

5246

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

Topographic } Sheet No. Field No. 46
Hydrographic } Reg. No. 5246

State South Carolina

LOCALITY
Intracoastal Waterway
~~SOUTH OF JETTIE BEACH~~

FLORAL BEACH

193 4 & 5

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1934

5246

Applied to chart 836 Feb. 6, 1936 H.L.
" " " 1237 Sept 1937. P.B.C.

Field No. 46
Reg. No. 5246

Photo Nos.
411 to 416
417 to 422 *Scale F.* $\frac{20,000}{20,555}$

Date
Aug. 5, 1934

Time
9:10 A.M.
9:35 A.M.

PROJECTION

L. C. Ripley
L. C. Ripley 10-25-34

PROJECTION CHECKED BY

E. H. Kirsch
E. H. Kirsch 10-25-34

CONTROL PLOTTED BY

M. L. Smith
M. L. Smith 10-29-34

CONTROL CHECKED BY

E. S. Ethridge
E. S. Ethridge 10-30-34

CONTROL PLOTTED ON PHOTOS BY

E. J. Anderson
E. J. Anderson 10-16-34

CONTROL CHECKED ON PHOTOS BY

T. P. Mitchell
T. P. Mitchell 12-4-34

TOPOGRAPHY TRANSFERRED BY

T. P. Mitchell
T. P. Mitchell

TOPOGRAPHY CHECKED BY

L. C. Ripley
L. C. Ripley

SMOOTH RADIAL PLOT BY

T. P. Mitchell
T. P. Mitchell 12-10-34

SMOOTH RADIAL PLOT CHECKED BY

Transferred
L. C. Lande

SCALE PLOT BY

Transferred
L. C. Lande 10-20-34

DETAIL INKED BY

T. P. Mitchell
T. P. Mitchell 2-28-34

DETAIL CHECKED BY

E. J. Anderson
E. J. Anderson

AREA DETAIL INKED: 49.06 Sq. St. Miles
LENGTH OF COASTLINE: 3.45 St. Miles
LENGTH OF SHORELINE: None
LENGTH OF STREAMS: 6.61 St. 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. 46

REGISTER NO. 5246

5246

State South Carolina

General locality INTRACOA-~~STAL~~ WATERWAY
South of Myrtle Beach

Locality Floral Beach

Scale 20,000 Photographs Aug. 5, 1934
20,555 Date of ~~survey~~ Compilation Feb. 28, 1935, 19

Vessel Air Photo Compilation Party No. 21

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by T. P. Mitchell

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 TOPOGRAPHIC INFORMATION

Bordering the Atlantic Ocean on the Southeast and extending in a northerly direction of approximately eleven statute miles, we find the general description of the sheet and adjoining sheets of this series to be very typical of the coastal section. The land along the coast is more or less uniformly low and flat; however, the relief gradually increases as the coast is left. In the areas covered by this sheet, lumbering is the chief industry as the type of soil in general is better adapted to lumbering than agriculture; however, in the central portion numerous small farms are shown. Therefore we believe the relief is enough to furnish adequate drainage for this industry. From field inspection notes, the wooded areas are about equally divided with coniferous and deciduous trees, but in various sections nothing but grass and scrub bushes appear. The coast line is very regular being broken only by one or two small swashes. Just inside the high water line are beaches and dunes. These dunes are interspersed with small patches of marshy ground. Sea grass and bushes are the only vegetation they afford.

The high ground line could not be definitely traced from the photographs, but is presumed that the junction of the sandy and wooded area is the actual high ground line.

The intracoastal waterway, a mechanically constructed canal is shown by two parallel solid lines. This canal when entirely completed will have an approximate depth of eight feet from mean low water, and will furnish a safer transportation than at present.

Report:

The general report is listed under "General Topographic Information".

Information:

Photographs from part of two flights were used in the compilation of this sheet. The 400 flight with photos beginning with No. 411 through 416. This flight was made August 5, 1934 at 9:10 A.M. 1 hour and 04 minutes before low tide parallel to and approximately 400 meters inwardly from the coast. The second flight with photos beginning with No. 417 and ending with No. 422 was made August 5, 1934 at 9:35 A.M. This flight was made several miles northwest of the coast; and, since no natural rivers or streams of importance appear on this sheet no actual tide time has been designated. Little trouble was found in transferring topography as most all photos were free from excessive distortion and scale fluctuation; however, objects in question were outlined in pencil on the photographs before being transferred to the celluloid then checked by other photos. All photographs were taken with a standard U.S. Army Air Corps 5-lens Camera No. H U I - 33 operated by the Aero Service Corporation of Philadelphia.

CONTROL

Source:

Triangulation by K. G. Crosby, 1934, C. D. Meaney, 1932, E. B. Roberts, 1924, and Traverse stations established and computed by the state of South Carolina (P.W.A.) 1934. All control has been reduced to North American 1927 datum.

