

5388

U. S. COAST & GEODETIC SURVEY  
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Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Air  
Photo

Topographic } Field 69  
Hydrographic } Sheet No. Reg. 5388

State ..... South Carolina

LOCALITY

BULL BAY

~~ROMAIN RIVER TO HARBOR RIVER~~

RACCOON KEY.

1934-5

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1934

5388

PHOTO NOS.	DATE	TIME
73 - 83	Aug. 4, 1934	7:45 A.M.
273 - 280	Aug. 5, 1934	8:05 A.M.
670 - 674	Aug. 25, 1934	4:35 P.M.

Scale F =  $\frac{10,000}{10,526}$

PROJECTION BY P. W. Hund 11-21-34  
P. W. Hund

PROJECTION CHECKED BY E. H. Kirsch 11-22-34  
E. H. Kirsch

CONTROL PLOTTED BY M. L. Smith 11-22-34  
M. L. Smith

CONTROL CHECKED BY Trans. 11-22-34  
M. D. Crook

CONTROL PLOTTED ON PHOTOS BY J. F. Richardson  
J. F. Richardson

CONTROL CHECKED ON PHOTOS BY Trans.  
M. D. Crook

TOPOGRAPHY TRANSFERRED BY Trans.  
R. G. Hickson

TOPOGRAPHY CHECKED BY P. W. Hund  
P. W. Hund

SMOOTH RADIAL PLOT BY Trans.  
M. D. Crook

RADIAL PLOT CHECKED BY Trans.  
R. G. Hickson

SCALE PLOT BY T. P. Mitchell  
T. P. Mitchell

DETAIL INKED BY Trans. 2-19-35  
R. G. Hickson

AREA OF DETAIL INKED: 17.8 Square Statute Miles.

LENGTH OF COASTLINE: 11 Statute miles.

LENGTH OF SHORELINE: 9.8 St. Miles (More than 200 meters wide)

LENGTH OF STREAMS: 46.5 Statute Miles (Less than 200 meters wide)

DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY

REG. NO.

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. 69

REGISTER NO. 5388

State South Carolina

General locality Bull Bay

Locality Raccoon Key  
~~Remain River to Harbor River~~

Scale 1/10,000 Photographs \* 8-4-34, 8-5-34  
1:10,526 Date of ~~survey~~ 8-25-34, 19

Compilation - 2-19-35  
Vessel Air Photo Compilation party No. 21

Chief of party E. H. Kirsch

Surveyed by See Data Sheet in Descriptive Report.

Inked by R. G. Hickson

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:

The total area covered by this sheet is 17.8 square statute miles. There are 11 statute miles of coastline, 9.8 statute miles of shoreline of rivers and streams more than 200 meters in width from the nearest opposite shore, and 46.5 statute miles of streams less than 200 meters in width.

### General Report:

Except for the sand beach along the coastline on this sheet, the area covered is composed entirely of salt marsh, broken by a large number of tidal creeks and streams.

### Photographs:

This sheet was compiled from parts of three flights of photographs taken by the Aero Service Corporation of Philadelphia with their U. S. Army Air Corps type five lens aerial camera No. T3A HUI 33

Photos No. 670 to 674, running across the north west corner of this sheet, were taken at 4:35 P.M. on August 25, 1934, 2 hours and 48 minutes after a low tide of 0.6 ft.

Photos No. 73 to 83, running across the center of the sheet in a north east direction were taken at 7:45 A.M. on August 4, 1934, 1 hour before a low tide of 0.3 ft. Photos No. 273 to 280 running along the eastern limit of this sheet, were taken on August 5, 1934, at 8:05 A.M., 1 hour and 35 minutes before a low tide of 0.3 ft.

As a whole these photos were in fair scale and had little tilt, though a few of them were rather badly out of scale and tilted enough to make compilation from them difficult. In these cases additional points were cut in to insure against error. No difficulty was experienced in interpreting the topography from these photos except the very indefinite shore line of Bull Bay.

## CONTROL

### Sources:

All control on this sheet was established or recovered by Lt. B. H. Rigg, 1934 and is unadjusted to N. A. 1927 datum.

### Errors:

No errors were found in the control by the radial plot.

### Discrepancies:

No control other than that established or recovered by

this organization was used in the compilation of this sheet.

### COMPILATION

#### Method:

The standard radial line method was used as described in the U. S. Coast and Geodetic Survey notes on the compilation of planimetric line maps from 5-lens aerial photographs.

