Form 504
Rev. Dec. 2923
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTEN, DIRECTOR

DESCRIPTIVE REPORT
Field 32

Air Photo
Topographic Sheet No. Reg. 5184
 Hydrographic

State SOUTH CAROLINA

LOCALITY
CHARLESTON HARBOR AND VICINITY
FOLLY ISLAND AND VICINITY

1934

CHIEF OF PARTY
E. H. KIRCH

U.S. GOVERNMENT PRINTING OFFICE: 1934
Applying to Chart 192 October 9 1936, Thomas A. Dow.

" " " 1239 Apr. 1937 T. M. A.
PHOTOS NO.
M-135 - 823B-8 to M-140 - 823B-8, December 21, 1933
M-64 - 823B-8 to M-67 - 823B-8, November 17, 1933

DATE
12:55 PM - 1h 21m after high of 5.3
11:15 AM - 2h 9m before a low of -0.3

TIME

PROJECTION BY
L. C. Ripley
2-14-34

E. H. Kirsch
2-14-34

PROJECTION CHECKED BY
E. H. Kirsch
2-14-34

M. L. Smith
2-16-34

CONTROL PLOTTED BY

CONTROL CHECKED BY
E. S. Ethridge
2-17-34

F. H. McBeth

CONTROL PLOTTED ON PHOTOS BY

CONTROL CHECKED ON PHOTOS BY
J. F. Richardson

J. F. Richardson
3-13-34

TOPOGRAPHY TRANSFERRED BY
H. W. Langley
3-22-34

TOPOGRAPHY CHECKED BY
E. H. Kirsch

SMOOTH RADIAL LINE PLOT BY
E. S. Ethridge
3-13-34

RADIAL PLOT CHECKED BY
J. H. Wulbern
3-13-34

SCALE PLOT BY
J. H. Wulbern

DETAIL INKED BY
H. W. Langley
3-13-34 to 4-2-34

AREA COVERED BY SHEET: 11.2 Square Statute Miles.

LENGTH OF SHORELINE: (More than 200 meters from nearest opposite shore) 4.7 St. Mi.

LENGTH OF STREAMS: (Rivers and sloughs less than 200m wide) 32.4 St. Mi.

LENGTH OF COASTLINE: 4.3 Statute Miles.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

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. 32

REGISTER NO. 5184

State... South Carolina

Charleston harbor - in Atlas sheet layout of Charleston and vicinity.

Locality... Folly Island and Vicinity

Photographs - November 17, 1933

Date of survey - December 21, 1933

Compilation - 3-13-34 to 4-2-34

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

Chief of party... E. H. Kirsch

Surveyed by... See data sheet in the descriptive report.

Inked by... E. W. Langley

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

Contour, Approximate contour, Form line interval... feet

Instructions dated... November 10, 1933

Remarks: Radial points on this sheet were transferred from overlay sheet "G" radial plotted by E. S. Ethridge - 3-13-34; and sheet "H" - radial plotted by J. H. Walburn - 3-16-34.
GENERAL INFORMATION

No general report covering this sheet is available. The only aids used in the compilation of this sheet were secured from the field inspection reports, and additional information furnished by Lt. B. H. Rigg in questionable areas.

The accompanying "Notes on Compilation" gives all data in connection with the compilation of this sheet.

This sheet was compiled from photographs taken by the U. S. Army Air Corps' single lens camera, photograph numbers as follows: M-135 - 823B-8 to M-140 - 823B-8 and M-64 - 823B-8 to M-67 - 823B-8.

CONTROL

Sources:

The following sources of control were used in the compilation of this sheet:

(a) Triangulation by G. D. Cowie & R. L. Shoppe 1933, M. O. Witherbee 1933 and 1934.

(b) 1934 Topographic Sheet (O) on Whatmanpaper by Lt. M. O. Witherbee's Party. (see below)

(c) Computed - Theodolite three point fix by Lt. E. H. Kirsch in 1934.

The geographic positions of the field party were used; these were on the North American 1927 datum.

(Computed three) Folly Dock: 79° 55' 19.068" L96.85 (1066.58)
(point fix ) 32° 40' 03.354" 103.31 (1741.85)

This has been shown on the topographic celluloid sheet by a double blue circle together with the name Dock in black.

Errors:

The following error was found on topographic sheet (O):

<table>
<thead>
<tr>
<th>Folly Dock</th>
<th>New Position</th>
<th>Old Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>79° 55' L96.8 (1066.5)</td>
<td>79° 55' L96.8 (1076.5)</td>
</tr>
<tr>
<td></td>
<td>32° 40' 103.3 (1741.9)</td>
<td>32° 40' 104.9 (1743.3)</td>
</tr>
</tbody>
</table>

The new position is the N.W. corner of the dock and located with a three point fix with a theodolite and its geographic position computed. The old position is on the N.E. corner of the dock and was located by topography on Whatman sheet O. It is five meters from the N.W. corner of the dock to the N.E. corner of the dock, which leaves an error of about 5 meters in the topographic position of the
N.E. corner of the dock.

