

5185

U. S. COAST & GEODETIC SURVEY  
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: South Carolina

DESCRIPTIVE REPORT

Air  
Photo

Topographic  
Hydrographic

Sheet No.

Field No. 33

Reg. No. 5185

LOCALITY

CHARLESTON HARBOR AND VICINITY

MOUTH OF STONO RIVER

1934

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1921

5185

E.H.K.

Applied to Chart 792 Oct. 9, 1936 Hem.  
" " " 1239 Apr. 1937 J. M. A.

SHEET NO. 33  
REG. NO. 5185

PHOTOS NO.  
M-1 to M-7 - 823B-8  
M-103 to M-111 - 823B-8

DATE  
October 25, 1933  
December 21, 1933

TIME  
1:15 P.M.  
12:50 P.M.

PROJECTION BY

L. C. Ripley

2-15-34

PROJECTION CHECKED BY

E. H. Kirsch

2-15-34

CONTROL PLOTTED BY

M. L. Smith

2-16-34

CONTROL CHECKED BY

E. J. Anderson

CONTROL PLOTTED ON PHOTOS BY

F. H. McBeth

CONTROL CHECKED ON PHOTOS BY

J. F. Richardson

TOPOGRAPHY TRANSFERRED BY

E. J. Anderson

TOPOGRAPHY CHECKED BY

M. L. Smith

SMOOTH RADIAL LINE PLOT BY

J. H. Wulbern

RADIAL PLOT CHECKED BY

E. J. Anderson

SCALE PLOT BY

J. H. Wulbern

DETAIL BY

E. J. Anderson

3-21-34 to 4-27-34

M. L. Smith

4-28-34 to 5-18-34

AREA OF DETAIL INKED: 19.5 Square statute miles (Land Area)

LENGTH OF COASTLINE: 5.2 statute miles (Outside coast)

LENGTH OF SHORELINE: 21.0 statute miles (More than 200meters from nearest opposite shore)

LENGTH OF STREAMS: 42.0 statute miles (rivers and sloughs less than 200m wide)

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5185

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. 33

REGISTER NO. 5185 **5185**

State South Carolina

General locality Charleston Harbor and Vicinity

Locality Mouth of Stone River

Scale 1:10,000 Photographs - October 25, 1933  
Date of ~~survey~~ December 21, 1933  
Compilation - 3-21-34 to 5-18-34

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 Anderson and Smith

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

Contour, Approximate contour, Form line interval - - feet

Instructions dated November 10, 1933, 19

Remarks: None

## GENERAL INFORMATION

### Statistics:

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

The land area covered by this sheet is 19.5 square statute miles. There are 5.2 statute miles of outside coast line, 21.0 statute miles of shoreline measured along streams the width of which is more than 200 meters, and 40.0 statute miles of rivers and sloughs less than 200 meters wide.

### General Reports:

This sheet is covered by Lt. B. H. Riggs' general field inspection report, 1933-34 submitted with sheet No. 1. The area covered by this sheet consists of low marsh land, woods, and cultivated land. There is a great deal of sand beach along the outside coast.

Register  
No. 5153

### Photographs:

The photographs used were taken with the U. S. Army Air Corps' single lens camera. Parts of two flight strips were used M-1 to M-7 - 823B-8, taken on October 25, 1933, at 1:15 P.M., 26 minutes after high tide, and M-103 to M-111 - 823B-8, taken on December 21, 1933, at 12:50 P.M., 1 hour 23 minutes after high tide.

The flight M-1 to M-7 - 823B-8 was taken at a very high stage of tide, and the marshland is in general so low that it was partly covered with water, and the edges of the streams were somewhat indefinite, the high water lines in some places being barely distinguishable. However, it is felt that, after careful study of both flights, the high water line is not in error more than the allowable limit.

M-108 - 823B-8 was considerably blurred and could not be used for tracing detail. It was used to some extent in making the radial plot, but a great many points could not be recovered.

### CONTROL

#### Sources:

Triangulation by G. D. Cowie and R. L. Shoppe, 1933  
" " M. O. Witherbee, 1934.  
A.C.S. "G" Reg. No. 6073, Lt. M. O. Witherbee, 1934  
A.C.S. "H" Reg. No. 6074, Lt. M. O. Witherbee, 1934.  
Whatman Topographic Sheet "O" Reg. No. 4856, Lt. M. O. Witherbee, 1934.

The field partys' geographic positions were used.  
All control has been reduced to 1927 datum.

