furnished the Compilation Office by the Field Inspection Unit. These data were transferred to the office photographs and then detailed on the Map Drawing. In general, the Field Inspection data were satisfactory.

All drainage flowing into the James River and its tributaries has been detailed. Drainage not identified by the Field Inspection Unit has been shown with a light weight, dashed, acid ink line.

The portion of Turkey Island Creek, beyond the limits of small boat navigation which was not identified by the Field Inspection Unit, has been delineated from stereoscopic examination and is also shown on the Map Drawing with a light weight, dashed, acid ink line.

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 was made with available charts and topographic quadrangles.

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

All buildings immediately adjacent to the shoreline have been detailed.

Buildings or groups of buildings which were believed to be located at a sufficient elevation so as to be visible from the navigable waters, have also been detailed.

At the head of Fourmile Creek, a pond, namely, Griggs Pond, which is believed to have been formed by the construction of a dam, has been detailed on the Map Drawing. This pond was not identified in the field as it is located beyond the limit of work of the Field Inspection Unit.

A bridge, which did not exist on the date the nine lens photographs were taken, is detailed on this Map Drawing. This bridge is across the James River between Hatcher Island and the mainland on the west. The Field Inspection Unit sketched this bridge in its proper location on field photograph No. 7631. The bridge was transferred directly from the field photograph to the Map Drawing by orienting the Map Drawing to corresponding common points of detail on the field photograph. An appropriate note relating to this bridge is shown on the Map Drawing.

See Review Report
28. DETAILING: (Continued)

The number of nine lens photographs covering the area of these two surveys were 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 very good 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 was furnished the Compilation Office for use in detailing this 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 the outer limits of low wet land at Mean High Water, and is not considered to be the Mean High Water Line.

In several instances the Field Inspection Unit identified the Mean High Water line on the field photographs with a dashed or broken red ink line.

According to a letter from Lieutenant Commander Henry O. Fortin, dated February 11, 1943, this dashed or broken line indicates that the field inspector could not interpret the shoreline correctly due to shadows, overhang of trees, bluffs, or poor photographs; sometimes a combination of all four.

Where these doubtful areas were indicated on the field photographs, a careful stereoscopic examination was made and the resulting interpretation, supplemented by the Field Inspector's interpretation was then detailed on the Map Drawing with a full, heavy weight line.

31. LOW WATER AND SHOAL LINES

No Mean Low Water Line has been shown on this Map Drawing, and none was indicated by the field inspection data, or was visible on the nine lens photographs.
31. **LOW WATER AND SHOAL LINES:** (Continued)

Several mud areas, identified by the Field Inspection Unit, are outlined on the Map Drawing with a light weight, dotted, black acid ink line, and labeled "Mud".

Other areas, not identified by the Field Inspection Unit, but shown on the field photographs with a broken green ink line, were interpreted from examination of the nine lens photographs, and are shown on the Map Drawing with a dashed, light weight, acid ink line, and labeled "Shoel. Shalow".

32. **DETAILS OFFSHORE FROM THE HIGH WATER LINE**

Piling areas, pilings across entrances, and remains of barges were identified by the Field Inspection Unit, and are detailed and labeled on this Map Drawing.

Several boulders, offshore from, or at the high water line, in the vicinity of Woodson Rock were indicated on the field photographs by the Field Inspection Unit. These boulders were not visible on the photographs and could not be detailed. The data for these boulders, as furnished by the Field Inspection Unit, has been transferred to the Map Drawing.

One obstruction was detailed on this Map Drawing off the south shore of the James River, west of Meadowville and south of Varina. This obstruction was not identified by the Field Inspection Unit and should be investigated by the Hydrographic Party.

One wreck, identified on field photograph No. 7641, by the Field Inspection Unit, at Point Bremo, has been radially plotted on this Map Drawing. The extent to which it bares has been noted on the Map Drawing, in accordance with the field inspection data.

33. **WHARVES AND SHORELINE STRUCTURES:**

Numerous jetties, piers, remains of piers, pilings, a few catwalk remains, wood retaining walls, and a concrete wall were identified by the Field Inspection Unit on the field photographs. These are detailed on the Map Drawing and labeled. No other shoreline structures were visible on the office photographs.

34. **LANDMARKS AND AIDS TO NAVIGATION:**

The following objects were recommended by the Field Inspection Unit for charting as landmarks. They are:

- **ELEVATED WHITE WATER TANK** (see comment under paragraph 26, entitled "CONTROL")
- **LIGHT-TOP N.E. RADIO TOWER** (also triangulation station)
34. **LANDMARKS AND AIDS TO NAVIGATION:** (Continued)

Form No. 567 is being submitted for the above recommended landmarks.