Discrepancies:

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

Compilation

Method:


Adjustment of Plot:

No unusual adjustment was required in the radial plot. The photographs were free of excessive tilt and scale fluctuation.

Remarks on Adjustment:

In the making of the smooth radial plot, it was noticed that "KAROW" could not be accurately spotted on the photos and would not line up with "WINDMILL FOLLY BRIDGE"; hence KAROW was disregarded in making the plot, and a corner of a dock was used instead. This dock is approximately 165 meters S.W. of KAROW -

79° 57' 51.6" 10° 38.8"

32° 39' 657.5" 1190.75"

was located by planetable from KAROW. The radial point used is the N.E. corner of the dock. This dock does not come within the limits of this sheet but appears on sheet No. 33, Reg. No. 5185.

Interpretation:

The graphic symbols as approved by the Board of Surveys and Maps (1932) were the only symbols used. No difficulty was experienced in the interpretation of the photographic detail.

The sand-dunes as shown on the coastline were clearly evident on the photographs, but the exact boundaries could not be clearly seen; hence, it will be noticed that the dune area has been shown as scattered dunes, the exact size and shape not shown.

The photos covering the Eastern half of the sheet were taken 2 hours 9 minutes before a low of - 0.3; hence, the low water line in the streams and sloughs could clearly be seen; yet, there may be a departure from actual conditions.

The sanded area between the low and high water lines of the streams and sloughs represents a sandy mud.

The open area extending 600 meters west of Station
CREEK is left blank due to the fact that it is impossible to interpret from the high water photos any streams that may and probably do run through this area at a low tide. Lat 32°42' Long 79°56.'

The irregular high water line West of the pavilion is caused by a series of bulkheads, which, according to Whatman topographic sheet "O" Reg. No. 7-4856, are all good. Lat 32°34.3' Long 79°56.5'

The structure just East of "Folly Dock" is a runway for taking boats out of the water. Lat 32°39.2', Long 79°56.5'

Trouble was experienced in seeing the houses on Folly Beach due to the thickly wooded areas. All the houses that were clearly seen were drawn.

In putting in the low water line along the beach, the low waterline as shown on Photo No. M-66 - 823B-6, which was taken 2 hours 9 minutes before a low of -0.3, was drawn in as far as the limit of the photo, which includes approximately the Eastern half of the sheet. The remainder of the coast low water line was taken from photo No. M-137 - 823B-6, which was taken 1 hour 21 minutes after a high of 5.3. Since the low water line was invisible, it was approximated. The conclusion was that, by comparison with M-66 - 823B-6, the low water line was approximately along the outside breaker line; ie, where the breakers start forming, which can be seen from the photos.

The beach high water line could not be seen on the photos, hence it was taken from topo sheet "O" Reg. No. 7-4856.

Information from other Sources:

The beach high water line and the dune line were run in by the topographic party on the Whatman Topographic sheet by Lt. M. O. Witherbee's party 1934.

Conflicting Names:

There are no names on the sheet conflicting with names shown on the U.S.C. & G. S. Charts of this area.

The following names have been submitted by Lieut. B. H. Rigg and are fully described in his report:

Periauger Creek  The Sister Creek  Secessionville Creek
Block Island Creek  Rat Island Creek  Sol Island
Goat Island  Oak Island Creek  Rat Island

Comparison with other surveys

Satisfactory junctions were made with sheet No. 5185 on the West, Sheet 5183 on the East, and with Sheet No. 5181 on the North.
The high water and dune line on the topographic sheet
agrees with that on the photos.

The bridges and main roads leading to Folly Beach as
shown on the topographic sheet agrees with the air photo topographic
sheet.

The boat basin as shown at "Windmill Folly Bridge" on this
sheet does not agree in shape with that on the Whatman Sheet. It is
clearly seen from the photos that the inside of the basin is rounded.
Hence it is felt that the whatman sheet is in error.

The H.W. line just South of "Secession" agrees with both
sheets.

The stream lines as shown on the whatman sheet do not agree
with this air photo topo sheet. It appears as if these shore lines were
roughly sketched in and are in error on the Whatman sheet from 5 to 15 meters.

The location of the pavilion at Folly Beach on the Whatman
sheet does not agree with that on the Air Photo topo sheet.

A radial point was plotted on the N.W. corner of the
pavilion. The positions is as follows:

Position from Air Photo Sheet - Position From Topographic Sheet "0"
79° 56' 567.5 (996.45) 79° 56' 577 (996.65)
32° 39' 502 (1346) 32° 39' 501 (1347)

This radial point was located by only two cuts which
intersected at an angle of 31°. Only two cuts could be taken; however,
the pictures were well fixed, and it is felt that the air photo position
is reliable. The plot plot position is actual, the pavilion is within
considerably drawn on 40156 and its difference is not large.

