5804

22 Topographic Sta Dasaniphions (Form 674)

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Rev.	Abi	di.	193

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic Hydrographic

Theet No. -- 5004 758

State

FIORIDA

LOCALITY

Cedar Key

Gulf West Coast, Florida

Photographs lakan 12-4-39 \$ 1-15

19841

CHIEF OF PARTY

Lieut. Kenneth G. Crosby

U. S. GOVERNMENT PRINTING OFFICE 102221

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
REGISTER NO. T-5804
State Florida
Gulf General locality <u>Hast</u> Coast
Locality Cedar Key
Photos. Scale 1:10,000 Date of survey December 4 , 1939 Party
Chief of party Lieut, Kenneth G. Crosby Field Inspected Surveyed by Lieut, (j.g.) E.L. Jones; H.A. Duffy; K.W. Shere
Inked by Jesse A. Giles
Heights in feet aboveto ground to tops of trees
Contour, Approximate contour, Form line intervalfeet
Instructions dated April 3 , 1940
Remarks:

SUPPLEATIMEN SURVEYS

UPPEALTMAN SUNVINE					
	lieo	1940 - 41 : Date	8	Hours	1
entrol Surveys	H.YK.W.S.	July	,	8	
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lanetable Surveys		1	3		
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Marina des Caracterista de la Caracterista de Marina de					
IND INSPECTION		, .	-	حج نجاجه حدايد	
reparation of Photographs	E. L. J W. H. S.	July & Dec.	\$	8	
ield Vork	ELJ-HAD-KWS	May June&Sep		52	•
nking lotos	ELJ-HAD	1 September	1	• 4	
oast Pilot Motes	ELJ-HAD-KGC	Sept. & Dec.	1	4	
cographic Name Report	ELJ-HAD	Sept. & Dec.	\$, 21	
andmarks for Charts	elj-had	Sept. & Dec.		2	
esoription Cards	elj-had-kws	June, Nov. &	1	38	
ecovery liotes		* December	1	·	
•	 	Total		129	-
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AIN BUDIAL PLOT					
-				-	
cale Plot	K.G.C.	: September	1	12	
rojection on Base Sheet	Washington Offi	.te	ŧ .	<u>~</u>	
rojection on Survey Sheet	J.P. Dunich	8 - F	t	-	
ontrol Plotted	K.G.C.	• October 10	t	3	
ontrol Checked	J.H.S.B.	October 10	ı	1	
ontrol Trais. to Base Sheet	K.G.C.	# October 17	1	효	
ransfer Checked	J.H.S.B.	October 17	1 .	훈	
ontrol picked on Photographs	K.G.C.	* September	\$	16	
ontrol checked on Photographs	K.G.CJ.H.S.B.		3	- 6	
ydro. & Topo. Stations picked	KGC-WHS-RD-KWS		, •	26	
ndial points picked	K.G.CJ.A.G.	Oct. & Dec.	•	17	
djacent centers picked	K.G.C.	September	•	28	
amplates	X	October	•	16	
adial Plotossossossossossoss	K.G.C.	October 18		3	
	K.G.CJ.A.G.	October	1	7	
ransfer checked	J.A.G.	October		3	
& T Stations scaled & checked	J.A.GJ.H.S.B.			8	
dditional Radial points	J.A.G.	December	•	9	
various office personnel.		Total		156	
etailing	•	•		,	
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ough Draft	J.A.G.	1 Nov. 1940 -	\$	54 6	٠.
mooth Draft.		March 1941	\$ ·		
·	-	Total		346	
Holtation					
MAR PRILATA	• •				
eme Overlay.	J.A.G.	1 February	1	28	-
BECLIDITA Beborg	J.A.GK.G.C.		. \$	25	
Teld Realessessessessessessesses	J.H.S.BK.G.C		1	28	
TATE VOIDENTALABLE ALL ALL ALL ALL ALL ALL ALL ALL ALL A		Total	-	81	-

SHEET NO. T- 5804 /

PHOTOGRAPHS

Number	Date s	Time	s Stage of Tide
3844	December 4, 1939	11:48	0.6
3846	December 4, 1939	11:52	0.6
3847	December 4, 1939	11:53	0.6
3848	December 4, 1939	11:54	0.6
3849	December 4, 1939	11:55	0.6
3855	December 4, 1939 :	12:03	0.6
4691	January 16, 1940	1:17	1 0.5

Tide from predicted tables for: Cedar Keys
Reference Station: Tampa Bay, Florida.