The Field Inspection Unit furnished the Compilation Office the identified location, on field photograph No. 7630, for DUTCH GAP LIGHT NO. 2, listed as Aiken Swamp Cut Light NO. 2, Fl. R. ev. 5 sec. in the 1944 Light List. This fixed aid to navigation was radially plotted, and comparison was made with its respective position as shown on U.S.C.&GS. Chart No. 531. It was found that the two positions were not in agreement. Form No. 567 is being submitted for the radially plotted position of this fixed aid to navigation.

Also, falling within the limits of this Map Drawing, are the following fixed aids to navigation which are also triangulation stations. These are shown on the Map Drawing with the triangulation station symbol. They are:

DUTCH GAP LIGHT Fl. W. ev. 5 sec. James River Light 150
JONES NECK CUT LIGHT NO. 3 Fl. W. ev. 5 sec. James River Lt 145
JONES NECK CUT LIGHT NO. 4 Fl. R. ev. 5 sec. James River Lt 146
See Chart Letter 675(44)

The Field Inspection Unit furnished the Compilation Office, and identification of the fixed aid to navigation, Aiken Swamp Cut Light No. 4, Fl. R. ev. 5 sec., pricked direct on field photograph No. 7631. This fixed aid to navigation was radially plotted and falls just west of the western limits of this Map Drawing, and on Map Drawing for Survey No. T-8096. However, this radially plotted position does not agree with the charted position shown on Chart No. 531, issued March 6, 1944. The radially plotted position does agree with the charted position shown on Chart No. 531, issued November 15, 1941. It is believed that this aid to navigation has been moved since the date of the field inspection. Both the radially plotted position and the charted position are shown. The charted position has been shown with a dashed, black acid ink circle.

35. **HYDROGRAPHIC CONTROL:**

The Compilation Office was furnished the identification of fifty-seven (57) temporary hydrographic stations, and eleven (11) recoverable topographic stations. These were identified on the 1:10,000 field photographs by numbers, and their descriptions listed in a field sketch book (form 274) by corresponding numbers. These stations were transferred to the office photographs, and radially plotted on the Map Drawing. The numbers and descriptions of these stations have been noted near the station to which they refer, directly on the Map Drawing.
35. HYDROGRAPHIC CONTROL: (Continued)

Form No. 524 is being submitted for the eleven (11) recoverable topographic stations. They are:

No. 680 - N.W. GABLE UNPAINTED BARN, METAL ROOF, 1943
No. 681 - S.W. GABLE UNPAINTED BARN, GALVANIZED ROOF, 1943
No. 738 - N.W. GABLE UNPAINTED SHINGLED BUILDING, 1943
No. 744 - W. GABLE CURLES NECK MANSION, 1943
No. 755 - W. GABLE SMALL WHITE HOUSE, 1943
No. 756 - S. GABLE UNPAINTED BARN, SHINGLED ROOF, 1943
No. 761 - S. GABLE LONG SHED, 1943
No. 769 - CONCRETE SILO WITH BARN, 1943
No. 794 - S.W. GABLE OF BARN WITH METAL ROOF, 1943
No. 797 - ELEVATED WHITE WATER TANK, 1944
No. 813 - DUTCH GAP LIGHT NO. 2 (also Aiken Swamp Cut Light No. 2)
James River Light 152., 1943

36. LANDING FIELDS AND AERONAUTICAL AIDS

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

37. JUNCTIONS:

To the north — No contemporary survey
To the east — Map Drawing for Survey No. T-8088 has been combined with Map Drawing for Survey No. T-8089. The small portion of James River and adjacent planimetry, falling within the area of Survey No. T-8088, has been detailed in the right hand margin of Map Drawing for Survey No. T-8089.
To the south — A satisfactory junction has been effected with the combined Surveys of this Map Drawing and the Map Drawings for Surveys No. T-8090 and T-8087.
To the west — The junction with Map Drawing for Survey No. T-8096 was in satisfactory agreement.

