

8062

Diag'd. on Diag. Ch. No. 78-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photographic (Shoreline)

Field No. CS-283 Office No. T-8062

LOCALITY

State VIRGINIA

General locality James River

Locality Ragged Is. Cr.-Cypress Cr.-Pagan R.

1941-'42

CHIEF OF PARTY

E.B.Lewey

LIBRARY & ARCHIVES

DATE August 31, 1949

B-1670-1 (1)

8062

DATA RECORD

T-8062

Quadrangle (II): Smithfield (USGS) Project No. (II):
Newport News (USGS) CS-283

Field Office:

Chief of Party:

E. B. Leway.

D. E. Sturmer and H. O. Fortin (additional work)

Compilation Office:

Chief of Party:

Air Photo Survey Party No. 2

Baltimore, Md.

Fred. L. Peacock

Division of Photogrammetry
Office Files

Instructions dated (II III):

Copy filed in Descriptive
Report No. T- (VI)March 26; July 15) 1942
Sept. 30; Nov. 14)Completed survey received in office: 1/4/43 7-14-44Reported to Nautical Chart Section: 1/15/43Reviewed: 10-15-48 Applied to chart No. 529 Date: 8-11-44

Redrafting Completed:

Registered: 6-22-49

Published:

Compilation Scale: 1:10000

Published Scale:

Scale Factor (III):

none

Scale 1:10,000

Geographic Datum (III):

Datum Plane (III): MHW

N. A. 1927

~~Mean Sea Level~~

Reference Station (III):

Terminal 2, 1941 recovered 1942

Lat.: $36^{\circ} 58' 03.207''$ 98.9m Long.: $76^{\circ} 30' 43.992''$ 1088.2m Adjusted
~~Unadjusted~~State Plane Coordinates (VI): Station Kitty - Virginia, South ZoneX = 2,580,502.88Y = 229,728.87

Military Grid Zone (VI)

PHOTOGRAPHS. (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
7706	11/26/41	10:00a.m.	1:10,000	0.2 above M. L. W.
7707	11/26/41	10:00a.m.	1:10,000	0.2 above M. L. W.
7708	11/26/41	10:00a.m.	1:10,000	0.2 above M. L. W.
7709	11/26/41	10:00a.m.	1:10,000	0.2 above M. L. W.
7831	11/26/41	1:04p.m.	1:10,000	1.5 above M. L. W.
7832	11/26/41	1:04p.m.	1:10,000	1.5 above M. L. W.
7833	11/26/41	1:04p.m.	1:10,000	1.5 above M. L. W.
7834	11/26/41	1:04p.m.	1:10,000	1.5 above M. L. W.

Tide from (III): Hampton Roads (Naval Base) with time correction to
Newport News, Virginia

Mean Range: 2.6 ft. Spring Range: 3.0ft.

Camera: (Kind or source) U. S. Coast & Geodetic Survey nine lens (focal
length 8.25 in.) All negatives are on file in the Washington Office.

Field Inspection by: Lieut. E. B. Lewey date:
Summer & Fall of 1942

Field Edit by: None date:

Date of Mean High-Water Line Location (III): November 26, 1941

Projection and Grids ruled by (III) WDH Washington Office date: 11/20/42

" " " checked by: JON Washington Office date: 11/20/42

Control plotted by: James E. Sunderland date: 11/23/42

Control checked by: Harry R. Rudolph date: 11/24/42

Radial Plot by: Walter E. Schmidt date: 11/27/42

Detailed by: Harry R. Rudolph & Abraham L. Goncharsky date: 11/30/42 to
(shoreline) 12/18/42

Reviewed in compilation office by: date:
Michael G. Misulia 12/22-29/42

Elevations on Field Edit Sheet
checked by: None date:

STATISTICS (III)

Land Area (Sq. Statute Miles): none

Shoreline (More than 200 meters to opposite shore): 19 Statute miles

Shoreline (Less than 200 meters to opposite shore): 26 Statute miles

Number of Recoverable Topographic Stations established:

10

Number of Temporary Hydrographic Stations located by radial plot:

~~23~~ / 5

Leveling (to control contours) - miles:

none

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:

Summary to Accompany T 8062

T 8062, scale 1:10,000, is one of 40 shoreline surveys in Project CS-283 along the James River, Virginia.

Project CS-283 was originally planned as a planimetric mapping project but was limited to shoreline surveys only after War Mapping Project CS-289, covering practically all the James River, was undertaken.

Topographic Quadrangle T 8305 (Project CS-289) completely covers T 8062. The former was compiled in 1944 from 1:20,000 scale photographs taken in 1942 in contrast with T 8062, compiled in 1942-4 from 1:10,000 scale photographs taken in 1941.

