

5394

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 21 1935

Acc. No. _____

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

OCT 11 1935

Air
PhotoTopographic
Hydrographic

Field 75

Sheet No. Reg. 5394

DESCRIPTIVE REPORT

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTORState South CarolinaLOCALITY
ISLE OF PALMS.NORTHEAST OF CHARLESTON HARBORDEWEES INLET DEWEES INLETDEWEES ISLAND.1934-5

CHIEF OF PARTY

E. H. Kirsch

U. S. GOVERNMENT PRINTING OFFICE: 1934

5394

Applied to chart 837-1935 H.L.C.

" " " 1239 April, 1937 Z.N.U.

" " " 1238 Oct. 18, 1937 G.H.S.

Photo Nos.	Date	Time
521 - 537	8-13-34	2:35 P.M.
44 - 52	8-2-34	8:40 A.M.

PROJECTION BY	<u>L. C. Ripley</u> L. C. Ripley	12-22-34
PROJECTION CHECKED BY	<u>E. H. Kirsch</u> E. H. Kirsch	12-22-34
CONTROL PLOTTED BY	<u>E. J. Anderson</u> E. J. Anderson	1-7-35
CONTROL CHECKED BY	<u>M. D. Crook</u> M. D. Crook	1-7-35
CONTROL PLOTTED ON PHOTOS BY	<u>W. W. King</u> W. W. King	November 34
CONTROL CHECKED ON PHOTOS BY	<u>J. F. Richardson</u> J. F. Richardson	November 34
SMOOTH RADIAL PLOT BY	<u>E. J. Anderson</u> E. J. Anderson	1-23-35
RADIAL PLOT CHECKED BY	<u>W. W. King</u> W. W. King	2-12-35
SCALE PLOT BY	<u>T. F. Mitchell</u> T. F. Mitchell	November 34
TOPOGRAPHY TRANSFERRED BY	<u>W. W. King</u> W. W. King	3-16-35
TOPOGRAPHY CHECKED BY	<u>P. W. Hund</u> P. W. Hund	3-7-35
DETAIL INKED BY	<u>W. W. King</u> W. W. King	3-12-35

AREA OF DETAIL INKED: 17 Square Statute Miles.

LENGTH OF COASTLINE: 6.9 Statute Miles.

LENGTH OF SHORELINE: 20.7 Statute Miles (more than 200 m wide)

LENGTH OF SHORELINE: 48.3 Statute Miles (less than 200m wide) 7 miles of which is intra-coastal waterway.

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. 75

REGISTER NO. 5394

State South Carolina

General locality Isle of Palms.
~~Northeast of Charleston Harbor~~

Locality Dewees Island.
~~Dewees Inlet and Capers Inlet~~

Scale 1:10,000 Photographs - 8-13-34
1:10,526 Date of survey 8-2-34, 19

Compilation - 3-12-35
Vessel Air Photo Compilation Party No. 21

Chief of party E. H. Kirsch

Surveyed by See data sheet in descriptive report.

Inked by W. W. King

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 Registered blue print scale 1:10,526

GENERAL INFORMATION

Report:

This area, embracing Dewees and Capers inlets and vicinity, is, in general, low and marshy, with scattered islands of high ground covered with a dense growth of scrub oak, palmettos, pine, and brush.

In the northwestern portion of the sheet there is much cultivated land and habitations.

There are also numerous small marshy islands between which are many streams winding their way out to larger ones.

Through this area the intracoastal waterway has been cut. The dredged spoils have been pumped on either side of the waterway causing the smaller streams to be almost filled with sandy mud. The coastline forms the southeast border of the sheet.

Statistics:

There are 17 square statute miles of land area covered by this compilation. 20.7 statute miles of shoreline on streams which are more than 200 meters wide, 48.3 statute miles of streams less than 200 meters wide, and 6.9 statute miles of coastline. There are 7 statute miles of intracoastal waterway on this sheet.

Photographs:

This sheet is compiled from photographs taken in two flights, made by the Aero Service Corp. of Philadelphia, with Army type T3A H U I 33 5-lens camera. Photographs 537 through 521 were taken August 13, 1934 at 2:35 P.M. 1 hour and 2 minutes before low tide. Photos 44 through 52 were taken August 2, 1934 at 8:40 A.M., 1 hour after low tide.

CONTROL

Sources:

Control stations were established by Lt. Roberts 1924, and B. H. Rigg 1934, P. W. A. Traverse 1934, by the State of S. C.

All control used in this compilation is reduced to, but unadjusted on N. A. 1927 datum. G.C.S. "BB" Reg. No. T-62896, "CC" Reg. No. T-62902, "DD" Reg. No. T-62906, Lt. Rigg, 1935,

Errors:

No errors were found in control by the radial plot.

Discrepancies:

No control stations established by other organizations were used in the compilation of this sheet except the state traverse.

COMPILATIONMethod:

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

Adjustment of Plot:

No difficulty was encountered in the making of the smooth radial plot.

Interpretation:

Very little difficulty was encountered in transferring detail to the sheet. All the photographs were clear as regards to detail and had little or no distortion due to tilt.

Only the usual graphic symbols were used as approved by the board of surveys and maps, 1932.

Information from other Sources:

Field inspection by Lt. Rigg, 1934-5 and Lt. E. H. Kirsch 1934-35. Entire coastline and parts of various streams from G.C.S. "BB" Reg. No. 7-6289 b, "CC" Reg. No. 7-6290 a, "DD" Reg. No. 7-6290 b, Lt. Rigg, 1934-35.

