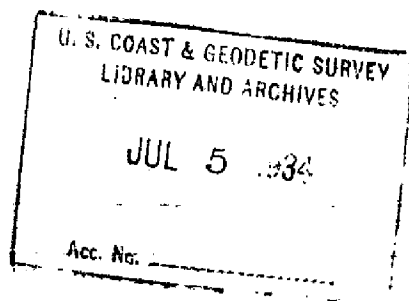


5174



Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: South Carolina

DESCRIPTIVE REPORT

Air Photo
Topographic } Sheet No. Field 22,
Hydrographic } Reg. No. 5174

LOCALITY 5174

CHARLESTON HARBOR AND VICINITY

WANDO RIVER AND BERESFORD CREEK

1934

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1921

E.H.K.

SHEET NO. 22

REG. NO. 5174

PHOTOS NO.

M-73 - 823A-8 to M-81 - 823A-8

M-93 - 823A-8 to M-99 - 823A-8

DATE

November 17, 1933

November 17, 1933

TIME

12:15 P.M.

11:20 A.M.

PROJECTION BY

L. C. Ripley
L. C. Ripley

2-6-34

PROJECTION CHECKED BY

E. H. Kirsch
E. H. Kirsch

2-6-34

CONTROL PLOTTED BY

M. L. Smith
M. L. Smith

2-7-34

CONTROL CHECKED BY

E. S. Ethridge
E. S. Ethridge

2-7-34

CONTROL PLOTTED ON PHOTOS BY

F. H. McBeth
F. H. McBeth

CONTROL CHECKED ON PHOTOS BY

J. F. Richardson
J. F. Richardson

TOPOGRAPHY TRANSFERRED BY

M. L. Smith
M. L. Smith

3-20-34

TOPOGRAPHY CHECKED BY

E. H. Kirsch
E. H. Kirsch

3-20-34

SMOOTH RADIAL LINE PLOT BY

J. H. Wulbern
J. H. Wulbern

2-9-34 (Sheet "A")

M. D. Crook
M. D. Crook

3-13-34 (Sheet "B")

M. D. Crook
M. D. Crook

2-24-34 (Sheet "E")

RADIAL PLOT CHECKED BY

E. H. Kirsch
E. H. Kirsch

SCALE PLOT BY

J. H. Wulbern
J. H. Wulbern

DETAIL BY

M. L. Smith
M. L. Smith

2-23-34 to 3-20-34

DETAIL CHECKED BY

E. J. Anderson
E. J. Anderson

4-10-34

AREA OF DETAIL INKED: 13 Square Statute Miles (Land Area)

LENGTH OF SHORELINE: 12 St. Miles (More than 200 meters from nearest opposite shore)

LENGTH OF STREAMS: 18 St. Miles (Rivers and sloughs less than 200 meters wide)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5174

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. 22

REGISTER NO. 5174

State South Carolina

General locality Charleston Harbor and Vicinity

Locality Wando River and Beresford Creek

Photographs - November 17, 1933

Scale 1:10,000 Date of ~~survey~~ 19

Compilation - 2-23-34 to 3-20-34

Vessel Air Photo Compilation Party No. 21, Charleston, S. C.

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by M. L. Smith

Heights in feet above - - - - to ground to tops of trees

Contour, Approximate contour, Form line interval - - feet

Instructions dated November 10, 1933³, 1934

Remarks:

...

GENERAL INFORMATION

Statistics:

The land area covered by this sheet is 13 square statute miles. There are 12 statute miles of shore line as measured along streams the width of which is more than 200 meters from nearest opposite shore. There are 18 statute miles of rivers and sloughs 200 meters or less in width.

This is one of 16 Atlas sheets covering Charleston Harbor and Vicinity.

General Report:

This sheet is covered by Lt. B. H. Rigg's general field inspection report, 1933-34.* The area covered by this sheet consists of low marsh land, wooded areas, cultivated ground and grassland. The cultivated fields are so small, and in most cases surrounded by ditches or hedge rows, that generally no symbol has been used.

* See Desc. Report T-5153 for Lt. Rigg's field inspection report.