Field Inspection

Field inspection data for the area of T 8062 are contained in the "Report on Field Inspection of Air Photographs, James River, Newport News to Hopewell, Virginia" by Ernest B. Lewey, dated October 12, 1942, Filed in Division of Photogrammetry, General Files.

COMPILATION REPORT

26 Control:

The control plotted on this map drawing consists of ten U. S. Coast & Geodetic Survey triangulation stations, three U. S. E. triangulation stations, four V. C. F. triangulation stations and one U. S. G. S. primary traverse station. This control was supplemented by three field inspection stations. The basic control has been shown on this map drawing with the usual triangulation symbol. The field inspection stations have been shown with a small square outlined in purple ink on the glossy side of the celluloid.

The following list of control stations are within the detailed limits of this map drawing:

4 U.S.C. & G. S. triangulation stations:

- Field, 1934, r.1942 (supplemented by F.I.S. "Ced")
- Terminal 2, 1941, r.1942
- Kitty, 1934, r.1942
- Seventeen, 1934, r.1942
- Jones Creek Lt No 2, 1938

2 V. C. F. triangulation stations:

- Max, (V.C.F.), 1938, r.1942
- Godwin, (V.C.F.) 1938, r.1942 (supplemented by F.I.S. "Gras")

The following list of control stations fall without the original detail limits of this map drawing with the exceptions noted.

6 U. S. C. & G. S. triangulation stations:

- Vest, 1934, r.1942 (in extended limits)
- Fishing 2, 1938, r.1942 (in extended limits)
- Rag, 1934, r.1942
- Kish, 1934, r.1942 (supplemented by F.I.S. "Log")
- Smithfield, 1932, r.1942
- Smithfield Black Water Tank, 1932, r.1942

3 U. S. E. triangulation stations:

- J.A.C. (U.S.E.) 1934, r.1942 (in extended limits)
- Day (U. S. E.) 1938, r.1942
- Pagan (U.S.E.) 1938, r.1942

2 V. C. F. triangulation stations:

- Cooper (V.C.F.) 1941, r.1942 (in extended limits)
- Rainbow (V.C.F.) 1938, r.1942

1 U.S.G.S. primary traverse station: Deleted - See Review Report

No. 415-TT 1, 1918 C

For a general discussion of the above control and its relation to the plot of this map drawing see the following paragraph.

27 Radial Plot:

An individual plot was laid for this map drawing by the usual radial line method. No templates were used. Each photo was resected under this map drawing and radial lines were drawn where necessary to carry the plot forward and obtain positions of the secondary control points. Principal points (mechanical centers) were transferred from one photograph to another by methods satisfactory to this office. Flight lines were established and satisfactorily used in laying the plot. The basic control was pricked on the office photographs and difficulties encountered are discussed at length in other paragraphs of this report. Secondary control was established to prove the plot. These points are shown by small double white ink circles on the office photographs and by small double purple or green ink circles on this map drawing. Small double purple ink circles indicate points which have been located by three or more good cuts and whose positions were considered strong. Small double green ink circles indicate weak positions of points.

The photographs were laid in the plot so that all triangulation as plotted on this map drawing held 100% or tangent to their respective radial lines on the office photographs except those stations specifically treated in other paragraphs of this report. Principal points (mechanical centers) were located and pricked on the map drawing. These points were then circumscribed with large purple ink circles. The numbers of the photographs were then noted on the map drawing with purple ink adjacent to their respective centers previously circumscribed.

The control density was adequate.

The control identification was not as adequate as might be expected. The following reasons are respectfully submitted:

Station "Rainbow" V.C.F. could not be identified very accurately on most photographs due to the failure to recognize recommended reference points as selected by the field inspection party and shown on their submitted sketch. The photography was not as good as might be expected in order to enable the personnel of this office to prick basic control stations within the required accuracy expected by the Washington Office. However, further consideration will be given to this accuracy and will be discussed in other paragraphs of this report. The above mentioned station would not hold within three meters on photograph No. 7705 and three meters on photograph No. 7833 when the plot for this map drawing was laid.

Station "Cooper" V.C.F. would not hold within five meters on photographs No. 7709 and 7831 when the plot was laid. Same reasons as above.

Station "Jones Creek Light No. 2" could not be held in the plot. Description of this station mentioned that this light was in six feet of water. The pricked position on the field photographs showed this station on the corner of a marsh area. The range of tide in this location is approximately two and one half feet; with this fact in mind it was therefore assumed by this office that the original light had been destroyed and a new one had been built on the corner of the marsh as recovered by

Station Jones Creek Light No 2 was not pricked correctly on the photographs in the field. There is evidence of a beacon on the photographs in the plotted position of the triang. sta.

