5888

Discrd. on Discg. Ch. No. 1255

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photo. Compilation

Field No. ..... *Office No.* T-5888

LOCALITY

State Florida

General locality Caloosahatchee Canal

Locality Vicinity of Fort Myers, Fla.

9 lens 12/21/39

194 3

CHIEF OF PARTY

Lieut. Comdr. Kenneth G. Crosby

LIBRARY & ARCHIVES

DATE Aug 26 1946

H-1870-1 (1)

5888

Applied Tech 1289 8/19/43 GTE before review

Form T-1

DATA RECORD

T- 5888

Quadrangle (II): Project No. (II): 242

Field Office: Tampa, Florida Chief of Party: K. G. Crosby

Compilation Office: Tampa, Fla. Chief of Party: K. G. Crosby

Instructions dated (II III): 4/3/40 Copy filed in Descriptive Report No. T- (VI)

Completed survey received in office: 4/43

Reported to Nautical Chart Section: 1/45

Reviewed: 4/45 Applied to chart No. Date:

Redrafting Completed: 5/45

Registered: 7/46 Published: Not to be published

Compilation Scale: 1:10,000 ~~Published Scale:~~

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.S.L.

Reference Station (III): Sue, U.S.E. 1937

Lat.: 26° 47' 38".244(1177.0 m.) Long.: 81° 14' 58".422(1613.7 m.) Adjusted ~~Unadjusted~~

State Plane Coordinates (VI): FLORIDA EAST ZONE

X = 418,588.59 FT. Y = 894,315.83

Military Grid Zone (VI) None

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
4419	12-21-39	10:58 A.M.	1:10,000	No Tide
4420	"	10:59	"	"
4421	"	10:59	"	"

Tide from (III): No tide

Mean Range: Spring Range:

Camera: (Kind or source) U.S.C. & G.S. 9 lens

Field Inspection by: H.A.Duffy, Prin. Photo. Aid date: 1-30-43

Field Edit by: date:

Date of Mean High-Water Line Location (III): Date of Photographs

Projection and Grids ruled by (III) J.O.N. Wash.Offc. date: 2-6-43

" " " checked by: " " " date: 2-6-43

Control plotted by: K.G.Crosby, Chief of Party date: 2-16-43

Control checked by: E.M.Bower, Photo. Aid date: 2-16-43

Radial Plot by: Tampa Office Personnel date: 2-24-43

Detailed by: J.Collins, Asst. Photo. Aid date: March & April 1943

Reviewed in compilation office by: A.L.Kidwell,Jr.Topo.Engr. J.A.Giles, Asst.Photo.Engr. date: April, 1943

Elevations on Field Edit Sheet checked by: date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 28.02

Shoreline (More than 200 meters to opposite shore): 0

Shoreline (Less than 200 meters to opposite shore): 13.11

Number of Recoverable Topographic Stations established: 20

Number of Temporary Hydrographic Stations located by radial plot: 0

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. T-5888

CONTROL

There are 2 triangulation stations within the limits of this sheet, which were held to during the laying of radial plot. No difficulty was experienced holding these during compilation to cut in additional radial points. The field inspection was adequate.

MAIN RADIAL PLOT

A continuous radial plot was run on Feb. 22-24 inclusive, 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-5883 to T-5889 inclusive. All 1:10,000 scale photographs in the area were used. It extended from Ft. Myers, Florida, eastward along the Caloosahatchee River to the Caloosahatchee Canal and on eastward along the canal to a junction with a previous plot at Lake Hicpochee on sheet T-5890. Photographs 11595, 11566 and 4236 formed the western limits while 4424 was the most western one.

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 fair. It was found that the squares on the base grid sheets were about 1 meter larger than those on the survey sheet and could be matched accurately by minor adjustment. After laying the plot, the intersections of the radial lines were transferred to the survey sheet by again matching grid squares as above described.

Control was adequate on sheet T-5883 therefore the plot was begun on that sheet. By having several rigidly controlled templates on T-5883 it was possible to establish an accurate azimuth line which was held to as the plot progressed onto sheet T-5884, which had only one triangulation station, viz, OLGA, 1937. From station OLGA, 1937, the azimuth and radial intersections were held until a "tie-in" could be made at station OWANITA, 1937, on sheet T-5885. This sheet had stations OWANITA, 1937, and ALVA, 1937, on it. The templates were laid with good results through this sheet.

