

8762

Diag'd. on Diag. Ch. 1218

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey ~~Photogrammetric Topographic~~

Field No. Office No. T-8762

LOCALITY

State Delaware

General locality Delaware River

Locality Frederica

Project PH-7(46)A

194 6

CHIEF OF PARTY

Thos. B. Reed

LIBRARY & ARCHIVES

DATE June 7, 1948

8-1870-1 (1)

8762

DATA RECORD

T- 8762

Quadrangle (II): FREDERICA ✓

Project No. (II): PH-7(46)A

Field Office:
New Castle, Delaware.Chief of Party:
E. L. JonesCompilation Office:
Baltimore Photogrammetric OfficeChief of Party:
Thos. B. ReedInstructions dated (II III):
25 March 1946 (Field)
19 July 1946 (Office)Copy filed in Descriptive
~~Report No. T- (VI)~~
Division Photogrammetry
Office FilesCompleted survey received in office:
23 January 1948

Reported to Nautical Chart Section:

Reviewed: 26 March 1948 Applied to chart No. Date:

Redrafting Completed:

Registered: 6 April 1948

Published:

Compilation Scale: 1:20,000

Published Scale: 1:24,000

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III): MSL

Reference Station (III): UNION, 1932

Lat.: 39° 00' 44.4" 1369.2m Long.: 75° 30' 38.7" 932.4 m Adjusted
~~Standard~~

State Plane Coordinates (VI): Delaware

X = 473,260.70 feet Y = 368,688.56 feet

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>75th meridian Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
15563 & 15564	3-21-46	1110	1:20,000	5.2' above M.L.W.
15591 & 15592	3-21-46	1230	1:20,000	5.0' above M.L.W.

Tide from (III): Actual tide observation at Atlantic City with corrections to St. Jones River to Mispillion River.

Mean Range: 5.4

Spring Range: 6.3

Camera: (Kind or source) U.S.Coast and Geodetic Survey nine lens camera
focal length 8 $\frac{1}{4}$ "

Field Inspection by: E. L. Jones

date: May-July 1946

Field Edit by: Donald G. Flippo
R.J. Sipe, Chief of Party

date: 1 Sept. to 18 Sept. 1947

Date of Mean High-Water Line Location (III): As of date of photographs supplemented by field inspection during April 1946.

Projection and Grids ruled by (III) T.L.J.

date: 8-26-46

" " " checked by: T.L.J. - K.N.M.

date: 8-26-46, 3-26-48

Control plotted by: L.A. Senasack

date: 1-6-47

Control checked by: G.O.Fellers

date: 1-7-47

Radial Plot by: F.J.Tarcza

date: 4-18-47

Detailed by: D.M.Brant

date: 4-30-47
6-12-47

Reviewed in compilation office by: J.W.Vonasek

date: 6-19-47 to
6-23-47

Manuscript
Elevations on Field Edit Sheet
checked by: J.W.Vonasek

date: 6-20-47

STATISTICS (III)

Land Area (Sq. Statute Miles): 48.

Shoreline (More than 200 meters to opposite shore): 5 statute miles

Shoreline (Less than 200 meters to opposite shore): 24 " "

Number of Recoverable Topographic Stations established: 9

hydrographic signal sites
Number of ~~Temporary Hydrographic~~ Stations located by radial
plot: 5

Leveling (to control contours) - miles: 44 statute miles

Roman numerals indicate whether the item is to be entered
by, (II) Field Party, (III) Compilation Party, or, (VI) the
Washington Office.