27 Radial Plot: (cont'd)

the field inspection party or the geographic position on hand by this office may be in error. The position of the light was determined by photo compilation and was in disagreement approximately twenty-two meters with the original plotted position on this map drawing. The original plotted position was deleted. The new position was pricked and shown by a 2 $\frac{1}{2}$ mm. black acid ink circle. Forms No. 524 and No. 567 are being submitted.

1938 Jones Creek Lt. No. 2 is shown as triangulation in the 1938 Position. Form 524 destroyed and 567 corrected. Filed during review No record of previous filing.
Station "Godwin" V.C.F. was supplemented by F.I.S. "Gras". The F.I.S. would not hold within three meters in the plot on photograph No. 7834. This F.I.S. was difficult to prick on the office photograph No. 7834.

Station "Kitty" would not hold within three meters in the plot on photograph No. 7709. This station was difficult to prick on most photographs. However, it held tangent or 100% in the plot except as noted above.

Station "Vest" would not hold within ten meters in the plot on photograph No. 7831. Field reference points were difficult to recognize as submitted on the field sketch.

Station "Smithfield Black Water Tank" could not be definitely pricked on photograph No. 7707 due to the fact that the image of the tank was located in an area near the outer limits of the above mentioned photograph which unfortunately was blurred. The station would not hold within three to five meters in the plot on this photograph.

In some instances, sketches submitted by the field party indicated certain reference points (a,b,c etc.) to help this office in pricking the control on the office photographs but failed to identify these reference points on the field photographs. Stations that were pricked on the field photographs were stained by red ink and in many instances not only covered the pricked point but slightly covered the immediate surrounding area. This made it difficult to prick a station accurately on the office photographs especially where a marker was pricked direct by the field inspection party.

It is respectfully recommended that those concerned with the above information refer to a "Report on field inspection of air photographs, James River, Newport News to Hopewell, Va." submitted by Lieut. E. B. Lewey; approved and forwarded by Fred. L. Peacock, Officer-in-Charge of Air Photographic Party No. 2. Filed in Div. of Photogrammetry General Files

The number of photographs was adequate insofar as the laying of the plot was concerned.

A two to three meter triangle of error was encountered in the location of a few secondary control points when the plot was at first laid. Adjustment of these errors was made after giving careful consideration to poor matching of the wing prints of the nine lens photograph, errors in pricking points on the photographs, paper distortion, possible tilt etc.

27 Radial Plot: (cont'd)

Areas of questionable accuracy are discussed in other paragraphs of this report.

Tilt computations were not necessary.

Deep shadows on the photographs caused considerable trouble.

The gloss finish photographs sent to this office have the following disadvantages:

Ordinary ^{or}led pencil cannot be used to draw lines upon them. The pencil makes an indentation rather than a pencil line.

Crayon pencil cannot be used.

Glare of light is a source of trouble when viewing the entire photograph from a distance of one foot or more.

Finish will stand very little correction. It peels off. Cracks easily.

This photographic paper will not stand the wear usually given it in the office. Edges tear easily. Slight bulges develop over entire area of the photographic paper.

No sketching is possible from one photograph to another under the stereoscope unless done with ink. This is impracticable.

28 Detailing:

All purple or green ink is on the glossy side of this map drawing.

The shoreline and immediate adjacent culture has been detailed on this map drawing in accordance with the Director's letters dated March 26, 1942; July 15, 1942; September 30, 1942; and November 14, 1942; pertaining to this project No. CS-283. Filed in Div of Photogrammetry-Office Files

The scales of the photographs and this map drawing were in disagreement. The projector was used.

For a discussion of the James River bridge see paragraph No. 28 of the compiler's report for map drawing No. T-8055. All necessary data was shown on map drawing No. T-8055; other bridges shown on map drawing No. T-8062 have been labeled and data noted. Field inspection did not note reference plane from which vertical clearances were taken. Time and date of these readings also were not noted. It was therefore assumed that all vertical clearances were from M. H. W.

Positions for minor detail points, hydrographic stations and landmarks for charts were determined by the usual radial line method. The shoreline was transferred from the field inspection photographs to the office photographs, checked, and then detailed upon the map drawing. In addition to the immediate shoreline of James River, marshes and small streams were detailed over a large portion of this map drawing except the following sections:

28 Detailing: (cont'd)

The southern part of Cypress Creek south of Latitude $36^{\circ} 57' 45''$, and the southern part of Jones Creek south of Latitude $36^{\circ} 57' 20''$. It was assumed by this office that these two areas were not at the present time essential for use by the hydrographic party. The number of photographs covering the above mentioned excepted area was inadequate for the required accuracy of detail expected by the Washington Office. This was another reason for the detail being omitted. See - Additional work done in 1944 - part of this report.

