5800

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric Map

Field No. T-5800 Office No.

LOCALITY

Florida

General locality Florida West Coast

Locality Weekiwachee River & Vicinity

Photos. - December 1939

194 1...

CHIEF OF PARTY

Lieut. Kenneth G. Crosby

LIBRARY & ARCHIVES

DATE aug 22 - 1946

B-1870-1 (I)

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.

SHEET

Kinkat No...T-5800......

REGISTER NO.

State Florida
General locality. Florida West Coast Rock Island Bay to Indian Bay
Locality Pine Island South to Aripeko
Photos.
Scale 1:20,000 Date of sucresy December 4 19.39
Vescel Air Photographic Party No. 1
Chief of party. Lieut. Kenneth G. Crosby. Field Inspected by: Surveyed by Lieut. (j.g.) E.L. Jones; H.A. Duffy, Photo. Aid, Oct. 1940.
Inked by Rudolph Dossett
Heights in feet aboveto ground to tops of trees
Contour, Approximate contour, Form line intervalfeet
Instructions dated
Remarks:

PHOTOGRAPHS

Vumber	: Date :	Time	: Stage of Tide
3888	December 4, 1939	1:06	0.2
3889	December 4, 1939:	1:07	0.2
3890	December 4, 1939:	1:08	: 0.2
3891	December 4, 1939:	1:10	: 0.2
3812	December 4, 1939:	10:34	: D.1
3813	December 4, 1939:	10:35	: 1.1
3814	December 4, 1939:	10:36	: 1.1

Tide from predicted tables for:

Bayport

Reference Station: Tampa Bay, Florida.

Camera: U.S. Coast and Geodetic Survey Nine-Lens (focal length 81 inches)
Negatives on file at Washington Office.

SCALE

Mean scale of Photographs	1:20,000	. 0.9	928
Scale of Survey Sheet	1:20,000		

STATISTICS

Area (land)	72.1	Square statute miles
Shoreline (more than 200 m. from opposite shore)	22.7	Statute miles
Shoreline (creeks)		Statute miles
Roads, streets, trails, and railroads	105.8	Statute miles

REFERENCE STATION

Station: CONNER, 1934

Latitude: 28° 27' 00.150" (462 m)

Datum: N.A. DATUM, 1927 (adjusted) Longitude: 82° 37' 40.269" (1095.6 m)

Florida State Coordinates Zone 2 (West) x = 298,240.18 y = 1,496,790.01

Platting Checked by F. H. M. Deth

pate of Survey: see page 6.

SUPPLET ENTARY SURVEYS

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Descriptive Report			May & June	•	9
Field Review	KCC:		June	2	23
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TO ACCOMPANY SHEET NO. T---5800

GENERAL

This sheet was compiled in accordance with "Instructions for Drafting Air Photographic Surveys, Project H.T. 242", dated April 3, 1940.

The general locality of the area covered by this survey sheet is Florida, West Coast, in the vicinity of the town of Bayport. It extends southward along the coast from PINE ISLAND to the town of ARIPEKA.

The terrain along the shoreline is marshy except for occasional clusters of palm, pine and cedar. The marshy areas along the shoreline are dotted with numerous ponds and flooded land. The higher ground inshore from the marshy area, northward from the vicinity of CENTIPEDE BAY, consists principally of swamp containing scattered palm. Southward from CENTIPEDE BAY and westward to a point near Florida Highway No. 15 the vegetation consists of scattered palm, pine and grass, with occasional cypress ponds. At this point a narrow strip of swamp (Weekiwachee Swamp) extends northward and southward to the limits of the sheet.

The eastern portion of this sheet consists principally of pine, oak, grass and brush with numerous ponds, grassy ponds and cypress ponds.

There is no cultivated ground within the area covered by this sheet.

Along the entire shoreline there are many foul areas of rock and rock reefs, which have been shown by symbol on the sheet. These rocks and rock reefs are in most cases not visible on the photograph and therefore should be located by the hydrographic party.

Along the road leading to PINE ISLAND, at the northernmost edge of this sheet, there is a ditch which appears to contain water. This has not been shown on the drawing as in the smooth draft insufficient space will make it impossible to show both road and ditch.

Approximate M.L.W. is shown by dotted lines.

