5831

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~ } Sheet No. T-5831

Diag. 1257

DATE OF PHOTOS - DEC. 7, 1939

State Florida

LOCALITY

West Coast - Pinellas County

Pass A Grille

1942

CHIEF OF PARTY

Lieut. Kenneth G. Crosby.

U.S. GOVERNMENT PRINTING OFFICE: 1934

5831

Lt 39 (1942)
529 (1943)
688 "
756 "

applied to chart 586 before review Oct 7, 1942. L.a.m.
" " " 1257 " " October 12, 1942 L.a.m.

Form 537a
Ed. Nov. 1929

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.

~~Field~~ No. T-5831

REGISTER NO.

State Florida

General Locality West Coast - Pinellas County

Locality Pass A Grille

Scale 1:10,000 Date of ~~survey~~ photo. December 12, 1939

~~Vessel~~ Party: Air Photographic Party No. 1

Chief of party Lieut. Kenneth G. Crosby,

Field Inspected: Lieut.(j.g.) J. D. Thurmond,
~~Surveyed by~~ H. A. Duffy, Photogrammetric Aid.

Inked by M. M. Slavney, Senior Engineering Draftsman.

Heights in feet above ..... to ground to tops of trees

Contour, Approximate contour, Form line interval ..... feet

Instructions dated April 3, 1940

Remarks:

GPO 266853

SHEET NO. T- 5831

SUPPLEMENTARY SURVEYS

	Name	Date	Hours
Control Surveys	KWS MMS	May and July	7 1/2
Planetable Surveys			
		Total	7 1/2

FIELD INSPECTION

Preparation of Photographs	KWS	Feb. and March	16
Field Work	JDT HAD MMS	May and Dec.	70
Inking Notes			
Coast Pilot Notes			
Geographic Name Report	LJD HAD JED	June and July	5 1/4
Landmarks for Charts			
Description Cards	JDT HAD	May and June	49
Recovery Notes			
		Total	140 1/4

MAIN RADIAL PLOT

Scale Plot	KGC LJD	June	3
Projection on Base Sheet	Washington Office		
Projection on Survey Sheet	Washington Office		
Control Plotted	KGC MMS	July	3 1/2
Control Checked	JED	July	3 1/2
Control Trans. to Base Sheet	KGC RHY	July	1
Transfer Checked	JED	July	1/2
Control Picked on Photographs	JED	June	5
Control Checked on Photographs	LJD MMS	June and Dec.	9
Hydro. & Topo. Stations Picked	JED LJD MMS	June and Dec.	27
Radial Points Picked	KWS LJD MMS	June	6
Adjacent Centers Picked	LJD	May	5 1/2
Templates	RD	July	9
Radial Plot	KGC RD RHY	July	6
Radial Points Transferred	RHY	July	2
Transfer Checked	JAG JED	July and Aug.	4 1/2
H & T Stations Scaled & Checked	MMS KGC	January	23 1/2
Additional Radial Points			
		Total	108 1/2

DETAILING

Rough Draft	MMS	Oct.Nov.Dec. Jan	338
Smooth Draft			
		Total	338

COMPILATION

Name Overlay	MMS	Jan.	21
Descriptive Report	MMS	Jan.	6
Field Review	KGC	Jan.	21
		Total	48

Total Time Spent on Sheet ..... 642 1/4 Hours.

SHEET NO. F-5831

PHOTOGRAPHS

Number	Date	Time	Stage of Tide
3964	12/7/39	11:54 AM	1.1
3965	"	11:55 AM	1.1
3966	"	11:55 AM	1.1
3967	"	11:56 AM	1.1
3968	"	11:57 AM	1.1
3999	"	12:23 PM	1.1
4001	"	12:25 PM	1.1

Tide from predicted tables for: Tampa Bay (St. Petersburg, Florida)

Camera: U. S. Coast and Geodetic Survey Nine-Lens (focal length 8½ inches)
Negatives on file at the Washington Office.