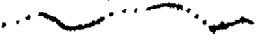
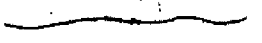
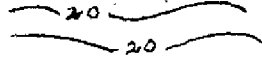
When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks:

Field Edit Corrections by:
Gladys S. Nottenburg

Jan. 1948

SYMBOLS
Project Ph-7 (46)
29 April 1946

MEAN HIGH WATER LINE (fast line).....	— — — — —
OFF SHORE EDGE OF MARSH (apparent shoreline).....	— — — — —
GRASS IN WATER.....	Gr
IN SHORE LIMITS OF MARSH.....	— — — — —
MEAN LOW WATER LINE (definite).....	— — — — —
APPROXIMATE MEAN LOW WATER LINE.....
INTERMITTANT DRAINAGE.....	
PERENNIAL DRAINAGE.....	
CONTOURS.....	
PLANE TABLE ELEVATIONS FOR CONTOURS.....	X17 BY X17
FLY LEVEL ELEVATIONS.....	CE12 59.7
BENCH MARKS, marked and described.....	○ J16, 1940 Elev. 36.47 ft.
TOPO STATIONS, natural object, described.....	/ REX, 1946 (dm)
TOPO STATIONS, marked and described.....	/ TANK (elev) steel (15' high)
TOPO STATIONS, addition Hydro Control, not named.....	/ T. Sta. # 6201
LANDMARKS.....	/ landmarks: STACK, black, (55' high)
FIXED AIDS TO NAVIGATION, (official light list name)...	/ CHERRY PT Lt 11
TRIANGULATION STATIONS.....	/ SMITH 1925
SUBSTITUTE STATIONS.....	/ (S. Sta.) SMITH 1925
BOUNDARIES: Refer to U.S.G.S. Bulletin 788 E for symbol, ink in purple or violet ink.	

ABBREVIATIONS FOR FIELD INSPECTION PHOTOS

Project Ph-7 (46)

10 May 1946

ROADS

Rd - road
X - abandoned (delete)
RR - railroad track
RR(2) - railroad, 2 tracks

SHORELINE

MHW - mean highwater
MLW - mean low water
M - marsh
Mud - mud
S - sand
Rky - rocky
Rk - rock
Dk - dock
Jet - jetty
Bkhd - bulkhead

STREAMS, PONDS

D - large ditch
DX - small ditch (delete)
Cr. - creek
P - pond

OBSTRUCTIONS TO NAV

Shl - shoal
Cov - covers
Wk - wreck
Subm - submerged
Del - dolphin
Pile - pile

VEGETATION

Gr - grass
WH - woods, hard wood
WS - woods, soft wood
WM - woods mixed
B - brush
SH - scattered hardwood
SS - scattered softwood
O - orchard

BUILDINGS

d - dwelling
b - barn
Bo Ho - boat house

BUILDINGS (con'td)

Ch - church
C.H. - courthouse
P.O. - post office
Sch - school
R R Sta - railroad station
Hosp - hospital

LANDMARKS & AIDS TO NAV:

TK - tank
TK(ELEV) tank elevated
Stk - stack
Bn - beacon
Lg - light
Rg - range
F Rg - front range
R Rg - rear range
Chy - chimney
Cup - cupola
S.Pipe - stand pipe
Gab - gable

BOUNDARIES

Bdry - boundary
Cem - cemetery
F - fence

BRIDGES

Br - bridge
Culv - culvert
Cl - clearance
Hor - horizontal
Ver - vertical (above MHW)
Wo - wood
Conc - concrete

STATIONS

BM - bench mark
T Sta - topo station
S Sta - substitute station
TBM - tidal bench mark
(d) - described
(dm) - described and marked

FIELD INSPECTION REPORT
T 8762 (39° 00' / 75° 30' / 7.5')
PROJECT PH 7 (46)
Sub-Project A
E. L. Jones, Chief of Party

1. Description of the Area:

This quadrangle is located on the western shore of Delaware Bay, south of Dover, and in Kent County, Delaware.

80% of the terrain is fertile, undulating land. In general, the remaining 20% of the area is salt water or tidal marsh.

Drainage is through numerous streams feeding the St. Jones and Murderkill Rivers. A mosquito drainage ditch project along the marshes augments the above.

There are no prominent topographic features: the highest elevations are forty feet and range to sea level in gentle slopes.