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

SCALE

Scale of Survey Sheet	1:10,000 - 0.978
STATISTICS	
Area (land)	00 Statute miles

REFERENCE STATION

Stations	TANK, 1933	Latitude: 29° 08' 19.640"
Datums	N.A. 1927	Longitude: 83° 02° 19.410° (Adjusted) (524.7m.)

Florida Plane Coordinates x = (Section 2) y=

Details on T-5804 are of the date of the photographs
Dec. 4,1939 and Jan. 15,1940 except for triangulation, topographic
stations and bench marks. Topographic stations were
identified and marked by field inspection May to Sept 1940.

To Accompany SHEET NO. T---5804

CENERA L

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 Cedar Key. The major portion of it is composed of small islands and oyster bars, the latter being covered at mean high water. The shoreline of the mainland is marsh, the inshore limits of which are met by firm, sandy soil covered with grass, pine, oak and the like. Portions of the larger islands are of firm ground having cedar, pine, palms, and oak growing there while the remainder is of marsh and mangrove. The major portion of the shoreline is marsh with numerous small areas of grass-in-water. There are no large areas of grass-in-water, therefore the spacing (north and south) of the broken marsh lines of the symbol itself for these small areas detailed are slightly less than the standard spacing in order to better depict the exact shape.

CONTROL

There are ten control stations on this survey sheet. Six are triangulation stations and four are traverse stations as follows:

Name of Station	Year	Established by
TANK	1933	H.C. Warwick
HARBOR KEY 3	1910	G.H. R.
LIME POINT 2	1874	A.T. M.
Snake key 2	1874	A.T. M.
CEDAR KEYS FLAT TOP WATER TANK	1955	H.C. Warwick
A.K. 27 Fla Good Survey 17	1934	Florida Mapping Project
A.K. 28	1934	Florida Mapping Project
A.K. 29	1934	Florida Mapping Project
A.K. 30	1934	Florida Mapping Project
DAUGHTRY ISLAND S.W. BASE	1877	F.W. P.

Triangulation stations HARBOR KEY 5, SNAKE KEY 2 and KEY NORTH 1910 (the latter on Sheet T-5803) were occupied to determine the datum difference between the old datum and that of N.A. 1927. The top of the municipal water tank at Cedar Key was located and connected to triangulation station TANK 1953. The resulting datum difference was computed to be Latitude -2.49 m.; Longitude 44.26 m. The correction was applied to all triangulation stations not on the 1927 datum in order that they might be used for control in making the radial plot. The computations for this datum difference will be submitted as a separate report.

Traverse stations A.K. 27, 28, 29 and 30 were plotted from computations made by the personnel in the Tampa field office of the U.S. C.&G.S. from data furnished

by the Gainesville office of the Florida Mapping Project. This data consisted of angles and taped distances for the traverse line extending from triangulation station TANK, 1955 to triangulation station LUKENS, 1955. The data was accompanied by a statement that the closures on this line were just under second order accuracy. The position computations for the traverse stations will be submitted in a separate report.

No errors were found in the location of the control stations by the photographic plot nor in the plotting of the stations on the field prints with the exception of traverse station A.K. 28, 1934. A discrepancy of approximately 10 meters exists between plotted position on survey sheet and position on photographs. A thorough investigation of the computations, plotting and picking of the point failed to reveal the reason for this incongruence. It is recommended that this station not be used when checking and reviewing survey sheet.

Triangulation station DAUGHTRY ISLAND S.W. BASE, 1877 was not used for control as this station was not recovered until after the compilation was in the process of being detailed.

The azimuth mark for triangulation station TANK, 1933 was located by the main radial plot. Its location is in agreement with the geodetic azimuth as determined by triangulation.

MAIN RADIAL PLOT

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A radial plot consisting of 12 templates was run for survey sheet No. T-5803 and T-5804 on October 18, 1940. Templates for all the photographs flown on an approximate scale of 1:10,000 were used although segeral of the pictures were very badly tilted.

To make full use of the triangulation in the area, a datum difference was applied to all stations on the United States Standard Datum. This correction was determined from a connection made at triangulation station TANK, 1933. By using these old stations which had been recovered by the field inspection party the plot was adequately controlled and it was possible to fix a majority of the templates. All templates were prepared in accordance with "Notes on Radial Plotting of Nine-lens Air Photographs" dated April 9, 1940 with the exception that many more radial points were located than recommended and that mask lines were not placed on the survey sheets.

