

8500

106.7
9.8
116.5

Diag'd. on diag. ch. No. 1219

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photo. Compilation

Field No. _____ Office No. T-8500

Harry Mark Crosby Tests

LOCALITY

State Delaware

General locality Sussex County

Locality Harbeson

1943

CHIEF OF PARTY

Lieut. Comdr. K. G. Crosby

Lieut. Comdr. F. L. Gallen

Comdr. Ray L. Schoppe

LIBRARY & ARCHIVES

DATE February 13, 1948

B-1870-1 (1)

8500

DATA RECORD

T- 8500

Quadrangle (II): HARBESON

Project No. (II): 302 B

Field Office:

Chief of Party: F. L. Callen
Ray L. Schoppe

Compilation Office: Tampa, Florida Chief of Party: K. G. Crosby

Instructions dated (II III):
18 March, 1943Copy filed in Descriptive
Report No. T- (VI)
Div. Photogram. Office Files

Completed survey received in office: 1 Nov. 1943

Reported to Nautical Chart Section: ✓

Reviewed:

11/17/44

Applied to chart No. None Date:

Redrafting Completed: 4 Feb 1944

Registered:

700
30 Jan. 1948

Published:

1944

Compilation Scale: 1:20,000

Published Scale: 1:25,000

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927

Datum Plane (III): M.S.L. 1929

Reference Station (III): HARBESON 1932

Lat.: 38°43'24" 365 (751.3) Long.: 75°17'14" 757 (356.5) Adjusted V-
m. m. ~~Standard~~

State Plane Coordinates (VI): Delaware, single zone.

X = 536,872.54 ft

Y = 263,482.16 ft oh

Military Grid Zone (VI)

Zone A

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
13360	4/4/43	2:13	1:20,000	No tidal waters
13358	"	2:16 2:10	"	
13354	"	1:56	"	
13355	"	1:57	"	

No record of date and times of photographs in the Tampa Office.

Tide from (III): --

Mean Range: --

Spring Range: --

Camera: (Kind or source) USC&GS 9 lens

Field Inspection by: M. W. Burr, Engr. Aid date: --

Field Edit by: *Wendell Bever, Jr. Topo. Engr.* date: *Nov., 1943*

Date of Mean High-Water Line Location (III): -- *No shoreline on sheet.*

Projection and Grids ruled by (III) J.C.D'N. & B.R.C. date: 6/4/43

" " " checked by: " " date: "

Control plotted by: Washington Office date: -

Control checked by: " " date: -

Radial Plot by: " " date: -

Detailed by: F.M.Gaines, Photo.Aid date: Aug.-Oct. 1943

J.A.Giles, Asst.Photo.Engr.
Reviewed in compilation office by: J.H.S.Billmyer " date: Oct. 1943

Elevations on Field Edit Sheet
checked by: *Wendell Bever, Jr. Topo. Engr.* date: *Dec., 1943*

STATISTICS (III)

Land Area (Sq. Statute Miles); 58.5

Shoreline (More than 200 meters to opposite shore); --

Shoreline (Less than 200 meters to opposite shore); 19 statute miles

Number of Recoverable Topographic Stations established; --

Number of Temporary Hydrographic Stations located by radial plot; --

Leveling (to control contours) - miles; 162.2 st. mi.

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;

General Procedure in the Production of Topographic Quadrangles for the War Department

This quadrangle, together with similar adjoining maps produced under Project C.S. 3013, was prepared by the Coast and Geodetic Survey for the War Department under "General Specifications for War Department Mapping Program" issued about December 1941, in which is incorporated the "Standard of Accuracy for a National Map Production Program" issued by the Bureau of the Budget under date of June 10, 1941.

The general procedure in the production of this and the adjoining quadrangles was:

FIELD SURVEYS

Aerial photography with the Coast and Geodetic Survey nine-lens camera, with airplane and flight crew furnished by the U. S. Coast Guard. The photographs were taken to the scale of 1:20,000. *Apr. 1943*

Ground inspection of the photographs for identification of control points, and classification and clarification of planimetric details on the photographs.

Contouring by planetable directly on the photographs. Supplementary vertical control was established by means of an extensive subordinate level net, furnishing unmarked elevations at road intersections, drive-ways, and numerous other points identifiable on the photographs.

