

8879

Merritt's Fl.

Cocoa, Fla.

Diag. Cht. No. 1246

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. _____ Office No. T-8879

LOCALITY

State Florida

General locality East Coast

Locality Brevard County

1947-'49

CHIEF OF PARTY

G.E. Morris, Jr., Chief Of Field Party

R.A. Gilmore, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE June 18, 1950

B-1870-1 (1)

6288

DATA RECORD

T - 8879

Project No. (II): Ph-19(47)

Quadrangle Name (IV):

Field Office (II): Titusville, Florida

Chief of Party: George E. Morris, Jr.

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: Ross A. Gilmore

Instructions dated (II) (III): October 21, 1946
May 28, 1947

Copy filed in Division of
Photogrammetry (IV)
Office Files

Method of Compilation (III): Graphic (Radial Plot)

Manuscript Scale (III): 1: 20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): None

Date received in Washington Office (IV): *5-2-49* Date reported to Nautical Chart Branch (IV): *5-5-49*

Applied to Chart No.

Date:

Date registered (IV): *23 May 1950*

Publication Scale (IV): *1:24,000*

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): *MSL*

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): ~~PEAY, 1940~~ ELKINS, 1940

Lat.: *28° 19' 45.370 (1396.6m)* *28° 41' 35.500 (967.0)*
~~28° 18' 36.856 (1174.5m)~~ Long.: ~~80° 41' 14.020 (382.0m)~~

Adjusted
~~Unadjusted~~

Plane Coordinates (IV):

State: *Florida*

Zone: *East*

Y= *1,452,480.17*

X= *598,702.65*

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

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

Areas contoured by various personnel
(Show name within area)
(II) (III)

DATA RECORD

Field Inspection by (II): L.F. Beugnet
John S. Winter
W.H. Nelson

Date: June-Oct. 1948

Planetable contouring by (II): John S. Winter

Date: July-Oct. 1948

Completion Surveys by (II): *James E. Hurdley*

Date: *July 1949*

Mean High Water Location (III) (State date and method of location):

~~June-Oct. 1948, Air Photo Compilation~~
Aerial photographs, 12-8-47. Identified on photographs in field.

Projection and Grids ruled by (IV): T.L. J.

Date: Feb. 3, 1948

Projection and Grids checked by (IV): T.L. J.

Date: Feb. 3, 1948

Control plotted by (III): B.F. Lampton
I.I. Saperstein

Date: July 1948
Aug. 1948

Control checked by (III): R.R. Wagner
B.F. Lampton

Date: July 1948
Aug. 1948

~~Radial Plot of Stereoscopic~~
~~Contouring~~ by (III): M.M. Slavney

Date: Oct. 12, 1948

Planimetry
Stereoscopic Instrument compilation (III):
Contours

Date:

Date:

Manuscript delineated by (III): R.A. Reece

Date: Dec. 1948-Mar. 1949

Photogrammetric Office Review by (III): J.A. Giles

Date: March 1949

Elevations on Manuscript J.A. Giles (III)
checked by (II) (III):

Date: March 1949

Camera (kind or source) (III): Single Lens, U.S. C. and G.S.

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
47J-416-418	12-8-47	10:27	1:20,000	No perceptible tide
47J-464-468	"	11:04	"	"
47J-520-523	"	11:55	"	"
47J-533-537	"	12:03	"	"
47J-561-563	"	12:33	"	"

Tide (III)

Reference Station:
Subordinate Station: No perceptible tide
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

Washington Office Review by (IV): E. H. Ramey

Date: 18 Jan 1950

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 40

Shoreline (More than 200 meters to opposite shore) (III): 53

Shoreline (Less than 200 meters to opposite shore) (III): 10

Control Levelling - Miles (II): 44.3

Number of Triangulation Stations searched for (II): 60

Recovered: 47 52 Identified: 27

Number of BMs searched for (II): 11

Recovered: 11 Identified: 11

Number of Recoverable Photo Stations established (III): 38 (includes 24 section & boundary mon.)

Number of Temporary Photo Hydro Stations established (III): None

Remarks:

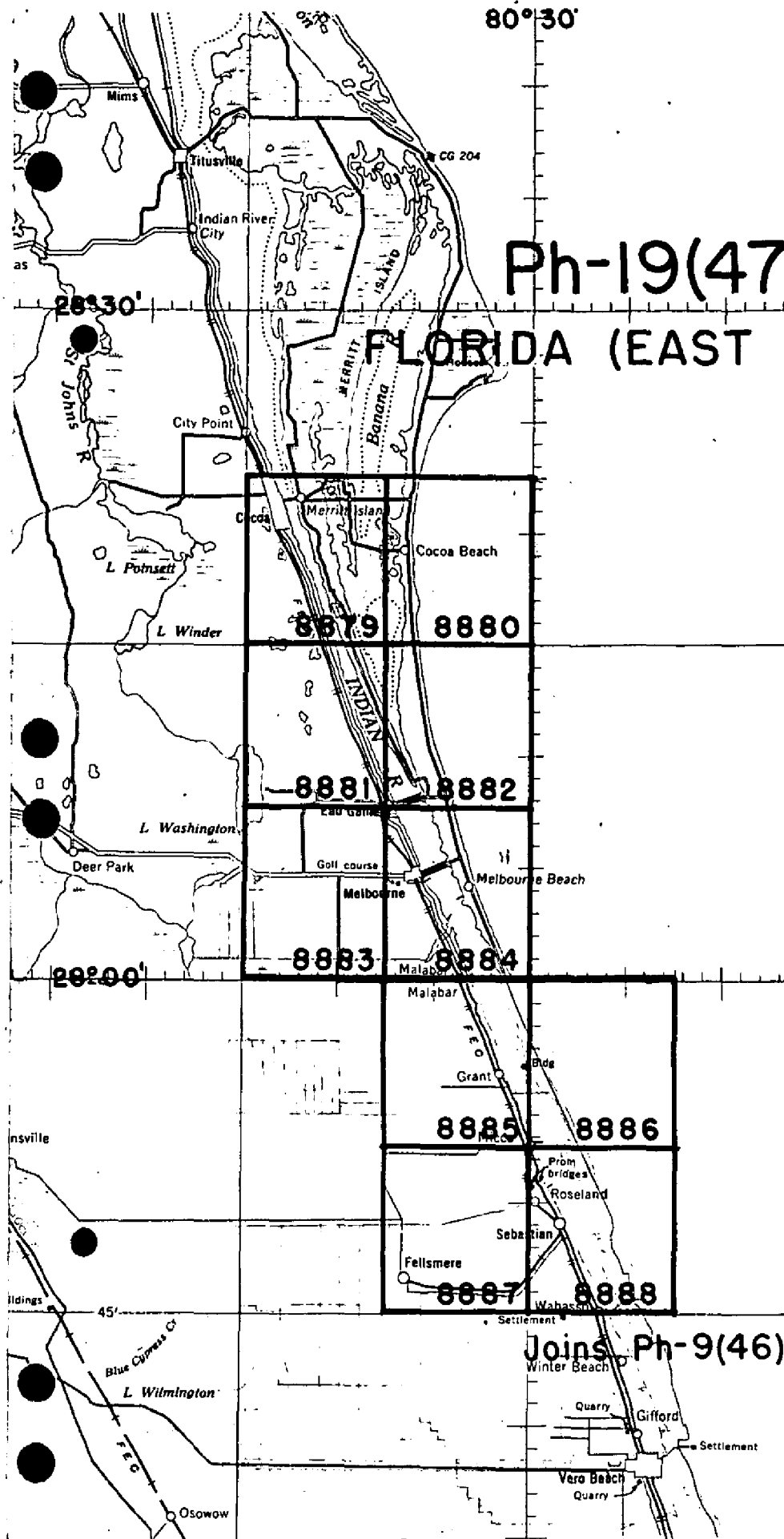
80°30'

80°00'

Ph-19(47)

FLORIDA (EAST COAST)^A

N



Joins Ph-9(46)

LEGEND

- TO BE STARTED NEXT
- IN PROGRESS
- == COMPLETED 1948 Fiscal Year
- X NOT APPLICABLE

Summary to Accompany T-8879

Topographic map T-8879 is one of ten similar maps in Project Ph-19(47) and is located at the northwest corner of the project. It covers a portion of the Banana River, Indian River and the land adjacent. This is a graphic compilation project. The field operations preceding compilation included complete field inspection, the establishment of some additional horizontal control, and the delineation of contours on the photographs by planetable methods.

The manuscript was compiled at a scale of 1:20,000 and covers $7\frac{1}{2}'$ in latitude by $7\frac{1}{2}'$ in longitude. The entire map was field edited. The map is to be published by the U. S. Geological Survey at a scale of 1:24,000 as a standard topographic quadrangle. Items registered under T-8879 will include a cloth-mounted print of the manuscript at a scale of 1:20,000, a cloth-mounted color print at a scale of 1:24,000 and the original descriptive report.

FIELD INSPECTION REPORT

TO ACCOMPANY

QUADRANGLE T-8879

N28°22'30" - W80°45'00"

PROJECT PH-19(47)

25 OCTOBER 1948

1. DESCRIPTION OF THE AREA

This quadrangle is located in the central portion of Brevard County, Florida. It lies partly on the mainland and partly on Merritt Island. The quadrangle is bound on the east by the Banana River and Canaveral Peninsula, on the north by Lat.28°22'30", on the west by Long.80°45'00", and on the south by Lat.28°15'00".

The principal cultural features within the boundaries of the quadrangle are: Florida East Coast Railroad, U. S. Highway No.1, Florida State Highways Nos.3, 515 and 520, Indian River, Banana River, Newfound Harbor, the village of Georgiana, the major portion of the boundaries of the village of Merritt Island, the town of Rockledge and the city of Cocoa.

The terrain rises from natural water level in the Indian River to a height of about 50 ft. on the highest point on a broken sand ridge parallel to the west bank of the Indian River.

The existing vegetation consists of palmetto, scattered pines, scrub oak, palms, brush, mangrove, sawgrass and orchards. The growing of citrus fruits is the principal industry. The tourist trade, lumber, cattle and fishing also bring a sizable income.

