

5210

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

Photo
Topographic

~~Topographic~~

Sheet No. 5210

LOCALITY

Coast South Carolina

North of Port Royal Sound

Parris Island

1934

CHIEF OF PARTY

Lieut. (j. g.) S. B. Grenell

U. S. GOVERNMENT PRINTING OFFICE: 1923

5210

Applied to Cht. 571, June 21, 1935

H. Reynolds

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.

REGISTER NO. 5210

State..... South Carolina

General locality..... North of Port Royal Sound.
~~Coast of South Carolina~~

Locality..... Parris Island

Scale 1:10,000 Date of Photographs: 10/25/33
Date of ~~survey~~ Comp. April, 1934

Vessel.....

Reviewed and recommended for approval:

Chief of party..... Lieut. (j. g.) S. B. Grenell

Photographs plotted by: F. B. Hickman
~~Survey Party~~

Inked by..... J. W. Griffith

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

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

Instructions dated..... November 10, 1933, ~~1934~~

Remarks:..... Compilation of aerial photographs Nos. (807) M1 to M4
" M22 to M26

NOTES ON COMPILATION

One copy of this form must accompany each chart from beginning to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnel will endeavor to keep these forms up to date and correctly posted. This form is very important inasmuch as the final Descriptive Report of the Chart compiled is based upon the information contained herein.

SHEET NO. 5210
 (807)M1 - M4
 PHOTO NO. (807)M22 TO PHOTO NO. M26

	BY	START	FINISH
ROUGH RADIAL PLOT			
SCALE FACTOR()			
SCALE FACTOR CHECKED	<i>S. B. Grenell</i>		
PROJECTION	<i>A. A. Futral</i>	<u>2/27/34</u>	<u>2/27/34</u>
PROJECTION CHECKED	<i>F. B. Hickman</i>	<u>2/27/34</u>	<u>2/27/34</u>
CONTROL PLOTTED	<i>F. B. Hickman</i>	<u>2/27/34</u>	<u>2/27/34</u>
CONTROL CHECKED	<i>J. C. Partington</i>	<u>2/27/34</u>	<u>2/27/34</u>
TOPOGRAPHY TRANSFERRED			
TOPOGRAPHY CHECKED			
SMOOTH RADIAL LINE PLOT	<i>F. B. Hickman</i>	<u>3/1/34</u>	<u>3/8/34</u>
RADIAL LINE PLOT CHECKED	<i>S. B. Grenell</i>	<u>3/8/34</u>	<u>3/8/34</u>
DETAIL INKED	<i>J. W. Griffith</i>	<u>4/3/34</u>	<u>5/12/34</u>
AREA DETAIL INKED	<u>12.6</u>	sq. Statute Miles	
LENGTH OF SHORELINE OVER 300 m.	<u>23.5</u>	Statute Miles	
LENGTH OF SHORELINE UNDER 300 m.	<u>33.4</u>	Statute Miles	
GENERAL LOCATION	<u>Coast of South Carolina</u>		
LOCATION	<u>Parris Island</u>		
DATUM STATION	<u>Marine 1931</u>	Latitude	<u>32-21+318.2 m</u>
	<u>N. A. 1927 Datum</u>	Longitude	<u>80-11+ 602.5 m.</u>

REPORT OF COMPILATION:

COMPILATION METHOD:

This sheet was compiled by the standard radial line plot method. Some topographic stations were used to help control this sheet and due to an erroneous position of Mooring Mast this plot was held up for a time but after the corrected positions were obtained the plot checked them.

ADJUSTMENT OF PHOTOGRAPHS:

Very little difficulty was experienced in adjusting the photographs through this sheet. In only one case were the cuts thin enough to cause any delay. This case will be discussed under "Interpretation".

INTERPRETATION:

The photographs, for the most part, were unusually clear, causing no great difficulty in interpretation of the detail. The eastern shore of the Beaufort River (along Long. 80-39, from Lat. 32-19.6 to Lat. 32-21.8) appeared on the outer edge of the photographs and consequently the detail was not as clear as it might have been. The cuts were also thin causing some of the radial points to vary slightly. This detail was checked with a 1:20,000 scale sheet (#5188) done in Charleston, S. C. and changed slightly so that this junction is now correct. The stereoscope was used to pick up as accurately as possible the detail having elevation such as docks, and buildings on Parris Island (Lat. 32-21, Long. 80-40.3) and also along the shore line where bluffs or trees might obscure the detail.

INFORMATION FROM OTHER SOURCES:

The photographs and field notations were the only source of information. After a discussion with the field party the shore line along the eastern side of Broad River (Lat. 32-20 Long. 80-43 to Lat. 32-18, Long 80-40) was picked along the white sand and bordering the fast land. Outside of this line appears a mud and marsh formation mostly flooded at high water. This feature was ~~outlined with a dashed line and filled in with broken marsh.~~

COMPARISON WITH OTHER SURVEYS:

Junctions with adjoining sheets compiled in this office and with 1:20,000 scale sheets done in Charleston, S. C. are complete and satisfactory.