COMPILATION OF MANUSCRIPT

Compilation on the map manuscripts by radial plot methods (celluloid hand templates) of all planimetry and contours. These manuscripts were drawn on the scale of 1:20,000 on celluloid sheets on which polyconic projections had been ruled with the Projection Ruling Machine in the Washington Office. Compilation was accomplished in the Baltimore Tampa Photogrammetric Office.

FIELD EDIT

Comparison of a copy of the manuscript with the ground. This included inspection for completeness and accuracy as well as the location by planetable methods of additional details, checking of nautical and aeronautical aids to navigation, etc.

Accuracy Tests - Application of systematic horizontal and vertical accuracy tests to check the maps for conformity with the specifications. These tests consisted of comparison of the map position and elevation of selected random points with the true position and elevation as independently determined by standard survey methods.

PROCESSING IN THE WASHINGTON OFFICE

Review - Examination of the manuscript for accuracy and completeness of compilation and compliance with specifications, correcting where necessary; addition of military and state grids and other special features; and verification of the general adequacy of the manuscript as a basis for the production of a finished map.

Drafting and Reproduction - Preparation of smooth color separation drawings on 1:20,000 scale on metal-mounted "blue-line" copies of the manuscript. From these drawings, negatives and printing plates were prepared for reproduction of the finished map on the scale of 1:31,680 or 1:25,000.

FIELD INSPECTION REPORT
QUADRANGLE T-8500
PROJECT CS-302-~~13~~
F. L. Gallen, Chief of Party

1. DESCRIPTION OF AREA:

The area covered by this quadrangle lies wholly in Sussex County, Delaware. It consists of farm land, swamp and woodland. The elevations run from 12 feet to 60 feet above sea level. The farm land is well developed in this area, but the wooded areas predominate. The ground varies from gently rolling to sharply rolling. The areas above the 40 foot contour ^{are} poorly drained, as the natural drainages have a very flat grade. Ditches were dug in this area to supplement the natural drainage. The roads in this area are well maintained and are passable for light vehicles in all kinds of weather. The four main highways are U.S. No. 13 through the southwest corner, Delaware State Highway No. 30, 5 and 18 running throughout the rest of the quadrangle. The timberland over the quadrangle consists of mixed pine and deciduous trees which have a heavy undergrowth of brush and vines. There are two small villages in this quadrangle. Harbeson, the largest, is in the north central portion. It has a post office but is unincorporated. Stockley, the other village, has only a post office, general store and a depot. Two Pennsylvania Railroad spur lines run through this quadrangle. There are two state institutions in this area. The Delaware Colony Infirmary in the south central portion and the Delaware State Prison farm in the west central portion. There is a large airport being constructed by the C.A.A. in the west central portion of this quadrangle.

2. COMPLETENESS OF FIELD INSPECTION:

The field inspection is thought to be complete. Buildings, churches, cemeteries, roads and trees have all been classified. Only the buildings circled are to be shown on the map drawing. Those that are only circled and not designated are to be classed as houses or dwellings. Trails are shown with a red dashed line. The drainage to be shown on the map drawing is shown on the photographs. The main highways are labeled on the photos. It is thought that all necessary information is shown on the field photographs that should be shown on the map drawing. Classification of bridges and culverts which have been designated on the photos or any other small items erroneously omitted will be noted by the field edit party.

3. INTERPRETATION OF THE PHOTOGRAPHS:

See report for T-8497.

4. HORIZONTAL CONTROL:

See report for T-8497.

5. VERTICAL CONTROL:

See report for T-8497.

6. CONTOURS AND DRAINAGE:

See report for T-8498.

7-13. The items under these headings in the field inspection report do not apply to this area.

14. ROAD CLASSIFICATION:

See report for T-8498.

15. BRIDGES AND CULVERTS:

See report for T-8498.

16. BUILDINGS AND STRUCTURES:

See report for T-8498.

17. BOUNDARY MONUMENTS AND LINES:

See report for T-8498.

18. GEOGRAPHIC NAMES:

See report for T-8498. *LK*

19. JUNCTIONS:

Junctions with T-8497 on the north, T-8501 on the east have been made and are in agreement. There are no recent surveys on the south or west of this quadrangle.