The limits of shoal areas are approximate and are shown by broken lines as an aid for use by the hydrographer.

All small islets along the shoreline should be drafted as marsh unless otherwise labeled.

All roads should be shown 0.6 m.m. wide as none of the roads in this area are over 12 meters wide.

Fire breaks and abandoned railroad grades are not shown on this map drawing.

For a general report on the field inspection of this area, see special report submitted by Lieut. (j.g.) E. L. Jones, entitled "Field Inspection

Report - Horseshoe Point to Anclote Keys", dated December 27, 1940.

CONTROL

Triangulation control on this map drawing consists of the following stations:

Name of Stations	Year	Established by
CONNER	1934	G.L. Anderson
ROBINS	1934	G.L. Anderson
SMITH	1934	G.L. Anderson
BEACON ROCK	1859	G.H. B.
GOMETZ	1934	G.L. Anderson

The position of the azimuth mark at triangulation station CONNER, 1934 as well as that at triangulation station ROBINS, 1934 was compared with the geodetic azimuth given in the list of geographic positions and each was found to be in good agreement.

INTERPRETATION OF PHOTOGRAPHS

Some difficulty was encountered in interpreting the shoreline in the area just south of CENTIPEDE BAY and in the vicinity immediately north of MINNOW CREEK. This appeared to be due to a semi-flooded condition, thus making it difficult to clearly define the limits of the marshy area. However, by using the stereoscope it is believed that a true interpretation has been obtained. Other than in this area no difficulty was experienced in interpreting the photographs.

MAIN RADIAL PLOT

A continuous radial plot was laid on February 4, 1941 for the location of radial points, marked hydrographic and topographic stations, bench marks and azimuth marks. This plot covers Sheet Nos. T-5799 to T-5802, inclusive, and includes all the photographs within the area of these sheets.

The plot comprised of 24 templates which extended southward for a distance of about 32 nautical miles, from a junction with the previous plot at photographs Nos. 3817, 3875 and 3886, as a northern limit, to photographs Nos. 3897 and 3806 as a southern limit.

All templates in this plot were controlled completely or in part by triangulation or traverse stations, the latter having been established by the Florida Mapping Project. Traverse stations of the "Y" series were plotted by coordinates furnished by the Washington Office but the "AU" series were plotted from coordinates computed at the Tampa Field Office from data furnished by the State Project Manager, Mr. George D. Barnhart, Gainesville, Florida. Fourteen templates were controlled by three to five triangulation stations supplemented by two to seven traverse stations; seven templates were controlled by two triangulation stations and three templates had but one triangulation station but the latter templates were rigidly fixed by radial points already well established by previously laid templates.

The plot was laid with excellent results and no large or unusual adjustments were necessary to obtain good agreement along the flight lines

or with radial points located by the previous main plot at the junction of the two plots.

The templates were made in accordance with "Notes on Radial Plotting of Nine-Lens Air Photographs" dated April 9, 1940. The usual practice of laying the main plot was followed and consisted of plotting the control on the survey sheets, transferring it to base grid sheets and then laying the plot on the latter which were securely taped to the plotting table. Upon completion of the plot, the points established by the main radial plot were transferred to the survey sheet by matching grid squares. There was excellent agreement between the grid squares on the base sheets and the survey sheets and the adjustment within a grid square was practically negligible.

All of the points which were determined in the main radial plot by the common intersection of three or more radial lines giving a strong intersection have been transferred to the survey sheet. These points are believed to be within 0.2 m.m. of their true position. Points determined by only two radial lines or points which could not be determined from the common intersection of three or more radial lines have been transferred to the survey sheet by carefully transferring the radial lines themselves for further study by the compiler.

Three unmarked hydrographic signals consisting of points of marsh, mangrove trees, etc. in the vicinity of the shoreline immediately northeast of signal BAS 1940 (Lat. 28° 28', Long. 82° 41') had a large triangle of error (10 millimeters from center of gravity to sides of triangle). Further study by the compiler resulted in the triangle of error being reduced to about 1 m.m. and the point picked in the center of gravity of the triangle.

Various colored inks were used on the office photographs and the survey sheet to designate triangulation stations, hydrographic stations, radial points, etc. The following key is furnished for this information.