The limits of this map drawing have been extended to include the area between Latitude $36^{\circ} 56' 15''$ to Latitude $36^{\circ} 58'$ and Longitude $76^{\circ} 28' 45''$ to Longitude $76^{\circ} 30'$. The statement of extended limits in the compiler's report for map drawing T-8055 should be revised to conform with the above. This area was not shown on map drawing No. T-8055. The revised limits on map drawing No. T-8062 have been outlined in red ink. This area will be shown on T-8055 by the smooth draftsman.

No bluffs were indicated within the detailed limits of this map drawing by the field inspection party.

29 Supplemental Data:

None

30 Mean High Water Line:

The mean high water line (firm ground) is indicated by a heavy black acid ink line the center of which should be taken as the true position. A light weight black acid ink line (marsh area) indicates the limits of navigation and not necessarily the M. H. W. A tide curve was drawn in order to approximate the tide for each photograph.

31 Low Water & Shoal Lines:

shallow
Approximate limits of ~~shoal~~ and foul areas have been shown with a dashed line and labeled for use of the hydrographer only. Most shoreline, except that developed with piers and bulkheads, consists of mud, sand and marsh. Important features have been labeled on the overlay sheet.

32 Details Offshore from High Water Line:

See paragraph No. 31.

All questionable areas have been noted on the overlay sheet for the attention of the hydrographer. None on this sheet

33 Wharves & Shoreline Structures:

All piers, wharves, marine railways and other shoreline structures were shown and labeled where it was thought necessary.

34 Landmarks, Fixed Aids to Navigation, and Aeronautical Aids:

The positions of the four charted fixed aids to navigation (existence verified by the Field Inspection Sub-Party of 1942), listed below, have been redetermined by radial intersection and submitted on Form 567 (to be charted). The names of such features have ^{been} lettered on the overlay sheet, while the radially plotted positions have been shown on the Map Drawing with $2\frac{1}{2}$ mm. black acid ink circles. The previously charted positions, which were in disagreement with those determined by radial intersection, were scaled from Chart No. 529 and submitted on Form 567 (to be deleted).

Four Fixed Aids to Navigation

Wrights Point Beacon

Battery Park Beacon

Jones Creek Beacon No.2

Bob Shoal Beacon

~~See Review Report~~

See Chart Letter 917 (49)

Copy enclosed.

No new landmarks or aeronautical aids were recommended by the Field Inspection Sub-Party of 1942 for the area of the Map Drawing.

35 Hydrographic Control:

~~Fifteen~~ hydrographic stations,

~~Twenty-three~~ temporary and ten Recoverable Topographic Stations have been shown on the Map Drawing. The positions of the temporary hydrographic stations as determined by radial intersection have been shown on the Map Drawing with $1\frac{1}{2}$ mm. black acid ink circles, while the positions of the Recoverable Topographic Stations which have also been determined by radial intersection have been shown with $2\frac{1}{2}$ mm. black acid ink circles. The names and descriptions of the Recoverable Topographic Stations and the descriptions of the temporary hydrographic stations have been lettered on the overlay sheet. The ten Recoverable Topographic Stations are as follows:

- ~~Chimney, red, white and blue, near center, house on bank, 1942~~
- ~~Cable, outer, large old building at water line, 1942~~
- ~~Pine, lone, small, Blaze on, 1942~~
- ~~Landing, small, center, in creek, 1942~~
- ~~Pine tree, blaze on northerly of 2 tall pine trees, 1942~~
- ~~Wrights Point Beacon (fixed aid to navigation), 1942~~
- ~~Battery Park Beacon (fixed aid to navigation), 1942~~
- ~~Jones Creek Beacon No.2 (fixed aid to navigation), 1942~~
- ~~Bob Shoal Beacon (fixed aid to navigation), 1942~~
- ~~B.M. E27, 1942~~

The positions of the above listed Recoverable Topographic Stations have been submitted on Form 524.

37 Junctions:

- Map Drawing Survey No. T-8061, north side, not started.
- Map Drawing Survey No. T-8055, east side, junction in agreement.
- Map Drawing Survey No. T-8063, south side, not started.
- Map Drawing Survey No. T-8067, west side, not started.

Junctions ok, check during review

39 Recommendations For Future Surveys:

This map drawing is believed to be complete in all details of importance for charting and no additional surveys are required.

The probable error of radial points and well-defined objects along the shoreline is not greater than 0.5mm. The error of inland radial points and details of importance is not greater than 1.0mm.

44 Comparison with Existing Topographic Quadrangles:

Smithfield Quadrangle, U. S. G. S. date, ¹⁹¹⁸~~1938~~.

Due to scale difference between this map drawing and the above mentioned quadrangle, planimetric details could not be satisfactorily compared. However, at approximately Latitude $36^{\circ} 59' 35''$ and Longitude $76^{\circ} 33' 50''$ the position of a bridge as shown on this map drawing is in disagreement with the position of a bridge as shown on the quadrangle. Examination of the photographs indicates that the bridge has been re-located.

