

5803

See note on Title Sheet

~~3 Topographic & Descriptions (Form 529)~~  
~~Filed under T-5803, Florida~~

Form 504 Rev. April 1935	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	Sheet No. <del>T-5792-B</del> T-5803
State FLORIDA	
LOCALITY	
North Key and vicinity	
West Coast Florida	
Photographs taken Dec 4, 1939	
1941	
CHIEF OF PARTY	
Lieut. Kenneth G. Crosby	

DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY

REG. NO.

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

Sheet No. T-5803\*

REGISTER NO. T5803

State Florida

General locality West Coast

Locality North Key and vicinity

Photos.

Scale 1:10,000 Date of survey December 4, 1939

Party:

Vessel Air Photographic Party No. 1

Chief of party Lieut. Kenneth C. Crosby

Field Inspected

Surveyed by Lieut. (j.g.) E.L. Jones; H.A. Duffy, Photogrammetric Aid

Inked by Jesse A. Giles

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated April 3, 1940

Remarks:

\* REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5803

The area covered by T-5803 (10,000) was also covered by T-5792 (1:20,000) of approximately the same date.

T-5792 is to be published. Since there appears to be little need for duplicating the same area on the larger scale, T-5803 will not be redrafted and will not be published.

The file copy of T-5803 is a reproduction of the original rough drawing for the use of the subsequent hydrography or other needs of the Bureau.

(OVER)

Persons outside of the Bureau requesting map information in this area should be referred to T-5792.

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

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

6-9-41.

B. G. Jones

# SUPPLEMENTARY SERVICES

Control Surveys.....	RHY-DRS	July	8
Planetable Surveys.....			
Total			8

## FIELD ILLUSTRATION

Preparation of Photographs.....	ELJ-WHB	July & Dec.	6
Field Work.....	HAD-ELJ-KWS	June & Sept.	15
Inking Notes.....	ELJ-HAD	September	5
Coast Pilot Notes.....	ELJ-HOC-HAD	December	2
Geographic Name Report.....	ELJ-HAD	Sept. & Dec.	16
Landmarks for Charts.....	ELJ-HAD	Sept. & Dec.	2
Description Cards.....	ELJ-HAD-KWS-WHB	Sept. & Dec.	6
Recovery Notes.....		(Feb. 1941)	
Total			48

## NAVAL RADIAL PLOT

Scale Plot.....	K.G.C.	September	12
Projection on Base Sheet.....	Washington Office		-
Projection on Survey Sheet.....	J.P. Hunkish		-
Control Plotted.....	K.G.C.	October	1
Control Checked.....	J.H.S.B.	October	1
Control Trans. to Base Sheet.....	K.G.C.	October	1
Transfer Checked.....	J.H.S.B.	October	1
Control picked on Photographs.....	K.G.C.	September	1
Control checked on Photographs.....	J.H.S.B.	September	1
Hydre. & Tere. Stations picked.....	K.G.C.-R.D.	Oct., Nov.	11
Radial points picked.....	K.G.C.	October	3
Adjacent centers picked.....	K.G.C.	September	4
Templates.....	I	October	3
Radial Plot.....	K.G.C.	October	1
Radial Points transferred.....	K.G.C.-J.A.C.	October	2
Transfer checked.....	J.A.C.-E.L.J.	October	3
H & T Stations scaled & checked.....	J.A.C.-J.H.S.B.	March '41	2
Additional Radial points.....	J.A.C.	February	3
Total			54

I various office personnel

## DETAILING

Rough Draft.....	J.A.C.	Feb.-March '41	71
Smooth Draft.....			
Total			71

## COMPILATION

Name Overlay.....	J.A.C.	February	7
Descriptive Report.....	J.A.C.-K.G.C.	March	15
Field Review.....	J.H.S.B.-K.G.C.	March	12
Total			32

Total Time spent on Sheets..... 215 hours.



~~F-5772-2~~  
SHEET NO. 2-5803 ✓

### PHOTOGRAPHS

Number	Date	Time	Stage of Tide
3849	December 4, 1939	11:55	+ .6
3851	December 4, 1939	11:58	+ .6
3852 ✓	December 4, 1939	11:59	+ .6

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

Camera: U.S. Coast and Geodetic Survey Nine-Lens (focal length 8 1/2 inches.)  
Negatives on file at Washington Office.

### SCALE

Mean scale of Photographs..... 1:10,000 ÷ 0.978  
Scale of Survey Sheet..... 1:10,000

### STATISTICS

Area (land).....	5.4	Square statute miles
Shoreline (more than 200 m. from opposite shore).....	21.5	Statute miles
Shoreline (Creeks).....	2.0	Statute miles
Roads, streets, trails, and railroads.....		Statute miles

### REFERENCE STATION

Station:	KEY NORTH 1910	Latitude:	29 07' 12.851"
			(395.6 m.)
Datum:	N.A. 1927	Longitude:	83 05' 19.142"
			(517.6 m.)

Based on datum difference  
Lat. -0.081" Long. +0.158" as  
determined by triangulation  
observations at triangulation  
station TANK, 1933, on Oct. 11,  
1940.