No graphic control sheets have been started at this date (March 4, 1935).

Errors:

No errors of importance were found in the projection, plotting of control or radial plot.

Discrepancies:

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

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.

Adjustment of Plot:

Little difficulty was had in the adjustment of the plot as all control stations established by this organization and the traverse by the State of South Carolina (P.W.A.) were field inspected and held to with equal value.

Interpretation:

Most of the photos used in the compilation of this sheet were very clear, however along the coast the high water line as shown was plotted from actual ground measurements made by the field inspection party.

In the heavily wooded area along the Intra-coastal waterway where radial points could not be accurately spotted or recovered, ranges were taken with the intersecting points falling in the center of the canal, therefore it is felt that no appreciable error will be found in the location shown on this sheet. Where the U. S. Highway No. 117 crosses the Inland Waterway canal a permanent "Swing" Bridge is under construction. This bridge pivots on the land side and when completed will have a horizontal clearance of 80 feet and a vertical clearance of about 13 feet from mean low water. It is situated on the easterly road of two shown between triangulation station SOCASTEE and Station HO 30. At present a temporary

passway is being used on the old road, but, upon completion of the new bridge, will be abandoned.

The Passway

Spoil banks have been shown along the waterway by the usual symbol.

Along the East side of U. S. Highway No. 117 at the junction of this sheet with sheet No. 5247 the transmission line could not be clearly seen and has been entirely omitted. West of Longitude $79^{\circ} 02'$ and north of Lat. $33^{\circ} 35'$ at junction of sheet No. 5252 a road shows on the 10,000 sheet but cannot be traced on this one. The depressions or bays shown in the northern part of this sheet are about one to three feet lower than the surrounding country and are partly filled with water during certain seasons. This information was furnished by the field inspection party 1934.

Improved roads are shown by two parallel solid lines, minor roads and trails are represented by a single dashed line. Not all minor trails and bridges have been shown as they could not be clearly seen on the photographs. All symbols were taken from the topographic manual except that used for sawdust piles.

Information from other sources:

Field inspection by Lieutenant E. H. Kirsch and Lieutenant B. H. Rigg, 1934-35.

Conflicting Names:

There are no conflicting names on this sheet.

Comparison with other Surveys:

A comparison with the U. S. Coast and Geodetic Survey chart No. 1237 has been made and no topographic changes of importance has taken place.

Junctions:

Satisfactorily junctions have been made with sheet Field No. 5245 on the east, 5252 on the South, on the west by 5250, 5249 and 5248, and on the North by 5247.

Landmarks:

At present there are no G. C. Sheets over this area due to the fact that dredging will not be completed for approximately a year and the inland water route will not be marked until dredging is completed. No landmarks were found along the coast.

RECOMMENDATION FOR FURTHER SURVEYS

The compilation of this sheet is believed to be accurate, thorough and complete in every respect for charting purposes and no additional surveys are necessary. A probable error of not more than .3 mm may be found in detail of importance for charting and not more than .6mm in detail of lesser importance.

Assisted by:

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

Submitted by:

T. P. Mitchell
T. P. Mitchell.

Survey No. T-5246

Chart No. 1237, 3254

Diagram No. 1237

GEOGRAPHIC NAMES

Date. Apr. 30, 1935.

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]

Review of Air Photo Compilation No T-5246

Comparison with Other Surveys

There are no graphic control surveys available for this area.

T-1280 b. (1872). This is a topographic survey on 1/20,000 scale. Only a small portion of T-1280 b is covered by this compilation. There is little change of detail since 1872, the time of T-1280 b. This compilation supersedes T-1280 b over their common area.

T-4198 (1926). This is a topographic survey on 1/20,000 scale. It covers the coastline from Floral Beach to North Inlet. The several small inlets in the vicinity of Floral Beach are now closed. All recoverable detail shown on T-4198 is also shown on this compilation for the common area.

Leonard A. Milbauer
May 31, 1935
B.G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 5246

Chief of Party: E. H. Kirsch

Compiled by: T.P. Mitchell

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)
- ✓ 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 shown is same as that shown on field photos by field inspection party.

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) *it*
- ✓ 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)~~
No described stations have been located for this comp.
- ✓ 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)~~
No landmarks for charts in this area.
- ✓ 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) ✓
- ✓ 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 for a geographic name comparison.
- ✓ 13. The geographic datum of the compilation is *NA 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. Busch
Chief of Party

19. Remarks after review in office:

See following page.

Reviewed in office by: Lionel A. Hulse ✓ B. G. Jones
May 31, 1935.

Examined and approved:

K. T. Adams
Asst Chief, Section of Field Records
Division of Charts
L. O. Solbad
Chief, Division of Charts

H. B. Borden
Chief, Section of Field Work
G. H. de
Chief, Division of Hydrography
and Topography.