2. COMPLETENESS OF FIELD INSPECTION

The field inspection, believed to be adequate, was done in accordance with Project Ph-19(47) Instructions dated 13 May 1948 and later general instructions.

3. INTERPRETATION OF THE PHOTOGRAPHS

Some photographs were slightly blurred in areas. Photograph No.47-J-533 was partially obscured by clouds. It is believed there are enough field inspection notes on the photographs to make them easily interpreted.

4. HORIZONTAL CONTROL

Horizontal control in this quadrangle consists of that established by the U.S.C. & G.S. and U.S.E.D. A thorough search was made for all stations in the quadrangle. Fifty-two (52) were recovered and twenty-seven (27) identified on the photographs.

The only triangulation station used, other than U.S.C. & G.S. triangulation stations, was U.S.E.D. FAIRY 1939 on photograph 47-J-520.

5. VERTICAL CONTROL

Vertical control consisted of existing bench marks and establishment of level points along principal roads in the quadrangle.

Approximately 44.3 miles of 4th order levels (60 temporary bench marks established) were run by Mr. Wilber H. Nelson and Mr. John S. Winter, Engineering Aids. Recordings were to the nearest .01 of a foot. The maximum closure was .56 of a foot and all closures greater than 0.30 of a foot were adjusted throughout the line.

Vertical control used other than U.S.C. & G.S. were PRM-NAB(USED), FAIRY USED 1939 and RP1 USED.

6. CONTOURS AND DRAINAGE

Contouring was done by planetable methods on 1:20,000 scale single lens photographs. The contours, of five (5) foot intervals, were inked on the photographs in purple ink. All work was done as near the center of the photographs as possible to minimize distortion and scale changes. Notes were made to clarify the existence of contours too close to draw legibly as in ditches and along roads.

The Banana River, Indian River, and intermittent drainage into Lake Florence (west of the quadrangle) provide natural drainage for the area.

7. MEAN HIGH WATER LINE

There is no evident mean high water line along the Indian and Banana Rivers. The apparent shoreline was indicated by Mr. Leo F. Beugnet, Engineering Aid. *See item 20*

8. LOW WATER LINE

The low water line closely parallels the mean high water line along the Indian and Banana Rivers due to the practically non-existence of tides.

9. WHARVES AND SHORELINE STRUCTURES

All wharves and shoreline structures have been indicated on the photographs by Mr. Leo F. Beugnet, Engineering Aid.

10. DETAILS OFFSHORE FROM HIGH WATER LINE

No details offshore for investigation by the hydrographic party were noted.

11. LANDMARKS AND AIDS TO NAVIGATION

See Item 34 and Item 51

Two (2) lights along the Intracoastal Waterway in the Indian River and two (2) daybeacons at the entrance to the Cocoa Yacht basin were identified and are recommended for charting.

Form 567 attached

12. HYDROGRAPHIC CONTROL

No hydrographic signals were required in this project.

13. LANDING FIELDS AND AERONAUTICAL AIDS

The Cocoa Municipal Airport is located in the northwest part of the city of Cocoa and is identified on photograph No. 47-J-468. The runways were outlined but no boundary marks were located, therefore, the boundaries have not been inked on the photographs. *See Item 67 Item 36*

14. ROAD CLASSIFICATION

All roads were classified in accordance with Photogrammetry Instructions No. 10 and amendments thereto. Roads to be deleted are shown by cross marks in green ink.

See Item 53

15. BRIDGES

Clearances of all bridges over navigable waters were checked with the U. S. Engineers "List of Bridges Over Navigable Waters in the United States", revised to 1 July 1941. All clearances were carefully measured with a steel tape. The published descriptions and clearances were found to be correct except for the following discrepancies:

U.S.E.D. BRIDGE LIST

TYPE	HORIZONTAL CLEARANCE			VERTICAL CLEARANCE
	Left	Center	Right	
Highway Bridge SW (Indian River)	80.0		80.0	M.H.W. 3.0
Highway Bridge F (Sykes Creek)		22.0		M.L.W. 8.0

~~4~~
U.S.C. & G.S. MEASUREMENTS

	TYPE	HORIZONTAL CLEARANCE			VERTICAL CLEARANCE
		Left	Center	Right	M.H.W.
Highway Bridge (Indian River)	SW	82.0		82.0	5.5
Highway Bridge (Sykes Creek)	F		11.5		M.L.W. 8.0

The old bridge over the Banana River, east of Cocoa, has been removed. The clearances of the new bridge over the Banana River have been noted on the photograph.

Discrepancies will be reported in a special project report.

16. BUILDINGS AND STRUCTURES

See Item 54

All buildings to be shown have been circled in red ink. Buildings to be deleted have been crossed out in green ink. New buildings have been blocked in approximately to scale.

17. BOUNDARY MONUMENTS AND LINES

See Item 52

Fifteen (15)* section corners were recovered and identified on the photographs. Only one section corner was recovered on the town limits of Rockledge. No other monuments were found on boundary lines.

** 2 monuments off manuscript. Forms 524 filed for 15.*

The boundaries of the city of Cocoa and the town of Rockledge follow, in general, the section lines and have been indicated on the photographs.

18. GEOGRAPHIC NAMES

(S.R. No. 114)

All geographic names information was obtained by Mr. Lowell I. Bass, Engineering Aid. This information was compiled in a special report and forwarded to the Washington Office.