38. GEOGRAPHIC NAMES

Approved list filed in Geographic Names Section

As instructed, no geographic name investigation was furnished the Compilation Office. The geographic names shown on this Map Drawing were taken from the following available sources, namely:

UNITED STATES COAST AND GEODETIC SURVEY CHART NO. 531, dated March 6, 1944.
UNITED STATES GEOLOGICAL DUTCH GAP, VA. 7½ min. quad. surveyed in 1938
UNITED STATES COAST PILOT, ATLANTIC COAST, section C, SANDY HOOK TO CAPE HENRY
38. GEOGRAPHIC NAMES: (Continued)

Both undisputed and disputed Geographic Names are shown on the Map
Drawing. In instances where disputed names occurred between the U.S.C.&G.S.
Chart and the U.S. Geological Survey Quadrangle, the preference was given
to the U.S.C.&G.S. Chart.

A list of the undisputed geographic names and a list of the disputed
graphic names are attached to this descriptive report.

39. HORIZONTAL ACCURACY:

The probable error in the relative 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 of the combined
Surveys, Nos. T-8038 and T-8039, is believed to be completed in all details
for charting and no other surveys are deemed necessary.

Combined survey number is T-8038 (T-8037 dropped)

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

Comparison was made with the U. S. Geological Survey, Dutch Gap, Va.,
7 1/2 minute quadrangle, scale 1:24,000 surveyed in 1938, advance unedited
edition. The following difference was noted:

On the north shore of the Aiken Swamp - Dutch Gap Cutoff, on Hatcher
Island, is an area which is being dredged out. This area is not shown on the
U. S. Geological Survey Quadrangle. All other shoreline detail and immediate
adjacent planimetry are in good agreement.

45. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with the U. S. Coast and Geodetic Survey Chart No.
531, scale of 1:20,000, dated March 6, 1944. The following differences were
noted:

The dredged out area on Hatcher Island, mentioned in paragraph No. 44,
does not appear on the chart.

The large marsh area shown on the chart, on the west shore of the
James River, west of Jones Neck, has been detailed on the Map Drawing as an
area which is flooded at Mean High-Water. An appropriate note has been shown
on the Map Drawing in this area.

A large marsh area in the vicinity of Jones Neck with canals flowing
through it is shown on the Map Drawing. The detail in this area as shown
on the chart is incomplete.
45. COMPARISON WITH NAUTICAL CHARTS: (Continued)

The extent of the navigable waters of Fourmile Creek at Deep Bottom is not shown on the chart. This creek has been detailed on the Map Drawing beyond the limit of small boat navigation.

Turkey Island Creek, which is not shown on the chart, has been detailed on the Map Drawing, as far as it could be delineated from stereoscopic examination of the photographs. This has been shown as marsh area only on the chart.

One wreck, radially plotted on this Map Drawing, at Point Bremo, was identified by the Field Inspection Unit. This wreck is not shown on the chart.

At the north end of Jones Neck, on the Map Drawing, is a radially plotted position of a temporary hydrographic signal, numbered 766, which has been described in field sketch book (form No. 274) as "BOAT OF ABANDONED BOAT". This is not charted on chart No. 531.

All other shoreline detail and immediately adjacent planimetry are in good agreement.
Respectfully submitted:
September 18, 1944

Albert C. Rauck, Jr.
Senior Photogrammetric Aid

Compilation and Descriptive Report, Reviewed by

Henry P. Eichert
Jr. Photogrammetric Engineer

Compilation of Map Drawing
Supervised by

J. Edward Deal, Jr.
Ass't. Photogrammetric Engineer

Approved and Forwarded:
September 19, 1944

Fred L. Peacock
Chief of Party, C. & G. Survey
Officer in Charge
Baltimore Photogrammetric Office
Descriptions of Photo-Hydro Stations
T-8009

674 - Tip of patch of tall grass, offshore at H. W.

675 - Chimney of red roofed, two story, yellow house

676 - Tuft of tall marsh grass, 1 m. in diameter

677 - Tuft of tall grass detached from other grass

678 - Tip of grass on mud bank on E. side of entrance to break in marsh.

679 - Tip of grass on mud bank on E. side of entrance to stream.

682 - Fifteen foot pole on gravel point at remains of old pier.

684 - E. end of fallen, red beacon

705 - S. gable of one story, brown

712 - Center of small, grass patch, farthest away from shore

713 - Center of offshore grass patch

714 - Center of offshore grass patch

715 - Small tuft of grass at edge of L. W., 5m in diameter.

716 - Center of tuft of grass, 1 m. in diameter at edge of L. W.

716 A - Tip of grass on mud bank on N. side of entrance to small stream.

724 - End of jetty, third from W. house on pier

725 - Cupola on house with red roof on pier

726 - Tip of bank at sharp break downward

739 - End of jetty, third N. of 737

740 - End of second jetty N. of 739

741 - End of jetty with lantern on white pole

742 - Rounding point of grass on SW side of break in grass

743 - NE corner of old pier, only piling remaining

746 - End of longer of two rows of piling

747 - Corner of S. side of low place in dock

748 - Tip of grass

749 - Tip of grass on point

750 - Remains of dolphin broken off at H. V. L., one tall piling left.