Economically, agriculture is predominant and the towns of Frederica and Magnolia are farm villages. Bowers has seasonal fishing interests, some oystering and summer resort trade.

Practically all roads are excellent and the Dupont Highway passes through the area. There are no railways, but they are readily accessible at Dover which is about 5 miles to the Northwest.

2. Completeness of Field Inspection:

Field inspection was accomplished by two parties. The shoreline party accomplished shoreline inspection and the contour party did the interior inspection. It is believed to be adequate.

There are no telephone or power transmission lines of cross country or prominent nature within the quadrangle limits.

Woods were classified in accordance with paragraph 54 of the instructions for this project, dated 25 March, 1946. Filed in Division of Photogrammetry Office Files.

Deletions are shown in green ink.

3. Interpretation of the Photographs:

Numerous smooth, oftentimes round, dark areas usually denote the heads of drains or depressions.

Marshes bordering streams were often indistinguishable from the adjoining foliage.

Occasionally areas adjoining marshes appear fast land on photos but are intermittently flooded and not tillable. This was noted on inspection.

4. Horizontal Control:

Horizontal control was recovered and identified according to paragraphs 13-33, incl., of the project instructions, dated 25 March, 1946.

Work consisted of recovery and identification of control on photographs and was completed in April, 1946, as a training program under the direction of John M. Neal, Photogrammetric Engineer. The trainees were Frederick F. Kaiser, Air-Photo. Observer, and Thomas W. Merriken, Jr., Photo. Aid.

The following is a tabulated list of information on horizontal control recovered and stations identified:

STATION	ESTABLISH. AGENCY	RECOVERED	IDENTIF. ON PHOTO	METHOD OF IDENTIF.	QUAD
UNION	U.S.C. & G.S.	yes	15562 15563	Sub. Sta.	West of
MURDERKILL R. RG. LT.	U.S.C. & G.S.	yes	15563	Picked Direct	8762
PRIM. TRAV. STA. #4 d	U.S.G.S.	yes	15600	Picked Direct	8762

5. Vertical Control:

Work consisted of B.M. recovery, and the establishing of new 4th order levels.

Frederick F. Kaiser, Air-Photo Observer, started B.M. recovery and the establishing of 4th order control April 30, 1946, and completed same on May 17, 1946.

The 4th order control was established by Wye levels. Spot elevations were used for control by the contour party, and were located at strategic, identifiable points. They are shown on the photographs by a dot in blue ink. The points are numbered consecutively from 1 to 96, incl., and each number is preceded by the prefix letters BW.

About 44 miles of 4th order levels were run by fly leveling methods: the maximum error of closure was 1.0 feet. All lines with an error of closure greater than 0.30 feet were adjusted, prorating the error among the spot elevations established.

The following is the recovery data for the Bench Marks in this quadrangle:

BENCH MARK DESIGNATION	IDENTIF. ON PHOTO	QUAD	RECOVERED	USED IN 4th ORDER CONTROL	
T.T.Sta. #3J	none	8762	no	no	
T.T.Sta. #2J	none	8762	no	no	
T.T.Sta. #4J ✓	15591	8762	yes	yes	
G-2 1931 ✓	15563	8762	yes	yes] Copy of Form 685 filed in Division of Photogrammetry General Files.
H-2 1931 ✓	15563	8762	yes	yes	
F-2 1931	15564	West of 8762 ✓	yes	yes	

6. Contours and Drainage:

Contouring was started May 20, 1946, and was completed July 23, 1946, by Frederick F. Kaiser, Air-Photo Observer. The contour interval is 10 feet. Work, done directly on 9-lens photos. nos. 15563, 15564, and 15565 was held as near the center of the photographs as practical in order to minimize distortion. Planetable methods were used.

Drainage and form lines were sketched on photographs from time to time during stereoscopic examinations of the photos. Drainage was checked in the field as planetable contouring progressed.

Elevations were shown along the south and west limits of the quadrangle, also the project limits, at a maximum interval of 600 ft. as per instructions.