#### Adjustments of Plot:

No unusual adjustments were necessary in making the plot or compiling this sheet.

#### Interpretation:

The standard topographic symbols as given in the U. S. C. & G. S. Topographic Manual were used in compiling this sheet.

A dashed line outside of the high water line was used to indicate a definite mud bank exposed at low water. There is no definite low water line outside the shore line of Bull Bay. The marsh gradually thins and the grass becomes shorter until it runs into mud flats. This bay is covered entirely by hydrography and no low water line was taken from the photographs, as the hydrography will undoubtedly show it more accurately.

#### Information from other Sources:

The shore line of Bull Bay, that of the islands known as White Banks, and the coastline of the front sand beach were taken from G. C. S. "HH" Reg. No. 7-6292 b, "JJ" Reg. No. 7-6293 a, "GG" Reg. No. 7-6292 a, "LL" Reg. No. 7-6494 a, B. H. Rigg, 1935. This shore line was too indefinite on the photographs to be compiled from them.

Field inspection by Lt. B. H. Rigg, 1935.

#### Conflicting Names:

On Chart No. 1238 the name Clark Creek is given to two separate creeks, one of which is a continuation of Key Creek and runs into Romain River. This section is named Key Creek on G.C.S. "HH" Reg. No. and therefore has been named thus on the overlay sheet.

Also the name Sett Creek appears on two separate streams on Chart 1238, one of which lies west and the other east of Five Fathom Creek.

The larger creek which lies to the east has been named Sett Creek on the overlay sheet.

The descriptive reports of T-6292a, T-6292b, T-6293a,  
and T-6294a state that in this area there are no land-  
marks of importance for charting.

Lam.  
6/7/55

# COMPARISON WITH OTHER SURVEYS

## Junctions:

Satisfactory junctions were made with the following:

Sheet No. 67, Reg. No. 5386 on the North		
68	5387	East
70	5389	West

## Landmarks:

A list of landmarks and marked topographic stations will be submitted with G.C. Sheets Nos. "JJ" Reg. No. T-6293 a "GG" Reg. No. T-6292 a, "HH" Reg. No. T-6292 b, "LL" Reg. No. T-6294 a by B. H. Rigg, 1935.

All described topo stations have been shown with a black circle.

## RECOMMENDATION FOR FURTHER SURVEYS

This compilation is believed to have a probable error of not more than 0.3 mm in well defined detail of importance for charting and of not more than 0.6 mm 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:

*Trans.*  
R. G. Hickson

Diagram No. 1238

Date. June 4, 1935.

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Five Fathom Creek</u>	same			✓
	<u>Key Creek</u>	same			✓
	<u>Nellie Creek</u>	same			✓
	<u>Raccoon Creek</u>	same			✓
	<u>Bay Creek</u>	same			✓
	<u>Key Bay</u>	same			✓
	<u>Bull River</u>	same	U.S.G.B.		✓
	<u>Bull Bay</u>	same	"		✓
	<u>Harbor River</u>	same			✓
	<u>White Banks</u>	same			✓
	<u>Long Creek</u>	same			✓
	<u>Sett Creek</u>	same	U.S. G.B. = to W.		✓
	<u>Raccoon Key</u>	same			✓
	<u>Romain River</u>	same			✓
	<u>Clark Creek</u>	same			✓
	<u>Key Inlet</u>		on sheet L.H. 11/22/42)		✓
	Santee Path Creek = U.S.G.B. = to E. (in place of former Sett. Cr.)				

APPROVED NAMES  
UNDERLINED IN RED  
H. L. F. Jones

(M-13)



## REVIEW OF AIR PHOTO COMPILATION T-5388

1:10,000 scale

### Comparison with the graphic control surveys

(a) T-6294a (1934), 1:10,000 scale. There are no discrepancies between T-6294a and this compilation over the common area.

(b) T-6293a (1934), 1:10,000 scale. There are no discrepancies between T-6293a and this compilation over the common area.

(c) T-6292a (1935), 1:10,000. There are no discrepancies between T-6292a and this compilation over the common area.

(d) T-6292b (1935), 1:10,000 scale. Sett Creek Beacon No. 2 was transferred from T-6292b to the compilation by L. A. McGann, checked by D. H. Benson, June 8, 1935. Sett Creek Beacon No. 1 and Five Fathom Creek Beacon No. 4 have not been located by the field party making the survey of T-6292b. The position of three 2-inch iron pipes erected by the U. S. Biological Survey have been transferred in this office from these graphic control surveys to the compilation. Three U. S. Coast and Geodetic Survey bench marks have been transferred from T-6292b to this compilation. There are no discrepancies between T-6292b and this compilation over the common area.