20. PHOTOGRAPHS USED:

Photographs Nos. 13353, 13355, 13358 and 13360 were used for topography and field edit on this quadrangle.

Approved and forwarded:

F. L. Gallen

F. L. Gallen,
Chief of Party

Submitted by:

Morris W. Burr

Morris W. Burr,
Engineering Aid

GEORGETOWN, DELAWARE, MUNICIPAL AIRPORT

The map of the airport shows the layout of the runways and the boundary of the land area. Sufficient points should be located on the boundary line so that it may be transferred from the map to ~~the~~ either the photographs or map manuscript. The runways are not securely tied in to the boundary line on the airport map and the runways should be located on the map manuscript by markers which have been set in the field and which are placed at the end of each runway. If at the time these markers are located on the photographs a measurement should be taken to the nearest stake showing the distance along the runway and the stationing of the marker recorded either on the map or on the photograph. This information will suffice for locating the ends of the runways by ~~reference~~ to the stationing at which the runways end.

All detail such as buildings and roads inside of the airport will be torn down or covered over during construction and should be deleted from the map manuscript. It may be necessary at the time of the field edit to locate a few roads around the perimeter of the airport where they have been rerouted to furnish continuous lines of travel. The trees inside of the airport boundary will be cleared to the lines shown on the map and all that is necessary at this time is to field inspect the class of timbering which will remain.

Present plans do not make any provision for buildings on the site of the airport and hence no plans are available.

The C.A.A. official in charge of the project indicated that there was no objection to showing the airport runways.

There will be no contours inside of the airport. The elevations shown in ~~in~~ near the short-right angle lines are final elevations after grading and surfacing are completed and may be mapped.

CONTROL PROJ CT 302 B
QUADRANGLE T-6500

STATION	CLASS	PHOTO NO.	DATE	INITIAL
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HORIZONTAL CONTROL:

Harbison, 1932	B-M	13354	5/11/43	L.G.C.
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VERTICAL CONTROL:

49.57(P.R.R.)	B-M	13358	5/11/43	L.G.C.
47 (MGS) 1908	B-M	13358	5/17/43	L.G.C.
G 8	B-M	13358	5/17/43	L.G.C.
H 8	B-M	13358	5/11/43	L.G.C.
E 4	B-M	13358	5/27/43	L.G.C.
43.09(P.R.R.)	L-M	13358	5/17/43	L.G.C.

SOUTH AND WEST OF QUADRANGLE

HORIZONTAL CONTROL:

Colony, 1932	B-M	13356	5/12/43	L.G.C.
Hillside Mon. Tall	B-M	13354	5/12/43	L.G.C.
Al. W.T., N.D., 1932	B-M	13354	5/12/43	L.G.C.
Hillside Houston-White	B-M	13356	5/12/43	L.G.C.
Co. Squat Al.W.T., 1932, N.D.	B-M	13344	5/12/43	L.G.C.
Firetower, 1932, N.D.	B-M	13361	5/11/43	L.G.C.
P.F.S. No.1	L-M	13356	5/13/43	L.G.C.
P.F.S. No.6, 1910	L-M	13356	5/12/43	L.G.C.
P.F.S. No.6, 1910	B-M	13356	5/11/43	L.G.C.
P.F.S. No.2	B-M	13356	5/12/43	L.G.C.
Tinians No. 2 (USED)	B-M	13356	5/12/43	L.G.C.

VERTICAL CONTROL:

J 8	B-M	13358	5/11/43	L.G.C.
L 8	Not rec.			
M 8	" "			
N 8	" "			
O 8	" "			
P 8	" "			
Q 8	" "			
R 8	" "			
S 8	" "			
T 8	" "			
U 8	" "			
V 8	" "			
W 8	" "			
X 8	" "			
Y 8	" "			
Z 8	" "			
U.S.G.S. "47"	B-M	13353	5/30/43	J.N.H.

Lieut. Comdr. F. L. Callen
Chief of Party

Joe H. Henningsen, Prin. Photo. Aid
In charge sub-party.

WOODS AND BRUSH

TYPE

D	Deciduous
E	Evergreen
Cy	Cypress

CONCEALMENT

Z	Trees 10 feet or more in height, and thick enough when in foliage to conceal troop and vehicles.
Y	Brush and undergrowth thick enough to impede foot troops and conceal troops lying down.
X	Scattered trees not thick enough to conceal troops.
W	Scattered brush not thick enough to conceal troops.