Florida Plane  $X =$   
coordinates  $Y =$   
(Section 2)

The details on T-5803 are of the date of the photographs Dec 4, 1939, except the triangulation and topographic stations. Topographic stations were identified and marked by field inspection, May to Sept. 1940.

DESCRIPTIVE REPORT  
To Accompany  
SHEET NO. T---5803

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 sheet is Florida, West Coast, in the vicinity of North Key which is just west of Cedar Key. The area is composed of islands and many shoals both large and small. The small shoals being oyster bars bare at mean low water. The larger islands have palms, deciduous trees and mangrove. The smaller islands are covered with marsh and mangrove.

CONTROL

There are two control stations on the sheet. They are triangulation stations KEY NORTH, 1910 and CEDAR KEYS L.H., 1874. The former station along with triangulation stations HARBOR KEY 3, 1910, and SNAKE KEY 2, 1874, (latter two stations on T-5804) 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, 1933. The resulting datum difference was computed to be Latitude -2.49 m., Longitude +4.26 m. This correction was applied to all triangulation stations not on the 1927 datum in order that they might be used for control in making radial plot. The computations for datum difference 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.

MAIN RADIAL PLOT

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 several 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 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 squares.



6

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.

Topographic station PAT, 1940 (d.m.) and Hydrographic signal END OF DOCK (unmarked) were not located by the main radial plot but were plotted on T-5792 (1:20,000) by using the individual photograph in the immediate vicinity. These stations were then transferred to this sheet and checked by photographs within the limits of this sheet. The agreement of positions was within a meter.

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

Triangulation stations.....2.5 mm blue circle  
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 red 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).....3.5 mm green circle on back of sheet

## INTERPRETATION OF PHOTOGRAPHS

No unusual conditions were found.

## FIELD INSPECTION

The field inspection was done by Lieut. (j.g.) E. L. Jones, assisted by H. A. Duffy, Photogrammetric Aid. This was accomplished during the months of May, June, August and September, 1940. A special report entitled "Field Inspection Report - Horseshoe Point to Ancote Keys, December 27, 1940" has been submitted by Lieut. (j.g.) E. L. Jones for the field work in this vicinity.

## DETAILING

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

Considerable tilt was found in the photographs covering the extreme north-eastern portion of the survey sheet and the projector was used in the detailing of this area.

Areas having too varied vegetation or too small to be labeled to advantage have been smooth drafted.

A bird rack just south of the entrance to NORTHWEST CHANNEL and one just south of entrance to DEADMANS CHANNEL have been located by the radial plot method. Since it was possible to obtain but two radial lines to these structures their position is unchecked. They are shown however as a possible aid to the hydrographer.

## NON-FLOATING AIDS

NORTH BANK LIGHT NO. 1 was located by the main radial plot with the intersection of only two radial lines. This position being unchecked, no list of non-floating aids has been submitted.

## JUNCTIONS

This sheet joins T-5804 on the east and T-5792 on the north. Both junctions were satisfactorily made and no adjustments were necessary to obtain an agreement.

## COMPARISON WITH OTHER SURVEYS

Due to scale differences between this sheet and maps and charts available, accurate comparison could not be made. Major differences in shoreline at the north end of NORTH KEY were noted between the old survey made in 1852 (T-422) and the shoreline shown on this survey sheet.

## GEOGRAPHIC NAMES

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



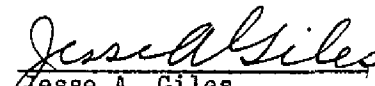
SEAHORSE REEF, EAST BANK and WEST BANK are geographic names of areas too far south to be shown on this survey sheet.

LANDMARKS

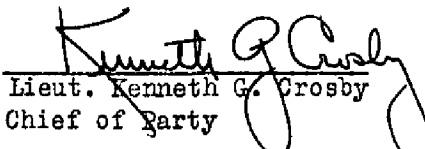
No prominent landmarks appear on this sheet other than those already charted.

The charted landmark on SEAHORSE KEY which was formerly CEDAR KEYS LIGHTHOUSE is shown on the charts as "OLD TOWER" and "CEDAR KEYS OLD TOWER". The light structure is about 12 feet in height and rises out of the center of a one story building. The building and structure are in good repair. Only the top of the light structure shows above the trees.

Respectfully submitted,

  
Jesse A. Giles  
Draftsman

Forwarded,

  
Lieut. Kenneth G. Crosby  
Chief of Party

INDEX USED ON FIELD DESCRIPTION  
 HOWE SPOT POINT TO TARPON BEACHES, FLORIDA  
 APRIL - MARCH, 1940 - LIEUT. R. L. JONES AND REAR ADMIRAL

TREES

PI - Pine  
 Cy - Cypress  
 Palc - Palmetto  
 Palm - Palm  
 D T - Deciduous trees (broad leaf)  
 Cit - Citrus (orchard)  
 Mix - Pine, cypress & Dec. trees  
       (Density)  
 Sc. - Scattered  
 t.w. - Thinly wooded  
 h.w. - Heavily wooded  
 Scr - Scrub trees; brush

