

5908

8065

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey Planimetric	
Field No. T-5908	Office No.
LOCALITY	
State Florida	
General locality Lake Okeechobee	
Locality South Bay, Fla.	
Photos taken Jan. 9, 1940 and supplemented by ground surveys to April 1942	
CHIEF OF PARTY	
Lieut. Comdr. Kenneth G. Crosby	
LIBRARY & ARCHIVES	
DATE July 21 - 1947	

Applied to chart 1289 7-29-43 GTE

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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
Filed No. T-5908

REGISTER NO.

State Florida

General Locality Florida East Coast, Lake Okeechobee

Locality South Bay, Florida

Scale 1:10,000 Date of ~~Survey~~ ^{Photos} January 9, 1940

~~Party~~ **Air Photographic Party No. 1**

Chief of party Lieut. Comdr. Kenneth G. Crosby

Field Inspected by: **Harold A. Duffy, Sr. Photogrammetric Aid**
~~Surveyed by:~~

Inked by Harold A. Duffy, Senior Photogrammetric Aid

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated April 3, 1940

Remarks: _____

REG. NO. **T5908**

CONTROL SURVEYS

	Date	Person	Hours
Control Surveys.....	X	Mar., Apr.,	163
Planetable Surveys.....		May, 42	1
		Total	163

FIELD INFORMATION

Preparation of Photographs.....	FHE, JEH, CH	Oct., Nov., 41	7½
Field Work.....	HAD	Feb., Apr., 42	5
Taking Notes.....	HAD	Feb., Apr., 42	1
Coast Pilot Notes.....			
Geographic Name Reports.....	FHE	May, 1942	5
Land Marks for Charts.....			
Description Cards.....	HAD	May, 1942	24½
Recovery Notes.....			
		Total	43½

RAIAL RADIAL WORK

Scale Plot.....	WHS	May, 1942	1
Projection on Base Sheet.....	Wash. Office		
Projection on Survey Sheet.....			
Control Plotted.....	RDE	June "	1
Control Checked.....	LCB	June "	2½
Control Trans. to Base Sheet.....	RDE	June "	1½
Transfer Checked.....	LCB	June "	½
Control Picked on Photograph.....	HVR	May "	6½
Control Checked on Photograph.....	JTW, CHW	May "	3
Hydro & Sigs. Stations Picked.....	HVR, CHW	May "	6½
Radial Points Picked.....	JEH	May "	2½
Adjacent Contours Picked.....	X	Mar. "	12½
Templates.....	CLB	May "	9
Radial Plot.....	X	June "	4
Radial Points Transferred.....	CAJP, HAD	June, July, 42	3½
Transfer checked.....	HAD	June, 1942	6
R & T Stations Sealed & Checked.....	HAD, BOB	Aug. "	3½
Additional Radial Points.....	HAD	July "	12
Investigation of Radial Points.....	HAD	June "	13
X-Several of Office Personnel		Total	88½

DETAILS

Rough Draft.....	HAD	June, July	222
Smooth Draft.....			
		Total	222

COMPARISON

Photo Overlay.....	HAD	July	7
Description of Photo.....	HAD	Aug.	5½
Field Notes.....	RD	Aug.	9
		Total	21½

Total time spent on sheet..... 538 hours

PHOTOGRAPHS

Number	Date	Time	Stage of Tide
4543	1-9-40	11:01	No Tide
4544	1-9-40	11:02	
4545	1-9-40	11:05	
4546	1-9-40	11:06	

Tide from predicted tables for: No Tide

Camera: U. S. Coast and Geodetic Survey Nine-Lens (focal length 8 1/2 inches)

SCALE

Mean scale of Photographs..... 10,000 + 1.012
Scale of Survey Sheet..... 1:10,000