The location of the numerous bench marks in the town of Cedar Key were determined by using the templates of three rigidly controlled photographs which gave strong intersections. The templates used for these locations consisted of 3846, 3847 and 4691. Since a majority of the pictures were tilted, it was felt that the radial lines on these three photographs would give an adequate location without a multiplicity of lines which would cause confusion and a chance of error. The location of the bench marks was fixed by the common intersection of three radial lines at a point.

The control in the area covered by this plot was plotted on the survey sheet and each position checked. These stations were then transferred to the grid sheets by matching grid lines and adjusting individual grid aquares. Very little, if any, adjusting was necessary, however, as the base grids were made on similar material as the survey sheets and approximately at the same time.

The base grids were securely taped to the plotting table and the templates laid and securely taped to the base grids. Excellent results were obtained and it was not necessary to relay the plot although several templates were subsequently relaid to obtain closer agreement at several radial points. Many points were selected which will be subsequently located by the 1:20,000 main plot for purposes of making a direct comparison between the two plots.

Upon completion of laying all the templates, the points determined by the radial plot were transferred to the survey sheet. The survey sheet was adjusted over the grid sheets by adjusting each individual grid square. There was only a very slight amount of adjusting necessary.

It is believed that most of the radial plotted points are within .25 millimeter of their true location. Radial points which were not strongly determined or had a small triangle of error were shown by green circles. In instances where the radial point could not be used as a control point due to lack of a common intersection or small triangle of error, the actual radial lines were transferred to the survey sheet for further investigation by the compiler.

No large or unusual adjustments were necessary in any part of the plot. It was, however, found that traverse station A.K. 28 consistently missed the radial line to its plotted position.

Various colored inks were used on the photographs and the survey sheet to designate triangulation stations, topographic and hydrographic stations and radial points. The following key is furnished for future reference.

Photographs

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)....3.5 mm green circle on back of sheet



INTERPRETATION OF PHOTOGRAPHS

In general, the photographs were dark. Photograph No. 4691 was nearest to scale, but found to be almost black. Considerable tilt was noted in many of the prints. No unusual conditions were found and the prints, although dark, were of sufficient clarity to permit accurate delineation on survey sheet.

FIELD INSPECTION

Field inspection was done by Lieut. (j.g.) E. L. Jones, assisted by H. A. Duffy and K. W. Sherer, Photogrammetric Aids. This was accomplished during the months of May, June, August and September, 1940.

Bench marks were field inspected and recovered. Recovery notes and conditions of Bench Mark (Form #685) are submitted with this report.

A special report entitled "Field Inspection Report - Horseshoe Point to Anclote Keys" December 27, 1940" has been submitted by Lieut. (j.g.) E. L. Jones which covers the field inspection for this area.

DETAILING

The celluloid was prepared for inking by being thoroughly cleaned with soap and water and then rubbed with magnesium carbonate.

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

Due to excessive tilt in the extreme northeastern and northwestern portions of this sheet, use of the projector was necessary in order to draft the area accurately. No other unusual conditions were encountered.

Areas too small or too complex to be labeled have been smooth drafted.

The landing field at the municipal airport at Cedar Key is now under construction. The runway is being lengthened, widened and regraded. The limits of the field on the map drawing are shown correctly as of March 16, 1941 field inspection.

NON-FLOATING AIDS

The was not possible to locate all of the non-floating aids within the area covered by the limits of this sheet. Only the larger size aids could be identified on the photographs and where such identifications were positive the aids have been located by the main radial plot. The list of non-floating aids is therefore not complete for all aids in the locality.

It was not possible to locate the light situated at approximately latitude 29° 07.3', longitude 82° 58.75' by air photographic methods. This light could not be identified on the 1:20,000 photographs and it appeared on only one photograph on the 1:10,000 photographs.

2

JUNCTIONS

This sheet joins T-5793 (1:20,000) on the east and north, east of longitude 83° 00'; T-5792 (1:20,000) on the north, west of longitude 83° 00', and T-5803 on the west. All junctions are in agreement and no adjustments were found necessary. Comparisons were made by pantographing the detail of this sheet to a scale of 1:20,000 along the junction line.

COMPARISON WITH OTHER SURVEYS

Due to scale differences, no detailed comparison could be made with maps and charts available in this office.

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 to the Washington Office by Lieut. (j.g.) E. L. Jones.

LANDMARKS

There are three prominent land marks appearing on this survey sheet. Names and geographic positions are submitted with this report on Form No. 567.