PHYSICAL FEATURES

HG	Higher ground - usually appears in light tone on photograph; either wooded or cultivated area; may be scrub trees or brush. (usually not symbolized on photographs.)
LG	Low areas - generally appears dark on photograph; becomes swampy during rainy season; often covered with dense growth of brush.
SW	Swamp - ground covered with water or boggy most of the time; lower in elevation than LG; wooded and/or brush.
M	Salt marshes

NOTE: The above areas are not outlined but sufficient notes are made on each photograph so that the variation in tones can be correctly interpreted in the office.

BRIDGE AND TUNNEL CLASSIFICATION

<u>First Symbol</u>	<u>One Lane</u>	<u>Unlimited</u>
Capacity	5 m.p.h.	
A	50 tons	25 tons
B	25 tons	18 tons
C	18 tons	13 tons
D	10 tons	7 tons
E	6 tons	4 tons
F	Light vehicles only	

Second Symbol

Vertical Clearance	A - over 14 feet
	B - over 13 feet
	C - over 12 feet
	D - over 11 feet, etc.

Third Symbol

Horizontal Clearance	A - over 18 feet
	B - over 17 feet
	C - over 16 feet
	D - over 15 feet, etc.

Fourth Symbol - Year of Classification

FIELD INSTRUCTIONS
PROPERTY 03-205

BUILDINGS

B - Barn
Bldg - building
Bo Ho - Boat House
Ch - Church (give name)
Ct Ho - Court House (give name)
P.O. - Post Office (give name)
Sch - school (give name)
Hos - Hospital (give name)
RR Sta - Railroad station
Cto - Country store or
gas station
F Sta - Ferry Station

BOUNDARIES

BY - Boundary
F B - Fire Break
Hed - Hedge
Park - Park
Cem - Cemetery
Co - County

LANDMARKS

LT - Lighthouse
W - Water tower (give name)
W - Windmill tower
RT - Radio tower or mast
Air Sta - Airway station
Bu - Buoy
Lt - Lighted aid to
navigation
Tx - Low tank
Tk elev - Tank elevated on
structure
Wk - Well

OTHER

X - delete, correct where it
pertains to other items.
Use only the abbrev. listed
on this page. Do not make
up abbreviations.

SHORE LINE

HVL - Mean high water; fast land
LWL - Low waterline
LL - Marsh shore line
K - Ferry
M - Marsh grass in water
Dr - Dock
Mier - Pier
S T - Sea Wall
Bld - Bulkhead
Jet - Jetty
Wh - Wharf
Pile - Pile
Pond - Pond
Lnd - Land
Rk - Rock or rocky
Sly - Slidy
Cmst - Concrete
Is - Island
Blk - Bluff
Dune - Dune

WATERWAYS

W - Water ditch only
W - Well ditch (delete)
I - Intersect stream
D - Drainage
Gr - Groove
Can - Canal
C - Channel
W - Water
P - Pond
L - Lake
R - River

ROADS

Tr - Track
W - Way
C - Crossroad

ROAD CLASSIFICATION FOR MAPS OF ALL SCALES

CLASS	LABEL	STRUCTURE	LOADING
1	Dependable hard-surface heavy duty road.	Concrete, asphaltic concrete bituminous Macadam, H-15 type structures.	Will bear heaviest loads with little maintenance.
2	Secondary, hard-surface all-weather road.	Surface-treated, oiled gravel, waterbound Macadam, structures generally lighter than H-15 but sturdy.	Will bear fairly heavy military loads in all weather if maintained.
3	Loose-surface graded, dry-weather road.	Gravel or stone surface, stable material, selected sand-clay, etc. Drained and graded.	Will bear light military loads in good weather.
4	Unimproved road.	Graded and drained earth, with very light structure.	Generally unsuitable for military loads.
4U	Truck road	Woods roads, farm roads, etc. over which a standard gage vehicle can be driven.	
5	Trail	(Horse trails, foot trails, etc.)	

Roads with more than two (2) lanes are indicated by note along road, e. g. 3 LANE. Change in lanes shown by tick at point of change. Main roads have two lanes unless otherwise marked.