Conflicting names:

The old landing at the bend of Santee Pass in the rear of Capers Island is named "Videl Landing" on U. S. Coast and Geodetic Survey Chart No. 1238, also the chart by the War Department, Corps of Engineers, U. S. Army, Capers Island Quadrangle. However, according to recent field inspection and local information, this landing is known as "OLD CAPERS BACK LANDING" and is shown as such on the overlay sheet.

Remarks:

All coastline on this sheet was drawn in to correspond to the coastline on the G.C. Sheets. When comparing photographs under these areas it will be noted that in some places the coastline as shown in the compilation appears to be farther in (toward land) than it should be. This is accounted for by erosion having taken place between the time when the photographs were taken and the time when the topography was run.

Comparison with other Surveys:

This topic is discussed under "Conflicting Names".

Junctions:

Satisfactory junctions were made with the following sheets: West - 5549, West - 5548, North - 5393, Northeast - 5392.

Landmarks: (see below)

The list of landmarks and marked topographic stations will be submitted by Lieut. B. H. Rigg with G.C.S. "BB" Register No. T-62896 "CC" Reg. No. T-6290a, and "DD" Reg. No. T-6290b.

RECOMMENDATION FOR FURTHER SURVEYS:

This compilation is believed to have a probable error of not more than .3mm in well defined detail of importance for charting and not more than .6 mm in other detail.

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

Assisted by:

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

Submitted by:

W. W. King
W. W. King.

* No landmarks have been recommended in the descriptive reports for the G. C. S. T-62896, T-6290a, T-6290b.

LAM.
Aug 9, 1935.

REVIEW OF AIR PHOTO COMPILATION NO. T-5394

Scale 1:10,000.

Comparison with the Graphic Control Surveys.

T-6289b (1935) 1:10,000 scale. There are no discrepancies between T-6289b and this compilation over the common area.

T-6290a (1935) 1:10,000 scale. There are no discrepancies between T-6290a and this compilation over the common area.

T-6290b (1935) 1:10,000 scale. There are no discrepancies between T-6290b and this compilation over the common area.

For a general description and purpose of the U. S. E. stations see the descriptive report for T-6295b on page 3, under "Permanent Hydrographic Stations". All detail on T-6289b, T-6290a, T-6290b is shown on the compilation over the respective common area with the exception of the magnetic meridians and non-recoverable plane table positions.

Comparison with Previous Topographic Surveys.

T-471 (1854) 1:20,000 scale. T-471 covers a part of the Isle of Palms. This area has undergone large changes in the position of the H. W. L. T-471 is superseded by this compilation which is adequate.

T-681 (1856) 1:20,000 scale. T-681 covers the outer coasts of Dewees and Capers Islands. This area is covered in full by the compilation, and has changed completely since 1856. The projection on T-681 is on an old datum. T-681 is superseded by this compilation which is adequate.

T-1400 b (1875) 1:20,000 scale. T-1400b covers the coast and the interior marsh areas from Bull Bay to Breach Inlet. The changes of topographic detail have been large since the time the survey of T-1400 b was made. The interior sheltered areas have changed least; the coastal areas have changed the most of any areas. T-1400b is superseded by this compilation over the common area.

T-3842 (1921) 1:20,000 scale. T-3842 covers the coast from Price Inlet to Charleston Entrance. The inlets and islands on the outer coast covered by this compilation have been subjected to forces of erosion and accretion to such an extent that vast changes in the position of the H. W. lines have taken place since 1921. The maximum values of these changes are between 200 and 300 meters. *The prominent bluff shown on T-3842 at Capers Inlet is no longer visible on the photos and consequently it would not be shown.*
The lights and beacons whose positions are shown on T-3842 have been removed. The new positions for lights and beacons are shown on this compilation. T-3842 is superseded by this compilation over the common area. *Pass.*

The prominent bluff shown on T-3842 at 32° 51', 79° 41' no longer exists. The shoreline has eroded back some 200 meters at this point destroying all evidence of this bluff.

Comparison with New Hydrographic Surveys.

H-5804 (1935) 1:10,000 scale. There are no conflicting low water lines or disagreement of hydrography and topography between H-5804 and this compilation.

Comparison with the Chart.

Chart No. 1239. The intracoastal waterway is new topographic information and is now shown on previous topographic surveys by this bureau. The position of new lights and beacons not yet published in the Local Light and Buoy List are shown on this compilation.

There are no landmarks of importance for charting within the area of this compilation.

Corrections to the chart as a result of this survey is required under Comparison U. R. Previous Surveys.

Remarks.

The diagonals and spacing of projection lines have been checked and are correct.

Lemard A. Nicksaue
August 8, 1935.
Frank G. Eschler

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: E. H. Kirsch

Compiled by: W. W. King

Project: HT 162

Instructions dated: 11-10-33

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)
Entire coastline and parts of various streams were taken from T-6284 b. T-6290 a. T-6290 b.
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~~
✓ ~~reefs~~, 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
of importance for charting.*
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 naviga-~~
~~tion 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)
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 Longi-
tude 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:

Frank G. Estlin

Examined and approved:

E. K. Green.
Chief, Section of Field Records

L. O. Solbut.
Chief, Division of Charts

J. B. Borden
Chief, Section of Field Work

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