SCALE

Main scale of Photographs..... 1:10,000 ÷ .9985
Scale of Survey Sheet..... 1:10,000

STATISTICS

Area (land).....	4.72	Square statute miles
Shoreline (more than 200 m. from opposite shore).....	52.1	Statute miles
Shoreline (creeks).....	2.0	Statute miles
Roads, streets, trails, and railroads.....	44.7	Statute miles

REFERENCE STATION

Station: Don#Ce#Sar Hotel Silver W.T. 1934 Latitude 27° 42' 26.116"(803.9m)

Datum: N. A. 1927 Longitude 82° 43' 59.137"(1620.2m)

Adjusted

W. Zone
X = 262,793.68 FT.
Y = 1,226,929.64 FT.

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. T---5831

GENERAL

This sheet was compiled from nine-lens aerial photographs 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 Long Key and Pass A Grille.

The shoreline consists of three general classes, namely bulkheaded areas; sand beach areas and mangrove covered areas of unstable character. The bulkheaded area extends from the Southeast end of Long Key along the East side of Long Key, to include the fast shoreline area of Big McPherson's Bayou. The Western side of Long Key is practically all sand beach. In one or two instances areas with a mangrove fringe are fast land as shown.

Gulfport, Long Key and Sunset Beach are built up areas more or less typical of beach subdivisions.

Areas of vegetation with varying density and identity were shown with symbols; labels were used in areas of uniform make-up.

Approximate mean low water is shown by a dotted line; the approximate limits of shoal areas are shown by a dashed line. These features are shown for the use of the hydrographer only.

All small islets are mangrove unless otherwise noted.

CONTROL

Control of this sheet consisted of the following U. S. Coast & Geodetic Survey, U. S. Engineers, Florida Mapping Project triangulation and Traverse stations.

NAME OF STATION	Year	Established by
DON CE SAR HOTEL, silver water tank,	1934	G.L. Anderson
GULFPORT, silver muni. tank flagpole	1934	G.L. Anderson
OYSTER 2	1908	W. B. F.
Tomlinson	1908	W. B. F.
S. AXIS T.A. 7A and 11, U.S.E.	1938	U.S.E.D.
Y-121b	1939	Fla.Mapping Proj.
Y-121c	1939	" " "
Y-128	1939	" " "
Y-129	1939	" " "
Y-132	1939	" " "
Y-133	1939	" " "
Y-134	1939	" " "
Y-135	1939	" " "

Mention is here made of the method of locating Topographic Station GRILLE NO. 1, 1934. This station is a reference mark for triangulation station GRILLE 1934, which has been destroyed. The position for GRILLE NO. 1, 1934 was plotted on the sheet by plotting the azimuth and distance of the reference mark, which accurately located it on the sheet. The picking of GRILLE NO. 1, 1934, on the photographs was then carefully checked, and in detailing this station was given strength comparable to triangulation control.
See Note #1.

In the area West of Longitude 82° 44' between Latitude 27° 39' and 27° 44', all the radial points and H. & T. Station intersections were considered to be very weak inasmuch as they practically coincided with the line of flight of the photographs. Therefore all adjustments for detailing and the final location of H. & T. stations in this area were made between triangulation stations and along the flight line, which very nearly coincided with the line between the triangulation stations. It was to facilitate and improve the accuracy of this procedure that H. & T. station GRILLE NO. 1, 1934, was located and used as described elsewhere in this report under CONTROL.

MAIN RADIAL PLOT

A continuous radial plot was laid on July 28 - 30, 1941 for the location of radial points, hydrographic and topographic stations, bench marks and azimuth marks on Sheets T-5826 to T-5833, inclusive. It extended Southward from a Northern limit formed by photographs 3828, 3995, 3916, 3954, 3974, 4185, 4176 and 4200 where it formed a satisfactory junction with the previous main radial plot. The plot consisted of 63 templates, all of which were controlled by triangulation or second order traverse. Four templates had 3 to 5 control stations; eighteen templates had 6 to 10 control stations; thirty-three templates had 10 to 20 control stations; and eight templates had 20 to 30 control stations. The latter being in the vicinity of St. Petersburg. All traverse stations of the "Y" series used for control of the plot were established and located by the Florida Mapping Project and were considered to be of second order accuracy. In several instances, triangulation established by the U. S. Engineers has been used for controlling the plot in conjunction with U. S. Coast and Geodetic Survey triangulation and traverse control. The order of accuracy for the U. S. E. triangulation is not definitely known although their office has advised that it is probably about third order. These stations are shown on the survey sheet by 2.5 m.m. black circles rather than by the triangle symbol.

