5789

Diag'd. on Diag. Ch. No. 1258

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey AIR PHOTO

Field No. CS-242-A *Office No.* T-5799

LOCALITY

State Flor ida

General locality Florida West Coast

Locality Chassahowitzka Bay and Vicinity

Photos - Dec.1939

1941

CHIEF OF PARTY

K.G.Crosby

LIBRARY & ARCHIVES

DATE

8-1870-1 (1)

5799

11/41

CS-242A

Form 537a
Ed. Nov. 1929

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO. T-5799

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 NO.
~~Register~~ No. T-5799

REGISTER NO.

State Florida

General locality Florida West Coast

Locality Chassahowitzka Bay south to Pine Island

Scale 1:20,000 Date of ~~survey~~ Photos. December 4, 1939

Party:
~~Vessel~~ 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 above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated April 3, 1940

Remarks:

Ms. received: 23 June, 1941
Reviewed: 1941
Redrafted: 16 Aug. 1943
Published: 19 Aug. 1943 1:20000
Registered: 18 Jan. 1949

SHEET NO. T- 5799

PHOTOGRAPHS

Number	Date	Time	Stage of Tide
3886	December 4, 1939	1:03	0.2
3887	December 4, 1939	1:05	0.2
3888	December 4, 1939	1:06	0.2
3875	December 4, 1939	12:31	0.3
3814	December 4, 1939	10:36	1.1
3815	December 4, 1939	10:37	1.1
3816	December 4, 1939	10:38	1.1

Tide from predicted tables for: Bayport
Reference Station: Tampa Bay, Florida

Camera: U.S. Coast and Geodetic Survey Nine-Lens (focal length 8¼ inches)
Negatives on file at Washington Office.

SCALE

Mean scale of Photographs..... 1:20,000 ± .993
Scale of Survey Sheet..... 1:20,000

STATISTICS

Area (land).....	60.5	Square statute miles
Shoreline (more than 200 m. from opposite shore).....	18.3	Statute miles
Shoreline (creeks).....	55.5	Statute miles
Roads, streets, trails, and railroads.....	31.3	Statute miles

REFERENCE STATION

Station: CENTRALIA, 1934

Datum: N.A. 1927 (adjusted)

Florida State Coordinates
Zone 2 (West)

Latitude: 28° 37' 25.016" (770.1 m)

Longitude: 82° 32' 31.514" (856.1 m)

x = 326,086.52 ft.
y = 1,559,764.34 ft.

Plotted as ✓ by E.H. McBeth.

SHEET NO. T-5299

SUPPLEMENTARY SURVEYS

	Name	Date	Hours
Control Surveys			
Planetable Surveys			
		Total	

FIELD INSPECTION

Preparation of Photographs	WHS - ELJ	Aug. & Dec.	3
Field Work	ELJ-HAD-KWS	October 1940	23
Inking Notes	ELJ-HAD	October	4
Coast Pilot Notes	ELJ-KGC-HAD	Oct. & Dec.	3
Geographic Name Report	ELJ-HAD	Oct. & Dec.	16
Landmarks for Charts			
Description Cards	ELJ-HAD-MMS	Jan. 1941	16½
Recovery Notes			
		Total	65½

MAIN RADIAL PLOT

Scale Plot	WHS-RD-KWS	December	5
Projection on Base Sheet	Wash. Office		-
Projection on Survey Sheet			
Control Plotted	K.G.C.	Jan.30,1941	2
Control Checked	E.L.J.	Feb. 3,1941	¼
Control Trans. to Base Sheet	E.L.J.	Feb. 3,1941	½
Transfer Checked	J.H.S.B.	Feb. 3,1941	½
Control Picked on Photographs	R.D.	Nov.29,1940	1
Control Checked on Photographs	K.W.S.	Nov.29,1940	1
Hydro. & Topo. Stations Picked	R.D.-K.W.S.	Dec. 1940	5
Radial Points Picked	K.W.S.	Dec. 1940	10
Adjacent Centers Picked	R.D.	Nov. 1940	1½
Templates	J.H.S.B.	Jan. 1941	11
Radial Plot	ELJ-KGC	Feb. 1941	3
Radial Points Transferred	K.G.C.	Feb. 1941	1
Transfer Checked	J.H.S.B.	Feb. 1941	1½
H & T Stations Scaled & Checked	R.D. - W.H.S.	Apr. 1941	3
Additional Radial Points			
		Total	46¼

DETAILING

Rough Draft	R.D.	Apr. 1941	99
Smooth Draft			
		Total	99

COMPILATION

Name Overlay	R.D.	Apr. 1941	13
Descriptive Report	R.D.-K.G.C.	Apr. & June	8
Field Review	K.G.C.	June 1941	25
		Total	46

Total Time Spent on Sheet: 256 3/4 Hours

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. T---5799

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 Chassahowitzka Bay. It extends southward along the coast from the mouth of the Chassahowitzka Bay to Pine Island.

