

5042

U. S. COAST & GEODETIC SURVEY
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Photo

Topographic
~~Hydrographic~~

Sheet No. 5042 5042

State North Carolina

LOCALITY

Intracoastal Waterway

MASON

Queen Inlet to Myrtle Sound

G.B.
Decision

1934

CHIEF OF PARTY

O.S. Reading

U. S. GOVERNMENT PRINTING OFFICE: 1934

5042

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5042

PHOTO TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. _____

REGISTER NO. T-5042. 5042

State North Carolina.

General locality _____

~~Atlantic Coast.~~ Intracoastal Waterway

Locality _____

Mason

~~Queen Inlet to Carolina Beach.~~ Myrtle Sound

Photographs.

Scale 1:20,000

Date of ~~survey~~ Sept. 25, 1933.

Compilation Mar, 31, 1934.

Vessel Army Air Corps F-1A Airplane.

Reviewed and recommended for approval.

Chief of Party _____

Photographs plotted by, Donald K. Albertson.

~~Sketches by~~

Inked by Donald K. Albertson.

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated _____, 19____

Remarks: Compilation of aerial photographs No. 625 to 645 incl.

Reduced to scale and printed by photolithographic process.

Polyconic projection by;

GPO

D.K. Albertson.

Feb. 6, 1934.

Projection verified by;

Henry Olsen.

Feb. 6, 1934.

Control plotted by;

D.K. Albertson.

Feb. 7, 1934.

Control verified by;

Henry Olsen.

Feb. 9, 1934.

Descriptive report to accompany
Air Photo Topographic Sheet No. 5042.
Queen Inlet to Carolina Beach.
North Carolina.

General Information;-

This sheet is a compilation of five lens aerial photographs made up of one flight, taken with a T-3 camera No. 31-80 by the U. S. Army Air Corps on Sept. 25, 1933 at 11:30 A.M. Direction of the flight was northeast and a scale factor of .922 was used in making the projection for the finished celluloid plot.

High tide at Wrightsville Inlet on Sept. 25, 1933 occurred at 12:07 P.M.

The area of this sheet covered by one strip of photographs, extending from Queen Inlet on the North to Carolina Beach on the South; embraces the intercoastal waterway with channel facilities as well as all adjacent topography that might prove of specific value. As a whole the area comprises approximately 15.2 statute miles of outer coastline, 16.5 statute miles of intercoastal waterway, 47 square miles of topography, 46.2 statute miles of inside shoreline, and approximately 11 statute miles of rivers and sloughs less than 200 meters wide.

Control;-

The control for this sheet consists chiefly of Coast Survey Triangulation by C. D. Meaney, 1932, R. P. Strough, 1914, C. L. Garner, 1918, and J. A. Bond, 1933. At the time of the compilation the control had not been reduced to 1927 Datum. Triangulation, however, was adjusted to the 1927 Datum by correction values supplied by the Division of Geodesy.

In making the radial plot triangulation station "D", U.S.E., Lat. $34^{\circ}06'$, and Long. $77^{\circ}56'$ failed to coincide with that spotted by the field inspection party by approximately 500 meters. According to the geographic position this station plots on the southeastern tip of an island in the Cape Fear River, whereas the field inspection locates same at the northwestern extremity of this same island. Due to this decided difference, this station was not used in making the radial plot.

Other than the above mentioned discrepancy, the control was well distributed and accurately spotted by the field inspection party, and enabled a good plot to be made in the minimum time.

Compilation;-

The radial plot method was used tying in to the plot of T-5041 on the South, and plot T-5043 on the North.

It might be added that the field inspection notes were incomplete insofar as only the "B" prints were furnished, and covered only the area running the length of the intercoastal waterway, making it necessary to interpret the outer coastline, as well as the inland topography west of the intercoastal waterway from the office photographs and previous sheets.