Critical elevations are shown, together with elevations of other points deemed advisable by the topographer for better topographic expression.

7. Mean High Water Line:

Delaware Bay is affected by the tide all along the shoreline of this quadrangle. Shoreline inspection was completed in the last part of April, 1946, by Frederick F. Kaiser, Air-Photo Observer.

The mean high water line as seen from offshore is indicated by a dashed red line at intervals where the line is indistinct on the photographs. At frequent intervals the MHWL was verified by actual measurements from points of detail.

In some areas the HWL is indefinite, or too far removed from the grass line to be of value to the charts. Where this condition exists the apparent shoreline follows along the outside edge of vegetation. This vegetation is usually supported by a low mud bank,

which is, in most cases, about 4 feet high. Generally the LWL follows this same line, but in some cases the tide and wave action has caused this mud bank to ^{slip off} and flatten out, and in some cases the LWL is outside the grass line.

8. Mean Low Water Line:

No special attempt was made to locate the mean low water line. If, during shoreline inspection, an area was visited at low water, the low water line and areas awash were indicated on the photographs.

9. Wharves and Shoreline Structures:

The wharves and shoreline structures in the quadrangle were delineated and noted on the photographs in red ink.

10. Detail Offshore from Mean High Water Line:

No obstructions were noted offshore. The shoreline inspection was done on foot or from a small boat close inshore. It was impractical to range more than one-half mile outside.

11. Landmarks and Aids to Navigation:

There were no charted landmarks along the shore of this quadrangle. A newly constructed steel tower at South Bowers should be added and is described on Form 567 attached hereto.

Three non-floating aids to navigation were identified on the photographs and are listed on the accompanying Form 567. One other aid was missing, having been destroyed in a June, 1943 storm, according to local information.* All aids present were checked against the 1945 Light List and found to be in agreement. See Item 34 of this report.

To determine the Azimuth of the Murderkill River Ranges, a point was established on the range. This is approximately 1.1 miles southwesterly of the rear range and determined with the same accuracy as a horizontal control station. This information is found on Photo 15591.

12. Hydrographic Control:

Hydrographic control was established and identified by the shoreline party. In addition to existing horizontal control, 6 recoverable topographic stations and 5 additional hydrographic control stations were identified.

The following recoverable topographic stations were identified. Form 524 is submitted for each at these stations, but form M-2226-12 is not submitted in all cases.

1 Filed in Division of Photogrammetry General Files.

* See attached copy of letter to Director.

STATION	IDENTIFIED ON PHOTO	METHOD OF IDENTIFICATION
BAHB	15591	Picked Direct
ABEL	15591	" "
TAPE	15591	" "
KENT	15591	" "
MURD	⁵⁶ 15600	" "
EBBA	15591	" "
DAYM	15600	" "

13. Landing Fields and Aeronautical Aids:

Dover Army Air Base is partially located in this quadrangle: the major portion containing installations is located in Quadrangle T 8761 as the east-west boundary line is in the lower third of the field.

The contouring and field inspection of the entire base was done by Elmer L. Williams, Engineering Aid, and further information is contained in paragraph 13 of the Descriptive Report of Quadrangle T 8761.

14. Roads:

Roads were classified in accordance with paragraph 49 of the instructions for this project with State and Federal Route numbers shown.

15. Bridges:

There are two bridges, both over the St. Jones River, in this quadrangle. ✓

At Barkers Landing is a bascule bridge having a horizontal distance between fenders of 50 ft. and a 5 foot vertical ~~closed~~ clearance when closed. This bridge is tended from 6a.m. to 7p.m., but few craft require a lift. This information checks with the 1941 Revised Edition of the List of Bridges over Navigable Waters of the United States.

At Lebanon is an iron swing bridge which has been stuck shut since Oct., 1945, according to local sources.