The terrain along the shoreline is marshy except for occasional clusters of palm, pine and cedar. The ground inshore from the marshy area consists of swamp with scattered pine and palm, mixed. Toward the center of the swamp the pine and palm disappear and the eastern fringe of the swamp is mixed with cypress; accordingly, in the smooth draft these two types of vegetation should be shown as gradually merging into the swamp, with the pine and palm on the west and the cypress on the east.

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

Approximate M.L.W. line is shown by a dotted line.

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

The small bars shown are oyster bars consisting of sand and shell.

Several notes containing information for the hydrographer have been made relative to various rocks and rock reefs. The position and limits of these rocks and reefs are shown approximately, as they are too indefinite on the photographs to be located by air photographic methods. A careful study was made to identify BLACK ROCK on the photographs without success. The approximate position, as shown on this sheet, has been transferred from topographic sheet No. 782 by adjusting this sheet to the topography shown on Sheet # 782.

The vegetation along the eastern edge of the sheet consists mainly of pine and oak with numerous cypress ponds and swamps.

In the southeastern corner of the sheet, there is a conjested area of ponds, grassy ponds and lakes. TOOKE LAKE in this area contains very little open water.

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

All roads should be shown as 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, December 27, 1940".

CONTROL

Triangulation control on this map drawing consisted of the following stations, although only the first two actually are within the tracing limits of this sheet.

Name	Year	Established by
CENTRALIA	1934	G.L. Anderson
RACCOON POINT	1859	G.H. B.
BEACON ROCK	1910,1934	G.H. B.
ROBBINS	1934	G.L. Anderson
JOHNS	1934	G.L. Anderson

The position of the azimuth mark at triangulation station CENTRALIA, 1934 was compared with the geodetic azimuth given in the list of geographic positions and was found to be in good agreement.

No errors were found in the location of the control stations by the photographic plot nor in the plotting of these stations on the photographs.

Triangulation station HERRING BLUFF, 1859 was not recovered by the field inspection party due to an inadequate description. After completing the drafting of the detail in this vicinity and plotting the geographic position of the station, it is believed that the field inspection party was searching in the wrong area. This station is shown on the map drawing but was not used for control.

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 was 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. Such points are indicated by 2.5 m.m. circles with tick marks to indicate the number and direction of radial lines.

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)

Triangulation & Traverse Stations	2.5 mm blue circle
Marked Hydro. & Topo. Stations	2.5 mm green circle
Radial Points (Main Plot)	2.5 mm red circle
Radial Points (Additional)	3.5 mm red circle
Photograph Centers	double circle

Survey Sheet

Triangulation Stations	3.5 mm high black triangle
Hydro. & Topo. Stations	2.5 mm black circle
Radial Points (Main Plot)	2.5 mm blue circle on back of sheet
Radial Points (Additional)	3.5 mm blue circle on back of sheet
Radial Points (Questionable)	2.5 mm blue circle with tick marks on back of sheet

INTERPRETATION OF PHOTOGRAPHS

The photographs were clear except for the area in the vicinity just south of RACCOON POINT, where the shoreline is indistinct. This appeared to be caused by a semi-flooded condition, the marshy area apparently merging gradually with the water. Other than in this area no difficulty was experienced in interpretating the photographs.

FIELD INSPECTION

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 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.

DETAILING

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 then washed off. No additional cleaning was necessary and the ink has adhered so well that no re-inking has been required.

The scale of the photographs were all reasonably good and some detail was taken from each.

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.

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

In the areas on eastern edge of the sheet, the areas of diversified vegetation were clear and definite; consequently a large portion was outlined and labeled.

All buildings visible under the stereoscope have been indicated, however, there are very few houses on this sheet.

JUNCTIONS

This sheet forms a junction with sheet No. T-5798 on the north and T-5800 on the south. All junctions are in agreement.

COMPARISON WITH OTHER SURVEYS

Comparison was made with the bromide print of topographic Sheets Nos.

1700 and 782 made in 1886. The shoreline is in general agreement except for some small changes due to natural erosion. The shoreline has receded in one or two places to a large extent, the most noticeable being in the vicinity of RACCOON POINT. There is a general recession of the shoreline, to a small degree, all along the coast. At PINE ISLAND the topographic sheet No. 782 shows a connecting stream that makes an island. Since then a paved road has been build across this area, the resulting drainage work forming a peninsular.