~~Control;-~~

The field inspection was made on "B" prints numbered from 336 to 375 inclusive. The compilation was made on photographs numbered 625 to 645, inclusive, a reflight much clearer than the 336-375 flight.

clearer

*The Geographic Board has not made a decision
on the name of this Inlet. This Inlet is showing
the same name as on the chart "Wrightville Inlet"

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. 5042

Title (Par. 56) ^{Mason} ~~Queen~~ Inlet to Carolina Beach, Atlantic Coast, N.C.
 Chief of Party *O. S. Reading* Compiled by *NK Alburton*
 Project *North Carolina* Instructions dated —

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, g and i.)
2. The character and scope of the compilation satisfy the instructions and the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
3. The control and adjustment of the radial plot were adequate. (Par. 12, 29.)
4. ~~There is sufficient control on maps from other sources that were transmitted by the field party for their application to the charts. (Par. 28.)~~
5. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
6. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)
7. Important details shown on previous surveys and on the chart have been compared with this sheet and a statement has been entered in the report regarding the removal from the chart or change in position of important detail such as rocks, lights, beacons, prominent objects, bridges, docks, and structures along the water front. *See reverse side also additional sheet.*
8. The span, ^{type} ~~draw~~ and clearance of bridges are shown. (Par. 16c.)
9. The data furnished ^(B" points only) by the Field Inspection is adequate.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

7. cont. The wrecks shown on chart 1235 in the vicinity of $34^{\circ}04'$, $77^{\circ}52\frac{1}{2}'$ are not shown on this sheet. There was no mention made of them by the field inspection and there is no evidence of them on the photographs. T-4785 does not cover the outer coast since there was no mention by the field party of their removal, they are very probably still in existence and should remain on the chart.

Beacons and U.S.E. stations were transferred to this sheet from the Air Photo Control sheet T-4785.

Transferred by Douglas H. Benson
Checked by

Harry C. Olsen

16 (cont.)

The names Purviance Creek, Barrett Creek, and Pickett Rock were furnished by Mr. John Marshall of Wilmington, N.C. thru Capt. K.T. Adams. These names have been submitted to Mr. H. Bacon for approval.

Dec. 26, 1934.

U.S.E. stations along channel, bouys,
Beacon locations, and channel width were secured from the
topographic survey No. 4785, and accurately plotted from same.

Comparison with other Surveys;-

Both North and South junctions agree favorably with the
adjoining sheets (T-5041 and T-5043).

However in comparing this sheet with T-4249, made in 1927,
considerable discrepancy was found in the coastline at Lat. $34^{\circ}13'$ and
Long. $77^{\circ}47'$. It is evident that appreciable fill has occurred at this
point, (known as Moores' Inlet) since 1927. It was also noted that at
Wrightsville Beach, Lat. $34^{\circ}12'$, and Long. $77^{\circ}48'$ a number of new piers
have been constructed in place of numerous old ones that have been removed.

At Masonboro Inlet, Lat. $34^{\circ}11'$, Long. $77^{\circ}49'$ a comparison
with sheet T-4248 made in 1926, shows that the inlet is now considerably
wider, and that the outer coastline is now approximately 100 meters further
east. This continues to be decidedly apparent between Lat. $34^{\circ}10'$ and $34^{\circ}11'$
at Long. $77^{\circ}49'$. A slight change was also noted in the remaining coastline
which naturally could be expected.

A single lens strip of photographs (M28.(884 D-8) to M45)
along the outer coast were taken Jan. 14, 1934 at 1:20 P.M.

This strip of the coast was flown because of possible changes
due to severe storms after the original photographs were taken. These photo-
graphs were used for a slight revision of Masonboro Inlet.

Low tide on Jan. 14, 1934, occurred at 1:09 P. M. at Wrights-
ville Beach.

Landmarks;-

A list of landmarks recommended for this area will be found
with Descriptive Report No. 4785.

Recommendation for further surveys;-

It is believed that the compilation does not have a probable
error of more than ten meters in position of well defined detail of impor-
tance for charting, and that no further survey is believed necessary at
this time.

Remarks;-

The work of the field inspection party over the area covered
by them was good.

Respectively submitted,

(Sgd.) *Donald K. Albertson*

Donald K. Albertson,
Jr. Cartographic Engineer.

10. The descriptive report covers all details listed in the Manual, so far as they apply to this survey. (Par. 64, 65 and 66.)
11. The descriptive report also contains all additional information required in photo topography as prescribed in the instructions and in the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
12. The descriptions of recoverable stations and references to shore line were accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.) *none submitted*
13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.) *with T-4785. Three landmarks are shown on chart 1235 in the area of this sheet (T-5042). Only one is mentioned in the report T-4785. An examination of the photographs failed to locate the other two.*
14. The geographic datum of the sheet is N. A. 1927 unadjusted and the reference station is correctly noted. (Par. 34.)
15. Junctions with contemporary surveys are adequate.
16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 64, 66k.) *from chart 1235 and field inspection notes and T-4785. The name "Greenwell Sound" is from field photo #350 (B print). (See opposite page.)*
17. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.)
18. No additional surveying is recommended.