Photographs:

This sheet was compiled from photographs taken by the Army Air Corps' single lens camera, over the Wando River in South Carolina between long. 79° 49' and Long 79° 54'. Two flights of pictures were used, M-73 - 823A-8 through M-81 - 823A-8, taken at 12:15 P.M., November 17, 1933 one hour and 24 minutes before low tide, and M-93 - 823A-8 through M-99 823A-8, taken at 11:20 A.M. November 17, 1933, two hours and 19 minutes before low tide.

CONTROL

Source:

Triangulation by Mr. R. F. A. Studds, 1928, Aluminum Control Sheet "C" Reg. No. 6070 Lt. B. H. Rigg, Chief of Party, 1933 Control has been reduced to 1927 datum. ~~Reduced to 1927 datum by Field Party. Final office adjustment, 1934. 12-7-34. B. H. Rigg~~

Errors:

No errors were found in the plotting of the control.

Discrepancies:

No control stations established by other organizations were used in the compilation of this sheet.

COMPILATION

Method:

The usual radial line method of plotting was used in the compilation of this sheet. The radial plots were made on large overlay

Sheet "A", "B", and "E", and the points transferred to the Atlas sheet.

Adjustments of Plot:

The photographs seem to be free from excessive tilt and scale fluctuation, and the radial plot required no unusual adjustments. All photographs could be used, as good cuts were obtained from those having little control.

Although the photographs were comparatively free from scale fluctuations, they were considerably out of scale, more than two points rarely coinciding at a time. This caused considerable difficulty in sketching detail, as the photographs had to be shifted a great deal. The shifting, however, was done with care, so that the sheet should be within the stated limits of accuracy.

In some cases, photographs not so near to scale as others available were used because of the clearness of detail. This was done because more error would probably have been caused by using an indistinct photograph than by shifting points considerably. The area in the Northeast corner of the sheet around triangulation station BECK is an outstanding example. M-98 was used because it was a clearer photograph, although M-97 was more nearly to scale.

Interpretation:

Only the usual graphic symbols were used, and no considerable difficulty was experienced in interpreting the detail. Hard surface roads have been shown by a double line, improved earth roads by a double dashed line, and poor roads and trails by a single dashed line. The numerous dashed lines just South of Lat. $32^{\circ} 51'$ consist of very poor wagon roads and paths.

The low water line, shown by a single dashed line, was taken from the photographs except in the area West of Long. $79^{\circ} 53'$, which was taken from Smooth Hydrographic Sheet No. 2, Reg. No. #5433A surveyed by Lt. M. O. Witherbee and Smooth plotted by Lt. B. H. Rigg - 1934. The low water lines taken from the photographs are subject to appreciable error, as this line was very indefinite on the photographs. The area between high and low water lines has been generally shown as sand, but this should not be mistaken for sand beaches, as it is more nearly a mixture of sand, mud and oyster beds. Areas identified as mud have been left bare. Some oyster beds which could be seen on the photographs have been shown by dotted forms. The dotted forms west of Long. $79^{\circ} 53'$, between Lat. $32^{\circ} 50'$ and $32^{\circ} 51'$, are sand or oyster shoals which show on the photographs some of them being inside and some outside the low water line. Reference is made to Mr. Studds' 1928 hydrographic sheets for a check on low water lines. Wrecks of three boats have been shown in the area North of Lat. $32^{\circ} 50'$ and just West of Long. $79^{\circ} 53'$.

Information from other Sources:

Besides the photographs, information was obtained from

Note The paragraph concerning the file on chart
470 apparently means that the file exists
but could not be identified on the photos
and was not located by the compilation.

B.G. Jones

the following:

Field inspection by Lt. B. H. Rigg.

Aluminum control sheet "C", Lt. B. H. Rigg, 1933. This sheet covered the area West of Long. 79° 53' and South of Lat. 32° 52'.

Hydrographic Sheet No. 2, Reg. No. ^{H-5433A}, Lt. M. O. Witherbee and Lt. B. H. Rigg, 1934. This sheet covered the shore lines West of Long 79° 53'.

Field inspection by the compiler.

Conflicting Names:

Lt. Rigg's field inspection party reported that the stream shown on the chart as Beresford Creek was called NOWELL Creek by natives of that section. Mr. Nowell used to own land around the creek. The name Beresford Creek was used on the Air Photo Sheet. *The name Beresford Creek has been retained pending Mr. Bacon's decision*

COMPARISON WITH OTHER SURVEYS

Junctions:

Junctions with all adjoining sheets are satisfactory:

North - Sheet 19, Reg. No. 5171
East - None
South - Sheet 25, Reg. No. 5177
West - Sheet 23, Reg. No. 5175

Landmarks:

No landmarks were found in the examination of photographs.