REVIEW OF AIR PHOTO COMPILATION T-5185 (1933)

The differences mentioned between this compilation and the plane table surveys as discussed under Paragraph, Interpretation, on pages 2 and 3 of the report have been treated as follows:

1. Outer Coast of Folly Island: The shoreline from long.  $79^{\circ} 58'$  eastward has been retained as compiled from the photographs. Photographs were taken 10/33 and T-4856 and T-6074 surveyed 1/34. The difference of 10 to 25 meters is due partly to change and to some extent to differences in interpretation. The two plane table surveys do not agree at their junction at long.  $79^{\circ} 58'$ .
2. Shoreline between  $\Delta$  Cole and  $\Delta$  Sable Lat.  $32^{\circ} 38.2'$ : The shoreline compiled from the photographs as mentioned in Paragraph 2, page 3 has been retained as shown by the compiler. This compilation gives the same interpretation for this detail as shown on T-3843 (1921).
3. Refer to Paragraph 4, Subparagraphs 1, 2, and 3, Page 3. Differences mentioned under subparagraph 1 are small and largely due to differences between planetable sketching between rod-readings and the tracing from the photos. The compilation has not been changed. Subparagraphs 1 and 2: These differences are due both to incomplete plane table work and to minor misinterpretation of the photographs. After studying the plane table surveys and the field inspection photographs the detail has been corrected on the compilation by redrawing from the photographs.

*B. G. Jones*

Errors:

No errors were found in the plotting of control except triangulation stations KAROW, which is ~~partly~~ *incorrectly* located on the photographs.

Discrepancies:

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

COMPILATIONMethod:

The usual radial line method of plotting was used.

Adjustments of Plot:

The photographs were comparatively free from tilt and scale fluctuations, so that no unusual adjustments were necessary in making the radial plot. The triangulation station KAROW was poorly spotted on the photographs, due to its being located where no definite measurements could be had, but there was sufficient control to make the plot without depending on this station.

Interpretation:

Only the usual graphic symbols, as shown in the Topographic Manual, Special Publication No. 1114, were used.

The shore line on the outer coast of Folly Island from station BRUCE to Long.  $79^{\circ} 58'$  was taken from A.C.S. "H", T6074. The remainder of the shore line on this island was taken from the photographs. This shore line fails to agree with Whatman Topographic Sheet "O" Reg. No. 4856, by from 10 to 25 meters. This is due to the fact, verified by field inspection, that the high water line on Folly Island is constantly shifting. The low water line was taken from the photographs at the outer line of breakers. \* See opp. page

The sand bar between Folly Island and Kiawah Island at Long.  $79^{\circ} 59'$  bares at low water. The small area of high ground on this bar was taken from A.C.S. "H", Reg. No. 6074, as was the Northern border of the sand bar. The southern border was approximated from the photographs. The dashed outlines to the South and East of this bar denote shoal water areas, shown by breakers on the photographs. The boundaries of the shoal water, and the Southern border of the sand bar are subject to considerable error, as they could not be definitely identified on the photographs.

The high water line of the Eastern and Southern part of Kiawah Island was taken from A.C.S. "H" Reg. No. 6074. The

break in the shore line at 80° 00' was taken from A.C.S. "H", Reg. No. 6074. It shows on the photographs indistinctly about 100 meters west of the position on the control sheet. This break or inlet probably shifts with each small storm. The low water line was taken from the photographs, and is subject to some error, except for the sand point Northeast of triangulation station PENNY, which was taken from A.C.S. "H" Reg. No. 6074.

The shore line above Lat. 32° 38' between triangulation station COLE and SABLE was indistinct on the photographs and tufts of grass showed outside the high water line. Most of the shore line along the sand beaches on this area was taken from A.C.S. "H", but the remainder was taken from the photographs and is subject to error. \* See opp. page 2

The sand dunes on Folly and Kiawah Islands could not be identified, so that the dunes shown are not necessarily in the correct positions, but were shown in order that it might be clear that a dune area did exist.

The outside of the grass line has been followed throughout this sheet as being high water line, and does not agree with A.C.S. "H" and "G" Reg. Nos. 6074, 6073, at the following places due to the field party's taking the solid ground line as being high water.

- (1) Point of Marsh near intersection of 32° 38' and 80° 01' A.C.S. "H" Reg. No. 6074.
- (2) Shore line near triangulation station DAYSE, A.C.S. "G" Reg. No. 6073.
- (3) Shore line between triangulation stations SOUTH WINDMILL and BROWN 1933 - A.C.S. "G" Reg. No. 6073.

*See opposite page 2.*

The area of marsh lying between James Island and Sol Legare Island consists of patches of grass and sand in some cases above high water, but too small and indistinct to be given definite outlines.

#### Information from other Sources:

Besides the photographs, information was obtained from the following:

Field inspection by Lt. B. H. Rigg  
 A.C.S. "H" Reg. No. 6074, Lt. M. O. Witherbee, 1934  
 A.C.S. "G" Reg. No. 6073, Lt. M. O. Witherbee, 1934  
 J-4856 Whatman Topo Sheet "O" Reg. No. Lt. M. O. Witherbee, 1934  
 Smooth Hydrographic Sheet No. 6, Lt. B. H. Rigg, 1934  
 Field inspection by the compilers.

#### Conflicting Names:

There are no names on this sheet in conflict with names appearing on former charts.