The following differences were noted:

	HOR. CLEARANCE	VERTICAL CLEARANCE OVER MHW	DESCRIP.
FIELD INSPECTION	36 feet	3 feet	swing
1941 List of Bridges	30 feet	6 feet	draw

The horizontal clearances were measured with a steel tape to the nearest 0.1 of a foot and the vertical clearance was measured from the MHWL estimated to the nearest 0.1 of a foot with a steel tape.

16. Buildings:

All obscure buildings were delineated on the photographs in red ink. Public buildings were identified and named.

17. Boundaries:

Boundaries were verified, checked in the field, and delineated in purple ink.

18. Geographic Names: *814*

Geographic names for this quadrangle were obtained by the topographer and will be covered in a special report on Geographic Names, Project PH 7 (46)A, by Lowell I. Bass, Engr. Aid. Approved list attached to this report.

19. Coast Pilot Information:

Coast Pilot Information for this quadrangle will be covered in a special report, Project PH 7 (46)A, by George E. Varnadoe, Photogrammetric Engineer.

20. Inshore Limits of Marsh:

Junctions were made with Quadrangle 8763 on the ^{East} ~~west~~ and Quadrangle 8761 on the north.

48. Accuracy Tests: (Vertical)

One unofficial vertical accuracy test was completed on July 24, 1946, by Harland R. Cravat, Photogrammetrist. The test was not made to take the place of any accuracy checks to be made at the time of Field Edit but to determine the quality of the field party's work.

A planetable level profile test was completed in the N.W. corner of 9-lens photograph # 15564, starting at spot elevation BW 88 and ending at spot elevation BW 89. The horizontal error of closure was 25 feet ground scale and the vertical error of closure was 0.4 feet. All results of the test have been shown directly on the contour photograph in black ink.

- RESULTS -

21 points tested

19 points in error less than 5 feet

2 points in error from 5 to 10 feet

0 points in error over a full contour interval

90.5% of points tested were found to be in error less than $\frac{1}{2}$ contour interval

Submitted By.

Frederick F. Kaiser
Frederick F. Kaiser,
Air Photo Observer

Approved and Forwarded:
August 2, 1946

Edmund L. Jones
Edmund L. Jones,
Chief of Party

COMPILATION REPORT

MAP MANUSCRIPT SURVEY NO. T-8762

T-8762 (Frederica Quadrangle) is one of four topographic maps in Project No. Ph-7(46)A located along the Delaware River and Bay. This survey is to be compiled in accordance with instructions dated 25 March 1946 and 19 July 1946 by graphic photogrammetric methods. The contouring will be compiled from data obtained by planetable methods. Instructions filed in Division of Photogrammetry Office Files

26. CONTROL:

See radial plot report for layout of control in this area. A list of the stations on Form No. M-2388-12 is included in this report.

27. RADIAL PLOT:

See report for combined radial plot covering the areas of T-8761 to T-8764 inclusive, submitted to the Washington Office 12 May 1947.

28. DELINEATION:

The compilation is in accordance with written instructions pertaining to Project PH-7(46) dated 19 July 1946.

The contours were traced directly from field photographs.

29. SUPPLEMENTAL DATA:

Town map of Frederica, Del. dated 3-5-42, scale 1"= 400'. Town map of Magnolia, Delaware, dated 3/24/41, scale 1"=200'. Filed in Division of Photogrammetry General Files

30. MEAN HIGH-WATER LINE:

The mean high water line was delineated in accordance with field data.

31. MEAN LOW-WATER LINE:

Only that part of the mean low water line identified by the field inspection party was shown on the map manuscript.

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

No comment.

33. WHARVES AND SHORELINE STRUCTURES:

No comment.

34. LANDMARKS AND AIDS TO NAVIGATION:

Refer to form No. 567, submitted with this report and to the field report for data pertaining to one landmark and three nonfloating aids to navigation, to be charted.

Filed in Division of Charts

Refer to form No. 567 attached to the field report for data pertaining to one non-floating aid to navigation to be deleted, No deletions. See

photostat copy of Form 567 attached to this report. There are 4 non floating aids.