Private roads are designated by the letter P after the road classification.

WOODS CONCEALMENT CLASSIFICATION

Class A: Trees-over-10'-high and thick enough to hide troops.

Class B: Brush thick enough to hide troops but dense enough to impede progress.

Class C: Scattered brush thick enough to hide troops but not thick enough to impede progress.

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-8500

26. CONTROL

But one triangulation station falls within the tracing limits of the sheet. This station could be held to during the radial plot. *Harbeson, 1932 & 1943*

27. RADIAL PLOT

The main radial plot, which was run in the Washington Office, is discussed in the compilation report for sheet T-8502.

28. DETAILING

The photographs were clear and of fairly good scale. Field inspection, although obviously incorrect in some minor details, was sufficient for the detailing.

Most of the disagreements between the compiler and the field inspector was the classification of some roads and vegetation, and the delineation between swampy areas and higher ground.

Many streams flowing through heavily wooded areas are shown on both the map drawing and field prints with the "intermittent stream" symbol. These streams are very likely "probable drainage, unsurveyed", and should be investigated by the field editor. *See field edit report.*

A radial point from the main plot, (shown in red), was found to be in error and was "Cut in" again. The new position of this radial point is shown in blue, near photograph center 13355, with the original point nearby in red.

29. SUPPLEMENTAL DATA

A map of the Georgetown, Delaware, Municipal Airport, (by the Civil Aeronautics Administration), was the only data used to supplement the photographs and field inspection. *Oblique photographs were also used (from aeronautical charts section)*

36. LANDING FIELDS AND AERONAUTICAL AIDS

The centerline of runways and boundary of the Georgetown Municipal Airport were located on the field print and are shown on the map drawing. As the airport was under construction, no other information from the map mentioned under heading 29 is shown. The field edit party should check this map in the field and mark out any deletions to be made and additions to be shown. *See field edit report.*

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

In comparing the sheet with the Geological Survey Millsboro Quadrangle, (Edition of 1938 from surveys made in 1917), the only major difference was the addition of the Georgetown Airport on the present map. Numerous slight discrepancies were noted as is only to be expected after a period of 26 years and the two surveys being on quite different scales, (1:20,000 and 1:62,500).

45. COMPARISON WITH NAUTICAL CHARTS

None of the published nautical charts show the area covered by this quadrangle in detail.

Respectfully submitted,

Frances M. Gaines

Frances M. Gaines,
Photogrammetric Aid

Forwarded by:

Kenneth G. Crosby
Kenneth G. Crosby,
Chief of Party....

FIELD EDIT REPORT
Quadrangle T-8500
Project CS 302 B
R. L. Schoppe, Chief of Party

1. DESCRIPTION OF AREA: See field inspection report.
2. COMPLETENESS OF FIELD INSPECTION: See field inspection report.
3. INTERPRETATION OF THE PHOTOGRAPHS: No photographs were used by this party.
4. HORIZONTAL CONTROL: See field inspection report.
5. VERTICAL CONTROL: The photographs showing level elevations and bench marks were ~~not~~ available to this office, ~~hence they should be checked by the compilation office.~~ *and were checked against the compilation.*
6. CONTOURS AND DRAINAGE: It was noted in the compilation report that streams in heavily wooded areas were probably unsurveyed (probable drainage unsurveyed) and should be investigated by the field edit party. It was, also, noted that the streams to be inspected were not indicated. Checking all the streams would require weeks of work by plane-table, traverse or taping. Therefore, inspection was made by visual checks and pacing of streams where a large ^{error} might exist. Hereafter, this party would recommend a discrepancy overlay be submitted to the field edit party showing questionable drainage and other pertinent information.
7. MEAN HIGH WATER LINE: This item is not applicable to this sheet.
8. LOW WATER LINE: This item is not applicable to this sheet.
9. WHARVES & SHORELINE STRUCTURES: There were no shoreline structures on this sheet.
10. DETAILS OFFSHORE FROM HIGHWATER LINE: This item is not applicable to this sheet.
11. LANDMARKS & AIDS TO NAVIGATION: There were no landmarks or navigational aids within the limits of this sheet.
12. HYDROGRAPHIC CONTROL: This item is not applicable to this sheet.
13. LANDING FIELDS & AERONAUTICAL AIDS: The runways and taxiways of the Georgetown Municipal Airport were located on this sheet by planetable methods. A small wooded area in the northeast corner of the airfield was shown, also.
14. ROAD CLASSIFICATION: All roads have been classified and shown in accordance with instructions from the Army War College dated January 12, 1942.
15. BRIDGES: Bridge classifications were made in accordance with instructions from the War Department dated July 23, 1942, and have been shown in key on the sheet by C. C. Fryer, Sr. Photo. Aid.
16. BUILDINGS: All farm buildings except dwellings and chicken-houses have been classified as barns(b). This includes all substantial sheds, garages, stables, et cetera. Due to the large number of chicken-houses they have been classified separately as ckh.