No large or unusual adjustments were necessary in any part of the plot. Agreement along the flight line was excellent and the intersection of radial lines to adjacent centers checked the actual center of the template very closely. Photographs on the shore flight (Gulf side) had large amounts of tilt but did not present any difficulties while laying the plot.

The templates were made in the usual manner and in accordance with "Notes on Radial Plotting of Nine-Lens Air Photographs", dated April 9, 1940. All hydrographic and topographic stations whether marked or unmarked were located by the main radial plot. A great number of radial

points were established to alleviate the necessity of the draftsman establishing additional points.

The usual practice of laying the main plot was followed. This consisted of plotting and checking the control on the survey sheets and then transferring these points to base grid sheets by matching individual squares. The amount of adjustment in each individual grid square was negligible, but amounted to about .5 m.m. in some cases for the entire length of the sheet. The grid sheets were securely taped to the plotting table and allowed to remain for 48 hours before any templates were laid. Before laying the templates, the base grids were examined for movemant and the necessary adjustments made to reduce or remove the discrepancies along the matched grid lines. After laying the templates all points were transferred to the survey sheet by again matching individual grid squares between the base grids and the survey sheets.

All but four of the points located by this plot Eastward of longitude 82° 44' have been located by the common intersection of three or more radial lines. Three of the points not located by the common intersection are about one quarter mile North, East and West of Latitude 27° 44.3', Longitude 82° 42.3', while the other is in the vicinity of Latitude 27° 40', Longitude 82° 43'. These latter points have had the radial lines transferred to the survey sheet for further study, as it was obvious that the point was plotted wrong on at least one of the photographs. The points located by this plot are believed to be 0.3 to 0.5 m.m. of their true location. The points Westward of this meridian between Latitude 27° 43' and 27° 40', are too close to the flight line to give strong intersections. The majority of the points in this latter area will necessarily have to be given additional study by the draftsman and the radial lines for these points are therefore transferred to the survey sheet.

A further check was made by comparing all photographs for each particular sheet against the location established by the radial plot. It has been found that much time can be saved by making this additional check at the time of completeing the transfer, rather that waiting until the sheet is ready for detailing. This eliminates a particularly fruitful source of discrepancy, namely the picking of a wrong intersection when there is a multiplicity of "cuts", not all of which meet at a common intersection.

Various colored inks were used on the mounted office prints and on the survey sheets to designate triangulation, traverse and topographic stations, etc. The following key is furnished for this information.

Photographs (Office Prints)

Triangulation & Traverse Stations....2.5 m.m. blue circle
Marked Hydro. & Topo. Signals.....2.5 m.m. green circle
Radial Points (Main Plot).....2.5 m.m. red circle
Photograph Centers.....Double Circle

Survey Sheet

Triangulation Stations.....3.5 m.m. black triangle
Hydro. & Topo. Stations.....2.5 m.m. black circle
Radial Points (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
Radial Points (Questionable).....3.5 m.m. green circle on back of sheet

INTERPRETATION OF PHOTOGRAPHS

Field notes were adequate with one exception. Road classification and some tree hidden roads in Gulfport were not shown. Inspection in the field by the compiler gave the necessary information. Those areas changed by storm action since the photographs were taken have been detailed as shown by the field inspector.

FIELD INSPECTION

The field inspection was made by Lieut. (j.g.) James D. Thurmond, and Harold A. Duffy, Photogrammetric Aid, in May,1941 by truck and skiff. The legend used for field inspection and detailing is made a part of this report.

DETAILING

The acetate was prepared for inking by rubbing with dry magnesium carbonate and then washing with water. No additional cleaning has been necessary.

All ditches as detailed on this sheet should be shown on the finished print.