Names The list of names on the opposite page includes all new names shown on this compilation. These names are not mentioned in the general report by Kigg, filed as part of report T 5153. However, they were probably reported by Kigg's party as in general use and it is recommended they be used. They are shown on this compilation pending Mr. Bacon's decision.

B.G. Jones

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The following names were submitted by Lieut. B. H. Rigg and are fully described in his report. ~~Filed with desc. report T-5153~~

Green Creek	Cut Off Reach	Long Island Creek
Robbins Creek	King's Flats Creek	Sol Legare Creek

COMPARISON WITH OTHER SURVEYS

*See opposite page.*

Junctions:

Satisfactory junctions were made with the following sheets:

North - Sheet No. 30, Reg. No. 5182  
East - Sheet No. 32, Reg. No. 5184  
South - None:  
West - Sheet No. 1, Reg. No. 5153

Landmarks:

A complete list of landmarks will be submitted by Lt. B. H. Rigg with A.S.C. "G" Reg. No. 6073, A.C.S. "H" Reg. No. 6074 and Whatman topographic Sheet "O" Reg. No. 4856. *See note below.*

Remarks:

The black circles shown along the Stono River and tributaries are hydrographic signals spotted on the photographs in the field and radial plotted by the compiler. *There are not permanent objects and will not appear on the printed compilation but will remain on the celestial. Bgg.*

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, except shoal water areas and low water lines as noted in "Interpretation" above.

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:

*E. J. Anderson*  
E. J. Anderson,  
*M. L. Smith*  
M. L. Smith.

*A Station Beacon No 3, 1933, lat. 32°-38.3', long. 79°-58.9', is reported on the Boat Shop # 5465 as destroyed. The new position is not known. The station has been removed from the compilation. Bggones*

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO.

Title (Par. 56) Mouth of Stono River

Chief of Party E. H. Kirsch

Compiled by Anderson and Smith

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 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 report attached at the back.* ✓
8. The span, draw and clearance of bridges are shown. (Par. 16c.) ✓
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. Sheets.  
*See file list attached at the back.*
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. Sheets.
14. The geographic datum of the sheet is N. A. 1927 and the reference station is correctly noted. (Par. 34.) *field computations used.*
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.) ✓
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. Nelson*  
*B.G. Jones*

Examined and approved:

*Chas. K. Green*  
Acting Chief, Section of Field Records

*R. O. Solbert*  
Chief, Division of Charts

*J. S. Borden*  
Chief, Section of Field Work

*G. W. Hulse*  
Chief, Division of  
Hydrography and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5185 (1933)

Comparison with Other Surveys: Comparison with T-3843 (1921) shows considerable change around Sandy Point.

This compilation is adequate to supersede T-3843 and also T-899 (1862) for the area which it covers.

Descriptions of recoverable topographic stations shown on the compilation are filed as follows:

<u>Station</u>	<u>Filed under Sheet No.</u>
Large Chimney on House (d)	T-6073 (Air Photo Control)
Bel (d)	T-6074 ( " " " )
Eye (d)	T-6074 ( " " " )

*B. J. Jones*

Survey No. T- 5185

## GEOGRAPHIC NAMES

Date. Feb. 5, 1935

Chart No. 1239

*Names underlined in red approved Mar. 21, 1935*

Diagram No. 1239 - 2

*Harlow Bacon Examination by W.J.W.*

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

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>RIVER ROAD</u>				$32^{\circ}42'00''$
	<u>STONO RIVER</u>	SAME			
	<u>JAMES ISLAND</u>	"			
	<u>RIVERLAND</u>	"			
	<u>SOL LEGARE ISLAND</u>	"			
	<u>JOHNS ISLAND</u>	"			
	<u>ABBAFOOLA CREEK</u>	"			
	<u>LEGAREVILLE</u>	"			
	<u>SOL LEGARE CREEK</u>	"			$32^{\circ}40'79''58$
	<u>KING FLATS CREEK</u>	"			$32^{\circ}40'79''59$
	<del>LONG ISLAND CREEK</del>	" change to Folly Creek *			$32^{\circ}40'79''58$
	<u>ROBBINS CREEK</u>	"			$32^{\circ}40'79''58$
	<u>CUTOFF REACH</u> <i>One word</i>	"			$32^{\circ}40'79''58$
	<u>KIAWAH RIVER</u>	"			
	<u>COLES CREEK</u>	"			$32^{\circ}38'79''589$
	<u>COLE ISLAND</u>	"			
	<u>GREEN CREEK</u>	"			$32^{\circ}39'80''00$
	<u>FOLLY RIVER</u>	"			
	<u>FOLLY ISLAND</u>	"			
	<u>CAUSEWAY</u>	"			$32^{\circ}39'79''58$
	<u>CINDER CREEK</u>	"			
	<u>BASS CREEK</u>	"			

\* correction reported to District Engineers

(M-128)

## GEOGRAPHIC NAMES

Date. Feb, 5, 1935

Chart No. I239

Diagram No. I239-2

Examination by W.J.W.

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

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

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

[illegible]