At Latitude $36^{\circ} 57'$ and Longitude $76^{\circ} 30' 10''$ Smithfield Quadrangle (U.S.G.S.) shows a small island detached from Ragged Island. This small island shows as part of Ragged Island on all the photographs.

45 Comparison with Nautical Charts:

Chart No. 529, published September 1940, issued March 25, 1942; Scale of 1:40,000.

Due to scale difference between this map drawing and Chart 529 planimetric details could not be satisfactorily compared. However, the same disagreements between this map drawing and Smithfield Quadrangle as noted in paragraph 44 apply to Chart 529.

Respectfully submitted,

Harry R. Rudolph
Harry R. Rudolph
Sr. Photogrammetric Aid (field)

Abraham L. Goncharov
Abraham L. Goncharov
Sr. Engineering Draftsman (field)

Reviewed by,

Michael G. Misulia
Michael G. Misulia
Jr. Topographic Engineer (field)

Compilation supervised by,

Walter E. Schmidt
Walter E. Schmidt
Asst. Photo Engineer

Approved & Forwarded,

Fred. L. Peacock
Fred. L. Peacock
Officer-in-Charge
Baltimore Field Office

ADDITIONAL WORK

1944

See "Report on Field Inspection of Air Photographs,
James River, Va" by Dale E. Sturmer, dated April 11,
1944. Filed in Div. of Photogrammetry, General Files.

CHV

Additional
DATA RECORD
T-8062

Form T-1

Quadrangle (II): ~~Yorktown U.S.G.S.~~
Smithfield (USGS)
Newport News "

Project No. (II): C.S. 283

Field Office:

Chief of Party:

Compilation Office:
Air Photographic Survey Party No. 2
Baltimore, Maryland

Chief of Party: Fred. L. Peacock

Instructions dated (II III):

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

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

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed:

Applied to chart No.

Date:

Redrafting Completed:

Registered:

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): TERMINAL 2, 1941, recovered 1942

Lat.: 36° 58' 03.207" (98.9m) Long.: 76° 30' 43.992" (1088.2m) ^{Adjusted}
~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
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Same as Original Data Sheet
Form T-1

Tide from (III): Same as original data sheet

Mean Range:

Spring Range:

Camera: (Kind or source)

Additional
Field Inspection by: Lt. Dale E. Sturmer
Lt. Comdr. H. O. Fortin

March 1944
date: April 1943

Field Edit by: None

date:

Date of Mean High-Water Line Location (III): Nov. 26, 1941

Projection and Grids ruled by (III)

date:

" " " checked by:

date:

Control plotted by:

date:

Control checked by:

date:

Additional

Radial Plot by: Joseph Steinberg & J. E. Deal, Jr.

date: 6/23/44

Additional

Detailed by: Mildred M. Trautman

date: 6/28 to 7/13/44

Reviewed in compilation office by: Joseph Steinberg

date: 7/12 to 7/13/44

Elevations on Field Edit Sheet
checked by:

None

date:

STATISTICS (III)

Land Area (Sq. Statute Miles);

Shoreline (More than 200 meters to opposite shore);

Shoreline (Less than 200 meters to opposite shore);

additional
Number of/Recoverable Topographic Stations established: 7

additional
Number of/Temporary Hydrographic Stations located by radial plot: ~~73~~ ~~72~~ 71

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:

ADDITIONAL WORK -- 1944

In accordance with the original instructions for Project C.S. 283 and various supplemental instructions, the field inspection at the lower part of the James River did not at first include complete field inspection of tributary streams. The field inspection of the main river and the mouths of all tributary streams was first completed to Richmond, Va. The completion of the field inspection of tributaries was then carried on from the upper river toward the lower river. The field inspection of tributary streams was completed in the spring of 1944.

In order to assure shore line and hydrographic information in advance of the needs of operating hydrographic parties working in the main river, Map Drawings for 10 surveys were submitted in advance of completion with respect to tributary streams. Survey No. T-8062 is one of these.

The High-Water Line and Marsh Line (Limit of navigation line) and adjacent planimetry of the portion of James River proper, Pagan River proper, part of the area of Jones Creek and part of the area of Cypress Creek, falling within the limits of this Map Drawing, were originally compiled in November and December 1942. Hydrographic stations were located in the James River proper and a few at the mouth of Pagan River proper, at that time.