Respectfully submitted,

Jesse A. Giles

∕Draftsman

Forwarded,

Lieut. Kenneth G. Crosby

Chief of Party

THE LE OF REST OF LESS EDUCATION HORS SHOT POINT TO TARPET ARRIVED, PHONISA APRIL - PROFESSIR, 1940 - LIMIT, A.L. JONES MED ILA. INTE

THE	نٽ

Pi - Pine

Cy . - Cypross

Palo - Palmotto

Palm - Palm

D 7 - Deciduous trees (broad leaf)

Cit - Citrus (orchard)

Mix - Pine, cypress & Dec. trees

[Density]

Seto - Sextered

tows - Thinly wooded

how. - Heartly wooded

Ser - Serub trees; brush

AND MALE TOO

- Cultivution

Gar-- 972.00

76r - Tall Tropical Grace

- Earth (dashed blue line on

inchere limital

H w - March grass in water (dashed blue

line on offshore limits;

- Symbol 1 m

- MANAGEO WO

iide - Roden

STRELLE

- Campi (width) Ca

CT. - Creek

- Dienh (width)

I & - Extermittent Stream

MF - Probable duines mentrepel

lug - bridge or symbol

- Culvert

Let - Letter

Y.G.S. - Florida Goodstie Survey

U.S.W. - U.S. Business

USM - U.S. Molegical Server

BOADS A MAILROADS

- let class roud (paved)

R4 2 - and class read

- Smil

2 2 - Rail Road

0 7 - Overpage (state the kind)

- Underpass (state the kind)

I - .bandoned trail, road, etc.

ill ab. - R.R. abandoned (grade only)

3500000

- Fond

- Cypress Fond

- Intermittent lund IP

SHOURS FLEE

Ro ole - mean high water line (colid

red line - fast land;

Lowale - low water line (deshed red line)

bol. - Light line (solid blue line for

mean high water line on march)

14 - Dock P - Pier

Se W - Seewall

- Bulkbond

Come - Comercie

. - Fooden

Jet - Jutty

ادف

- Dolphin pile - pile (give type)

- Sand 8

lad.

- Rock or Recky

- Stour Star

- later 2/

M - Bluff (helcht)

MILLU LINGS

- Mouse, barn or building

C2 - Church (give mane)

Ct H - Court House (give name)

Do E - Beat House

PoO. - Post Office (give mane)

Roll- Sta - Railroad station (give name)

bee - Hospital (give name)

Seb - School (give nere)

HISCHILL SOUT

¥ - Sence

FB - Fire Sweak (maintained)

- Fire Break (abendoned) YEZ

- Cometery Com

- Park (give name) Park

P.T. - Fire Tower

T.T. - Transmission towers (tall steel).

Pale. - Power Line

Shoal - Approx. limits by long dashed

line for use by hydrographer

LEGATE USED ON PILLY INCOMPONENT HORSELFOR POLICY TO TARPOT ACTION, PIRALLY ARREST - MEDICARDA - MEDICAL LANGUAGE FOR ALL MARKET

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Pl - Pine

Cy - Cypress

Palo - Palmetto

Palm - Palm

P 7 - Decidnons trees (broad lenf)

Cit - Citrus (erchard)

Mix - Pine, cypress & Dec. trees

(Density)

Bot. - Scattered

tows - Thinly wooded

here - Heartly wooded

Ser - Serub trees; brush

ARCTAL TOR

C - Cultivution

Gr - Grass

TGr - Tall Tropical Grace

H - Harsh (dashed blue line on

inchore limits)

HF - Barah grace in water (dashed blue line as offshore limits)

STEEN - STEENERS

ile - lienerove

iide - Heden

STILLE

Co - Commit (width)

Cr - Creak

B - Ditch (width)

I & - Intermittent Street

HW - Probable drainage unsurveyed

Nog - Bridge or agmicl

GV - Calvers

Lot - Loves

F.G.B. - Florida Geoletic Burvey

U.S.R. - U.S. Ingineers

USBS - U.S. Mological Survey

STADELLAN A BLADE

Md 1 - lot class road (paved)

Ed R - 2nd class road

Tr - Brail

RR - Reil Read

O P - Overpage (state the kind)

U F - Underpose (state the kind)

X - bendoned trail, read, etc.

HR ab. - Hallo abandoned (grade only)

KCDS

P - Fond

Cy P - Cypress Fond

I P - Intermittent | and

SHOUR ITE

R. . L. - mean high water line (colid

red line - fast land)

Levels - low water line (desired red line)

in in the light line (solid blue line for mean high outer line on march)

- Dock

Pr - Pier

II.