LANDMARKS

There are no landmarks 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.

Respectfully submitted,

Rudolph Dossett,
Photogrammetric Aid.

Forwarded,

Lieut. Kenneth G. Crosby,
Chief of Party.

REVIEW OF AIR PHOTO COMPILATION NO. T- 5799

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

Project: H.T. - 342 Instructions dated: April 3 19 41

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,f and i; 26; and 64)

Yes

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 f, n)

Yes

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. 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. (Par. 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 office and are discussed in the descriptive report.

Yes

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 65 e,h,i)

Yes

7. High water line or marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

Yes, see also No. 17.

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) Yes. Low water line is approximate. Areas of foul ground are shown approximately for use as an aid by the hydrographer.

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)

Yes

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. 164, e; and 60)

No landmarks.

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 of navigational importance.

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 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)

See paragraph "Geographic Names". No overlay.

13. The geographic datum of the compilation is N.A. 1927 and the reference station is correctly marked.

Yes

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)

Yes

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. Yes, legend also used.

2. The degrees and minutes of Latitude and Longitude are correctly marked. Yes

3. All station points are exactly marked by fine black dots. Yes

4. Closely spaced lines are drawn sharp and clear for printing. Yes

5. Topographic symbols for similar features are of uniform weight. Yes, legend also used on rough draft.

6. All drawing has been retouched where partially rubbed off. Not necessary to retouch.

7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. Yes

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.

No additional topographic survey required.

17. Remarks: The light line around marsh 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:

Kenneth C. Crosby
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

Chief, Section of Field Records

Chief, Section of Field Work

Chief, Division of Charts

Chief, Division of Hydrography

T-5799

	Remarks	Decisions
1		2826826
2		"
3		286827
4	Submitted to USGB: ok to apply pending decision.	282826
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		285826
20		"
21		
22		286826
23		285825
24		
25		
26		
27		

M 234

GEOGRAPHIC NAMES

Survey No.

T-5799

Name on Survey	On Chart No. A,	On previous survey No. B,	On U. S. quadrangle Maps C,	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Chassahowitzka Bay	✓									1
Bird Key										2
Black Rock										3
Chassahowitzka Reefs										4
South Point										5
Crawl Key										6
Saddle Key										7
Mud Creek										8
Chub Creek										9
North Blind Creek										10
South Blind Creek										11
Haulover Creek										12
Fish Creek										13
Sheephead Key										14
Wall Creek										15
Net Spread Key										16
Raccoon Point										17
Stapleton Creek										18
Higgenbotham Creek										19
Pine Island										20
Gulf of Mexico										21
Chassahowitzka Swamp										22
Tooke Lake										23
				L. L. Heck 11/12/41						24
										25
										26
										27

M 234

DIVISION OF CHARTS

Surveys Section

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5799

November 1941

Contemporary Surveys

None.

Previous Topographic Surveys

T-782 (1859) Scale 1:20,000
T-962 (1860) Scale 1:20,000
T-1700 (1886) Scale 1:20,000

T-5799 supersedes for charting purposes those sections of the older surveys which it covers with the exception of the rocks awash shown on T-1700, south of latitude 28°35'.

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-5799 is accepted as of standard accuracy without checking in this office.

Comparison with Chart 178

T-5799 is adequate for revising the topography on Chart 178 with the exception of the details below high water line, south of latitude 28°35' which are to be completed by the hydrography.

T-5799 has not been applied to charts as of the date of this review.

Preparation of Hydrographic Boat Sheets

In addition to the celluloid drawing, the smooth drawings on mounted paper will be held in the Air Photographic Unit until after completion of the hydrographic surveys. These blue-line prints are more permanent than the celluloid and show the following details useful to the hydrography which will not be shown on the printed copies of T-5799.

1. ~~To~~ Semi permanent topographic stations such as Points of Marsh and Points of ~~Mangrove~~ 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 ~~these details~~ these rocks. The information shown on T-5799 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-5799 should be carried forward on the hydrographic boat sheet for investigation by the hydrography.

Redrafted

T-5799 will be redrawn in this office for publication.

Reviewed by F. H. McBeth and B. G. Jones 11/41

Examined and approved:

B.G. Jones 3/49
Technical Assistant to Chief
Division of Photogrammetry
Chief, Surveys Section

H.C. Edwards
Nautical
Chief, ~~Division of~~ Charts Branch

K.T. Adams
Division of Photogrammetry
Chief, ~~Section of Topography~~

C.K. Green
Chief, Division of
Coastal Surveys