ACCURACY AND COMPLETENESS:

The areas covered on this sheet are complete in every detail. As nearly as can be determined from the photographs, all well defined detail is located with a probable error of not more than 4 meters; less well defined detail with an error of not more than 10 meters.

PHOTOGRAPHS:

No.	to	No	Date	Time	Stage of tide.
(807)M1	-	M4	10/25/33	10:15	4/6
(807)M22	-	M26	"	10:45	5/7

APPROVED:

S. B. Grenell, Chief of Party.

J. W. Griffith
J. W. Griffith, Jr.,
Draftsman

INSPECTION REPORT

SHEET No. 5210

REFERENCE:

In reviewing this sheet the Washington Office should refer to the General Report filed with sheet No. 5206.

GENERAL INFORMATION:

There are few unusual topographic features on this sheet worthy of special note. The marsh is of the usual variety for this section of the coast and the land is generally low and wooded where not cleared for cultivation or military operations.

There are several rifle and machine gun ranges in connection with the Marine Barracks at Parris Island and the circular ditch in Lat. 32 - 19.5, Long. 80 - 41.0 surrounds a mooring mast for dirigibles.

The shoreline is in general clear cut and well defined with the exception of the south point of Parris Island which is bordered by a flat mud area which supports a scattering growth of marsh and which bares for a considerable distance from shore on extreme low tides.

CONTROL:

The triangulation on this sheet was located by the following chiefs of Party: F. S. Borden, 1916; C. A. Egner, 1931-33. There are two stations located in 1916-Parry 2 and Parris Id. Rear Range- of which the Chief of Party is not known.

The position of station Mooring Mast was found to be in error about two miles (unchecked triangle) so the topographic location of the mast was secured from Lieut. Rittenburg and used to control the plot in that area.

LANDMARKS FOR CHARTS:

Form 567 for this area has been submitted by Lt. Rittenburg.

COAST PILOT NOTES:

N Notes have been submitted by Lt. Rittenburg.

NAMES:


All names appearing on this sheet were secured from current issues of charts.

CHART CHANGES:

Lat. 32-19.8, Long. 80-42.8 - Only one long dock appears on the photographs apposite the four buildings where two smaller docks appear on chart #571.

AGREEMENT WITH CONTEMPORARY SURVEYS:

This sheet has been compared with adjoining compilations made in Charleston and all junctions are complete and accurate. A tracing for the shoreline of this sheet was forwarded to Lt. Rittenburg and later both hydro sheet and tracing were forwarded to Charleston for completion. No notice of disagreement between sheets has been received to date. (Respectfully submitted, S. B. Grenell)



REVIEW OF AIR PHOTO COMPILATION NO. 5210

Chief of Party: S.B. GRENNELL

Compiled by: J.W. Griffith, Jr.

Project: F.P. 4 Ga. Party # 18

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) *See last paragraph of Inspection Report.*
- ✓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.~~ *review.* (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*
- ✓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~~ *office* and are discussed in the ~~descriptive report.~~ *review.*
- ✓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) *No large discrepancies found.*
- ✓7. High water line on marshy ~~and mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

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)
Form 524 submitted by Lieut. J. Rittenburg, 1934.
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)
Form 567 submitted by Lieut. Rittenburg, 1934
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 bridge data for drawbridge over Archers Creek.
- ✓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 new names
- ✓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;

8/29/34

S. Bell
Chief of Party

19. Remarks after review in office:

See following pages.

Reviewed in office by:

B. G. Jones

Examined and approved:

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

F. B. Borden
Chief, Section of Field Work
G. M. Mude
Chief, Division of Hydrography
and Topography.

REVIEW OF AIR PHOTO COMPILATION T- 5210 (1934)

Comparison with other Surveys:

The contemporary planetable surveys show a few short sections of shore line, and the locations of signals for hydrography and air photo control:

1. T-6102 (1933). The shore line around two small islands, lat. $32^{\circ}21.1'$ long. $80^{\circ}39.3'$ shows a difference of from 0 to 25 meters. The compilation shore line was used on H-5518, and agrees well with the hydrography. The differences with the planetable is probably due to interpretation and sketching between rod readings. The differences affect only short sections of the shore line. The compilation is accepted as correct. The photographs are not yet in the office.

The following recoverable positions, described on Form 524, were transferred from T-6102 in this office: Descriptions are filed under T-6102

HOW (d), flagpole,	Plotted by <i>J.P.S.</i>
PEA (d), Steel Stack,	
SO (d)	
WHY (d)	Checked by <i>B.G.</i>

2. T-6103 (1933). A short stretch of shore line in the vicinity of the drawbridge over Archer Creek, lat. $32^{\circ}21.7'$, long. $80^{\circ}42.8'$, shows a difference of from 0 to 30 meters. The compilation shore line was used on H-5519 and agrees well with the hydrography. The differences with the planetable are probably due to interpretation and to sketching between rod readings. The differences affect only short sections of shore line. The compilation is accepted as correct. Photographs are not in the office.