STATISTICS

Area (land)..... 18.94 Square statute miles
Shoreline (more than 200 m. from opposite shore)... 11.5 Statute miles
Shoreline (creeks)..... 30.13 Statute miles
Roads, streets, trails, and railroads..... 48.23 Statute miles

REFERENCE STATION

TRIANGULATION

Station: TOP, 1942 (~~Top, 1942~~) Latitude: ~~26° 42' 104.9"~~ (1741.1 m.)
Datum: N.A. 1927 ~~Lat. 26° 42' 03.408" (104.9)~~ ~~Long. 80° 42' 56.708" (1568.6)~~ ~~1/20/43 f.m.~~
~~26° 42' 104.9"~~ (1741.1 m.)
~~80° 42' 1507.0"~~ (91.0 m.)

Coordinates X = ~~592,510.56~~ 592,800.63 ft.

Y = ~~860,534.706~~ 860,531.61 ft.

5 m. - 9 m. 10 m. 11 m. 12 m.

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. T-5908

GENERAL

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

The area covered by this sheet is in the locality of Florida East Coast and Lake Okeechobee, in the immediate vicinity and including South Bay, Florida, and its surrounding territory. Nearly all of this sheet is glade land, the most of which has been drained and put under cultivation. This land is very flat and has an elaborate drainage system in which the water level is maintained by gravity and pumps. In general each field is surrounded by a ditch and a narrow field trail. The field trails were not shown because of their unimportance and to avoid congestion.

The vegetation in this section on uncultivated areas consists of a tropical grass called Parra Grass which was first planted along the railroad and levees to control erosion and settling, and has spread to other areas. There is also an abundance of low brush and scrub willow. There are numerous windbreaks planted along the roads and field boundaries consisting of Australian Pine, bamboo and palm. In the southwest corner of the sheet there is an area of virgin glade land covered by sawgrass and scrub brush native to this section.

DETAILING

Sheet T-5908 was detailed in accordance with the current instructions for the project.

Photographs 4546 and 4545 were in good scale, except for the fact that 4546 is slightly tilted. Numerous radial points were added to those of the main radial plot so that more accurate detailing could be accomplished since the detailing limits extended very near the photograph limits in the northeast corner of the sheet. Photographs 4543 and 4544 were in good scale, but were slightly tilted causing poor intersections on many of the radial points during the main radial plot near the south limits of the sheet. Numerous radial points were added and the picking of the original points checked and a few were moved giving satisfactory control along the south edge of the sheet. In general the photographs were well controlled except along the south and east edge of the sheet where the detailing limits extended very near the photograph limits. The city of Belle Glade falls outside detail limits of this sheet and outside the project along the southeast side.

In the northwest corner of the sheet where the detailing limits extend into Lake Okeechobee, the water level has been raised by the construction of the new levee around the lake, causing an indefinite marsh shoreline in this area. The problem was discussed with the Chief of Party and it was decided to outline the definite marsh and smooth draft the areas of grass in water, and scattered tufts of grass in water. In this same marsh area there is a narrow canal abandoned and lodged with water hyacinth. This canal has no importance to navigation since it was of a temporary nature dug to put out the anchors for dredges used in the construction of the new levee.

Labels were used freely by the draftsman, except in small areas where smooth drafting was necessary to give a better interpretation of vegetation.

The stereoscope was frequently used to interpret detail and limits of

vegetation.

The legend used by the field inspection party and by the draftsman is made part of this report.

Roads shown by centerline should be shown 0.6 m.m. wide.

CONTROL

- > N.W. Belle Glade, Muni., Water Tank 1942 —
- > TOP, 1942 —
- > TOM, 1942 —
- > S. E. Belle Glade, Muni., Water Tank 1942 —
- > Tank, Okeechobee Migratory Camp, Belle Glade 1942 —
- > S.W., 1942

The above listed control stations were established by Lieut. Comdr. K. G. Crosby as triangulation stations in 1942. The last ~~two~~ control stations listed fall outside the project.