From this point on eastward it became increasingly difficult to hold a true azimuth, form good radial intersections and tie-in to the scattered control, therefore, the laying of templates was started at the eastern end of the plot where control was adequate due to having the radial points from sheet T-5890 of the previous plot to hold to. There was triangulation station MAUD, 1937, from this previous plot which was also held to. By working westward templates were laid with good results through station BESS, 1937, on sheet T-5889, station HAG, 1937 on sheet T-5888 and to station OPAL, 1937 on sheet T-5887. It was difficult to bridge across sheets T-5887 and T-5886 and tie-in to the part of the plot previously laid from the west end. This was due to lack of control. However, after relaying the templates the also Sue, USE 1937 was held on sheet T-5888

junction was affected and it is believed this part of the plot is reasonably strong even though it cannot be considered as good as the other areas.

No unusual difficulty was experienced in identifying the control stations on the photographs.

There was only a single flight line of 1:10,000 scale photographs covering the area of this plot. Templates were made for the 34 photographs and all were used. The photographs appear adequate for detailing of the Cross State Waterway and a mile or more on both the north and south sides.

Not more than 2% of the radial points were formed by intersections of 4 or more radial lines. However, those points formed by 3-cut intersections had good closures and if there was any question as to the point to be picked the radial cuts were transferred to the survey sheet for further investigation by the draftsman.

"held" See 5887 p.1

There were no unusual adjustments. The only stations not held to were OPAL, 1937, AF-13, 1934, and AF-16, 1934. In the case of OPAL, 1937, the 3 radial lines formed an intersection about 7 meters to the east of the plotted position. Two of the three cuts failed to go through the exact point of station AF-13, missing it by 2 or 3 meters. One of 5 cuts failed to intersect the point at station AF-16, 1934.

Various colored inks were used on the photographs and survey sheet to designate triangulation stations, topographic and hydrographic stations and radial points. The following key is furnished for future 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 main plot	2.5 m.m. red circle
Radial points (additional)	3.5 m.m. red circle
Photograph centers	double red circle

SURVEY SHEET

Triangulation stations	3.5 m.m. high black triangle
Hydrographic and topographic stations	2.5 m.m. black circle
Radial points in main plot	2.5 m.m. blue circle on back of sheet
Radial points (additional)	3.5 m.m. blue circle on back of sheet
Photograph centers	double blue circle on back of sheet

DETAILING

The photographs used in detailing this sheet were clear and the scale reasonably good.

SUPPLEMENTAL DATA

No other surveys, maps, or plans were used to supplement photographs except in determination of destination of highways and railroads. In this

case the general Highway map of Glades County, Florida was used.

HYDROGRAPHIC CONTROL

There are 20 marked stations which can be used as hydrographic control on this sheet, namely:

909+90.30 (U.S.E. Trav.) P.I. 1935	R.W. 31, P.I. 1932
869+32.30 P.I. S.R.W. U.S.E. 1937	700 (U.S.E. trav.) 1935
Z-72, 1934	W-72, 1934
X-73, 1934	640 (U.S.E. Trav.) 1935
Hag Azi., 1937	Sue (U.S.E.) 1937 Azi.
Y-72, 1934	620 (U.S.E. Trav.) 1935
824+00 (U.S.E. trav.) 1935	Add, 1942
U.S.E. B.M. Ortona Locks	Y-72, 1934
X-72, 1934	Bess Azi., U.S.E. 1937
890+06.11 (U.S.E. Trav.) P.I. 1935	U.S.E. B.M. Ortona Locks

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

There is no quadrangle map available at this office for comparison.

COMPARISON WITH NAUTICAL CHARTS

There were no charts available at this office for comparison.