In congested areas and towns, dwellings were not classified. Public buildings were classified according to standard topographic practice.

17. BOUNDARY MONUMENTS & LINES: The political subdivisions of Sussex County have been added from political boundary maps and when necessary verified in the field. All other boundaries, added by the the field inspection party, have been checked by this party.
18. GEOGRAPHIC NAMES: See field inspection report.
19. The discrepancy and suggestion noted in the compilation report under items 28 and 36 respectively, have been inspected. Suitable notes have been made on the compilation and under the proper items in this report.
46. METHODS: This compilation was field edited on the chart paper print and later transferred to the Whatman paper print. Discrepancies not covered by suitable symbols were noted on the compilation by a sentence and an arrow to the point in question. All symbols used are standard topographic symbols except that a green X was used for deletions and tick marks were used to indicate the limits of deletions and points of change in road classifications. The following color scheme was used:

Deletions	Green
Additions, classifications, names, notes . . .	Black
Water Culture.	Blue
Political Boundaries.	Violet
47. ADEQUACY OF COMPILATION: Except for known deficiencies, such as classifications of roads, dwellings and public buildings, and the additions of new structures; the compilation of this sheet was complete and adequate.
48. ACCURACY TESTS:
 1. Horizontal: A separate report of the horizontal accuracy test for this sheet has been previously submitted to the Washington Office. ^{computations} Filed in review unit.
 2. Vertical: See field inspection report. See photo 13355 (field photo.)

Submitted by:
Wendell Bever
 Wendell Bever,
 Jr. Topo. Engr.

Approved by:
R. L. Schoppe
 R. L. Schoppe,
 Chief of Party.

*Now filed in General
 Files of the Division
 of Photogrammetry.*

TESTS FOR HORIZONTAL ACCURACY

Quadrangle T-8500

Project 302 B...

HORIZONTAL ACCURACY TEST
Quadrangle T-6500
Project 302 B

This test consists of a traverse between triangulation stations Marvel(1932) and Harbeson(1932). The traverse is 9.3 statute miles in length and contains 29 test points; 6 of which are within the limits of this quadrangle. The traverse closure is one part in 25900 and a discrepancy of 0.53 meter was adjusted through the traverse. In the tabulation the geodetic position from the traverse computations is referred to as T. No. and the scaled position from the map manuscript is referred to as M. No.

TABULATION OF TEST POINTS

Description of Point	Test Point Number	Latitude	Longitude	Displacement in mm.
Inter. of road & road, 80 degrees	T.No.24	38-44-1588.6	75-17-671.7	.22
	M.No.24	38-44-1589.2	75-17-676.1	
Center of house	T.No.25	38-44-872.1	75-17-553.3	.84
	M.No.25	38-44-888.2	75-17-548.5	
Inter. of road & road, 90 degrees	T.No.26	38-44-91.5	75-17-458.3	.40
	M.No.26	38-44-99.4	75-17-457.0	
Inter. of road & road, 60 degrees	T.No.27	38-43-1344.6	75-17-374.7	Not compiled
	M.No.27			
Center of house	T.No.28	38-43-1053.6	75-17-302.7	Not compiled
	M.No.28			
Inter. of cross roads, 90 degrees	T.No.29	38-43-896.8	75-17-229.6	.17
	M.No.29	38-43-900.1	75-17-229.1	

Except for test point No. 25, which is a less well defined point, the remaining points are well defined. Test point No.27, which was not compiled, should probably be discarded for this reason: the excessive displacement between the computed ~~point~~ and scaled positions questions the accuracy of the traverse distance measured ~~to~~ this point by the field party; the office computation for this point was rechecked and found to be correct. Test point No. 28 was not compiled; the dwelling was not shown on the manuscript. It may be noted that the well defined points are within the requirements of .5 mm. and the less well defined point is within the requirement of 1.0 mm.