These stations are shown on the sheet as topographic stations (3.5 m.m. black circle); see Director's letter dated July 20, 1942; Reference No. 28-P.F.A. - 1990; Subject, Lake Okeechobee Triangulation. (*Note: This control has since been adjusted, will be shown as a G.P. in file. JRE 11-23-43.*)

The U. S. Engineers established a scheme of triangulation to control the survey and construction of the new levee around this portion of Lake Okeechobee. There were no written descriptions or other information available for recovery of these stations. None of these stations were recovered.

MAIN RADIAL PLOT

A continuous radial plot was run on June 17 and 18, 1942, for the purpose of locating all photograph centers, all hydrographic stations, topographic stations, bench marks, azimuth marks, and radial points. The plot extended over the area covered by sheets T-5905 to T-5911, inclusive. All photographs in the area were used. It extends south and west along the east and south sides of Lake Okeechobee from Lat. $26^{\circ} - 57.5'$, which is just south of Port Mayaca, Fla., to Long. $80^{\circ} - 59'$ which is just west of Clewiston, Florida. Photographs 4534 and 4433 are the western limits, 4544 is the southernmost one, while 4561 is the photograph forming the northern limits.

The plot consisted of 34 templates all being for 9-lens photographs and being controlled by triangulation stations as follows: 1 by 9; 2 by 8; 1 by 7; 5 by 6; 2 by 5; 7 by 4; 6 by 3; 6 by 2; 4 by 1. Triangulation existing at the time of the field inspection could not, in a number of instances, be recovered, due to it having been destroyed by cultivation. Therefore, a supplementary scheme of triangulation was established by this Party which proved adequate for rigid control throughout the plot.

The usual practice of laying the plot was followed. This consisted of plotting the control on the survey sheets and then transferring it to the base grid sheets by matching grid squares. The agreement between the grid lines on the survey sheet and those on the base grid was excellent and no adjustment was necessary. After laying the plot, the intersections of the radial lines

were transferred to the survey sheet by again matching grid squares as previously described.

The plot was laid only once, beginning on sheet T-5911 and working south and west until it was completed on sheet T-5905. The agreement along the flight lines and the intersections of radial lines to adjacent photographs was excellent. In some instances where a good intersection was not formed by the radial lines, the "cuts" were transferred to the survey sheet for further investigation by the draftsman. They are as follows: sheet T-5905 had 4; T-5906 had 4; T-5907 had 0; T-5908 had 8; T-5909 had 12; T-5910 had 6; T-5911 had 10. In addition to these, the radial lines were transferred to the survey sheet where only two "cuts" could be obtained. The draftsman will determine the value of these 2-cut intersections, 47 such instances occur in the entire plot. All other points were established by the intersections of from 3 to 6 radial lines.

This plot is considered "strong"; no large or unusual adjustments were necessary; and all points are picked within 0.25 m.m. of their true position.

Various colored inks were used on the photographs and survey sheets to designate control, topographic stations and radial points.

The following key is furnished for reference:

PHOTOGRAPHS

Triangulation and Traverse Stations.....	2.5 m.m. blue circle
Hydrographic and Topographic Stations.....	2.5 m.m. green circle
Radial Points in the Main Plot.....	2.5 m.m. red circle
Radial Points (Additional).....	3.5 m.m. red circle
Photograph Centers.....	Double white circle

SURVEY SHEETS

Triangulation and Traverse Stations.....	3.5 m.m. high black triangle
Hydrographic and Topographic Stations.....	2.5 m.m. black circle
Radial Points on Main Plot.....	2.5 m.m. blue circle on back
Radial Points (Additional).....	3.5 m.m. blue circle on back
Photograph Centers.....	Double blue circle on back

FIELD INSPECTION

Field inspection was made during March and April 1942 by Harold A. Duffy, Sr. Photogrammetric Aid. Field notes were adequate for detailing.