Respectfully submitted,

James Collins

James Collins
Asst. Photogrammetric Aid

Forwarded by:

Kenneth G. Crosby

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

T-5888

	Remarks.	Decisions
1		268809-811
2		267812
3		"
4		"
5		267813
6		"
7		"
8		268813
9		"
10		268812
11		
12		Railway Guide
13		Road Maps
14		"
15		
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GEOGRAPHIC NAMES

Survey No. T-6888

	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	
✓	Caloosahatchee Canal										1
✓	Long Hammock Creek	✓									2
✓	Long Hammock	✓									3
✓	Turkey Branch	✓									4
✓	Ortona Locks	✓									5
✓	Goodno	✓									6
✓	Bonnet Run	✓									7
✓	Ortona	✓									8
✓	Coffee Mill Hammock	✓									9
✓	Citrus Center	✓									10
											11
✓	Atlantic Coast Line R.R.										12
✓	Flowida Highwey No. 25										13
✓	" No. 142										14
✓	Glades County										15
✓	Hendry County										16
					L Heck 8/18/43						17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

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DIVISION OF PHOTOGRAMMETRY

REVIEW OF SHORELINE SURVEY T-5888

Radial Plot:

The radial plot for the planimetric maps T-5887 to T-5889 inclusive, along the Caloosahatchie Canal west of Lake Okeechobee to the northeasterly limits of Fort Myers, Florida, was laid on adequate control at the easterly and westerly extremities but lacked a sufficient number of control stations between the fixed ends. This radial plot spanned a distance of approximately forty miles tied to only eleven stations between the fixed ends, the stations spaced at intervals of approximately four and one-half miles.

The USED had run a traverse along the canal and with the existing eleven USC&GS stations in the area, Lt. Comdr. Crosby had hoped to have adequate control upon which to lay a well controlled plot. The USED stations were identified on the field inspection photographs and the plane coordinate positions of the stations were obtained from the USED at Jacksonville, Florida. Attempts were made to convert the positions of these stations to geographic values so that they could be plotted on the map bases and used to control the aerial photographs.

However, after spending considerable time attempting to convert the values to geographic coordinates, Lt. Comdr. Crosby concluded that the values could not be obtained in time to complete the radial plot and compilation on schedule and ordered the plot laid on the USC&GS stations.

The radial plot and resulting compilations do not meet with usual Bureau standards. Accumulating errors in azimuth and distance amounting to 2 to 3 millimeters probably exist in these sheets, but relative local errors are negligible.

Investigation of the USED traverse along the Caloosahatchie Canal leads to the conclusion that even though this control might be found to be adequate for map control, the effort of obtaining the necessary information from the USED, computing and possibly affecting additional ties to USC&GS stations, replotting the aerial photographs and recompiling or revising the compiled sheets would not be practical nor would it materially improve the nautical charts prepared from these sheets.

The basic map data of these sheets have been used in the preparation of nautical chart 1289. The scale of these compiled sheets is 1:10,000 and the nautical chart 1:80,000. Because of the great reduction in scale between the base maps and the compiled nautical chart, the latter is probably sufficiently accurate.

Therefore, the sheets T-5884 to T-5889 inclusive, will be treated as shoreline sheets only. They are not to be published for distribution but will be drafted and printed for Bureau use exclusively with the possible exception of T-5883, which, after the review is completed, may be found to meet current map specifications.

Field Inspection and Detailing:

In some cases more detailed field inspection would have been desirable. This was especially noted in the vicinity of Ortona Locks where considerable detail had to be added by stereoscopic examination in the office. It also would have helped if the abandoned sub-division of Citrus Center had been more closely inspected in the field. In some cases, too, the vegetation classification appeared to be somewhat inconsistent, probably due to different interpretations by the field inspectors. These inconsistencies were corrected in so far as possible in the office.

Bridges:

A discrepancy exists between the bridge data submitted by the field inspectors and that given in the Bridge List 1941. The A. C. L. R. R. bridge as described by the field inspector is a steel siving bridge with a horizontal clearance of 54 feet, and a vertical clearance of 11½ feet at M.H.W. The Bridge List (1941) described apparently the same bridge as a swing bridge having a horizontal clearance of 50 feet, and a vertical clearance of 11 feet at M.L.W. and 7 feet at M.H.W.

Comparison with Other Surveys:

There are no other contemporary or previous surveys of this Bureau in this area.

Comparison with Nautical Charts:

T-5888 was applied to Chart 1289 in 1943 prior to this review. No changes have been made during the review which affect the chart.

Reviewed by Howard W. Thune - April 20, 1945

Under the direction of R. M. Berry and S. V. Griffith

Review report prepared by B. G. Jones July 2, 1946 from reviewer's notes.

APPROVED BY:

B. G. Jones
B. G. Jones, Technical Asst.
Div. of Photogrammetry

Robert W. Knox
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

Raymond R. Gyman
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T-5888

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
11-19-48	1289	[illegible]	~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.