The following recoverable positions, described on Form 524, were transferred from T-6103 in this office: Descriptions are filed under T-6103.

FAT (d), drawbridge light	Plotted by <i>J.P.S.</i>
HEN (d), brick stack	Checked by <i>B.G.</i>

3. Comparison with T-1070 (1868) and charts 1240 and 571 shows very little change in shore line. The compilation is complete and adequate to supersede the old survey.

Triangulation:

The following stations were plotted on the compilation from the triangulation records in this office:

Parris Island, Low White Stack, 1932	Plotted by <i>J.P.S.</i>
Mooring Mast, 1933	
Fort Freemont Beacon, 1931	
Fort Freemont Observation Tower, 1931	Checked by <i>D.H.B.</i>

aids ^{PARIS} Paris Inland Beacon at the
mouth of Paris R. is not shown
as much on this compilation. The position
of the old Paris Inland Front Range
light structure is shown. The ~~light~~
light has been discontinued. ~~but the~~
The Beacon listed on the 1934 list
is given the same elevation as the
old light structure and may be the
same structure though there is
no definite information at hand.

B. G. Jones

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△ Parris Island Low White Stack agrees in plotted position with KIL (d) described as a steel stack on planetable sheet T-6102 (1933)

△ Mooring Mast, 1933. The office adjusted position of this station checks the location of the mooring mast, HIC (d) on planetable sheet T-6102 (1933) and on the compilation within 3 meters. The triangulation position was plotted on the compilation.

△ Parris Island High Brick Stack 1932, has been plotted in this office in preference to △ Stack 1921. See the attached letter from Grenell.

Bridges:

No clearance data is given for the drawbridge over Archer Creek at lat. $32^{\circ}21.7'$ long. $80^{\circ}42.8'$.

Names:

All names on the compilation were taken from chart 571.

Land Marks:

All land marks found on chart 571 are on the compilation.

~~Parris Island Range Lights. It would appear that these lights were discontinued prior to 1921, but the structures were left standing. The 1931 copy of chart 571 shows them as beacons. The "Notice to Mariners" state that the Parris Island Rear Range was discontinued on July 12, 1932 and the "Local Light List" (1934) includes Parris Island Beacon on the South point of the island and gives it the same height as the old Front Range Light structure.~~

See opposite page

~~△ Parris Island F.R.L. H-1900 is on the compilation and on planetable sheet T-6102. No other position is shown for the beacon. △ Parris Island R.R.L. H-1916 is also on the compilation. From this it would appear that both structures are still standing.~~

V. R. Sobiewalski B. G. Jones

The description of Parry 2, 1931, lat $32^{\circ}18.1'$, long. $80^{\circ}41.1'$, states that the station is on the HW line and 10 meters from the line of vegetation. The compilation party has located the HW line at the edge of the fast land which puts the station 23 meters out from the shore line in a mud and marsh area. Inspection of the photographs shows no indication of the HW line passing thru the station. The compilation is accepted as correct.

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POST-OFFICE ADDRESS: 808 Realty Building, Savannah, Ga.

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

Dec. 8, 1934.

To: The Director,
U. S. C. & G. Survey,
Washington, D. C.

From: Lieut. (j.g.) S. B. Grenell,
Chief of Party # 18.

Subject: Position - Paris Id. high brick stack, 1932.

There is only one tall prominent brick stack near the position in question. This stack is very prominent and should be indicated as a Landmark.

The best position of this stack is from the list of intersection stations of the first order are 1932 listed as follows:

" Paris Id. high brick stack, 1932."
N.A. 1927 Datum:- Lat. 32° 21' 02.099" (64.7m)
Long. 80 40 17.182 (149.3m)

Considerable difficulty was experienced in finding correct datum corrections for stations in this vicinity prior to the receipt of the first order connections reduced to 1927 datum. This sheet was one of the first compiled and there were insufficient connections to the new datum to give correct datum corrections. Later, on receipt of the first order intersection positions a new set of corrections were worked up. This probably accounts for the fact that the position plotted on the sheet does not agree with the office position.

In making the plot in this region stations STEEL (tank) and WHITE (naval station water tank) were held as correct because they could be seen directly on the photographs; therefore, the plot in this area is not in error due to the incorrect plotted position of Paris Id. High Brick Stack.

There have been three systems of triangulation executed in this region:- Borden, 1921, Egner, 1931-33 and Meaney, (first order) 1932. Many natural objects such as stacks and tanks have been located separately by all three parties and many of these have two and three names. wherever possible we have used the latest position and name in this office for the compilations.

S. B. Grenell,
S. H. C. & L.

Survey No. T-5210

Date. Feb. 1, 1935

GEOGRAPHIC NAMES

Chart No. 1240 -571

SOUTH CAROLINA

Diagram No. 1240

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]