19. TOPOGRAPHIC STATIONS

A total of fifteen (15)* topographic stations were established along the Indian and Banana Rivers. These consisted of permanent natural objects or standard topographic station monuments.

** See Item 68 for 2 previously established stations.*


Flag 1948 ✓	Calm 1948 ✓
Bird 1948 ✓	Boat 1948 ✓
Lion 1948 ✓	N.E. Corner of Garage, 1948 ✓
Goat 1948 ✓	East Gable Boat House, 1948 ✓
Han 1948 ✓	Cocoa Yacht Basin Daybeacon 1, 1948 ✓
Reno 1948 ✓	" " " 2 1948 ✓
Jean 1948 ✓	

13 Forms 524

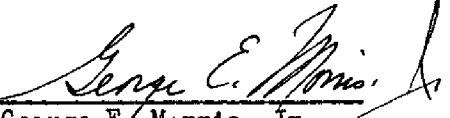
20. JUNCTIONS

A junction was made with quadrangle T-9173 to the north and quadrangle T-8881 to the south. The quadrangle line to the east fell in Banana River. All junctions are in good agreement. The western boundary coincides with the western limits of Project Ph-19(47).

Submitted by:


John S. Winter
Engineering Aid.

Approved and forwarded:


George E. Morris, Jr.
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT

This report for all of Project Ph-19(47), sheets T-8879 through T-8888, is filed in the General Files, Division of Photogrammetry.

MAP T-8879

PROJECT NO. Ph-19(47)

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
TWO STORY BOAT- HOUSE, FLAGPOLE 1940	G.P.s P.565	N.A. 1927	28°	22'	16.995"			523.2	(1323.8)		
			80	43	58.981	✓		1606.0	(27.7)		
WHITE FLAGPOLE ON DOCK, 1940	"	"	28	22	04.718			145.2	(1701.8)		
			80	43	52.202	✓		1421.5	(212.3)		
COCOA MUN. W.T. 1934	P.564	"	28	21	28.204			868.2	(978.8)		
			80	43	52.761			1436.8	(197.1)		
WHITE HOUSE EAST GABLE 1940	"	"	28	21	29.290			901.7	(945.3)		
			80	43	38.675			1053.2	(580.7)		
COCOA STATE THEATRE CHIMNEY, 1940	"	"	28	21	18.267			562.3	(1284.7)		
			80	43	33.743			918.9	(715.0)		
COCOA, TOWN DOCK SHED EG 1940	"	"	28	21	17.697			544.8	(1302.2)		
			80	43	24.485			666.8	(967.2)		
COCOA-MERRITT BRIDGE " HIGH PT. 1940 P.565 CENTER OF DRAWSPAN OLEANDER PT. 2 1929 1906	P.554	"	28	21	01.790			55.1	(1791.9)		
			80	43	21.106	✓		574.8	(1059.2)		
AIRWAY B. 18 (near Cocoa) 1934	P.178	"	28	21	36.739			1131.0	(716.0)		
			80	44	48.836	✓		1329.9	(304.0)		
DERRICK POLE ON DOCK, 1940	P.564	"	28	20	29.701			914.3	(932.7)		
			80	43	09.884			269.2	(1365.0)		
MCKEOWN, 1940	P.551	"	28	20	22.882	✓		704.4	(1142.6)		
			80	43	08.406			229.0	(1405.2)		
MIDDLE ONE OF THREE BOATHOUSES FLAG- POLE, 1940	P.563	"	28	20	19.403			597.3	(1249.7)		
			80	43	05.356			145.9	(1488.3)		

1 FT. = 3048006 METER

COMPUTED BY: E.C. Andrews

DATE April 26, 1948

CHECKED BY: R.R. Wagner

DATE April 27, 1948

M-2388.12

G

MAP T-8879 PROJECT NO. Ph-19(47) SCALE OF MAP 1: 20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID OR PROJECTION LINE IN METERS (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
INDIAN R. NORTH LT. 151 1940	G.P.s. P. 563	N.A. 1927	28 20 30.792 80 42 42.330	✓		947.9 (899.1) 1152.9 (481.3)	
INDIAN R. HOTEL S CUPOLA 1940	" P. 563	"	28 20 04.635 80 43 01.984			142.7 (1704.3) 54.0 (1580.3)	
TWO STORY BOATHOUSE E GABLE 1940	" P. 563	"	28 19 37.394 80 42 49.621			1151.1 (695.9) 1351.7 (282.7)	
GREEN ROOFED BOATHOUSE SE CORNER 1940	P. 563	"	28 18 49.040 80 42 22.392			1509.6 (337.4) 610.1 (1024.5)	
PRAIRIE, ✓ 1934	" P. 126	"	28 17 54.332 80 44 48.068			1672.5 (174.5) 1309.7 (325.1)	
GAST, ✓ 1940	" P. 549	"	28 17 59.435 80 42 00.356	✓		1829.6 (17.4) 9.7 (1625.1)	
STEWART 2, ✓ 1906	" P. 549	"	28 16 49.951 80 41 25.950	✓		1537.6 (309.4) 707.2 (928.0)	
ALBERT, ✓ 1940	" P. 548	"	28 15 52.856 80 41 04.877	✓		1627.1 (219.9) 132.9 (1502.4)	
STEW, ✓ 1940	" P. 548	"	28 15 05.073 80 40 42.708	✓		156.2 (1690.8) 1164.2 (471.4)	
LOTUS, ✓ 1940	" P. 548	"	28 15 10.851 80 39 51.795	✓		334.0 (1513.0) 1411.8 (223.7)	
INDIAN R N. LT. ✓ 155, 1940	" P. 561	"	28 15 09.971 80 40 11.529	✓		306.9 (1540.1) 314.2 (1321.3)	
WHITE HOUSE ON DOCK RED ROOF SW CORNER 1940	P. 561	"	28 15 43.748 80 40 11.525			1346.7 (500.3) 314.1 (1321.3)	