Submitted by:
Charles Hanavich
Charles Hanavich,
Prin. Photo. Aid.

Approved by:
Ray L. Schoff
Ray L. Schoff
Chief of Party.

DIVISION OF CHARTS

SURVEYS BRANCH

REVIEW OF AIR PHOTOGRAPHIC SURVEY T- 8500

HARBESON, DELAWARE QUADRANGLE

This quadrangle manuscript has been examined for completeness, accuracy, and conformity with the specifications. It is adequate for smooth drafting, reproduction and publication. Revisions found to be necessary in this office are discussed on the next page.

Horizontal and Vertical Accuracy The horizontal accuracy test consisted of 6 points within the limits of this sheet, ~~and is the subject of a special report.~~ Traverse Point 27 differed considerably from the radially plotted point and from investigation it would seem obvious that an error was made in the field work. Horizontal accuracy report states that this point was not compiled, however it was ~~compiled~~ as a secondary point. TP 28, which was not Previous Surveys (see over)

This manuscript has been compared with the following previous topographic surveys of this Bureau and other agencies. This map is satisfactory to supersede the previous surveys over the common area.

U.S.G.S. MILLSBORO 15' ed 1938 1/62500

Survey T-8500 supersedes the quadrangle in their common areas, ~~because of cultural changes and because more accurate topographic work gives rise to slight contour changes.~~

Comparison with Nautical Charts Nos. None for this area.

The manuscript has not been applied to the charts at the date of this review. The following comments are pertinent to the compilation and correction of nautical charts:

compiled, was not visible on the photographs because of trees; but a house was drawn in at this point.

TP 28 was found to have been compiled in the wrong place, and was corrected. The other three points were well within the required accuracy. ~~It is believed that,~~ From the results of the horizontal and vertical accuracy tests, the map falls well within the required specifications of the War Mapping project.

The vertical accuracy test for T-8500 was run on field photograph 13355, and showed the contours in this area were well within the required limits of accuracy. The contours were slightly altered in places to conform to the test work, which was verified with the stereoscope.

The following revisions of the map manuscript were found to be necessary and were accomplished as a part of this review:

Runways to Georgetown Municipal Airport were added to the map manuscript.

Reviewed 8 Jan. 1944 By Robert B. Collier
under direction of D. H. Benson *per LTS.*

Inspected by B. G. Jones *B.G. Jones 2/48*

Examined and approved:

[Signature]
Chief, Surveys Branch

[Signature]
Chief, Topography Section

Nautical Chart Branch

K.T. Adams
Chief, Div. of Charts *Photogrammetry*

E.K. Allen
Chief, Div. of Coastal
Surveys

RECORDS

Between January, 1942 and July, 1944, this Bureau completed 323 quadrangles. These maps have been published, or are in the process of being published on scales of 1:31,680 or 1:25,000. This series of quadrangles includes a land area of approximately 15,000 square miles. Incident to this work, a considerable volume of survey records and data has accumulated which will be filed for future reference. This material is filed as follows:

Registered and Filed in the Vault.

Cloth-mounted copy of the published quadrangle.

Black and white cloth-mounted copy of the published quadrangle at 1:20,000 scale. This copy is filed to preserve original survey detail shown on the manuscript at 1:20,000 scale which may not have been shown on the published sheet. For woodland, refer to the published quadrangle for the finally adopted outlines.

Descriptive Report.

Filed in the Photogrammetric Division.

Field inspection photographs.

Contoured photographs (on which planetable contouring work was performed.)

Field edit sheet.

Descriptions of recoverable topographic stations (Form 524), filed in Review Section.

Supplementary traverse and level records.

Field notes, computations, lists of positions, and tabulations of results of horizontal and vertical accuracy tests.

Reproduction proof.

Correction sheet (copy of quadrangle showing in red changes to be made when next printed.)

Check lists of work performed on each sheet in the Washington Office during review, drafting, edit, and reproduction.