Se 7 - Seamall

Mind - Bulkhood

Come - Comprehe

ve - vooden

Jet - Jetty

dol - Dolphin

pile - pile (give type)

B - Sand

Mad - Mad

Mr - Rock or Rocky

Sty - Stony

W - Water

Blf - Bluff (height)

BUILD INCO

B - Bouse, bern or building

t - Charch (give mese)

Ot H - Court House (give name)

Bo # - Beat House

P.O. - Post Office (give name)

Holo Sta - Railroad station (give name)

bee - Hospital (give name)

Sch - School (give name)

HISCHLA SOL

P - fence

FB - Fire Sweek (maintained)

YER - Pire Break (abendened)

Com - Come betty

Park - Park (give name)

For - Fire Tower

ToTo - Transmission towers (tall steel)

Pala - Power Line

Sheal - approx. limits by long dashed

line for use by hydrographer

REVIEW OF AIR PROTO CONTLATION TO. T- 5004

Chief of Party: Kennath G. Crosby Compiled by: Jesse A. Giles

Project: H.T. - 342

Instructions dated:

15 40

April 5

lo The charts of this even have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Para lingbooks, and i; 26; and 64)

Tes

2. Change in position, or non-existence of wherfs, lights, and other topographic detail of particular importance to newigation which affect the chart, is discussed in the descriptive report, (par. 26; and 66 g. n)

Tes

So 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)

Yes

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)

Home 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 reports

Tes

- 6. The control and adjustment of the photo plot are discussed in the descriptive report. However in the descriptive report. However in the state of the area affected are stated. (Paroles; 46; and 55 c_sh_ci)
- 7. High arter lime or marshy and congress const is clear and adequote for chart compilation. [Par. 16s, 45, and 46]

Yes. The light line around march and mangrove areas defines the outer limits of vegetation visible at mean high water. The mean high water line as shown only on fast land and is represented by a heavy solid line. 8. The representation of low water lines, recfs, coral reefs and rocks, and legends partaining to them is autisfactory. (Pare 36, 37, 38, 39, 40, 41)

Yes. Outline of shoal areas are approximate and are shown for use by the hydrographer.

- 90 Recoverable objects have been located and described on Form 524 in accordance with circular 50, 1955, circular letter of Earch 3, 1955, and circular 51, 19540 (Paro 29, 30, and 57)
- 10. A list of landwarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landwarks for Charts. co.plick with. (Par. 164, e; and 60)

Yes

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 importance to naviegation is given in the descriptive report. [Par., 160]

Tee. Bridges over small streams or inless which are unimportant to mavigation are shown without their respective

- clearances.
 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 adviseable. Complete discussion of place names differing from the charts and from the UoSo Go So Quadrangles is given in the descriptive report, together with reasons for recommendations made: (Par. 64, and 66k) overlay, See paragraph entitled "Geographic Names".
- 15. The geographic datum of the compilation is W.A. 1929 and the reference station is correctly moded.

To:

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

Tes

- 15. The drafting is satisfactory and particular attention has been given the following:
 - lo Standard symbols sutherised by the Board of Surveys and Haps have been used throughout except as noted in the reporto Yes
 - 2. The degrees and minutes of latitude and longitude are correctly marked. Yes

- 3. All station points are exactly arrived by fine black dots. Yes
- 4. Closely spaced lines are drawn sharp and clear for printing.
- 5. 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. Het required.
- 7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. Yes

(Per. 24, 35, 86, 37, 38, 39, 40, 41, 42, 45, 46, 46, 48)

16. We additional surveying is recommended at this time.
We additional topographic survey required.

17. Remarks:

180 Examined and approved:

Samuel & Green

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

Chief, Susting of Field Records

Chief, Division of Charts

K.T. Adams

Chief, Division of Rydrography

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5804

The area covered by T-5804 is also covered by T-5792 (1:20,000) and T-5793 (1:20,000) of approximately the same date.

T-5792 is to be published. Since there appears to be little need for duplicating the publications of this area on the larger scale, T-5804 will not be redrafted and will not be published.

The file copy of T-5804 is a reproduction of the original rough drawing made for the use of the subsequent hydrography or other needs of the Bureau. Persons outside of the Bureau requesting map information in this area should be referred to T-5792 and T-5793.

The regular office review is incorporated in the review of T-5792. T-5792 and the descriptive report T-5792 contain all information for chart correction to be obtained from the air photographic surveys in this area.

Descriptions of recoverable topographic stations are filed under T-5792.

B. G. Jones, June 9, 1941