JUNCTIONS

^{West}
~~South~~ This sheet forms a junction on the North with sheet T-5909 and on the South with sheet T-5907. Junctions are in good agreement.

COMPARISON WITH OTHER SURVEYS

A comparison was made with Photostat of Section of Topographic Survey No. T-4127, surveyed in 1924-25 on scale 1:20,000, and registered at U. S. C. & G. S. in Washington. Due to radical changes created by the new levee, the hurricane of 1928, and the scale of the above mentioned survey, a favorable comparison could not be made.

GEOGRAPHIC NAMES

The geographic names for this area are the subject of a special report entitled "Investigation of Geographic Names, Florida East Coast, St. Lucie River, Cross State Waterway and Lake Okeechobee", submitted to the Washington Office by Harold A. Duffy, Senior Photogrammetric Aid.

LAND MARKS

The following landmarks have been listed on form #567 which is submitted as part of this report:

TANK (Elevated), N.W. Belle Glade, muni., 135 Ft. tall, painted aluminum
TANK (Elevated), S.E. Belle Glade, muni., 135 Ft. tall, painted aluminum
TANK (Elevated), Okeechobee Migratory Camp, 135 Ft. Tall, painted aluminum
Hurricane Gate No. 4, concrete, painted aluminum (TOP 1942)

Respectfully submitted by,

Harold A. Duffy
Harold A. Duffy,
Senior Photogrammetric Aid

Forwarded by,

Kenneth G. Crosby
Kenneth G. Crosby,
Chief of Party.

LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE CHARTED }
TO BE CHARTED } STRIKE OUT ONE

2101 E. Broadway, Tampa, Florida
Feb. 6, 1942, 193

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks, be charted on (*deleted from*) the charts indicated.

The positions given have been checked after listing.

838 - 1943

1. Youth. Council. Harwich O. County

Chief of Party:

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION				METHOD OF LOCATION	DATE OF LOCATION	CHARTS AFFECTED			
		LATITUDE		LONGITUDE				DATUM	HARBOR CHART	INSHORE CHART	OFFSHORE CHART
		°	'	°	'						
Florida-Lake Okechobee-South Bay											
TAKE (Elevated), H.W. Bell's Glade, cont., 135 ft. tall, painted alum.	R6 A1	738.3	80 40	1116.2	NAD 83 1984	Triangulation	1942	X		603	
TAKE (Elevated), S.E. Bell's Glade, cont., 135 ft. tall, painted alum.	R6 A0	1650.9	80 40	209.2	"	"	1942	X		603	
TAKE (Elevated), Greenwood Heights-Camp, 135 ft. tall, pad. alum.	26 39	1076.3	80 40	1281.8	"	"		X		603	
HARRISONS CAYE, No. 4, concrete, painted aluminum (EXP 1942)	26 42	104.9	80 42	1567.6	"	"		X		603	

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

P - Bond
C - Corporate Bond
I - International Bond

1. - Pine
 2. - Cypress
 3. - Red oak
 4. - Elm
 5. - Maritime cross (round leaf)
 6. - Birch (round)
 7. - Elm, cypress & red cross
 8. - (Mossy)
 9. - Maritime
 10. - Cherry tree
 11. - Maritime
 12. - Cherry tree

- 1 - [illegible]
- Gr - [illegible]
- T Gr - [illegible]
- 12 - [illegible] (dated [illegible])
- 147 - [illegible] in [illegible] dated [illegible]
- 148 - [illegible]
- 149 - [illegible]
- 150 - [illegible]

- (a) - Canal (width)
- (c) - Creek
- D - Ditch (width)
- TO - Intermittent Stream
- MS - Probable drainage unsurveyed
- Brg - Bridge or symbol
- lv - Culvert
- Loc - Loc

ECs - Florida Ecologic Survey
 ES - U. S. Engineers
 USBS - U. S. Biological Survey

