

# 8044

Diag'd. on Diag. Ch. No. 1233

Form 504

## U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

### DESCRIPTIVE REPORT

Type of Survey Air Photographic  
Shoreline Survey

Field No. \_\_\_\_\_ Office No. T-8044

#### LOCALITY

State North Carolina

General locality Core Sound

Locality Central Portion

194 5

#### CHIEF OF PARTY

R. W. Knox

#### LIBRARY & ARCHIVES

DATE March 15, 1949

B-1870-1 (1)

# 8044

## DATA RECORD

T-8044

~~Quadrangle (II):~~Project No. ~~(II):~~

Field Office:

Chief of Party:

Compilation Office:  
Washington, D. C.Chief of Party: R. W. Knox  
Chief of BranchInstructions dated (II III):  
Verbal onlyCopy filed in Descriptive  
Report No. ~~T-----~~ (VI)

Completed survey received in office: July 5, 1945

Reported to Nautical Chart Section:

Reviewed: 3 Feb 49

Applied to chart No. 420

Date: 11/16/45

Redrafting Completed:

Registered: 18 Feb 1949

Published: Not to be published

Compilation Scale: 1:20,000

~~Published Scale:~~

Scale Factor (III): 1.00

Geographic Datum (III): N. A. 1927

Datum Plane (III): <sup>M.H.W.</sup> ~~Mean Sea Level~~

Reference Station (III): Davis Shore, N. E. Church Spire, 1933

Lat.: 34°47'48.032"  
1480.1 m.Long.: 76°27'37.797"  
960.9 m.Adjusted  
~~Unadjusted~~

State Plane Coordinates (VI): Not shown

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>
Single Lens: 450856 to 450866, inc.	1-24-45	11:06 a. m.	1:20,000	0.1' above M.L.W.
Nine Lens (Unmounted) 8951 to 8955, inc.	4-16-42	3:00 to 3:05 p.m.	1:20,000	0.7' above M.L.W.

Tide from (III): Tide tables: Atlantic Ocean; Reference Station

Hampton Roads, Va., with corrections to Cape Lookout, N. C.

Mean Range: 3.7'

Spring Range: 4.4'

Camera: (Kind or source) U. S. Coast and Geodetic Survey nine lens camera (focal length  $8\frac{1}{4}$ " ) and U. S. Coast and Geodetic Survey single lens camera (focal length 6"), Type "C". All negatives are on file in the Washington

Field Inspection by:

date: Office.

None

Field Edit by:

date:

None

Date of Mean High-Water Line Location (III):

Photographs of 1-24-45 and 4-16-42

Projection and Grids ruled by (III) S. Rose

date: 3-29-45

" " " checked by: S. Rose

date: 3-29-45

Control plotted by: Michael G. Misulia  
Dorothy Mosely

date: 4-2-45

Control checked by: Michael G. Misulia  
Dorothy Mosely

date: 4-2-45

Radial Plot by: Michael G. Misulia

date: 4-45

Detailed by: Eula L. Johnson

date: 4 & 5-45

Reviewed in compilation office by:

date: 5-45

*Map Manuscript*  
Elevations on ~~Field Edit Sheet~~  
checked by: None

date:

STATISTICS (III)

Land Area (Sq. Statute Miles); 49

Shoreline (More than 200 meters to opposite shore); 55.5 statute miles

Shoreline (Less than 200 meters to opposite shore); 30 statute miles

Number of Recoverable Topographic Stations established;

None

Number of Temporary Hydrographic Stations located by radial plot;

None

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;



T-8043

RADIAL PLOT  
REPORT

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26. Control:

The control plotted consists of four horizontal control stations, all of which are U. S. Coast and Geodetic Survey triangulation stations.

CORE, COAST GUARD STATION, FLAGPOLE, 1933

LIFE SAVING STATION, CUPOLA

\* HARBOR ISLAND CLUBHOUSE, EAST CHIMNEY

ATLANTIC METHODIST CHURCH SPIRE, 1933

\* Station destroyed. Point pricked on photographs in same position as that shown on Survey T-3662, scale 1:40,000, date 1916.

SEE PAGES 1 ITEM 27  
and 3 ITEM 26

27. Radial Plot:

A combined radial plot was laid for Surveys Nos. T-8043 to T-8045, inclusive, which lies within the limits of Chart No. 421.

The area of these surveys was covered by nine and single lens photographs. Templates were used for the nine lens photographs, while the single lens photographs were oriented directly under the celluloid projection sheet.

All of the horizontal control, shown on the projection sheets with the conventional triangulation symbols, was identified in the office from available descriptions.