JUNCTIONS

This sheet joins T-5829 and T-5830 on the North, T-5832 on the East, and T-5833 on the South. All junctions are in good agreement.

COMPARISON WITH OTHER SURVEYS

Reference is made to a letter from the Washington Office, dated May 10, 1941 (28-PFA-1990), advising that this paragraph may be dispensed with forsthis area. Surveys of other agencies are of such scales that accurate comparison could not be made.

NON-FLOATING AIDS

The non-floating aids in the area covered by this sheet in the vicinity of Boca Ciega Bay, Pass A Grille channel and Southwest channel have been located by sextant fixes taken at the site of each individual aid. This work was done by Lieut. (j.g.) J. D. Thurmond, on September 5 and 8, 1941

The aids so located, agree with those shown on the charts of this area, but do not agree with the list of aids shown on page 115 and 116 of the "Light List, Intracoastal Waterway - 1941", due to changes since the light list was printed. A black beacon with no number is

established just West of Boca Ciega Bay beacon No. 13A.

GEOGRAPHIC NAMES

The investigation of geographic names is incorporated in the special report entitled "Investigation of Geographic Names - Anclote Keys to Tampa Bay", submitted to the Washington Office by Lieut. (j.g.) James D. Thurmond.

LANDMARKS

Landmarks in this area are shown on existing charts, with one exception which is shown on Form 567, which is made a part of this report. Form 567 is filed in Nautical Charts Section under Chart letter 96-1945.

? sta GAL not found in this letter
JCC 2/21/63

Respectfully submitted,

Milton M. Slavney

Milton M. Slavney,
Sr. Engineering Draftsman.

Forwarded,

Kenneth G. Crosby

Kenneth G. Crosby,
Chief of Party.

Note #1. Grille No.1 1934 has been computed, from its azimuth and distance from Δ Grill 1934, for its geographic position and is recorded in Geodesy as a triangulation station replacing Grille 1934 which has been lost, this date Nov. 6, 1945.
S. V Griffith
Ch. Review Section

LEGEND USED FOR FIELD INSPECTION AND DRAFTING
PROJECT 242 - 1941

TREES

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

VEGETATION

C - Cultivation
Gr. - Grass
T Gr - Tall Tropical Grass
M - Marsh (dashed line on inshore limits)
M W - Marsh grass in water (dashed blue line on offshore limits)
Sw - Swamp
Mg - Mangrove
Hdg - Hedge

STREAMS

Ca - Canal (width)
Cr - Creek
D - Ditch (width)
I S - Intermittent Stream
PDU - Probable drainage unsurveyed
Brg - bridge or symbol
Cv - Culvert
Lev - Levee

F.G.S. - Florida Geodetic Survey
U.S.E. - U. S. Engineers
USBS - 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)

PONDS

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

SHORE LINE

H.W.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
Dk - Dock
Pr - Pier
Se W - Seawall
Blhd - Bulkhead
Conc - Concrete
Wo - Wooden
Jet - Jetty
Dol - Dolphin
Pile - Pile (give type)
S - Sand
Mud - Mud
Rk - Rock or rocky
Sty - Stony
W - Water
Blf - Bluff (height)

BUILDINGS

H - House, barn or building
Sch - School (give name)
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)

MISCELLANEOUS

F - fence
FB - Fire Break (maintained)
FBX - Fire Break (abandoned)
Cem - Cemetery
Park - Park (give name)
F.T. - Fire Tower
T.T. - Transmission Tower (high tension)
P.L. - Power line
Shoal - Approx. limits by long dashed line for use by hydrographer.