VEGETATION

C - Cultivation  
 Gr - Grass  
 TOR - Tall Tropical Grass  
 M - Marsh (dashed blue line on  
       inshore limits)  
 M W - Marsh grass in water (dashed blue  
       line on offshore limits)  
 Sw - Swamp  
 Mg - Mangrove  
 Edg - Edge

STREAMS

Ca - Canal (width)  
 Cr - Creek  
 D - Ditch (width)  
 I S - Intermittent Stream  
 MS - Possible drainage unsurveyed  
 Brg - Bridge or aqueduct  
 Cv - Culvert  
 Lw - Levee

F.G.S. - Florida Geologic Survey  
 U.S.E. - U.S. Engineers  
 USNS - U.S. Biological Survey

ROADS & RAILROADS

Rd 1 - 1st class road (paved)  
 Rd 2 - 2nd class road  
 Tr - Trail  
 R R - Rail Road  
 O P - Overpass (state the kind)  
 U P - Underpass (state the kind)  
 X - Abandoned trail, road, etc.  
 RR ab. - R.R. abandoned (grade only)

WATER

P - Pond  
 Cy P - Cypress Pond  
 I P - Intermittent land

SHORE LINE

H. L. - mean high water line (solid  
       red line - fast land)  
 L.W.L. - low water line (dashed red line)  
 L.L. - Light line (solid blue line for  
       mean high water line on marsh)  
 Ik - Dock  
 Plr - Pier  
 Se W - Seawall  
 Bld - Bulkhead  
 Conc - Concrete  
 Co - Wooden  
 Jet - Jetty  
 Dol - Dolphin  
 pile - pile (give type)  
 S - Sand  
 Mld - Mud  
 Rk - Rock or Rocky  
 Stg - Strong  
 V - Water  
 Blf - Bluff (height)

BUILDINGS

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

MISCELLANEOUS

F - Fence  
 FB - Fire break (maintained)  
 FBA - Fire break (abandoned)  
 Cem - Cemetery  
 Park - Park (give name)  
 F.F. - Fire Tower  
 T.T. - Transmission towers (tall steel)  
 P.L. - Power line  
 Shal - Approx. limits by long dashed  
       line for use by hydrographer

LEGEND USED ON FIELD INSTRUCTIONS  
 HOWS SHOT POINT TO TARPON SPRINGS, FLORIDA  
 APRIL - NOVEMBER, 1940 - LIEUT. R. L. JONES AND M. A. TUNNEY

TREES

P1 - Pine  
 Cy - Cypress  
 Palo - Palmetto  
 Palm - Palm  
 D T - Deciduous trees (broad leaf)  
 Cit - Citrus (orchard)  
 Mix - Pine, cypress & Dec. trees  
       (Density)  
 Sct. - Scattered  
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C - Cultivation  
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       inshore limits)  
 M S - Marsh grass in water (dashed blue  
       line on offshore limits)  
 Sw - Swamp  
 Mg - Mangrove  
 Mdg - Midge

STREAMS

Ca - Canal (width)  
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 I S - Intermittent Stream  
 EW - Erosion drainage unurveyed  
 Brg - Bridge or symbol  
 Cv - Culvert  
 Lav - Lagoon

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       red line - fast land)  
 L.W.L. - low water line (dashed red line)  
 L.L. - Light line (solid blue line for  
       mean high water line on marsh)  
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 Sch - School (give name)

MISCELLANEOUS

P - Fence  
 PB - Fire Break (maintained)  
 PAB - Fire Break (abandoned)  
 Cem - Cemetery  
 Park - Park (give name)  
 F.F. - Fire Tower  
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 Sheal - approx. limits by long dashed  
       line for use by hydrographer

REVIEW OF AIR PHOTO COMPILED NO. T- 5803

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

Project: H.T. - 942

Instructions dated: April 3

1940

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. 18a, b, c, d, e, g and i; 25; and 54)

Yes

2. Change in position, or non-existence of wharfe, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (par. 28; and 54 g, 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. 54; and 55 d, e)

Yes

4. Kine 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. Differences 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 55 c, h, i)

Yes

7. High water line or marshy and mangrove coast is clear and adequate for chart compilation. (Par. 18a, 43, and 44)

Yes. 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.

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. The outline of shoal areas has been shown only as an aid to the hydrographer.
9. Recoverable objects have been located and described on Form 524 in accordance with circular 80, 1933, circular letter of March 3, 1933, and circular 51, 1934. (Par. 29, 30, and 37)  
Yes
10. A list of landmarks was furnished on Form 557 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 144, e; and 60)  
No landmarks other than already charted.
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. 160)  
No bridges within the limits of this sheet.
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. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 65k)  
No overlay. See paragraph entitled "Geographic Names".
13. The geographic datum of the compilation is N.A. 1927 and the reference station is correctly noted.  
Yes
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 64j)  
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
  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 reink.
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:

18. Examined and approved:

*Kenneth G. Crosby*  
Kenneth G. Crosby  
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examined and approved:

*[Signature]*  
Chief, Section of Field Records  
*[Signature]*  
Chief, Division of Charts

*[Signature]* K.T. Adams  
Chief, Section of Field Work  
*[Signature]*  
Chief, Division of Hydrography