35. HYDROGRAPHIC CONTROL:

Five hydrographic signal sites, identified by the field party, have been plotted on this map accompanied by their description.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

Refer to paragraph No. 13 of the field report.

37. GEOGRAPHIC NAMES: 814 ✓

Geographic names have been taken from final name standards dated 12/9/46 furnished by the Washington Office. A list of the geographic names is attached to this report. Approved by L. Heck - Geographic Names Sect., Div. of Charts.

38. JUNCTIONS:

A satisfactory junction has been made with Surveys Nos. T-8761 to the north and T-8763 to the east. To the south and west is the project limits.

39. DISCREPANCY OVERLAY:

A discrepancy overlay has been prepared.

40. BOUNDARIES:

The district boundaries were delineated as shown on the U.S.G.S. Bowers Quadrangle. The boundaries of Frederica and Magnolia have been taken from town maps listed under side heading No. 29. The identification of the boundary lines of the town of Bowers and legal description thereof were not furnished the compilation office. The boundary lines of Bowers were, therefore, not shown on the map manuscript.

verified by legal description

Legal descriptions of town b'drys and district b'drys filed in Div. of Photogr. General files.

The field inspection party identified the boundary lines of Dover Army Air Base on the field photographs and were delineated on the map accordingly.

Discrepancies between boundary lines plotted from descriptions and those shown on the U.S.G.S. Bowers Quadrangle were noted on the discrepancy overlay.

41. BRIDGES:

All bridge information for the area covered by this report as listed

41. BRIDGES:(Continued)

in the U.S. Engineers "List of Bridges Over Navigable Waters in the U.S." dated July 1, 1941 was verified in the field; all clearances were carefully measured with a steel tape, and the published descriptions and clearances were found to be correct except for the following discrepancies which were not reported to the local District Engineer:

(Letter to the local Dist. Engr. being prepared by the Review Section) B 5/6/48

BRIDGE AT:	FIELD MEASUREMENTS		LISTED MEASUREMENTS
FREDERICA, DEL. over Murderkill River	Hor. Cl.	75'	24'
	Vert. Cl.	3'	3.7'
FREDERICA, DEL. over Murderkill River	Hor. Cl.	Fixed concrete	26'
	Vert. Cl.	bridge. Skiff clearance only.	3.9'
FREDERICA, DEL. over Spring Creek	Hor. Cl.	30'	26'
	Vert. Cl.	3'	2.2'

See paragraph No. 15 of the field report for field data on two additional bridges.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

T-8762 has been compared in detail with the U. S. Geological Survey Bowers Quadrangle, scale 1:62,500 and found to be in good agreement except the contours, which are, in general, somewhat in disagreement.

45. COMPARISON WITH NAUTICAL CHARTS:

T-8762 has been compared to Nautical Chart No. 1218, scale 1:80,000 and found to be in fair agreement. The following topographic information shown on T-8762 is of sufficient importance to warrant immediate application to the chart: None.

The following topographic details above the plane of mean high water are not shown on this manuscript but are believed to still exist and should be carried forward on the chart:

None.

Low water features are shown in part and will be completed by the hydrographic party.

Respectfully submitted:
13 June 1947

Donald M. Brant
Photogrammetric Aid
Compilation and Descriptive
Report

Harry R. Rudolph
Supervisor

Joseph W. Conner
Photogrammetric Engineer
Photogrammetric Office
Review

Approved and Forwarded
2 July 1947

Thomas B. ...
Officer in Charge
Baltimore Photogrammetric
Office

**TO BE CHARTED
TOXED/DELETED**

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Baltimore, Maryland

January 20

1948

I recommend that the following objects which have ~~(has been)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(charts of area)~~ the charts indicated. *A. R. Anderson*

The positions given have been checked after listing by

Thos. W. Reed

Chief of Party.

