

5255

U. S. COAST & GEODETIC SURVEY
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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 55

Sheet No. Reg. 5255

State South Carolina

LOCALITY

~~North of~~ Winyah Bay

Georgetown ~~vicinity~~

1934-5

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1934

5255

applied to chart 836 Feb. 5, 1936 Wallace T. Bruden
applied to ^{new} chart 787 April 19, 1937 J. S. [signature]

Photos
145 through 168
340 through 344
269 through 271

Date
August 4, 1934
August 5, 1934
August 4, 1934

Time
7:45 A.M.
8:05 A.M.
8:45 A.M.

PROJECTION BY

On leave 10-30-34
L. C. Ripley

PROJECTION CHECKED BY

E. H. Kirsch 10-30-34
E. H. Kirsch

CONTROL PLOTTED BY

M. L. Smith 11-1-34
M. L. Smith

CONTROL CHECKED BY

E. S. Ethridge 11-3-34
E. S. Ethridge

CONTROL PLOTTED ON PHOTOS BY

E. J. Anderson Oct. & Nov. 1934
E. J. Anderson

CONTROL CHECKED ON PHOTOS BY

Transferred Oct. & Nov. 1934
J. F. Richardson

SMOOTH RADIAL PLOT BY

Transferred Nov. 1934
L. C. Lande

RADIAL PLOT CHECKED BY

Discharged 2-6-35
M. R. Donaldson

SCALE PLOT BY

T. P. Mitchell Nov. 1934
T. P. Mitchell

TOPOGRAPHY TRANSFERRED BY

Discharged Mar. 1935
M. R. Donaldson

TOPOGRAPHY CHECKED BY

P. W. Hund Mar. 1935
P. W. Hund

DETAIL INKED BY

Discharged Mar. & Apr. 1935
M. R. Donaldson

T. P. Mitchell
T. P. Mitchell

AREA DETAIL INKED- 26.1 Square Statute Miles.

Length of Coastline - None

LENGTH OF SHORELINE- 7.5 St. Miles (more than 200 meters wide)

LENGTH OF STREAMS- 7.0 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 forwarded to the Office.

Field No. 55

REGISTER NO. 5255

State South Carolina

General locality ~~North of~~ Winyah Bay

Locality Georgetown and vicinity

Scale 1:10,000 Photographs - Aug. 4 and 5, 1934
Date of ~~survey~~ 950, 19

Vessel Air Photo Compilation Party No. 21,
Compilation - April 1935.

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report

Inked by M. R. Donaldson and 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 REPORT

This sheet covers the area North of Winyah Bay. The Port of Georgetown in the South portion of the sheet is the chief topographic feature of this locality.

The land is, in general, quite level, as is all this portion of the coast, and consists of a forest area North of Georgetown, chiefly of pine, but oak, gum, and cypress are present, the oak lying largely along the river banks and the cypress lying chiefly in swampy areas in the forest and in and along the edges of the old rice fields.

The area along the river banks consists of a belt of old rice fields, now abandoned, and which now is covered by fresh water marsh and the remains of old dikes, canals, and ditches. These old fields are gradually reverting to their original condition of marshy savannahs and swamps of cypress and gum trees.

The high land area was once densely covered with pine forests but a great many years of lumber operations have thinned the pine and cypress areas considerably.

Photographs:

All photographs were made by Aero Service Corp., with five lens camera.

The sheet was compiled from portions of three flights, the list of photos, time and date being given at the beginning of this report.

In general the photos were clear and sharp, but with a certain amount of tilt and scale variations. Detail was traced only from the best photos nearest to the area in question and verified from other photos.

The western limit of the compilation was determined by the limit of the photos 145 through 168 as there was no other flight west of this.

CONTROL

Sources:

Triangulation by K. G. Crosby-1934 and J. C. Sammons-1934, and a number of traverse stations established and computed by the South Carolina State (P.W.A.) Survey 1934, was the only control used in making the radial plot.

Graphic Control Sheet "E" Reg. No. T-6246, by H. Odessey, 1935. Sheet "E" Reg. No. T-6246, ~~by Lt. J. C. Sammons, 1935~~ were used as control for checking portions of the shoreline, the location of the Pee Dee Waccamaw Bridge, and the location of docks at Georgetown.

Errors:

No errors were discovered in the plotting of triangulation stations. Several radial points were discovered to be plotted wrong and were corrected. This was due, no doubt to error in recovering the same point on the photos, from two different flights.

Discrepancies:

No discrepancies of importance. A few minor discrepancies between the compilation and the topo layout of the waterfront docks, was satisfactorily adjusted.

COMPILATIONMethod:

The standard radial line method was used in making the plot.

Adjustment of Plot:

No unusual adjustments were necessary in the smooth radial plot.

Interpretation:

Not much difficulty was experienced in compiling the shoreline or the layout of roads. A great deal of difficulty was had in compiling portions of the town streets. This was due to this portion lying in the wing prints and to the heavy trees along streets. The streets were shown as carefully as possible and of a width from property line to property line. Also all streets in the town proper were shown by double solid lines, although not all streets are paved.

A great deal of difficulty was had in compiling the buildings of the Atlantic Coast Lumber Corp. No attempt was made to show the numerous tracks and tramways around these buildings.

Along the waterfront and in the town, no buildings were shown except the largest, and no trees shown along the streets.

Outside the town, an attempt was made to show at least the largest houses along highways etc.

In the wooded areas are numerous sawdust piles, left from lumbering operations, and these were shown by a symbol.

The shoal area along the river banks was shown by a row of heavy dots and light sanding. This area is foul with many snags and some cypress trees.