1 FT. = 3048006 METER

COMPUTED BY: E.C. Andrews

DATE April 26, 1948

CHECKED BY: R.R. Wagner

DATE April 28, 1948

M-2388-12

14

MAP T. 8879

PROJECT NO. Ph-19(47)

SCALE OF MAP 1: 20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
RED TANK, 1940	G.P.s.	N.A.	28	15	48.038			1478.8	(368.2)		
	P. 561	1927	80	39	57.229			1559.9	(75.5)		
NORTH WHITE TANK 1940	"	"	28	17	09.50			292.4	(1554.6)		
	P. 562	"	80	40	29.92			815.3	(819.7)		
MUNSON, 1940	"	"	28	17	11.417			351.4	(1495.6)		
	P. 548	"	80	40	39.765	✓		1083.6	(551.4)		
FREY, 1940	"	"	28	18	36.856			1134.5	(712.5)		
	P. 549	"	80	41	14.020	✓		382.0	(1252.7)		
HILL 1876	"	"	28	18	58.792			1809.8	(37.2)		
	P. 554	"	80	41	22.245	✓		606.0	(1028.6)		
ELKINS	"	"	28	19	45.370			1396.6	(450.4)		
	P. 549	"	80	41	35.500	✓		967.0	(667.4)		
WINDMILL, 1940	"	"	28	19	52.257			1608.6	(238.4)		
	P. 562	"	80	41	41.275			1124.3	(510.0)		
WHITEHOUSE FIREPLACE ON S. SIDE, CHIMNEY	"	"	28	19	56.10			1726.9	(120.1)		
1940	P. 563	"	80	41	45.20			1231.2	(403.1)		
NEW, 1940	"	"	28	20	14.753			454.1	(1392.9)		
	P. 550	"	80	40	59.112	✓		1610.1	(24.2)		
ANGELL, 1940	"	"	28	20	40.556			1248.4	(598.6)		
	P. 550	"	80	40	03.994	✓		108.8	(1525.3)		
FOUND, 1940	"	"	28	20	47.745			1469.7	(377.3)		
	P. 550	"	80	41	01.121	✓		30.5	(1603.6)		
SECTION CORNER MARK, 1940	"	"	28	20	47.702			1468.4	(378.6)		
	P. 569	"	80	42	14.487			394.6	(1239.5)		

1 FT. = 3048006 METERS
COMPUTED BY E.C. Andrews

DATE April 26, 1948

CHECKED BY R.R. Wagner

DATE April 28, 1948

M. 2388-12

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MAP T. 8879

PROJECT NO. Ph-19(47)

SCALE OF MAP 1: 20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
VIERTY, 1940	G.P.s.	N.A.	28	20	48.571			1495.2	(351.8)	
	P.550	1927	80	42	14.461			393.8	(1240.3)	
CAUSE, 1940	"	"	28	21	23.199			714.1	(1132.9)	
	"	"	80	40	23.935			651.8	(982.2)	
HARBOR, 1940	"	"	28	22	15.323			471.7	(1375.3)	
	"	"	80	40	20.719			564.1	(1069.6)	
LAND, 1940	"	"	28	21	58.096			1788.4	(58.6)	
	"	"	80	41	10.832			295.0	(1338.8)	
N.A.C. (USE) 1940	P.554	"	28	22	15.882			488.9	(1358.1)	
	"	"	80	42	46.659	✓		1270.5	(363.3)	
FAIR, 1940	"	"	28	22	10.924			336.3	(1510.7)	
	P.551	"	80	42	44.264			1205.3	(428.5)	
BOATSHOP METAL 1940	"	"	28	21	27.240			838.5	(1008.5)	
	P.565	"	80	42	28.379			772.8	(861.1)	
BREVARD HOTEL CUPOLA, 1940	P.564	"	28	21	01.913			58.9	(1788.1)	
	"	"	80	43	23.082			628.6	(1005.5)	
COQUINA, 1876	"	"	28	19	22.711			699.1	(1147.9)	
	P.549	"	80	42	38.815			1057.4	(577.2)	
DRIVE, 1940	"	"	28	21	54.482			1677.2	(169.8)	
	P.551	"	80	43	53.987			1470.1	(164.0)	
TANK, (1.7 miles NW of Cocoa) 1934	P.178	"	28	21	54.81			1687	(160)	
	"	"	80	45	21.57			587	(1047)	
SMALL BOAT HOUSE E.G. 1940(nd)	P.563)	"	28	19	05.071			156.1	(1690.9)	
	"	"	80	42	34.353			235.9	(698.7)	

1 FT. = 3048006 METER

COMPUTED BY: E.C. Andrews

DATE August 11, 1948

CHECKED BY: B.F. Lampton, Jr.