Copies of specifications and all instructions to field parties and field offices.

Filed in Reproduction Branch.

Glass negatives of the color separation drawings.

Filed in the Library.

Special report on office work by B. G. Jones, 1944.

Season's report on field work by Commander F. L. Gallen, 1944.

Season's report on field work by Commander R. L. Schoppe, 1944.

Delivered to the Army Map Service in accordance with the contract.

Film negatives and film positives of the color separation drawings.

All color separation drawings.

A correction sheet consisting of a copy of the first edition of the quadrangle with notes in red indicating changes desirable at the next printing.

T-8500

No. 1

Remarks

Decisions

1		
2		Railway Guide
3		Road Maps
4		"
5		
6		
7		
8		
9		385752
10		387753
11		386753
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		"
21		"
22		"
23		"
24		"
25		"
26		"
27		"

GEOGRAPHIC NAMES

Survey No. T-8500

HARBESON quadrangle

1 Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A,	B,	C,	D,	E,	F,	G,	H,	K,	
Sussex County ✓				✓					1
Pennsylvania R.R. (Delmarva Division) ✓				✓					2
U.S. Highway No. 113 also: Dupont Highway ✓				✓					3
State Highways Nos. 5, 18, 30 ✓				✓					4
District 8 (Indian River) ✓									5
District 9 (Georgetown) ✓									6
District 10 (Lewes and Rehoboth) ✓									7
District 6 ✓									8
Swan Creek ✓	✓								9
Gravel Hill Road ✓	✓								10
Morris Mill									
Simpler Branch ✓	✓								11
Morris Millpond									
Welsh Branch ✓	✓								12
Deep Branch									
Sanderson Crossroads ✓	✓								13
Zoar ✓	✓								14
Cow Bridge Branch ✓	✓								15
Morris Mill ✓	✓								16
Morris Millpond Pond ✓	✓								17
Deep Branch ✓	✓								18
Wood Branch ✓	✓								19
Wilson Prong ✓	✓								20
Stockley Branch ✓	✓								21
Stockley ✓	✓								22
Catfish Branch ✓	✓								23
Catfish Bridges ✓	✓								24
Spicer Prong ✓	✓								25
Green Branch ✓	✓								26
Springfield Crossroads ✓	✓								27

T-8500

No. 2
Decisions

Remarks

1		386753
2		"
3		"
4		"
5		"
6		"
7		"
8	Still pending with USGB	387753
9		387751
10		387753
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		"
20		387752
21		"
22		"
23		387751
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-8500

2	Name on Survey	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
		A,	B,	C,	D	E	F	G	H	K
	<u>St. Johns Road</u> ✓	✓								1
	<u>Georgetown Municipal Airport</u> ✓		✓							2
	<u>Pepper Branch</u> ✓		✓							3
	<u>Wood Branch</u> ✓ ✓ (settlement, R.R. crossing)									4
	<u>County Prison Farm</u> ✓	✓								5
	<u>Sabrey Branch</u> ✓	✓								6
	<u>Selbyville State Road</u> ✓	✓								7
	<u>Saulsbury Switch</u> ✓	✓								8
	<u>Georgetown and Lewes Road</u> ✓		✓							9
	<u>Savanna Ditch</u> ✓	✓								10
	<u>Sand Hill</u> ✓ ✓ (settlement)	✓								11
	<u>Dutton Ditch</u> ✓ ✓	✓								12
	<u>Waples Branch</u> ✓	✓								13
	<u>Ingram Millpond</u> ✓ <i>not shown</i>									14
	<u>Ingram Run</u> ✓	✓								15
	<u>Milton Road</u> ✓	✓								16
	<u>Gravel Hill</u> ✓	✓								17
	<u>Bennum</u> ✓	✓								18
	<u>Round Pole Branch</u> ✓	✓								19
	<u>Harbeson</u> ✓	✓								20
	<u>Beaverdam Creek</u> ✓	✓								21
	<u>Hunters Millpond</u> ✓	✓								22
	<u>Bundicks Branch</u> ✓	✓								23
										24
										25
										26
										27

Names underlined in red approved
by L. H. Beck on 11/29/44

NAUTICAL CHARTS BRANCH

SURVEY NO. 7-8500

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.