Rd 1 - 1st class road (paved)
 Rd 2 - 2nd class road
 Tr - trail
 RR - railroad
 OP - Overpass (state the kind)
 UP - Underpass (state the kind)
 X - abandoned trail, road, etc.
 SE co. 3.2. abandoned (grade only)

H.H. - mean high waterline (solid red line - Post 1940)
 L.H. - low waterline (dashed red line)
 L.L. - light line (solid blue line for mean high water line on marsh)

- lk - Dock
- lt - Pier
- lo - small
- lh - pulled
- lc - concrete
- ld - wooden
- le - Jetty
- li - Dolphin
- ll - Pile (give type)
- lj - Sand
- lk - Sand
- ll - Rock or Rocky
- lm - Stone
- ln - Water
- lo - Bluff (height)

H - House, barn or building
Ch - Church (give name)
Ct H - Court House (give name)
Bo H - Post House
P.O. - Post Office (give name)
Rd Sta - Railroad station (give name)
Hos - Hospital (give name)
Sch - School (give name)

- Y - Yancey
- FB - Fire Break (maintained)
- SBK - Fire Break (abandoned)
- Gas - Cemetery
- Park - Park (give name)
- T.T. - Fire tower
- T.T. - Transmission tower (tall steel)
- P.L. - Power line
- Abundant - Approx. limits by long dashed line for use by hydroographer.

T-5908

Remarks.

Decisions

1		269806-08 USGB
2		267806-07
3		"
4	Use this form pending decision of USGB	"
5		"
6		"
7		266806-08
8		"
9		"
10		"
11		"
12	Just off limits of sheet	"
13	" " "	"
14		Railway Guide
15		1941 Off. Road Map
16		"
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-5908

GEOGRAPHIC NAMES											
Survey No. T-5908											
Name on Survey											
	A.	B.	C.	D.	E.	F.	G.	H.	K.		
Lake Okeechobee											1
South Bay											2
Torry Island											3
Hillsborough Canal											4
Hurricane Gate No. 4											5
North New River Canal											6
South Bay (town)											7
South Bay U.S. Sugar Corp. Camp											8
Chosen											9
Osceola Migratory Workers Camp											10
Belle Glade Municipal Airport											11
Belle Glade											12
Okeechobee Migratory Workers Camp											13
Florida East Coast Ry.											14
Florida Highway No. 25											15
Florida Highway No. 26	143										16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names determined in red approved by

L Heck on 12/29/42

M 234

Name determined in red ink
 by L. Heck on 12/29/42

Division of Photogrammetry
Review of Planimetric Map T-5908

Field Inspection and Detailing.

These were generally complete and adequate. A number of drainage ditches omitted by the compiler were added during the review. The distinctions between Marsh Islands visible at high water and low grass in the water is very indefinite in this area, and much of the marsh shoreline has been revised by the reviewer, after a study of the charts, the adjoining manuscript, and the photograph. Changes made during review are shown on the manuscript in red.

Comparison with Previous Surveys.

T-5908 has been compared with and supersedes T-4127(1:20,000)1925. The shoreline in this area has changed ~~readily~~ ^{considerably} due to the construction of a levee along the lake shore.

Comparison with Nautical Charts.

T-5908 was applied to chart 1289 prior to this review. The revision of shoreline made during the review may affect the chart, and should be examined the next time chart 1289 is taken up for correction.

This report prepared by B. G. Jones from reviewer's notes, July 1947.

Reviewed under the direction of R. M. Berry, January 1944.

APPROVED BY:

B.G. Jones 7/47

Technical Assistant to the
Chief, Div. of Photogrammetry

K.T. Adams

Chief, Div. of Photogrammetry

J. E. Steenling

Chief, Nautical Chart Br.
Division of Charts

C. J. Green

Chief, Div. of Coastal
Surveys *1292*

NAUTICAL CHARTS BRANCH

SURVEY NO. T-5908

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.