DATE August 11, 1948

M. 2388.12

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PROJECT NO. Ph-19(47)

SCALE OF MAP 1: 20,000

SCALE FACTOR

[illegible]

1 FT. = 3048006 METERS

COMPUTED BY: I.I. Saperstein

DATE August 11, 1948

CHECKED BY: B. E. Lampton, Jr.

DATE August 11, 1948

01 DEC 1961

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COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE T-8879

26 AND 27. CONTROL AND RADIAL PLOT:

A special report on these items was prepared by M.M. Slavney, Photogrammetric Engineer, and submitted to the Washington Office on December 7, 1948. *Filed in Div. of Photogrammetry*

28. DELINEATION:

The detail was delineated from 1: 20,000 scale single-lens ratio prints. For the most part they were clear and of good scale and furnished adequate coverage for cutting in detail points and delineation.

Field inspection was adequate for delineation of this map manuscript except in some instances. Where discrepancies arose they were noted on the discrepancy overlay.

Contours were altered slightly in some cases to conform to the drainage. Insofar as possible, contours along ditches and spoil banks have been delineated according to Photogrammetry Instructions No. 32 issued after the completion of field inspection.

Field inspection and classification of vegetation was also completed before Photogrammetry Instructions No. 21 were issued. Vegetation on this manuscript has been classified according to these latest instructions by the compiler and should be checked by the field editor. *See item 55*

All buildings within the town of Cocoa were delineated as no urban limits were designated by the field inspector. It is believed by the compiler that this town is of sufficient size to have urban limits.

29. SUPPLEMENTAL DATA:

Indexed street map of Cocoa and Rockledge, Florida, published and copyrighted by Frank B. Dolph, Fort Lauderdale, Florida.

Filed in Div. of Photogrammetry

30 AND 31. MEAN HIGH-WATER, LOW-WATER AND SHOAL LINES:

Delineated in accordance with field inspector's notes.

There is no perceptible tide in this quadrangle.

Shallow areas were shown with a dashed line on the east side of Merritt Island and Horti Point.

*Lines removed
during review to
agree with hydrography.
EHR*

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

There are no offshore details requiring further investigation by the hydrographic party.

33. WHARVES AND SHORELINE STRUCTURES:

Delineated according to field inspector's notes.

34. LANDMARKS AND AIDS TO NAVIGATION:

Four nonfloating aids were established from theodolite cuts and Form 567, giving their scaled positions, is submitted as a part of this report. *See Item 68*

Three landmarks recommended for charting by the field inspector have been shown on the map manuscript and Form 567 submitted accordingly. *See Item 51*
copy attached

35. HYDROGRAPHIC CONTROL:

None required.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

One landing field, the Cocoa Municipal Airport, is located in the northwest corner of this quadrangle. *See Item 67*

Airway Beacon No. 18 is the only aeronautical aid within the limits of this quadrangle. Its position has been previously established by triangulation.

37. SECTION AND PRECINCT LINES:

Thirteen section corners within the limits of this quadrangle were recovered by the field inspector. Two other section corners fall outside the project limits.

Most of the section corners were located by the photo point method. *See*
It was impossible for the compiler to locate such section corners with the desired accuracy because the points were too close together. *Item 69*

Six precincts in whole or in part fall within this quadrangle as follows: 21A & B, 4, 5, 9, 10 and 11.

Section and precinct lines that are felt to be in their proper position are shown on the map manuscript in red acetate ink. Those that are more or less doubtful are shown on an ozalid print and will be inked on the map manuscript after verification by the field editor.

See item 52
Field Edit Rpt.

General Land Office plats were used to help construct the section lines where corners were not recovered.

The entire area of this quadrangle falls within Brevard County.

38. GEOGRAPHIC NAMES:

All geographic names submitted have been applied to the map manuscript. *Approved list attached. ENR*

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

There are no topographic quadrangles available in this office for comparison.

A comparison was made with Planimetric Maps 4556 and 4532 which were compiled by the U.S. Coast and Geodetic Survey in 1930 at 1:20,000 scale. They were found to be in good agreement except for changes in cultural detail and some of the marsh areas which are now ponds. Shorelines have not changed to any great degree. A causeway and Florida State Highway 520 have been added; other roads and buildings have been added, bulkheads built, etc.

45. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 844, bearing a print date of June 21, 1948, scale 1:40,000. This chart is in good agreement with the map manuscript. Areas shown primarily as marsh around Cocoa and Rockledge on the chart are interpreted by the compiler as intermittent ponds, ponds and marsh.

A comparison was also made with chart 1246 bearing a print date of December 15, 1947, scale 1:80,000. In general, they are in good agreement. A bridge on south end of Herti Point to Coñoa Beach is now destroyed.

Respectfully submitted,

Richard A. Reece

Richard A. Reece,
Photogrammetric Aid

Approved and Forwarded:

Ross A. Gilmore

Ross A. Gilmore, 4/22/49
Chief of Party.