State of Delaware

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
			LATITUDE		LONGITUDE								
			°	'	D. M. METERS	°	'	D. P. METERS	DATUM				
	St. Jones River Range Front	Same as charting	39	03	1797	75	24	144	N.A. 1927	Rad. Ploc T-8762	1947	x	1218
	St. Jones River Range Rear	"	39	03	1779	75	24	351	"	"	1947	x	1218
	Murderkill River Range Front	"	39	03	817	75	23	1385	"	"	1946	x	1218
	Murderkill River Range Rear	"	39	03	554.8	75	24	575.9	"	Tri. T-8762	1933	x	1218
Supersedes Form No. 567 forwarded to Washington 2 July 1947													

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. 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.

Field Edit Report of Map Manuscript T-8762
Project Ph-7(46)
R. J. Sipe, Chief of Party

The field edit of this quadrangle was accomplished during the period 1 September to 18 September 1947 by Donald G. Flippo, Photogrammetric Aid. All work was done in accordance with the field edit instructions for project Ph-7(46), dated 24 August 1945 and supplemental field instructions.

11. Landmarks and Aids to Navigation: Two Range lights have been established in the Quadrangle since the field inspection. They are St. Jones Front and Rear Ranges, and were rebuilt in October 1946. St. Jones Front Range 1946 was identified on the manuscript but was rebuilt after the identification. These two Ranges have been identified by the field editor, and also a Pt. on Range has been identified.

46. Methods: All delineated features such as roads, structures, drainages, and contours were checked either visually by traveling on roads or trails or by planetable method.

Delineation and some additions were made directly on the field edit sheet. Some additions and corrections were noted on the photographs with a reference to the photograph on the field edit print. A legend to the symbols and to the colored ink used during the field edit is on the field edit print.

47. Adequacy of the Compilation: Some compiled roads and trails were deleted during the field edit. These were, however, valuable to the field editor in many instances. Several small outbuildings had been compiled but these have been deleted. Also some structures were added.

The relative position of compiled detail was found to be entirely satisfactory. With the addition of the field edit data to the manuscript, this map will be complete and accurate.

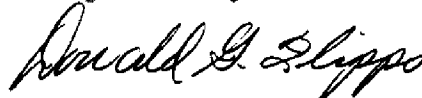
48. Accuracy Tests: Two accuracy tests were made in this quadrangle.

The field edit party has made no attempt to verify the horizontal accuracy of this map.

49. Review of First Proof: The following named gentleman has expressed his willingness to review the first proof of this quadrangle:

Mr. W.M. Stevenson
Frederica, Delaware

Respectfully submitted



Donald G. Flippo
Photogrammetric Aid
18 September, 1947

Division of Photogrammetry
Review Report of
Topographic Map Manuscript T-8762

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

40. Boundaries.--

A notation on the field edit discrepancy sheet states that the identification and legal description of the Bowers' boundary line has been provided. These data were not available at the time of review. The boundary line of Bowers has not been shown on the map manuscript.

43. Comparison with Previous Surveys.--

T-150	1:20,000	1842
T-1548a	1:20,000	1883
T-3087	1:20,000	1910
T-4667	1:10,000	1931-32

The legal description is available and the b'dry line has been shown on the map manuscript
Maki 4-2-48

Numerous changes in shoreline and cultural features have occurred since the above surveys were made. These surveys are superseded by the map manuscript in all common areas.

44. Comparison with Existing Topographic Surveys.--

Vineland, Del.-N.J., USGS, 1:125,000, 1886-96
Bowers, Del.-N.J., USGS, 1:62,500, 1926, 1933-34

45. Comparison with Nautical Charts.--

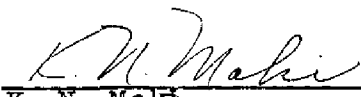
Chart No. 1218, 1:80,000, 1248-47

This map manuscript has not been applied to nautical chart 1218.

48. Vertical Accuracy Test.--

Two vertical accuracy tests run for this quadrangle meet the project specifications. This map complies with the national standard map accuracy requirements.