c = charted 586
W.A.S. 9/3/43

GEOGRAPHIC NAMES

Survey No. T-5831

Sheet No. 1

		Name on Survey	A, On Chart No.	B, On previous survey No.	C, On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
c	✓	Boca Ciega Bay										1
c	✓	Long Key										2
c	✓	Blind Pass										3
c	✓	Sunset Beach										4
c	✓	St. Petersburg Beach										5
c	✓	Lido Beach										6
c	✓	Bellevista Beach & Subdivision										7
c	✓	Don Ce Sar Beach										8
c	✓	Mud Key										9
c	✓	Mud Key Cutoff										10
c	✓	Mud Key Point										11
c	✓	Big McPherson Bayou										12
c	✓	Little McPherson Bayou										13
c	✓	Coon Key										14
c	✓	Gulfport Middle Ground										15
c	✓	Cats Point Bank										16
c	✓	Bird Key Middle Ground										17
c	✓	Corey Causeway										18
c	✓	Deadman Key										19
c	✓	Gulfport										20
c	✓	Daisy Bank										21
c	✓	Pass-a-Grille	U.S.G.B. approved									22
c	✓	Pass-a-Grille Beach	form Pass-a-Grille									23
c	✓	Pass-a-Grille Channel										24
c	✓	Pine Key										25
c	✓	Meloche Bayou										26
c	✓	Pine Key Cutoff										27

M 234

	Remarks.	Decisions
1		277827 U S G B
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15	omitted from finished sheets	"
16	omitted from finished sheets	"
17	omitted from finished sheet	"
18		"
19		"
20		"
21	omitted from finished sheet	276827
22	Lines 22, 23, 24, referred to USGB: OK to apply as	" U.S.G.B
23	on T-5831 (all capitals) pending its decision.	" U.S.G.B.
24		"
25		"
26		"
27		"

M 234

GEOGRAPHIC NAMES

Survey No. T-5831

Sheet No. 2

	Name on Survey	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
c ✓	Main Channel										1
c ✓	Pardee Key										2
c ✓	Little Bird Key										3
. ✓	Mud Bayou										4
c ✓	Cabbage Key										5
. ✓	Dents Hole										6
. ✓	Dents Channel										7
c ✓	Shell Key										8
c ✓	Southwest Channel										9
c ✓	The Reefs										10
c ✓	Summer Resort										11
c ✓	Sister Key										12
c ✓	Bunces Pass										13
c ✓	Cunningham Key										14
. ✓	Butler Hole										15
c ✓	Mule Key										16
c ✓	Jackass Key										17
c ✓	Sawyer Key										18
c ✓	Listen Key										19
c	[illegible]										20
	Treasure Island										21
					L Heck 7/28/42						22
											23
											24
											25
											26
											27

M 234

T-5831, sheet No. 2.

	Remarks.	Decisions
1		276827
2		"
3		"
4		"
5		"
6		"
7		"
8		"
9		"
10		"
11		"
12		"
13		"
14		"
15		"
16		"
17		"
18		"
19		
20	Added [illegible] to apply to [illegible]	[illegible] - [illegible]
21		
22		
23		
24		
25		
26		
27		

M 234

Review of Planimetric Map T-5831

Division of Charts

Surveys Branch - August 1943

Field Inspection and Compilation:

Field inspection was made in May 1941 and was sufficiently complete for detailing of the manuscript. The compilation of details as accomplished in the Tampa Office was satisfactory.

Radial Plot:

The office photographs were dismounted prior to this review in order to conserve aluminium , and no check has been made of the main radial plot in this office. As mentioned on page 2 of the descriptive report, positions of details along Pass-A-Grille Branch are strong in the east-west direction but depend on adjustment of the distances between the photographs and control stations in the north-south direction. Since the area is flat and there was ample horizontal control, this method of adjustment is accepted as satisfactory.

Comparison with Previous Surveys:

T-5831 is complete and adequate to supersede those sections of the following previous surveys which it covers:

T-4203	(1:10,000)	1926
T-1316A	(1:20,000)	1873

Comparison with Nautical Charts 586 and 1257:

This survey was applied to the above surveys prior to this review. No changes of sufficient importance to effect the charts have been made on the manuscript during this review.

Reviewed by: Lillian A. Lee

Under direction of: D. H. Benson

August 17, 1943.

B. G. Jones

Inspected by B. G. Jones - November 7, 1945

K. T. Adams

Chief, Division of Photogrammetry

Robert W. Fox

Chief, Nautical Chart Branch,
Division of Charts

Raymond B. Lyman

Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. 5831

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5-12-47	586	[illegible]	~~Before~~ After Verification and Review Fully applied
			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
			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.