Reference is made to Mr. Studds' topographic Sheets, 1928, and Lt. Rigg's aluminum Control Sheet "C" Reg. No. 6070, 1934. for a list of landmarks and marked topo stations.

Recommendations for Further Surveys:

The compilation of this sheet is believed to have a probable error of not more than 3 meters in well defined detail of importance for charting and of not more than 6 meters for other data.

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no additional surveys are required.

Assisted by:

E. H. Kirsch
E. H. Kirsch,
Chief of Party.

Submitted by:

M. L. Smith
M. L. Smith

the following:

Field inspection by Lt. B. H. Rigg.

Aluminum control sheet "C", Lt. B. H. Rigg, 1933. This sheet covered the area West of Long. $79^{\circ} 53'$ and South of Lat. $32^{\circ} 52'$.

Hydrographic Sheet No. 2, Reg. No. ^{H-5433A}, Lt. M. O. Witherbee and Lt. B. H. Rigg, 1934. This sheet covered the shore lines West of Long $79^{\circ} 53'$.

Field inspection by the compiler.

Conflicting Names:

Lt. Rigg's field inspection party reported that the stream shown on the chart as Beresford Creek was called NOWELL Creek by natives of that section. Mr. Nowell used to own land around the creek. The name Beresford Creek was used on the Air Photo Sheet. *The name Beresford Creek has been retained pending Mr. Bacon's decision*
COMPARISON WITH OTHER SURVEYS

Junctions:

Junctions with all adjoining sheets are satisfactory:

North - Sheet 19, Reg. No. 5171
 East - None
 South - Sheet 25, Reg. No. 5177
 West - Sheet 23, Reg. No. 5175

Landmarks:

On chart No. 470 one lone pile is shown along the East bank of the Wando River that could not be recovered from the photos covering this area. Therefore, it has been omitted on the finished compilation of this sheet. *Verified by field inspection see opposite page.*

OR REMARKS AND MARKED COAST STATIONS.

Recommendations for Further Surveys:

The compilation of this sheet is believed to have a probable error of not more than 3 meters in well defined detail of importance for charting and of not more than 6 meters for other data.

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no additional surveys are required.

Assisted by:

E. H. Kirsch
 E. H. Kirsch,
 Chief of Party.

Submitted by:

M. L. Smith
 M. L. Smith

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO.

Title (Par. 56) Wando River and Beresford Creek

Chief of Party E. H. Kirsch

Compiled by M. L. Smith

Project F.P.-13-S.C., 1933-35

Air Photo Compilation Party
Number 21.

Instructions dated November 10, 1933

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.)
No information taken from outside sources.
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. ✓
8. The span, draw and clearance of bridges are shown. (Par. 16c.) ✓
no bridge.
9. The data furnished 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.

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.) Submitted with A.C.S. Sheets.
none falls on this sheet Cam.
13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.)
Submitted with A.C.S. Sheets.
14. The geographic datum of the sheet is N. A. 1927 ✓ and the reference station is correctly noted. (Par. 34.)
15. Junctions with contemporary surveys are adequate. ✓
~~*Except as noted on following page*~~
16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 64, 66k.) ✓
Conflicting names are listed pending Mr Bacon's decision. Cam.
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:

E. H. Kirsch
E. H. Kirsch, Chief of Party

21. Remarks after review in office:

Reviewed in office by:

Leonard A. McLean
approved B.G. Jones

Examined and approved:

K.T. Adams
Chief, Section of Field Records

L.O. Pollett
Chief, Division of Charts

H. Borden
Chief, Section of Field Work

G. H. Hulse
Chief, Division of Hydrography and Topography.

Survey No. T-5174

Chart No. 1239- 470

Names approved Jan. 17, 1935. *John M. Brown* Diagram No. 1239

℄, Not Approved by the Division of Geographic Names, Department of Interior.

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

[illegible]

Applied to drawing of chart #470. May 8, 1935.
g. H. S.

Applied to chart 1239 Apr. 1937 F. M. A.