Reviewed by:


K. N. Maki
3-25-48

APPROVED BY:

S. V. Griffith
Chief, Review Section
Div. of Photogrammetry

H. P. Penning
Chief, Nautical Chart Br.
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

C. H. Green
Chief, Div. of Coastal Surveys

GEOGRAPHIC NAMES

- ASH GUT ✓
- BARKERS LANDING ✓
- BARRATTS CHAPEL ✓
- BAY. ROAD ✓
- BROCKONBRIDGE GUT ✓
- BOWERS ✓
- CYPRESS BRANCH ✓
- CYPRESS POND ✓
- DOUBLE RUN ✓
- FREDERICA ✓
- JOHN WESLEY CHURCH ✓
- KITTS HUMMOCK ✓
- KIUNK DITCH ✓
- LEBANON ✓
- MAGNOLIA ✓
- MILFORD NECK ✓
- MURDERKILL RIVER ✓
- Lewis Ditch ✓
- Dover Army Air Base ✓

- MURDERKILL NECK ✓
- OLIVE SCHOOL ✓
- SAND DITCH ✓
- SOUTH BOWERS ✓
- SPRING CREEK ✓
- ST. JONES RIVER ✓
- ST. JONES NECK ✓
- UNION CHURCH ✓
- WEBB LANDING (abandoned) ✓
- Delaware Bay ✓
- Dupont Highway, U.S. 113 ✓
- U.S. No. 113A ✓
- State Nos. 9, 12 ✓

Names preceded by . are approved
3/16/48 - L. Heck

Listed by Donald M. Beant
Photogrammetric Aid

Checked by: Joseph W. Mascek
Photogrammetric Engineer

C
O
P
Y

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: P. O. Box 110 New Castle, Delaware

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

7. June, 1946

To: Director
U. S. Coast & Geodetic Survey
Washington 25, D. C.

Subject: Report of Aid to Navigation Destroyed.

Benjamin W. Hoxie, Photogrammetrist in charge of the Sub Office on Project Ph-7 (46) at Dover, Delaware reports that the St. Jones River Range Rear listed on page 234, No. 1630, of the Light List, Atlantic and Gulf Coast's (1945) and on chart No. 1218 (lat. $39^{\circ} 04'$, long. $75^{\circ} 24'$) has been destroyed.

According to local sources this rear range was washed out during a storm in June 1943.

Edmund L. Jones,
Chief of Party.

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS:

12 June, 1946

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

To: Lieut. Comdr. Edmund L. Jones,
 U. S. Coast and Geodetic Survey
 Post Office Box 110
 New Castle, Delaware

Subject: Report of Aid to Navigation Destroyed

Receipt is acknowledged, with thanks, of your letter of 7 June, calling our attention to the destruction of St. Jones River Range Rear Light shown on Chart No. 1218.

Information received from the Coast Guard is that this light will be replaced at an early date. It will, therefore, be marked on the charts as being temporarily extinguished.

Acting Director.

NOTES
FOR
HYDROGRAPHIC PARTIES
DELAWARE RIVER

MAP MANUSCRIPT, SURVEY NO. T-8762

PROJECT PH-7(46)A

The 2½ millimeter circles, accompanied with a name and date, are the positions of the recoverable photo (topographic) stations. The dot accompanied with a number and description are the positions of the hydrographic signals.

The outline of the shoal areas are approximate and are for your advance information.

T-8762 has been compared to Nautical Chart No. 1218, scale 1:80,000, and found to be in fair agreement.

The following topographic information shown on T-8758 is of sufficient importance to warrant immediate application to the chart:

None.

The following topographic details above the plane of mean high water are not shown on this manuscript, but are believed to still exist and should be carried forward on the chart:

None.

Low water features are shown in part and will be completed by the hydrographic party.

Respectfully submitted
13 June 1947


Photogrammetric Aid

Approved and Forwarded:
2 July 1947


Officer in Charge
Baltimore Photogrammetric Office