

5376

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
Hydrographic

Field 57

Sheet No. Reg. No. 5376

State South Carolina

LOCALITY

Vicinity of Winyah Bay
Atlantic Coast N.E. of Winyah Bay

Bobbing Island to Winyah Inlet

Pawleys Island.

1934-5

CHIEF OF PARTY

E. H. Kirsch.

U. S. GOVERNMENT PRINTING OFFICE: 1934

5376

applied to chart 836 Feb. 4, 1936 Wallapa Bruden
applied to new chart 787 May 3, 1937 J.S. Reed
" " " 1237 Oct 1937 P.K. L.

SHEET NO.57
Reg. No. 5376

Photo No.	Date	Time
560 - 581	August 17, 1934	9:15 A.M.
248 - 253	August 4, 1934	8:45 A.M.
PROJECTION BY	<u>On leave</u> L. C. Ripley	10-31-34
PROJECTION CHECKED BY	<u>T. B. Matting</u> T. B. Matting	10-31-34
CONTROL PLOTTED BY	<u>M. L. Smith</u> M. L. Smith	11-1-34
CONTROL CHECKED BY	<u>E. S. Ethridge</u> E. S. Ethridge	11-2-34
CONTROL PLOTTED ON PHOTOS BY	<u>M. D. Crook</u> M. D. Crook	Oct. & Nov. 1934
CONTROL CHECKED ON PHOTOS BY	<u>E. J. Anderson</u> E. J. Anderson	Oct. & Nov. 1934
RADIAL PLOT BY	<u>R. G. Hickson</u> R. G. Hickson	11-16-34
RADIAL PLOT CHECKED BY	<u>F. H. McBeth</u> F. H. McBeth	11-23-34
SCALE PLOT BY	<u>T. P. Mitchell</u> T. P. Mitchell	October 1934
TOPOGRAPHY TRANSFERRED BY	<u>F. H. McBeth</u> F. H. McBeth	12-12-34
TOPOGRAPHY CHECKED BY	<u>P. W. Hund</u> P. W. Hund	3-29-35
DETAIL INKED BY	<u>F. H. McBeth</u> F. H. McBeth	12-19-34

AREA DETAIL INKED: 18.5 Sq. St. Miles.

LENGTH OF COASTLINE: 7.75 St. Miles.

LENGTH OF SHORELINE: 3.2 St. Miles (More than 200 meters wide).

LENGTH OF STREAMS: 17.0 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 for-
warded to the Office.

Sia 1237

Field No. 57

REGISTER NO. 5376

State South Carolina
General locality Vicinity of Winyah Bay
Atlantic Coast N.E. of Winyah Bay
Locality Pawleys Island
Debidue Island to Midway Inlet
Scale 1:10,000 Photographs August 4-1934
950 Date of survey August 17, 1934, 19
Compilation: December 19, 1934
Vessel Air Photo Compilation Party No. 21
Chief of party E. H. Kirsch
Surveyed by See data sheet in descriptive report.
Inked by F. H. McBeth
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 sheet covers a total land area of 18.5 square statute miles. There are 7.75 statute miles of coast line on this sheet. The length of shoreline as measured along rivers more than 200 meters in width from the nearest opposite shore is 3.2 statute miles.

There are 17.0 statute miles of rivers and streams less than 200 meters wide.

Photo Numbers:

The photos 560 - 581 taken in this flight are by the Aero Service Corporation of Philadelphia and are of the five lens type. They parallel the coast at a distance of approximately one half mile. They were taken on August 17, 1934, at 9:15 A.M., 3 hours and 8 minutes after low tide, using North Inlet Gauge as base.

Pictures 248 to 253 inclusive were used for compilation of the Waccamaw River vicinity. These are from flight paralleling the one above mentioned, but whose centers do not fall on this sheet. This flight was made at 8:45 A.M. August 4, 1934, two hours before low tide at Georgetown, Winyah Bay Gauge as base.

CONTROL

Sources:

Triangulation by C. D. Meaney 1932; K. G. Crowby 1934. and E. B. Roberts 1924.

G. C. Sheet F Reg. No. *T-6327 b*, by J. C. Sammons 1934. Traverse stations located by the State of South Carolina, all control is on adjusted N. A. 1927 datum.

The state traverse is not office adjusted.

Errors:

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

COMPILATION

Method:

The standard radial line method as described in the

U.S.C. & G. S. Notes on the Compilation of Planimetric Line Maps from 5-lens Aerial Photographs was used in compiling this sheet

Adjustment of Plot:

No unusual adjustments of the radial plot were necessary.

Interpretations:

The high water line appearing on the coast of this sheet has been taken from field inspection notes and joined with the location as given on the two adjoining sheets.