The usual graphic symbols, as given in the topographic manual were used and only in a few cases was difficulty experienced in interpreting detail.

The abandoned dikes in and around old rice fields were shown

in many cases, by two parallel ditches, one on each side of the dike, and in some cases solely by bushes and a few trees, now growing on the dike.

These fields abandoned many years, are covered with ditches, but due to the high marsh grass such ditches do not show clearly in the photos. All ditches and canals which could be distinguished were shown.

Information from other sources:

The layout of the railroad tracks entering the town and those around the railroad yards was obtained from a blue print loaned by the Railroad Company and with this as a guide the tracks could be distinguished on the photos. Three or four short spur tracks at the waterfront could not be distinguished.

The new highway bridge over the Pee Dee and Waccamaw Rivers is not shown on any photos, as it is under construction. It was located by graphic control sheet "D" H. Odessey, Reg. No. *T-6247a*, and transferred to the compilation by carefully scaling the control sheet and plotting the bridge. This was done, as being more accurate by far, than by tracing the control sheet and use of the projection camera.

As shown on the control sheet, the width between fenders on either side of the draw, or turntable, appears to be a little less on one side than the other. The figures given by the engineers, for clearance, width etc., show that the width between fenders is equal, on each side of the draw.

The above remarks apply both to the Pee Dee and Waccamaw draws, but the discrepancy shown on control sheet, is so slight, that it is not believed important.

Light Beacon No. 17 was moved slightly and rebuilt, and was located by the above control sheet.

A fire tower was located by radial plot. The entire waterfront in Georgetown was transferred from Graphic Control sheet "E" Reg. No. *T-6246* by H. Odessey.

Conflicting Names;

There are no conflicting names appearing on this sheet.

COMPARISON WITH OTHER SURVEYS

Junctions:

North - 5253, East 5256, West - None, South - 5377 & 5378.

Landmarks:

A list of landmarks and marked topographic stations in this area will be furnished by Lt. H. Odessey on Graphic Control Sheet "D" Reg. No. *T-6247a*, and G.C.S. "E" Reg. No. *T-6246*, by ~~J. C. Sammons.~~
Lt. H. Odessey.

RECOMMENDATIONS 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 about 0.6 mm. for other detail.

To the best of my knowledge this sheet is complete in all detail of importance for charting, and no further surveys are required.

Assisted by:

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

Submitted by:

Discharged.
M. R. Donaldson.

Date. July 10, 1935

Chart No. 428, 1237

Under investigation. Q

(M-L36)

REVIEW OF AIR PHOTO COMPILATION NO. T-5255

Scale 1:10,000

Comparison with Graphic Control Surveys.

(a) T-6246 (1935) 1:5,000 scale. T-6246 was reduced to the scale of the compilation by photography for comparison. There are no discrepancies between T-6246 and this compilation.

(b) T-6247a (1935) 1:10,000 scale. There are no discrepancies between T-6247a and this compilation over the common area.

(c) All detail shown on T-6247a and T-6246 within the area of the compilation is shown on the compilation except for temporary plane table stations and the magnetic declinations.

Comparison with Previous Topographic Surveys.

T-526 (1857) 1:20,000 scale. T-526 covers Georgetown and the shoreline of Winyah Bay. It is incomplete in so far as the projection and geographic names are concerned. T-526 is superseded by the compilation in the common area.

T-834 (1858) 1:20,000 scale. T-834 covers Winyah Bay and its entrance. The Sampit River and Georgetown area of T-834 is common to the compilation and over this area there are many large and important changes of topography. This compilation is adequate to supersede this portion of T-834.

T-1276 (1872) 1:20,000 scale. T-1276 covers Georgetown, Winyah Bay, North Island, and the adjacent topography inshore from Winyah Bay. T-1276 shows rice fields which have been abandoned. These rice areas along the Pee Dee and Waccamaw Rivers are now partially flooded, covered with high marsh grass. They are represented with the marsh symbol. The hachures along the high ground line here are not shown on the compilation. There are numerous changes in Georgetown Harbor since the time of T-1276. This compilation supersedes T-1276 over the common area.

Comparison with New Hydrographic Surveys.

H-5816 (1935) 1:10,000 scale and H-5821 (1935) 1:5,000 scale. These hydrographic surveys are now in agreement with this compilation. The new hydrographic surveys above the Pee Dee Bridge have not been received yet in this office.

Comparison with the Charts.

Chart No. 428. Changes to be made to this chart as a result of this compilation are discussed above under the comparison with Previous Topographic Surveys. The lists of new landmarks in the area of this compilation are furnished with the descriptive reports of T-6246 and T-6247a, and the recommended landmarks within the area of this compilation are shown thereon.

Remarks.

The projection of this compilation was tested roughly and found satisfactory.

There are no old topographic surveys by this Bureau covering the area north of latitude $33^{\circ}23'$.

Leonard A. McSauer
July 16, 1935.
B. G. Jones

REVIEW OF AIR PHOTO COMPILATION NO. 5255

Chief of Party: E. H. Kirsch

Compiled by: M.R. Donaldson
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)~~ *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)

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)
Furnished with descriptive reports T-6246 and T-6247 a.
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)
U.S. Engineer's Georgetown Quadrangle used in making geographic name comparison.
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: Lionard A. Kulsam July 16, 1935.
B. G. Jones

Examined and approved:

C. F. Green
Chief, Section of Field Records

L. O. Pollock
Chief, Division of Charts

B. Borden
Chief, Section of Field Work

G. Hude
Chief, Division of Hydrography
and Topography.