751 - SW gable of green, boat house

752 - Tip of bank on SW side of break

753 - Center of grass patch with line bush in middle

754 - S End of row of piling

757 - End of log, half way across creek, bare 1 ft. at M. H. W.

758 - N. side of entrance to break in grass

758 A - End of jetty with 3 ft. cedar on end.

759 - End of jetty with 3 ft. cedar in middle

760 - End of first jetty N. of canal entrance

762 - Tip of grass at jetty opposite canal entrance

763 - End of jetty, last jetty going North

765 - Gravel point on S. side of stream entrance

766 - Bow of abandoned boat

767 - Silver colored ball over top of cabin with dark roof

768 - Tip of patch of tall grass with shorter grass around
770 - Tip of grass
771 - Ten foot delphin on W. corner of pier
772 - Eight foot pile on end of jetty
773 - End of third jetty V. of 772
774 - End of jetty W. of barge with growth of trees on it.
776 - Outer end of short jetty
777 - Chimney in center of unpainted house with galvanized roof
778 - End of abandoned catwalk
781 - Tip of gravel bank
795 - SW corner of pier
796 - Eight foot pile on SW corner of pier
798 - Tip of grass on W. side of break
799 - N. chimney of two story house with chimney on both ends and shed on back, E. side
812 - Tuft of grass in entrance to bight
I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (delete from) the charts indicated.

The positions given have been checked after listing by ____________________________

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<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
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<td>77 19 662</td>
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<td>1946</td>
<td></td>
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<tr>
<td>Cupola</td>
<td>Cupola, wharf house</td>
<td>37 23 401</td>
<td>77 18 114</td>
<td>Radial Plot</td>
<td>1943</td>
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<td>Silo</td>
<td>Concrete Silo</td>
<td>37 23 410</td>
<td>77 22 599</td>
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<tr>
<td>Chimney</td>
<td>Chy., NE Gable, White House</td>
<td>37 22 1155</td>
<td>77 16 727</td>
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<td>1943</td>
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</tr>
<tr>
<td>S. Gab. Ho.</td>
<td>S. Gable, white house</td>
<td>37 22 1312.7</td>
<td>77 19 508.5</td>
<td>Triang.</td>
<td>1942</td>
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<td>James River L 145</td>
<td>James River Light 145</td>
<td>37 22 1452.9</td>
<td>77 19 238.4</td>
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<td>James River L 150</td>
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<td>James River L 152</td>
<td>James River Light 152</td>
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<td>77 21 1075.8</td>
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<td>James River L 154</td>
<td>James River Light 154</td>
<td>37 22 1760</td>
<td>77 22 736</td>
<td>Hydro</td>
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</tbody>
</table>

Copy of Chart Letter 275(146) for points on T-8089
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED | STRIKE OUT ONE
TO BE DELETED

Baltimore, Md. Sept. 19 1944

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by

<table>
<thead>
<tr>
<th>STATE</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
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<tbody>
<tr>
<td></td>
<td>Tank</td>
<td>Elevated White Water Tank</td>
<td></td>
<td>37 23 1071.1</td>
<td>77 21 1396.0</td>
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<td>1943</td>
<td>x 531</td>
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<tr>
<td></td>
<td>N.E. R. Tr. Edgeworth, WVA, E.R. Tr.</td>
<td>Dutch Gap Light 2</td>
<td>37 24 533.3</td>
<td>77 18 1289.6</td>
<td>&quot;</td>
<td>Triang. &quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Now James River Lt 152)</td>
<td></td>
<td>37 22 1292.4</td>
<td>77 21 1075.8</td>
<td>&quot;</td>
<td>Radial Plot</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aiken Swamp Cut l</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Now James River Lt 154 -)</td>
<td></td>
<td>37 22 1785.1</td>
<td>77 22 791.4</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
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</tbody>
</table>

See chart letter 275 (46) for new position

Copy of chart letter 678 (44) for points on T-6089
GEographic Names
Undisputed

- Aiken Swamp
- Bailey's Creek (Location Decision)
- Curles Neck
- Curles Neck Road
- Deep Bottom
- Dutch Gap
- Fair Hill
- Farrar Island
- Fort Brady
- Fourmile Creek
- Griggs Pond
- Hatcher Island
- Hapall
- James River