Landmarks:

The landmarks for charts and marked topographic stations
included in this area have been submitted with Whatman Topographic Sheet
"0" Lt. M. C. Witherbee, 1954.

RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a
probable error of 3 meters in well defined detail of importance for
charting and of 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.

Remarks:

The bridge near triangulation station SIDE is a wooden
type with a span of 30 feet and a vertical clearance of 1½' 6" at mean high water.

Folly bridge at triangulation station WINDMILL FOLLY BRIDGE is a wooden fixed type with a span of 30 feet and a vertical clearance of 1½' 6" at mean high water.

The small bridge between the above two is of unimportance for navigation.

Assisted by:  
E. H. Kirsch  
E. H. Kirsch,  
Chief of Party.

Submitted by:  
H. W. Langley
Title (Par. 56) Folly Island and Vicinity

Chief of Party E. H. Kirsh

Compiled by H. W. Langley

Project HT-162

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 banks, 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. 16a.)

   For Seawaves to Creek Bridge 65 Engineers give clearance of 15.5 Ft.
   For Folly River Bridge 65 Engineers give clearance of 15.5 Ft.

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. 54, 55 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 554, and scaling of positions checked. (Par. 29, 30 and 57.) Submitted with A.C. Sheets plotted by Benson

13. A list of landmarks for charts was furnished on Form 557 and scaling of positions checked. (Par. 16d, e, 60.) Submitted with A.C. 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.

16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 54, 66k.) Name list submitted for approval.

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, Chief of Party

21. Remarks after review in office:

Reviewed in office by: Leonard A. Milburn

Examined and approved:

Chief, Section of Field Records

Chief, Division of Charts

Chief, Section of Field Work

Chief, Division of Hydrography and Topography.
REVIEW OF AIR PHOTO COMPILATION T-5184 (1934)

Topographic Stations: Descriptions of recoverable Topographic Stations Shown on this compilation, filed under T-4856 (plane table), are as follows:

- Tank, Flat top, wood (d)
- Pavillion, Seaward Hip of roof (d)

Comparison with Other Surveys: A comparison was made with the following surveys: H-51468 (1934) shows soundings in the mud flats north of Folly River and in Perianger Creek between longitude 79°56' and 79°57'. These places have been changed to agree with the low water line as shown on the hydrographic sheet (H-5468).

T-964 (1864). This survey shows considerable change and erosion of Folly Island.

T-1604 (a) (1876). This survey is incomplete and covers only a small portion. Full comparison cannot be made.

T-2488 (1900) shows coastline only. Covers only a portion of Folly Island Coast.

T-3843. (1921) 1:20,000 scale. This is the most recent survey of this area covering Folly Island. The only noticeable changes may be seen in bulkheads and building developments on Folly Island Beach.

This compilation is detailed and complete so that it may supersede the older topographic surveys of this area.

L. W. McGann

APPROVED & compilation dated 4/71. May 3, 1935

L. B. Jones
**GEOGRAPHIC NAMES**  
S.C.

**Survey No. TS184**  
**Chart No. 1219**

Names approved Jan. 22, 1935. Helen M. Strong  

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

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

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

<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perinauger Creek</td>
<td>change to Long Island Creek</td>
<td>OK</td>
<td>Perinauger Creek</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black Island Creek</td>
<td>6/13/39</td>
<td>Black Island Creek T-964, 1866</td>
<td>T-1604a, 1876</td>
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</tr>
<tr>
<td></td>
<td>Goat Island</td>
<td></td>
<td></td>
<td></td>
<td>Goat Island</td>
</tr>
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<td>Rat Island</td>
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<td>The Sister Creek</td>
<td>Sister Creek recommended as more usable</td>
<td>deleted</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Oak Island Creek</td>
<td></td>
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<td></td>
<td>Oak Island Creek</td>
</tr>
<tr>
<td></td>
<td>Secessionville Creek</td>
<td>change location</td>
<td></td>
<td></td>
<td>Secessionville Creek</td>
</tr>
<tr>
<td></td>
<td>Salt Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

None of these names appear on U.S. Engr. Progressive Military Map, and only one as indicated on any survey sheet.

These names appear on neither the G.S. quadrangles or the charts.

Continued on P. 2.
### GEOGRAPHIC NAMES

**Survey No.**: T-5184  
**Chart No.**: 1239  
**Diagram No.**: 1239

Names approved Jan. 22, 1935. Helen M. Strong

- Approved by the Division of Geographic Names, Department of Interior.
- Not Approved by the Division of Geographic Names, Department of Interior.
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<th>Names assigned by Field</th>
<th>Location</th>
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<td></td>
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<td>Same</td>
<td>U.S. Engr.</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Folly River</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Folly Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Atlantic Ocean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lighthouse Inlet</td>
<td></td>
<td>Also see for extension in between Morrie and Pat Islands: T-1604c, T-2488, T-5043.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* *add Folly Creek*

* New names and changes reported by District Engineers.

KTA