Photographs (Office Prints)

Survey Sheet

FIELD INSPECTION AND DATE OF SURVEY:

The field inspection was made by Lieut. (j.g.) E. L. Jones and H. A. Duffy, Photogrammetric Aid, in October, 1940 by truck and skiff. The legend used for the field inspection and detailing is made a part of this report.

Field notes were plentiful along the roads and shoreline and by comparing these areas with those where field notes were lacking, it is believed that an accurate interpretation of the vegetation has been obtained.

Details on T 5800 are of the date of the photographs

DETAILING Dec 4, 1939.

The detailing of this sheet has been done in accordance with the current instructions for this project.

Before detailing, the surface of this sheet was rubbed down with magnesium carbonate and washed off. No additional cleaning was necessary and the ink has adhered so well that no re-inking has been required.

Except for Photograph No. 3889, the scale of the photographs were good. The scale of Photograph No. 3889 was found to be so poor that it could not be used except as an aid for identification of detail.

Symbols were used whenever the vegetation was not of consistent density in order that a truer interpretation could be obtained than could otherwise be shown by legend.

LOW ROCK, BLUE FISH ROCK, and RED ROCK, whose approximate positions are shown on Field Print No. 3891, are not shown as they are not visible on the photographs.

The stereoscope was used in picking the detail in those parts of the sheet not covered by the field notes.

All buildings visible under the stereoscope have been indicated but it is very probably that some may have been obscured by trees and are therefore not shown.

JUNCTIONS

This sheet forms a junction with Sheet No. T-5799 on the north and T-5801 on the south.

Attention is called to a discrepancy in the matching of grid intersections in the vicinity of X = 330,000; Y = 1,540,000. When matching the intersections of the latitude and longitude of the projection, the grid intersections do not coincide by an amount of approximately 10 meters.

concited in the office

COMPARISON WITH OTHER SURVEYS

Comparison was made with the bromide print of topographic Sheet No. 1700 made in 1886. The shoreline is in general agreement, but there are areas of marked change due to natural erosion. The most noticeable of these is as follows:

DINNER POINT has receded about 190 meters.

Northeast of DINNER POINT two islands are shown on the Topographic Sheet No. 1700; now there is only one.

At GUN POINT there has been a large amount of erosion and the point has now become an island. This is shown on the map drawing as GUN PT. KEY. The shoreline of HAMMOCK CREEK (Lat. 28° 26', Long. 82° 40') is out of position due to an apparent error in azimuth.

LAND MARKS

There are no land marks within the limits of this sheet.

GEOGRAPHIC NAMES

The geographic names for this area are the subject of a special report entitled "Investigation of Geographic Names, Horseshoe Point to Anclote Keys", submitted by Lieut. (j.g.) E. L. Jones to the Washington Office.

Attention is directed to the name of "GOMEZ ROCK" as submitted in the above mentioned report. In all peferences to the triangulation station, the name is spelled "GOMETZ" and not "GOMEZ" as stated in the paragraph on page 45 of the report. Les name wheets

Respectfully submitted,

Photogrammetric Aid.

Forwarded,

Lieut. Kenneth G. Crosby, Chief of Party.

REVIEW OF AIR PROTO COMPILMION NO. T- 5800

Chief of Party: Kenneth G. Crosby Compiled by: R. Dossett

Project: H.T. - 242

Instructions dated: April 3

19 40

lo The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Paro 16a, b,c,d,e,g and i; 26; and 54)

Yes

2. Change in position, or non-existence of wharfs, lights, and ether topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (per. 26; and 66 g. m)

Yes

5. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all much surveys are discussed in the descriptive report. (Par. 66; and 66 d, e)

None used.

4. Blue prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Pero 28)

None transmitted.

5. Difference between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the effice and are discussed in the descriptive report.

Yes

5. 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 weated. [Par., 12b; 46; and 65 c.h., 1]

Yes

7. Righ wrigh line or marely and sangrove const is clear and adequate for chart compilation. (Par. 16s, 43, and 44)

Yes, see also No. 17.