- Jones Neck
- Kingsland Road
- Malvern Hill
- Meadowville
- Picketts Wharf
- Point Premo
- Presque Isle Swamp
- Roundabout Creek
- Richmond Yacht Basin
- Turkey Island
- Turkey Island Bend
- Turkey Island Creek
- Varina Road
- Woodson Rock

Names precede by • are approved 12/10/48 L. Heck
GEORGIC NAMES

Disputed

U.S.C. & G.S. Chart

✓ Aiken Swamp - Dutch Gap Cutoff ✓
✓ Curles (as on chart 531)
✓ Jones Neck Cutoff ✓
✓ Varina ✓
✓ Curles Neck Plantation ✓ (as on chart 531)

U.S.G.S. Quadrangle

Dutch Gap Channel
Curles Neck Plantation
Meadowville Channel
Aiken House
Division of Photogrammetry
Review Report of
Shoreline Map Manuscript T-2089

Subject numbers not used in this report have been
adequately covered in other parts of the descriptive report.

26 - Control. - The following triangulation stations were
removed from the map manuscript. They were reported lost.

Dutch, 1932
Richmond BM No. 50(USGS), 1952

All unmarked USGS temporary traverse stations were
deleted.

The triangulation station, "Elevated, White Water Tank,
1942" is apparently lost. A tank in the same vicinity
with the same description has been located by the radial
plot and the position obtained has been verified by the
hydrographic party in 1946. See Chart Letter 678(44) for
its position.

The names of lights along the James River have been
changed. The Light List name has been shown on the map
manuscript followed by the triangulation station name in
parenthesis.

28 - Detailing. - The symbolization of several areas of
"grass in water" and mud has been changed to conform with
recent instructions.

The symbols for jetties should be changed to standard
specifications by the smooth draftsman.

A bridge that had been sketched on a photograph by
the field inspector and shown on the map manuscript with a
dashed line, has been deleted. The correct position for this
bridge is shown on H-7083. The bridge clearance note has
been left on the map manuscript with an arrow to its approx-
imate position. Not on registered copy.

34 - Landmarks and Aids to Navigation. - Aiken Swamp Cut Light
4 was renamed James River Light 164 and the position changed.
See Chart Letter 275(46) for the new position. The radially
plotted position and the position transferred from the old
chart 5/1 have been removed from the map manuscript.

Copies of Chart Letters 275(46) and 678(44) were prepared
and made a part of the descriptive report.
37 - Topographic and Photo-Hydro Stations. - The Form 524 card for Allen Swamp Cut Light 4 (Jones River Light 154) was destroyed. The light has been moved.

A list of descriptions of photo-hydro stations was prepared and made a part of the descriptive report.

The names of topographic stations were changed to a short descriptive term.

### 43 - Comparison with Contemporary Hydrographic Surveys -

H-7083 1:10,000 1948

Extensive dredging operations on Hatcher Island have changed the shoreline considerably in that area on the hydrographic survey.

The bridge to Hatcher Island is shown in its true position on H-7083.

The wreck at Pt. Brevo is shown in a different position on the map manuscript than on the hydrographic survey. (See Review H-7083(MK) July 64)

### 44 - Comparison with Existing Surveys -

<table>
<thead>
<tr>
<th>Name</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.G. Dutch Gap Quadrangle 1:51,680</td>
<td>1943</td>
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<tr>
<td>T-423</td>
<td>1:10,000</td>
<td>1853</td>
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<td>T-429</td>
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<tr>
<td>H-3227</td>
<td></td>
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</tr>
</tbody>
</table>

Common features on all previous surveys are superseded by the map manuscript in common area for charting purposes.

### 45 - Comparison with Nautical Charts -

<table>
<thead>
<tr>
<th>Chart No. 331</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1:20,000</td>
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</tr>
</tbody>
</table>

The chart shows several landmarks that were recommended by the hydrographic party in Chart Letter 275(46) in addition to the two landmarks recommended by the field inspector for T-3083.

The recent changes noted in Paragraph 43 have been applied to the chart.

The area W. of Jones Neck shown as "grass in water" flooded at MHW has been shown as marsh inside the MHWL on the chart.

### 51 - Application to Nautical Charts -

The map manuscript has been applied to the nautical chart.
Reviewed by:

Charles Glover
S. Thomas
12-21-48

S. V. Griffith
Chief, Review Section

Approved by:

B.J. Jones 7/50
S. V. Griffith
Chief, Div. of Photogrammetry

O. Stanley
W. M. Acaife
Chief, Div. of Coastal Surveys