Since that time the Compilation Office has been furnished the identification of additional triangulation stations established in 1944. One of these, MUDDY, 1944, falls just south of the limits of this Map Drawing. At the time the original radial plot was run it was believed that the points established in the southern area of the Map Drawing were weak, due to the lack of horizontal control in that area. This new triangulation station, MUDDY, 1944, was pricked on the 1:10,000 office photographs and its geographic position (field computations) was plotted on the Map

Drawing. The photographs were then oriented under the Map Drawing and it was found that with very slight adjustment this new triangulation station could be held with the compilation work which had already been accomplished. Several new secondary points were established in the southern area of the Map Drawing. It is believed that all well defined points of detail on this Map Drawing are within the limits of satisfactory accuracy.

The Compilation Office has also been furnished the identification of seven additional recoverable topographic stations, (one of which has been recommended as a landmark) and ~~75~~ additional temporary hydrographic stations. These were identified on the 1:10,000 field photographs by numbers and their descriptions were listed in sketch book, Form No. 274, by corresponding numbers. These stations were transferred to the 1:10,000 office photographs and radially plotted on the Map Drawing. The descriptions of both classes of hydrographic stations have been noted on an overlay which accompanies the Map Drawing. See Review Report

Form 524 is submitted for the seven additional recoverable topographic stations, namely:

- ~~N.E. CORNER~~ GABLE, ~~WHITE HOUSE~~, 1944
- ~~CENTER OF~~ BRIDGE TOWER, 1944 (Also recommended as a landmark)
- ~~CHIMNEY ON WHITE HOUSE~~, 1944
- ~~E. GABLE WHITE STONE~~, 1944
- ~~S. GABLE SMALL WHITE HOUSE~~, 1944
- ~~NORTH GABLE, UNPAINTED BARN~~, 1944
- ~~BRICK CHIMNEY~~, 1944

Form 567 is submitted for the additional new landmark, namely:

- ~~CENTER OF~~ BRIDGE TOWER, 1944 Chart Letter 499-44

The Mean High-Water Line, Marsh Line (Limit of navigation line), and immediate adjacent planimetry of Cypress Creek and Jones Creek, were extended on the Map Drawing to include the area of these creeks to a point about one mile above the head of small

boat navigation. Some of this detailing was accomplished without the aid of field inspection data.

Additional data furnished the Compilation Office on Fulgham Bridge across Jones Creek changed the vertical clearance on this bridge from 8.0 ft. above M.H.W. to 9.2 ft. above M.H.W. This has been noted on the ~~overlay~~ map manuscript

~~Puttins~~ ^{Titus} Additional data was furnished the Compilation Office on ~~Puttins~~ Bridge across Titus Creek. This data has also been noted on the ~~overlay~~ map manuscript

Additional data furnished the Compilation Office on a concrete draw bridge over Cypress Creek changed the vertical clearance from 3.6 ft. above M.H.W. to 2.7 ft. above M.H.W. This has been noted on the ~~overlay~~ map manuscript

This Map Drawing is now believed to be complete in all details of importance for charting, and no other surveys are necessary.

Respectfully submitted:
July 12, 1944

Mildred M. Trautman
Mildred M. Trautman
Jr. Photogrammetric Aid

Additional work reviewed
and supervised by:

Joseph Steinberg
Joseph Steinberg
Asst. Photogrammetric Engineer

Approved and Forwarded:
July 14, 1944

Fred. L. Peacock
Fred. L. Peacock
Chief, Air Photographic Party No. 2

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED
TO BE DELETED

**LANDMARKS FOR CHARTERS
NONFLOATING AIDS**

Washington Office 10-15 1948

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

The positions given have been checked after listing.

S. V. Griffith

Chief of Party.

[illegible]

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

Descriptions of Photo-Hydro Stations

No.

- .97 . Point of grass on South side of entrance to small stream on East side of Cypress Creek.
- ~~100 . Point of dark grass on North side of Ragged Island Creek.~~
- .101 . Point of grass at MHWL on South side of Ragged Island Creek.
- .104 . Southwesterly tip of off-shore patch of marsh grass South of brush.
- .105 . North point of grass at fork of creek.
- .106 . Point of grass on East side of creek, just North of Pines.
- ~~107 . Point of grass on North side of small inlet into marsh at point of marsh on East side of creek.~~
- .107 A . Center of bushy tree.
- .108 . Point of grass on Northwest side of small inlet on South side of East fork of Cypress Creek.
- .108 A . Northeast tip of grass.
- .109 . Southwest corner of pier on East side of creek.
- .109 A . Northeast tip of grass.
- .111 . East gable of small white house with chimney in center of dark roof. A group of 3 buildings are in front of and to the east.
- .111 A . Center of end of dock.
- .112 . North chimney of unpainted two story dwelling with galvanized roof and two chimneys
- .113 . Tip of grass on North side of entrance to Titus Creek.
- .113 A . Southeast point of grass about 30 yards North of fence.
- .114 . Tip of grass on Northeast side of entrance to small stream on south side of Jones Creek.
- .114 A . Southwest corner of concrete foundation
- .115 . South tip of small, grass island covered at MHW.
- .115 A . East tip of grass by two small galvanized iron pipes.