- 80 The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is autisfactory. (Para 36, 37, 38, 39, 40, 41) Yes, the approximate limits of foul areas have been outlined as an aid to the hydrographer.
- 90 Recoverable objects have been located and described on Form 524 in accordance with circular 50, 1955, circular letter of March 3, 1955, and circular 51, 1954. (Par. 29, 50, and 57)
- 10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1954, Landmarks for Charts, complice with. (Par., 166, e; and 60)

No landmarks within limits of sheet.

llo All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, elearance, and width of draw if a draw bridge. Additional information of impertance to navigation is given in the descriptive report. (Par., 160)

No bridges of navigational importance. All are small fixed span highway bridges across unnavigable streams.

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 the source of information and a specific statement when advisorable. Complete discussion of place names differing from the charts and from the UoSa Go So Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Paro 64, and 66k)

No overlay. See paragraph "Geographic Names".

25. The geographic defen of the compilation is N.A. 1927 and the reference station is correctly moded.

Yes

- 14. Junctions with adjoining compilations have been against and are in agreement. (Ture 66)
- 15. The drafting is satisfactory and particular attention has been given the following:
 - 1. Standard symbols authorised by the Board of Surveys and Maps have been used throughout except as noted in the report. Yes, legend also used.
 - 2. The degrees and minutes of Latitude and Longitude are correctly marked.

- 5. All station points are exactly sarked by fine black dots. Yes
- 4. Closely spaced lines are drawn sharp and clear for printing. Yes
- 5c Topographic symbols for similar features are of uniform weights Yes, legend also used on rough draft.
- 6. All drawing has been retouched where partially rubbed off. Not necessary to retouch.
- Yo Buildings are drawn with clear straight lines and square corners where such is the case on the groundo Yes

(Per. 34, 35, 56, 57, 58, 59, 40, 41, 42, 45, 44, 45, 46, 48)

16. To additional surveying is recommended at this time.

No additional topographic survey required.

- 17. Remarks: The light line around marks and mangrove areas defines the outer limits of vegetation visible at mean high water. The mean high water line is shown only on fast land and is represented by a heavy solid line.
- 18. Examined and approved:

the Groot

19. Remarks after review in office:

Reviewed in office by:

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Chief, Section of Plate Becards

Chief, Division of Charges

Chief, Section of Field Work

Chief, Mission of Hydrography

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DIVISION OF CHARTS

Surveys Section

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5800

Contemporary Surveys

None.

Previous Topographic Surveys

T-962 (1860) Scale 1:20,000 T-1700 (1886) Scale 1:20,000

Refer to the descriptive report of T-5800 for a comparison made with the older surveys by the field party.

T-5800 is complete and supersedes for charting purposes the sections of the older surveys which it covers with the exception of details outside of high water line. A number of rocks awash and submerged rocks shown on the older surveys were not visible on the photographs and are not shown on T-5800.

Refer also to a subsequent paragraph heading, Preparation of Hydrographic Sheets.

Field Inspection

The field inspection is complete with the exception of details outside of high water line as noted in the preceding paragraph. It was not practicable to locate these details by field inspection and they have been left for completion by the subsequent hydrography.

Radial Plot and Detailing

The plot was well controlled and is discussed in detail in the descriptive report. In view of the ample control, T-5800 is accepted as of standard accuracy without checking in this office.

Comparison with Chart 178

T-5800 is adequate for revision of topographic details on the charts with the exception of rocks which will have to be carried forward from older surveys pending completion of the hydrography.

Preparation of Hydrographic Boat Sheets

The celluloid manuscript T-5800 shows the following details which are not on the printed file copy:

- 1. Semi-permanent topographic stations such as Points of Marsh and Points of Mangrove.
- 2. Rocks awash, submerged rocks and rocky areas.

It was impracticable for the field inspection to determine the exact location, extent and character of the rocks. The information shown on T-5800 should be carried forward on the boat sheets for completion by the hydrography. In addition, similar details on T-1700 which were not covered by T-5800 should be carried forward on the hydrographic boat sheet for investigation by the hydrography.

Redrafting

T-5800 was redrawn in this office for publication.

Reviewed by F. H. McBeth and B. G. Jones

Approved by:

B. G. Jones, Technical Asst.

Div. of Photogrammetry

Chief Div. of Photogrammetry

Chief, Nautical Chart Branch Division of Charts

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hief Div. of Coastal Surveys