The shore line about Pawley Inlet is detailed completely from field inspection. The amount of sand deposited in the lower part of the stream forming this inlet makes detailing from photographs alone a difficult task of questionable value. In as much as no soundings are contemplated in this stream care has been taken in delineating shoals and bars and in indicating the channel of the stream.

The shoreline about Midway Inlet has been handled in the same manner. Coming south along the stream emptying into Pawley Inlet the photos show a number of drainage ditches in the marsh area. According to field inspection notes they are but a foot or so wide and appear to have no bearing on the natural drainage of this area and have consequently been left off. They appear to best advantage on photos No. 572,73,75-B.

Interpretation of the marsh area between [△]station Debidue and Pawley Inlet has been difficult. The marsh growth merges into the field grass area in places and is difficult to delineate. Drainage of a large portion of this area is accomplished through the ditch shown just north of triangulation station DEBIDUE. The ^{marsh lines} ~~symbols~~ in the area have been ~~left~~ broken and open and it is probable from the large area drained ^{with} ~~and~~ inadequate discharging facilities that ~~were thus indicated~~ ^{this} the area at times is more of the nature of a stagnant pond than typical marsh. No distinct water lines are visible in this area however.

Most of the cultivated area on this sheet is in the northern portion. Besides woods, there are considerable areas of open uncultivated ground covered with a scattering of trees and brush but mostly field grass. These areas have been so indicated.

Names have been taken from the U.S.C. & G.S. Chart No. 1237 covering this area.

Pawley Island has been so named on the overlay sheet because of this name being on the present chart, but it is known in that locality as PAWLEYS ISLAND., and the Inlet on the south end of the Island as PAWLEYS INLET.

Highway 49 and the road leading to the northern part of Pawley Island are the only 1st class roads shown. Others are not dependable in bad weather and although it is kept in fair condition the road along the length of Pawley Island is sometimes covered by storm tides. The embankment upon which it is built is between 1 and 2 feet above the adjoining marsh to the west.

COMPARISONS WITH OTHER SURVEYS:

Junctions:

Satisfactory junctions have been made with sheet Nos. 5253 and 5254 on the North, 5256 on the west and 5379 on the South.

Discrepancies:

No discrepancies appear between this sheet and the U.S.C. & G.S. Chart No. 1237, covering this area.

Landmarks:

G. C. Sheet F, Reg. No. T-6327 *b*, by J.C. Sammons Chief of Party 1934, covers the small section of the Waccamaw River shown on this sheet. Any landmarks ~~are~~ marked topographic stations would be submitted with this sheet. There are no G. C. Sheets along the outside coast. The coast is low and no objects suitable for landmarks could be picked up on the photographs.

Remarks:

There are no bridges appearing on this sheet, of any importance to navigation.

RECOMMENDATION FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a probable error of not more than 0.3 mm in position of 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,

F. H. McBeth
F. H. McBeth.

REVIEW OF AIR PHOTO COMPILATION NO. T-5376

Scale 1:10,000.

Comparison with the Graphic Control Surveys.

T-6327b (1935) 1:10,000 scale. There are no discrepancies between T-6327b and this compilation over the common area. All detail on T-6327b is also shown on this compilation with the exception of non-recoverable plane table positions.

Comparison with Previous Topographic Surveys.

T-1280a (1872) 1:20,000 scale. T-1280a covers the coast from Midway Inlet to North Inlet. There are changes of importance in new roads and the alignment of others. The changes in the position of H. W. L. at the inlets are extensive. T-1280a is superseded by the compilation over the common area.

T-4198 (1926) 1:20,000 scale. T-4198 covers the coast from Floral Beach to North Inlet. No roads on the interior high ground areas are shown on T-4198. Changes in the position of the H. W. L. at the inlets are large, as much as 280 meters of change at Pawleys Inlet where the inlet has moved southward. Changes along the unbroken beach are not very large. T-4198 is superseded by this compilation over the common area.

Comparison with the Charts.

Chart No. 1237. Changes to be made to this chart as a result of this compilation are discussed above under the comparison with Previous Topographic Surveys.

Remarks.

There are no new hydrographic surveys of this area. The projection of this compilation was tested roughly and found satisfactory.

Lionel A. McKinnon
August 6, 1935.
B. J. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 5376

Chief of Party: E. H. Kirsch

Compiled by: F. H. McBeth

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)
T-63276.
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 sand beach of the coast was obtained from the field inspection notes on the field photos.

Fam.

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)
No landmarks in this area were recommended by the field party. Sam.

- ✓ 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 ✓

- ✓ 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)

- ✓ 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;

Chief of Party

19. Remarks after review in office:

Reviewed in office by: *Lemard A. McNamee* August 6, 1935.
B. G. Jones

Examined and approved:

E. K. Green
Chief, Section of Field Records

L. O. Solbut
Chief, Division of Charts

W. S. Borden
Chief, Section of Field Work

G. H. de
Chief, Division of Hydrography
and Topography.