19. Remarks:

20. Examined and approved:

O. Reading
Chief of Party

21. Remarks after review in office:

Reviewed in office by:

Frank G. Euskin

July 31, 1934

Examined and approved:

K.T. Adams
Asst Chief, Section of Field Records
Division of Charts
L.O. Lobnitz
Chief, Division of Charts

J.S. Borden
Chief, Section of Field Work
G. M. de
Chief, Division of
Hydrography and Topography.

ADDITIONAL NOTES

7-0007

The bridge across the Sound to Wrightsville Beach is an electric railway bridge and does not carry automobile traffic.

The highway paralleling the electric line from Wrightsville stops at the Auditorium. T-4249 (1927) shows the highway continuing into Wrightsville Beach. This is incorrect.

In Wrightsville Beach there is a walkway extending the length of the island. It is shown by a single solid line. Upon entering Wrightsville Beach the electric line turns south and parallels this walkway.

Frank A. Perkins

Jan 4, 1935

North Carolina

Survey No. T5042

GEOGRAPHIC NAMES

Date. Mar 20, 1935

Chart No. 1235-425

Names underlined in red approved March 21, 1935

Diagram No. 1235

Harlow Bacon Examination by H.H.B.

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior, R

Let names marked R stand till change by DGN.

Under investigation. Q

| Status | Name on Survey | Name on Chart | New Names in local use | Names assigned by Field | Location |
|--------|-----------------------------------|--|---------------------------|---|----------|
| | <u>Howe Pt</u> | Same | | | ✓ |
| | <u>Howe Creek</u> | " | | | ✓ |
| | Queen Inlet R | <i>Mason Inlet approved by D.G.N. Nov. 26, 1935</i> | * Mason Inlet | <i>Reported as local name by survey party C.H.S. in 1927 to be referred to DGN.</i> | ✓ |
| | <u>Middle Sound</u> | " | | | ✓ |
| | <u>Wrightsville</u> | " | | | ✓ |
| | Wrightsville Inlet R | <i>Moore Inlet approved by D.G.N. Nov. 26, 1935</i> | * Moore Inlet | <i>Reported as the local name by survey party C.H.S. in 1927 to be referred to DGN.</i> | ✓ |
| | <u>Bradley Creek</u> | " | | | ✓ |
| | <u>Money Point</u> | " | | | ✓ |
| | <u>Mary Island</u> | " | | | ✓ |
| | <u>Hewlet Creek</u> | " | | | ✓ |
| | <u>Holland Point</u> | " | | | ✓ |
| | <u>Masonboro Inlet</u> | " | | | ✓ |
| | <u>Wrightsville Beach</u> | " | | | ✓ |
| | <u>Masonboro</u> | " | | | ✓ |
| | Greenville Sound GN 36 | <i>Part of Masonboro Sound. Portion should be changed.</i> | | Same | ✓ |
| | <u>Purviance Creek</u> | Todd Creek | | | ✓ |
| | <u>Masonboro Sound</u> | Same | | | ✓ |
| | <u>Silver Lake</u> | | | | ✓ |
| | <u>Peden Point</u> | Same | | | ✓ |
| | <u>John Creek</u> | " | | | ✓ |
| | <u>Dick Bay</u> | " | | | ✓ |
| | <u>Myrtle Sound</u> | " | | | ✓ |

Survey No. T 5042

Date. Mar 20, 1935

Chart No. 425

Names underlined in red approved March 21, 1935

Diagram No. 1235

Diagram No. 1255
Harlow Bacon Examined by H.L.S.

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]

T 5042 Supplemental

Bn 44, light 42 and the U.S. Engineer Stations north of lat. $34^{\circ}14'$ have been transferred from Graphic Control Survey T 4761, 1933.

○ light 42 on T 5042 Supplemental is shown on T 4761 as Δ Bn 42. Division of Geodesy cannot furnish a position 12/3/35. Light House Notice to Mariners #34, 1935 states Bn. has been lighted but does not indicate any change in position.

○ Masonboro large white Ho. Cupola lat. $34^{\circ}10'$ has been transferred from T 4248, 1928. This is a landmark which is still in existence as evidenced by examination of photos. Object is shown on T 4248, 1926 as Δ station but geodesy cannot furnish a position 12/3/35.

This information supplied to cartographer prior to filing this supplemental and not made subject for chart letter at this time.

B.G. Jones
12/3/35