FIELD EDIT REPORT
QUADRANGLE T-8879
Project Ph-19(47)

The field edit of this quadrangle was accomplished in compliance with Field Edit Instructions dated August 24, 1945 and Supplement I dated February 4, 1946. Actual field work was started July 13, 1949 and completed July 27, 1949.

46. METHODS:

Field edit was accomplished by traversing, via truck, all passable roads; and by walking to other areas in which the reviewer requested information, or for a general check on the adequacy of the map compilation.

Planetable, hand level, sextant and tape methods were used to make corrections and additions not shown on the photographs.

On the field edit sheet red ink was used to show corrections and additions; green ink for deletions. On the discrepancy print violet ink was used to indicate corrections and green ink for deletions. Black ink was used for all work on the photographs.

The reviewer's questions are answered on the discrepancy prints whenever possible. Other work was shown on the field edit sheet or photographs. All work shown on the photographs is properly referenced on the discrepancy prints on field edit sheet.

47. ADEQUACY OF COMPILATION:

The map compilation is believed to be adequate with the corrections added by the field editor.

48. ACCURACY TESTS:

No accuracy tests were required for this quadrangle. The map is believed to comply with standard horizontal and vertical accuracy specifications. Information concerning the two nearest map accuracy test was not available.

49. TOPOGRAPHIC EXPRESSION:

The topographic expression of the quadrangle is considered adequate.

50. HORIZONTAL CONTROL:

Form 526 is submitted for three triangulation stations about which the reviewer requested special information.

-2-

51. LANDMARKS FOR CHARTS:

One landmark previously recommended for charting is being recommended for deletion; a more prominent object is being recommended for charting in its stead. One correction, regarding height of landmark, has been made. Form 567 is submitted. *Form 524 filed.*

52. BOUNDARY MONUMENTS AND SECTION LINES:

Two boundary monuments and several points* on section lines were recovered, identified on the photographs, and Form 524 submitted.

** Seven points. ENR*

53. ROADS:

All roads in this area have been inspected by the field editor and classified in compliance with strict interpretation of Photogrammetry Instructions No. 10, dated April 14, 1947 and amendment dated October 24, 1947.

*Photogr. Instr. #10, 29 & 21
filed in Div. Photogr.
Office Files.*

54. BUILDINGS:

All buildings have been classified in compliance with Photogrammetry Instructions No. 29, dated October 1, 1948.

55. WOODLAND COVER:

All woodland cover has been classified in compliance with Photogrammetry Instructions No. 21, dated August 18, 1948.

56. EXAMINATION OF PROOF COPY:

It is believed that Carl A. Schnabel of Cocoa, Florida, registered land surveyor and engineer for Cocoa-Rockledge, is best qualified to examine a proof copy of this quadrangle.

Respectfully submitted
August 1, 1949

James E. Hundley
James E. Hundley
Cartographer (Photo)

Approved and forwarded:

Ross A. Gilmore
Ross A. Gilmore 8/19/49
Chief of Party.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Cocoa, Florida

15 July

8481

I recommend that the following objects which have ~~(4444/4444)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(4444/4444)~~ the charts indicated.

The positions given have been checked after listing by

Tampa Photogrammetric Office

George E. Morris, *Master of Party.*
Lieut. Govr.

STATE FLORIDA		DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	LATITUDE			LONGITUDE		DATUM							
				D. M. METERS	D. P. METERS								
INDIAN RIVER NORTH LIGHT 155	28 15	306.9	80 40	314.3	NA	1927	Triangulation	1940				844	
INDIAN RIVER NORTH LIGHT 151	28 20	947.9	80 42	1152.9		"	"	"				844	
COCOA YACHT BASIN DAYBEACON 1	28 21	454	80 43	264	Red buoy faded	"	Radial Plot No. 8879	July 1948				844	
COCOA YACHT BASIN DAYBEACON 2	28 21	505	80 43	264	Red buoy faded	"	"	"				844	

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. 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.

TO BE DELETED

Cocoa, Florida

August 1, 1949

I recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be ~~struck out~~ ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by F.A. Reece,

Tampa Photogrammetric Office

Boag A. C-17 more
Chief of Party.

Ross A. Gilmore

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. 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.

ESSENTIALS OF ZONING COORDINATION LANDMARKS FOR CHARTS

STRIKE OUT ONE

Cocoa, Florida

August 1,

649

I recommend that the following objects which have ~~been~~^{been} inspected from seaward to determine their value as landmarks be charted on ~~charts of~~^{charts of} the charts indicated.

The positions given have been checked after listing by R.A. Heene
Tampa Photogrammetric Office

Boag A. Gilmore

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. 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.

GEOGRAPHIC NAMES

Survey No. T-8879

7 1/2' quad., Florida, East

1 Name on Survey Coast A

On Chart
No.

On previous survey
No.