The horizontal control consists of the following 21 U. S. Coast and Geodetic Survey triangulation intersection stations:

ATLANTIC METHODIST CHURCH SPIRE, 1933

CAPE LOOKOUT LIGHTHOUSE, 1933

\* CARTARET CLUB, MAIN CHIMNEY

CORE, COAST GUARD STATION, FLAGPOLE, 1933

DAVIS SHORE, N.E. CHURCH SPIRE, 1933

DAVIS SHORE, S.W. CHURCH SPIRE, 1933

\*\* HARBOR ISLAND CLUB HOUSE, E. CHIMNEY

HARKERS ISLAND E. CHURCH SPIRE, (NORTHERN METHODIST CHURCH), 1933

HARKERS ISLAND W. CHURCH SPIRE, (SOUTHERN METHODIST CHURCH), 1913, r. 1933

E. RADIO TOWER, CAPE LOOKOUT, 1933

\* LIFE SAVING STATION CUPOLA

KINGS PT. BEACON, 1933

MARSHALLBURG BAPTIST CHURCH SPIRE, 1913



- MARSHALLBURG METHODIST CHURCH SPIRE, 1913
- S. GABLE HO. N.E. OF STA. LEO, 1933
- \* SEA LEVEL CHURCH SPIRE
- SHELL POINT BEACON, 1933
- \* STACY SPIRE
- SHACKLEFORD BANK E. GABLE HOUSE, 1933
- W. RADIO TOWER, CAPE LOOKOUT, 1933
- \* WILLISTON SPIRE

\* Positions were taken from the original computations made in 1915, the datum of which was listed as "Approximately North American". These positions were office adjusted to N. A. 27 datum.

\*\* Station destroyed. Point pricked on photographs in same position as that shown on Survey 3662, scale 1:40,000, date 1916.

All of the horizontal control stations, common detail points from adjoining surveys, and flight lines were "held", either 100% or tangent in the plot.

Surveys Nos. T-8044 and T-8045 were adequate in control density, while more control for Survey No. T-8043 would have been desirable, it is believed to be of required accuracy. Secondary points and photograph centers which were established on Survey No. T-8044 were used to supplement the horizontal control on Survey No. T-8043.

The error of closure was negligible and no exceptional difficulty was encountered in the adjustment.

The position of all secondary points and photograph centers, established by the radial plot, have been shown on the glossy side of the projection sheet with small double and large single blue ink circles respectively.

Chamber no. 5, of photograph no. 8949, could not be held in the plot because of the incorrect orientation of this chamber relative to the photograph. The presence of double images along the mask lines of this chamber were noted. When drawing rays from this chamber, intersections established from other photographs were used in determining the correct orientation.

The positions of the secondary points and photograph centers, established by this combined plot, are believed to be within the standard of accuracy required by the Bureau.



26. Control:

The control plotted consists of seven U. S. Coast and Geodetic Survey triangulation stations. All of the stations have been shown on the map drawing with the conventional symbol.

ATLANTIC METHODIST CHURCH SPIRE, 1933  
DAVIS SHORE, N. E. CHURCH SPIRE, 1933  
DAVIS SHORE, S. W. CHURCH SPIRE, 1933  
KINGS POINT BEACON, 1933  
SEA LEVEL CHURCH SPIRE  
STACY SPIRE  
CARTARET CLUB MAIN CHIMNEY

27. Radial Plot:

A combined radial plot was laid for the areas of Surveys No. T-8043 to 8045, inclusive. The report on this plot has been submitted with the Descriptive Report for Survey No. T-8043 under section 27. *A carbon copy of this report is included in this Descriptive Report.*

28. Detailing:

There were no field inspection data for the area of Map Drawing Survey No, T-8044. All of the planimetric details shown were interpreted from office examination of the photographs, the stereoscope being used wherever deemed necessary.

A small area north of a line from Latitude  $34^{\circ}56'$  - Longitude  $76^{\circ}26'$  to Latitude  $34^{\circ}53'$  - Longitude  $76^{\circ}30'$  was not detailed because of insufficient photograph coverage.

The general character of the shoreline consists of sandy beaches and marshy areas, while the interior consists mainly of marsh and wooded areas, and small areas of cultivated land. There are a few scattered settlements including the towns of Atlantic and Davis.

All roads accompanied by the note "d.f.l." or "d.d.l." have been shown by a center line only and are to be considered 0.6 m.m. in width. Trails have been shown by a single dashed line accompanied by the note "s.d.l."

The area in the vicinity of the town of Davis is believed to be relatively weak with respect to the horizontal control, because of the flight lines being almost directly in azimuth with the planimetric detail in this



area. Therefore strong intersection of detail points could not be obtained.

The scale of the photographs and of the map drawing were in good agreement, and most of the detailing was done direct, the vertical projector being used very little. Wherever possible, the single lens photographs were used in preference to the nine lens photographs because of the later date of the single lens photographs.

30. Mean High-Water Line:

The mean high-water line has been shown by a full heavy weight black acid ink line. Marshy areas are shown with the conventional symbol. The shoreline along Core Bank is subject to constant change.

31. Low-Water and Shoal Lines:

The approximate outer limits of sandy areas have been shown on the map drawing with a dotted black acid ink line and should not be considered the position of the M. L. W. Line. Definite shoal areas did not appear on the photographs, so these were not shown on map drawing.

32. Details offshore from the high-water line:

There are numerous images of objects appearing on the photographs in the vicinity of Atlantic and Huff Creek. They have been shown on the map drawing and accompanied by the note "Probable ruins of piers or boats."

33. Wharves and Shore Line Structures:

All piers have been shown on the map drawing by the conventional symbols.