For a general description and purpose of the U. S. Engineers stations see the descriptive report for T-6295b on page 3, "Permanent Hydrographic Stations."

All detail shown on T-6294a, T-6293a and T-6292a and b is shown on this compilation with the exception of non-recoverable plane table positions and the magnetic declination.

### Comparison with previous topographic surveys

T-772 (1857), 1:20,000 scale. T-772 covers Bull Bay and Reccoon Key. There have been large changes of shore line over the whole area of T-772. The compilation supersedes T-772 over the common area.

T-1400a (1875), 1:20,000 scale. T-1400a covers Bull Bay and vicinity. The most prominent change since the time of T-1400a is the extension westward of the Bull Bay end of Raccoon Key. This move westward amounts to about 800 meters. The two inlets along the coast of Raccoon Key are now closed. This compilation supersedes T-1400a over the common area.

T-3841 (1921), 1:20,000 scale. T-3841 covers Bull Bay and vicinity. The shell reef on White Banks Islands does not appear on T-3841. A sand or shell mound on the shore of Five Fathom Creek just east of triangulation station Five Fathom, 1934, is gone. T-3841 is superseded by the compilation over the common area.

T-4100 (1925), 1:20,000 scale. T-4100 covers the coast from South Santee River to Bull Bay. Only the outer coast of Raccoon Key is included within the common area. This shows, in general, a recession of approximately 50 meters since the time of T-4100. There is a bluff or hachure symbol on T-4100 along the high ground line of Raccoon Key. There is no evidence on the photographs of a pronounced incline here and this hachure is not shown on the compilation. This compilation supersedes T-4100 over the common area.

Comparison with hydrographic surveys

H 5802 (1935), 1:10,000 scale. There is good agreement between this compilation and H 5802.

Comparison with the chart

Chart No. 1238. Sett Creek Beacon No. 1 and Five Fathom Creek Beacon No. 4 have not been recovered by the field party doing the work of T 6292b which covers this area. They cannot be identified on the photographs. These beacons are listed in the Local Light and Buoy List for 1935. ~~Their continuance on this chart is recommended.~~ There are no landmarks of importance for charting in the area of this compilation.

This compilation shows a new beacon in Harbor River. Other changes to be made to this chart as a result of this compilation are discussed under the comparison with previous topographic surveys.

June 7, 1935.

*Leonard A. McGann*  
Leonard A. McGann

*B. G. Jones*

## REVIEW OF AIR PHOTO COMPILATION NO. 5388

Chief of Party: E. H. Kirsch

Compiled by: R. G. Hickson

Project: HT 162

Instructions dated: Nov. 10, 1933

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)
3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)
4. ~~Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts.~~ (Par. 28)  
*None transmitted*
5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)
7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

*High water line on the sand beach of Raccoon Key, in Bull Bay and along the White Banks Islands was taken from the graphic control sheets of this area.*  
*R.G.H.*

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."



8. 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)
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
11. ~~All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report.~~ (Par. 16c)  
*No bridges in this area.*
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)  
*No U.S.G.S. quadrangles of this area are available.*
13. The geographic datum of the compilation is *N.A. 1927* and the reference station is correctly noted.
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
15. The drafting is satisfactory and particular attention has been given the following:
  1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
  2. The degrees and minutes of Latitude and Longitude are correctly marked.

- ✓ 3. All station points are exactly marked by fine black dots.
- ✓ 4. Closely spaced lines are drawn sharp and clear for printing.
- ✓ 5. Topographic symbols for similar features are of uniform weight.
- ✓ 6. All drawing has been retouched where partially rubbed off.
- ✓ 7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

✓ 16. No additional surveying is recommended at this time.

✓ 17. Remarks:

✓ 18. Examined and approved;

E. H. Kirsch.  
Chief of Party

19. Remarks after review in office:

Reviewed in office by: Lemard A. Hubbard ✓ B. J. Jones

Examained and approved:

C. K. Green  
Chief, Section of Field Records  
L. O. Colburn  
Chief, Division of Charts

F. B. Bordin  
Chief, Section of Field Work  
G. H. Anderson  
Chief, Division of Hydrography  
and Topography.

E H Kish

forms from 20

Applied to chart 837 Oct 3, 1935 H.C.

Applied to chart 1238 Oct. 20, 1937 J.H.S.