No.

- .116 . Southwest corner of catwalk on East side of Jones Creek.
- .117 . Tip of grass between forks of creek.
- .119 . Point of grass on South side of entrance to small stream on East side, North of bridge.
- .129 . Northwesterly of two tips of grass on point.
- .130 . Southwest tip of grass on East end of small bight in grass
- .131 . East tip of grass.
- .132 . Center of easterly of several dark grass patches.
- .135 . Southeast gable of house. Chimney at this gable.
- .136 . Twenty foot flat top cedar.
- .137 . Northwest tip of grass on East side of entrance.
- .138 . Center of westerly of two grass islands.
- .139 . Northwest tip of grass on point.
- .140 . South gable of small shingle house with two chimneys and screen porch on West side. Closest to bank of group.
- .175 . Outer gable of small house, back of landing.
- .177 . Vent on top of fertilizer plant.
- .178 . Outer gable of boat house.
- .181 . Outer gable large white building at West end of James River Bridge.
- .182 . Blaze on easterly of two pines about 300 meters North of group of pines on point.
- .185 . Chimney, North gable of prominent, red house.
- .186 . Red chimney on main part of large, white house with green roof.
- .187 $\frac{1}{2}$. Chimney on South gable of white house at South edge of roof.
- .188 . Outer end of landing.
- .189 . Chimney, North gable of prominent, red house.

No.

- 190 . Blaze on southerly of 4 scattered pines. These pines are 3 of a group of small pines.
- 191 . Banner on pole (Old hydro signal)
- 192 . Blaze on small pine, southerly of a group of trees at stretch of sand beach.
- 193 . Dead tree close to MHWL (Old hydro signal)
- 194 . Small tripod (Old hydro signal)
- 195 . Tripod (Old hydro signal)
- 196 . Cedar tree on beach, just West of trees.
- 197 . Small cedar in brush patch on point.
- 234 . Stake on sharp, small point of marsh on South side of Pagan River, just West of small stream into Pagan River, Marked by cloth.
- 235 . North gable of red barn with white roof, just North of a silo.
- 236 . Double tall deciduous bush on bank in clearing.
- 496 . Lone, bushy cedar tree in a group of bushes midway between Jones Creek and wharf at Battery Park and about 75 meters East of a white house with 3 windows in North end.
- 497 . Northeast tip of grass at entrance to Morris Creek.
- 498 . Center of break at inside of turn.
- 499 . East corner of a patch of bullrushes back of water's edge.
- 500 . Double cedar tree, Southeast edge of brush, 10 meters from waters edge.
- 501 . Northwest tip of marsh at entrance to small creek in marsh.
- 502 . Lone, dead tree, 20 feet high, in marsh, 10 meters from fast land and 5 meters from edge of water.
- 503 . Northeast tip of grass at entrance to ditch in marsh.
- 504 . Northwest tip of marsh at entrance to ditch in marsh.

No.

- .505 Long 30 foot pine tree, 8 meters from water's edge, no limbs for first 15 feet.
- .506 North end of southerly tall grass patch.
- .507 Center of patch of bull-rushes in marsh, 7 meters from water's edge.
- .508 North tip of marsh at entrance to small creek in marsh.
- .509 Northeast tip of marsh at entrance to northerly of two medium size creeks.
- .510 Center of break in grass at water's edge inside of turn.
- .511 North tip of marsh at entrance to small stream.
- .512 East tip of marsh at entrance to small creek.
- .513 Northeast tip of marsh at forks.
- .514 North tip of marsh at entrance to small creek on East side
- .517 Southwest tip of grass on East side of bight.
- .518 Center of ditch on Northeast side of rounding point.
- .537 Center of ditch in marsh on South side.
- .538 Center of ditch in marsh on South side.
- .539 Southeast tip of marsh at entrance to small creek in marsh.
- .540 Center of ditch in marsh on North side.
- .541 Northwest tip of marsh at entrance of upper of two small creeks 50 meters apart on North side.
- .542 Three feet square box, 3 ft. high, 10 meters North of creek on North side. (Duck blind)
- .543 Southeast tip of marsh at entrance of large stream on South side.
- .544 Tip of grass at middle of fork.
- .545 Northeast tip of marsh on South side of entrance to creek.
- 546 Southerly of two small pine trees, 5 ft. apart, 10 meters back from point, 12 ft. high.

No.