36. Landing Fields:

The Airport at Atlantic, The Marine Corps Auxiliary Air Facility, has been detailed from single lens photographs. The airport is believed to be still under construction. However, it is believed that all runways and taxiways are complete.

37. Geographic Names:

No geographic name investigation for the area of the map drawing was available. All names shown were taken from the nautical charts in the area. A list of the geographic names on this sheet is attached to this report.



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38. Junctions:

The junctions with T-8043 to the north and east and T-8045 to the south and west are in agreement. A junction could not be made with the old surveys to the north because of changes in planimetric detail.

39. Recommendations for future surveys:

The planimetry shown is believed to be complete in all important details and within the limits of satisfactory accuracy except for the area in the vicinity of Davis as mentioned in section 28. Since field inspection was not made of the area of the survey, a field edit is recommended.

It is to be emphasized that this survey was made by office compilation from aerial photographs without ground identification of control or clarification of photographic details. This survey is adequate for Nautical Chart compilation or revision but is not up to Bureau Standards of completeness or accuracy and should not be used for Hydrographic control or certified for engineering or legal purposes.

40. Bridges:

There are two bridges of navigational importance shown on the map drawing. Notes pertaining to their vertical and horizontal clearances, type, number of spans, and date of completion have been lettered on the map drawing. The data used were taken from "List of Bridges over the Navigable Waters of the U. S." compiled by the Corps of Engineers.

44. Comparison with Existing Topographic Surveys:

<u>Survey</u>	<u>Date</u>	<u>Scale</u>
T-1306	1872	1:20,000
1017	1866	1:20,000
1020	1866	1:20,000
1277a	1872	1:20,000
1277b	1872	1:20,000

A detailed comparison with the above mentioned surveys was not possible because of the changes in planimetric details; however, the general outlines are in agreement. The above surveys are superseded by Survey T-8044.

45. Comparison with Nautical Charts:

Chart No. 42D, published Nov., 1940, scale 1:40,000, reissued Aug., 1943.

Chart No. 1233, published Aug., 1942, scale 1:80,000,  
reissued May, 1944.

These charts were compiled from the old surveys listed in paragraph 44. Accordingly, detailed comparisons of this map drawing with the nautical charts could not be made. In general, however, the planimetric details are in fair agreement.

*This sheet was compiled for revision of the charts.*

Compilation and Descriptive Report  
reviewed by:

Michael G. Misulia  
Michael G. Misulia,  
Cartographic Engr.

Approved by: *Magones*

L. C. Lande  
L. C. Lande,  
Cartographic Engr.

Compilation and Descriptive Report  
by:

Eula L. Johnson  
Eula L. Johnson



## GEOGRAPHIC NAMES

Survey No.

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
DAVIS ✓										1
SEALEVEL ✓										2
ATLANTIC										3
CORE BANK ✓										4
MARINE CORPS AUXILIARY AIR FACILITY										5
JARRETT BAY ✓										6
SPIT BAY ✓										7
BRETT BAY ✓										8
NELSON BAY ✓										9
STYRAN BAY ✓										10
THOROUGHFARE BAY ✓										11
BARRY BAY ✓										12
LONG BAY ✓										13
GREAT ISLAND BAY ✓										14
<sup>S</sup> SMYRNA CREEK										15
OYSTER CREEK ✓										16
HUFF CREEK ✓										17
WILLIS CREEK ✓										18
LEWIS CREEK ✓										19
BROAD CREEK ✓										20
SALTERS CREEK ✓										21
CEDAR CREEK ✓										22
CLOVER CREEK ✓										23
HORSEPEN CREEK ✓										24
DEER CREEK ✓										25
JOHNSON CREEK ✓										26
GREAT ISLAND CREEK ✓										27

*For approved geographic names  
refer to Desc Reports for the  
Ph-5 surveys listed in  
the Review Report.*

# GEOGRAPHIC NAMES

Survey No.

GEOGRAPHIC NAMES											
Survey No.											
Name on Survey											



Division of Photogrammetry  
 Review Report of  
~~Planimetric~~ Map Manuscript T-8014  
 Shoreline

28. Detailing.—This survey was compiled from aerial photographs without field inspection of any kind. It is not to be published and was intended only for the revision of nautical charts for this area.

It is superseded by more recent surveys in project Ph-5. Refer to T-8733, T-8734, T-8740, T-8741, and T-8746. A note that it has been superseded has been placed on the map manuscript.

*The map manuscript had been applied to chart 420 prior to this review.*  
 Reviewed by: Reviewed under direction of:

*Jack L. Rihn*  
 Jack L. Rihn  
 T-3-49  
 Cartographer

*S. V. Griffith* 3/1/49  
*S. V. Griffith*  
 Chief, Review Section *K. H. M.*

APPROVED:

*B. B. Jones per Mr.*  
 Tech. Asst. to the Chief  
 Division of Photogrammetry

*H. C. Edmonston*  
 Chief, Nautical Chart Branch  
 Division of Charts

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

*C. K. Green*  
 Chief, Div. of Coastal  
 Surveys



