

8043

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-8043

LOCALITY

State North Carolina

General locality Core Sound

Locality Portsmouth Bank - Core Bank

194 5.

CHIEF OF PARTY

R. W. Knox

LIBRARY & ARCHIVES

DATE March 15, 1949

B-1870-1 (11)

8043

DATA RECORD

T- 8043

~~Quadrangle (II):~~~~Project Name (II):~~~~Field Office:~~~~Chief of Party:~~

Compilation Office:

Chief of Party: R. W. Knox

Washington, D. C.

Instructions dated (II III):

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

Verbal only

Completed survey received in office: July 5, 1945

Reported to Nautical Chart Section:

Reviewed: 3 Feb 49

Applied to chart No. 419
1231Date: 7/31/45
10/22/45

Redrafting Completed: None.

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Published: Not to be published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): ^{MHW}~~Mean Sea Level~~

Reference Station (III): Core, Coast Guard Sta., Flagpole, 1933

Lat.: 34°51' 31.038" - 956.4m Long.: 76°18' 37.524" - 953.2m ^{Adjusted}
~~Unadjusted~~

State Plane Coordinates (VI): Not shown

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time (E.S.T.)</u>	<u>Scale</u>	<u>Stage of Tide</u>
8949 - 8952 *	4/16/42	2:57 - 3:01 p.m.	1:20,000	0.6' above M.L.W.
867 - 877 **	1/24/45	11:20 a.m.	1:20,000	0.2' above M.L.W.
202 - 204 **	1/5/45	1:50 p.m.	1:20,000	2.4' above M.L.W.
205 - 208	1/5/45	2:05 p.m.	1:20,000	2.2' above M.L.W.

* Nine-lens photographs

** Single lens photographs

All photographs are unmounted.

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

Field Inspection by: No field inspection

date:

Field Edit by: No field edit

date:

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

Photographs of: April 16, 1942

January 5, 1945

January 24, 1945

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: Dorothy Mosely

date: 4 & 5/45

Reviewed in compilation office by: Michael G. Misulia

date: 6/45

Map Manuscript
Elevations on ~~Field Edit Sheet~~

checked by: None

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 20

Shoreline (More than 200 meters to opposite shore): 66 statute miles

Shoreline (Less than 200 meters to opposite shore): 20 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:

RADIAL PLOT REPORT

26. Control:

The control plotted ^{on T-8043} 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.

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.

COMPILATION REPORT

28. Detailing:

There were no field inspection data for the area of this Map Drawing. All planimetric details were interpreted by the compiler from the office photographs, the stereoscope being used when needed.

A small area in the northwest portion of the Map Drawing, from Latitude $35^{\circ}01'$ to $35^{\circ}02'$ and Longitude $76^{\circ}20'$ to $76^{\circ}21'$ was not shown because of insufficient photographic coverage. For the same reason the complete detail of the shoal areas north of Wainwright Island could not be shown.

The area from Latitude $34^{\circ}50'$ to $34^{\circ}56'$ and Longitude $76^{\circ}20'$ to $76^{\circ}21'$ was not shown on this Map Drawing. This area was detailed on Survey No. T-8044 so that the entire airport at Atlantic might be included on one survey.

The general character of the shoreline consists of sandy beaches and marshy areas while the interior consists mainly of marsh and wooded areas. There are a few scattered settlements along the southern shore of Hog Island Bay.

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 scales of the photographs and of the Map Drawing were in good agreement for the most part. However, in a few small areas the vertical projector was used. The single lens photographs were used in detailing in preference to the nine lens photographs because of their later date.

30. Mean High-Water Line:

The mean high-water line has been shown by a full heavy weight black acid ink line. Where marsh areas border the mean high-water line they have been shown with the conventional symbol, the outer limits of which have been shown with a light weight black acid ink line. The shore lines along Core Bank, Portsmouth Bank, and the southern shore of Pamlico Sound are exposed to storms, making these shorelines subject to considerable changes.

31. Low-Water and Shoal Lines:

The approximate outer limits of shoal areas have been

shown by a dashed light-weight black acid ink line. The approximate outer limits of offshore sand areas have been shown by dotted black acid ink lines. These latter dotted lines are not to be considered the true position of the mean low-water line but are the outer limits of sandy areas visible on the photographs.

32. Details Offshore from the High-Water Line:

The only offshore detail on the Map Drawing is piling lying northeast of Hog Island and was shown with the conventional symbol.