- . 547 Lone, 35 ft. pine tree on edge of marsh, 20 meters from water line, 2 lower branches pointing Southwest Tree is on North side of fast land point.
- . 548 Twelve foot cedar tree at edge of brush, 5 meters back of MHWL; 35 ft. from dead tree 8 meters inshore and in brush.
- . 549 Southeast tip of marsh at entrance to small stream.
- . 550 Center of small ditch on upstream side of outside turn.
- . 551 Northwest tip of marsh at entrance to small creek in marsh.
- . 552 Northeast tip of marsh at entrance to medium sized stream in marsh on Southwest side.
- . 553 Northeast tip of marsh at entrance to small stream in marsh.
- . 554 Northeast tip of marsh at entrance to small creek.

GEOGRAPHIC NAMES

Practically no investigation of Geographic Names was made by the field party. Listed below are the names that have been shown on this map drawing unless otherwise noted.

- ✓ Ballard Marsh
- ✓ Battery Park
- • Bob Shoal
- ✓ Candy Island — with T-8055
- • Carrollton (town) area not detailed on this map drawing
- ✓ Chalmers point*
- ~~Cooper Creek~~ (called Cappers Creek on Chart 529)
- ~~Capper Cr.~~ (called Cooper Creek on Newport News Quadrangle)
- ✓ Cypress Creek (called Coopers Creek on Smithfield Quadrangle)
- ✓ East Island
- ✓ Fishing Point ← with T-8055
- ✓ Fulgham Bridge
- ✓ James River
- ✓ Jones Creek
- ✓ Morris Creek
- ✓ Pagan River* (called Pagan Creek on Smithfield Quadrangle U.S.G.S.)
- ~~Pattino Bridge~~
- ✓ Ragged Island
- ✓ Ragged Island Creek
- ✓ Red Point
- ✓ Rescue
- • Smithfield
- ✓ Titus Creek
- • Whitley Wharf - to be detailed at a later date on this map drawing.
- ✓ Carrollton Branch
- ✓ Smithfield Bridge
- ✓ Town Farm Cr.
- ✓ Titus Bridge
- ✓ Gatland Pt.
- ✓ Ballard Cr.
- ✓ Kings Cr.
- ✓ Cooper Cr.
- ✓ James River Bridge
- ✓ Holly Pt.
- ✓ Virginia* (for title)
- • Benns Church
- ✓ ~~Champion Swamp~~ aut

* = Decis. of BGN

• = Approved name

10-12-48.

A. J. W.

DIVISION OF PHOTOGRAMMETRY
Review Report of
Shoreline Map Manuscript T-8062

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

26 Control

The U.S.G.S. Transit Traverse Station was removed from the map manuscript because it is unmarked.

34 Landmarks and Aids to Navigation

A Form 567 was prepared and filed in the Nautical Chart Section for four aids to navigation. A copy was made a part of the descriptive report.

A copy of Chart Letter 499, 1944 was added to this report.
See Chart Letter 917(49). Copy enclosed.

37 Topographic and Photo-Hydro Stations

Names of topographic stations were changed to a short descriptive term on the map manuscript and the Form 524 cards.

A list of descriptions of Photo-Hydro Stations was prepared and made a part of the descriptive report. The stations were numbered on the map manuscript.

38 State Grid

The state grid, Virginia South Zone, was plotted on the map manuscript at a 5,000 foot interval.

40 Geographic Names

Names were added to the map manuscript from the approved list submitted by the Geographic Names Section.

43 Comparison with Contemporary Hydrographic Surveys

H 7162 1:10000 1944-47

No discrepancies were noted in the position of soundings on the hydrographic survey and the shoreline on the map manuscript.

44 Comparison with Existing Surveys

U.S.G.S. Smithfield Quadrangle	1:62,500	1918	Reprinted 1944
U.S.G.S. Newport News Quadrangle	1:62,500	1918	Reprinted 1947
T-497	1:20,000	1853	T-1266 1:20,000 1871-3
T-501	1:20,000	1853	T-6871 1:10,000 1941
T-1265	1:20,000	1871-2	*T-8305 1:20,000 1944

*T-8305 is a more recent survey. Corrections were not brought forward to T-8062.

Common features on all previous surveys are superseded by T-8062 in common areas.

45 Comparison with Nautical Charts

Chart No. 529 1:40,000 1944 Corr. 1947

The fish traps that are shown on the map manuscript are not shown on the nautical chart.

The landmark, Center of Bridge Tower, is not shown on the Nautical Chart.

51 Application to Nautical Charts

The Map Manuscript has been applied to the nautical chart.

Reviewed by:

Under the direction of:

Charles Theurer
C. Theurer 10/15/48

L. V. Griffith
Chief, Review Section K. M.

Approved by:

B. J. Jones
Technical Asst. to Chief,
Division of Photogrammetry

H. R. Edmonston
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

W. M. Scaife
Chief, Division of Coastal Surveys

STRIKE OUT ONE

Washington Office

Nov. 8 1949

The positions given have been checked after listing by

S. V. Griffith

Chief of Party.

[illegible]