On U. S. quadrangle
Maps

From local
information

On local Maps

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

27

	A	B	C	D	E	F	G	H	K	
Florida									USCB	1
Brevard County										2
Indian River	✓									3
Intracoastal Waterway	✓								USCB	4
Banana River	✓									5
Florida East Coast R.R.	✓									6
U.S. No. 1/State No. 5										7
State No. 3	✓									8
State No. 520	✓									9
State No. 515	✓									10
State No. 503	✓									11
										12
Shortys Banks	✓									13
Sprig Point	✓									14
Jones Creek	✓									15
Thousand Islands	✓									16
Flowing Well Creek	✓									17
Houseboat Cut	✓									18
Catfish Creek	✓									19
Big Island	✓									20
Newfound Harbor	✓									21
George Island	✓									22
Brady Island	✓									23
Book Point	✓									24
Horti Point	✓									25
Pullman Point	✓									26
Angel City	✓									27

(note correction in application: it runs N-S through village of Merritt Island)

Old Dixie Highway---east of U.S. 1

?: short road southward from No. 520

GEOGRAPHIC NAMES

Survey No.

T-8879

GEOGRAPHIC NAMES		Survey No. T-8879									
		On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
2	Name on Survey	A	B	C	D	E	F	G	H	K	
	Crane Creek	✓								1	
	McClintock Point	✓								2	
	Sykes Creek	✓								3	
	Merritt Island Loc.	✓								4	
	Merritt Island									5	
	Footman Loc.	✓								6	
	Georgiana Loc.	✓								7	
	Georgiana Centery)	NO							8	
	Georgiana Methodist Church))	NO							9	
	Fairyland Loc.	✓								10	
	H neymoon Lake	✓								11	
	Baggers Point	✓								12	
	Cape Cod	✓								13	
	Lotus Loc.	✓								14	
	Bonaventure Loc.	✓								15	
	Rockledge Loc	✓								16	
	Rockledge Golf and Country Club	✓								17	
	Cocoa-Rockledge Station	✓								18	
	Cocoa Loc	✓								19	
	Cocoa Yacht Basin									20	
	Cocoa Municipal Park									21	
	Evergreen Memorial Park	✓								22	
										23	
										24	
										25	
										26	
										27	

Names underlined in red are approved, on basis of map usage and report by Bass. 5-9-49 L. Heck

M 234

(village: write "island" in full)

NO shown on Names Report sheets near Georgiana

NO

(near west edge of sheet)

Names underlined in red
are approved, on basis of
map usage and report by
Bass. 5-9-49 L. H. H. H.

Review Report T-8879
Topographic Map
18 January 1950

62. Comparison with Registered Topographic Surveys:

T-1435	1:20,000	1876
T-1450b	1:20,000	1876-77
T-4532	1:20,000	1928
T-4556	1:20,000	1928
T-4442b	1:20,000	1929

This survey supersedes these prior surveys for nautical charting purposes for the area of this map.

63. Comparison with Maps of Other Agencies: None

64. Comparison with Contemporary Hydrographic Surveys: None

65. Comparison with Nautical Charts:

844	1:40,000	48 - 6/21
1246	1:80,000	49 - 4/4

66. Adequacy of Results and Future Surveys:-This map meets the National Standards of Map Accuracy and complies with project instructions.

67. Landing Fields and Aeronautical Aids:-According to information furnished by field edit, Cocoa Municipal Airport is an open field with no marked runways.

68. Landmarks and Aids to Navigation:-Indian River North Light No. 151 and Indian River North Light No. 155 were previously located by triangulation (1940). Form 567 gives positions of these aids as determined by triangulation.

69. Section Lines:-Positions of section corners may have small errors resulting from the method of location but they do meet the accuracy requirement for map features in general. A statement regarding accuracy is included on Forms 524 for these stations.

70. Mean High Water Line:-Fast land borders portions of the Indian River and the Banana River and the shoreline is classified accordingly.

71. Boundaries:

The corporate limits of the City of Rockledge and the City of Cocoa were compiled during the review of the manuscript, using the boundary descriptions and the data submitted by field inspection and field edit. The limits in the Indian River were compiled by holding to the channel, a part as given by the Nautical Chart Branch (See enclosed report) and a part as interpreted from the photographs.

Reviewed by:

Everett H. Ramey
Everett H. Ramey

Approved by:

L. V. Griffith
Chief, Review Section *L.H.M.*
Division of Photogrammetry

H. B. Edmonson
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

W. M. Scaife
Chief, Div. Coastal Surveys

HISTORY OF HYDROGRAPHIC INFORMATION

T-8879, Florida

Hydrography was compiled for this quadrangle in accordance with Division of Photogrammetry request of January 24, 1950; and with general specifications of May 18, 1949.

omitted on registered copy

The depths are in feet at mean low water, and originate with the following surveys and charts:

H-1293	(1876)	1:20,000
H-1380	(1876-77)	1:20,000
H-1415b	(1878)	1:20,000
BP. 39926	(1945)	1:10,000 (U.S.E.)
Chart 844	1:40,000, printed Oct. 24, 1949,	
	corrected Feb. 6, 1950.	
Chart 1246	1:80,000, printed Apr. 4, 1949, corrected	
	Feb. 6, 1950.	

The depth curves are drawn at 6 and 12 feet.

The hydrography was compiled by R. E. Elkins and checked by G. F. Jordan.

R. E. Elkins
R. E. Elkins - 2/15/50
Nautical Chart Branch