33. Wharves and Shore Line Structures:

Piers have been shown on the Map Drawing with the conventional symbol.

37. Geographic Names:

No geographic name investigation was available. All names on the Map Drawing have been taken from available nautical charts.

The geographic names covering the area of the Map Drawing have been compiled in two lists (undisputed and disputed) and are submitted herein.

38. Junctions:

The junction with Survey No. T-8044 on the southwest corner of the Map Drawing is in agreement. Junctions could not be made with the old topographic surveys to the north and west because of the changes in planimetric detail.

There are no contemporary surveys to the east or south of the Map Drawing.

39. Recommendations for Future Surveys:

The planimetry shown on the Map Drawing is believed to be complete in all details of importance except for the areas which did not have complete photographic coverage mentioned under side heading number 28.

The positions of the planimetric details shown within the area - Latitude $34^{\circ}59'$ to $35^{\circ}01'$ and Longitude $76^{\circ}18'$ to $76^{\circ}21'$ - are believed to be relatively weak with respect to the horizontal control because of insufficient photographic coverage.

The probable error in the position of radial points and details of importance is believed to be within the limits of satisfactory accuracy, with the exception of the area mentioned in the previous paragraph.

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.

44. Comparison with Existing Topographic Surveys:

<u>Survey</u>	<u>Date</u>	<u>Scale</u>
T-1016	1866	1:20,000
T-1020	1866	1:20,000
T-1277a	1872	1:20,000
T-3662	1916	1:40,000

A detailed comparison with the above mentioned surveys was not possible because of the changes in planimetric detail, however the general outlines are in agreement.

The above mentioned surveys are superseded by Survey No. T-8043.

45. Comparison with Nautical Charts:

Chart No. 421, published Nov. 1940, scale 1:40,000, reissued Aug. 1943.

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

The above mentioned charts were compiled from the old surveys mentioned in paragraph 44, thus 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 correction of the charts.*

Compilation and Descriptive Report
by:

Dorothy Moseley
Dorothy Moseley

Compilation and Descriptive Report
reviewed by:

Michael G. Misulia
Michael G. Misulia
Cartographic Engr.

Approved by: *B. G. Jones*

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

GEOGRAPHIC NAMES

Survey No.

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>UNDISPUTED</u>									1
BACK BAY									2
BARRY BAY									3
CAMP POINT									4
CEDAR ISLAND									5
CEDAR ISLAND BAY									6
CHAIN SHOT ISLAND									7
CORE BANK									8
CORE SOUND									9
DRUM INLET									10
GREEN POINT									11
HALL POINT									12
HARBOR ISLAND									13
HOG ISLAND									14
HOG ISLAND BAY									15
HOG ISLAND POINT									16
HOG ISLAND REEF									17
LEWIS CREEK									18
LONG POINT									19
LOOKOUT POINT									20
NORTH BAY									21
OYSTER CREEK									22
PAMLICO SOUND									23
PORTSMOUTH BANK									24
ROBINSON POINT									25
RUMLEY BAY									26
SHELL ISLAND									27

*approved
for Geogr. Names refer to Desc.
Reports for the P-5 surveys
listed in the Revised Report.*

GEOGRAPHIC NAMES

Survey No.

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>UNDISPUTED</u>									1
WAINWRIGHT ISLAND									2
WHITE POINT									3
THOROFARE BAY									4
									5
<u>DISPUTED</u>									6
<u>BIG DITCH</u> --- PIG DITCH									7
									8
									9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

Division of Photogrammetry
Review Report of
~~Planimetric~~ Map Manuscript T-8043
Shoreline

18. Geographic Names: "Big Ditch", listed under disputed names, is the accepted name according to Mr. Heck, Geographic Names Section, Division of Charts.

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 in this area.

It is superseded by more recent surveys in Project Ph-5. Refer to T-8726, T-8734, T-8735, and T-8741. A note that it has been superseded has been placed on the map manuscript.

The map manuscript had been applied to charts 419 and 1231 prior to this review.

Reviewed by:

Under the direction of:

Jack Rihn
Jack Rihn
2-5-49
Cartographer

S. J. Griffin
S. J. Griffith
Chief, Review Section *K.M.*

APPROVED:

B. G. Jones person
Tech. Assist. 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

NAUTICAL CHARTS BRANCH

SURVEY NO. T8043

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.