

8884

10

Melbourne 7/2
Melbourne East

Diag. Cht. No. 1246

8884

Form 504 U. S. COAST AND GEODETIC SURVEY DEPARTMENT OF COMMERCE DESCRIPTIVE REPORT	
Type of Survey	TOPOGRAPHIC
Field No.	Office No. T-8884
LOCALITY State FLORIDA General locality EAST COAST Locality BREVARD COUNTY	
<u>194 7-'48</u> CHIEF OF PARTY G.E.Morris, Jr., Chief of Field Party R.A.Gilmore, Tampa Photo. Office	
LIBRARY & ARCHIVES	
DATE	June 8, 1950

DATA RECORD

T

Project No. (II): Ph-19(47) Quadrangle Name (IV):

Field Office (II): Cocoa, Fla.

Chief of Party: George E. Morris, Jr.

Photogrammetric Office (III): Tampa, Fla.

Officer-in-Charge: Ross A. Gilmore

Instructions dated (II) (III): Oct. 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): 4-13-49

Date reported to Nautical Chart Branch (IV): 4-25-49

Applied to Chart No. 845

Date: 11/10/49

Date registered (IV): 24 Apr 50

Publication Scale (IV): 1: 24,000

Publication date (IV):

Geographic Datum (III): N.A. 1927 ✓

Vertical Datum (III):

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): MELBOURNE TANK, 1934 ✓

Lat.: 28° 05' 02."084(64.1m) ✓

Long.: 80° 36' 53."443(1459.1m) ✓

Adjusted ✓

~~MDA010240~~

Plane Coordinates (IV):

State: Florida

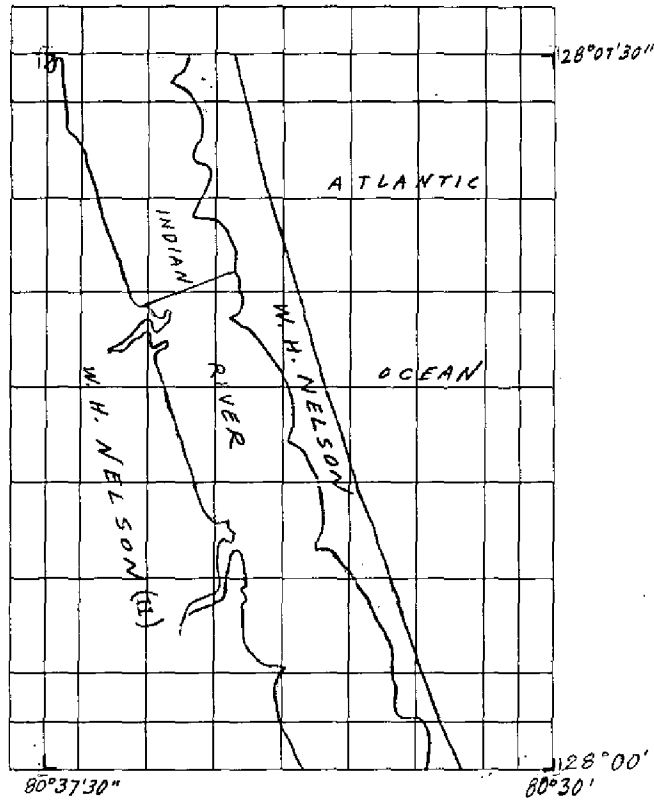
Zone: East

Y = 1,363,350.28 Ft.

X = 624,192.04 Ft.

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): W.H. Nelson

Date: March-June, 1948

Planetable contouring by (II): W.H. Nelson

Date: March-June, 1948

Completion Surveys by (II): J.E. Hundley

Date: June 1949

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

Date of photographs (Dec '47)
Air photo compilation

Projection and Grids ruled by (IV):

Date:

Projection and Grids checked by (IV):

Date:

Control plotted by (III): R.R. Wagner

Date: July 6, 1948

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

Date: July 9, 1948

Radial Plot or Stereoscope ~~Control Extension~~ by (III): M.M. Slavney

Date: Sept. 17, 1948

Stereoscopic Instrument compilation (III):

Planimetry

Date:

Contours

Date:

Manuscript delineated by (III): C.H. Baldwin

Date: Nov. 1948

I.I. Saperstein

Mar. 1949

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

Date: March 1949

Elevations on Manuscript
checked by (II) (III):

J.A. Giles (III)

Date: March, 1949

Camera (Kind or source) (III): U.S. C. & G.S. Single-lens

Number	Date	Time	Scale	Stage of Tide
47J-374	Dec. 8, 1947	12:54	1:20,000	1.3' Atlantic
375	"	12:54	"	" Ocean side
376	"	12:54	"	" only.
377	"	12:54	"	"
378	"	12:54	"	"
428	"	10:33	"	No tide-No tide in
454	"	10:55	"	Indian River
455	"	10:55	"	
456	"	10:56	"	
457	"	10:57	"	
458	"	11:58	"	
542	"	12:11	"	0.8' Atlantic
543	"	12:17	"	Ocean side only

Tide (III)

Reference Station: Mayport
Subordinate Station: Cape Canaveral
Subordinate Station:

Interpolation for T-8884

Ratio of Ranges	Mean Range	Spring Range
0.8	3.5	4.1
	3.1	3.6

Washington Office Review by (IV): J. L. Rihn

Date: Dec. 1949

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 23

Shoreline (More than 200 meters to opposite shore) (III): 32.2 miles

Shoreline (Less than 200 meters to opposite shore) (III): 4.4 miles

Control Leveling - Miles (II): 30

Number of Triangulation Stations searched for (II): 46

Recovered: 29

Identified: 19

Number of BMs searched for (II): 7

Recovered: 5

Identified: 5

Number of Recoverable Photo Stations established (III): 30

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

Remarks:

80°30'

80°0'

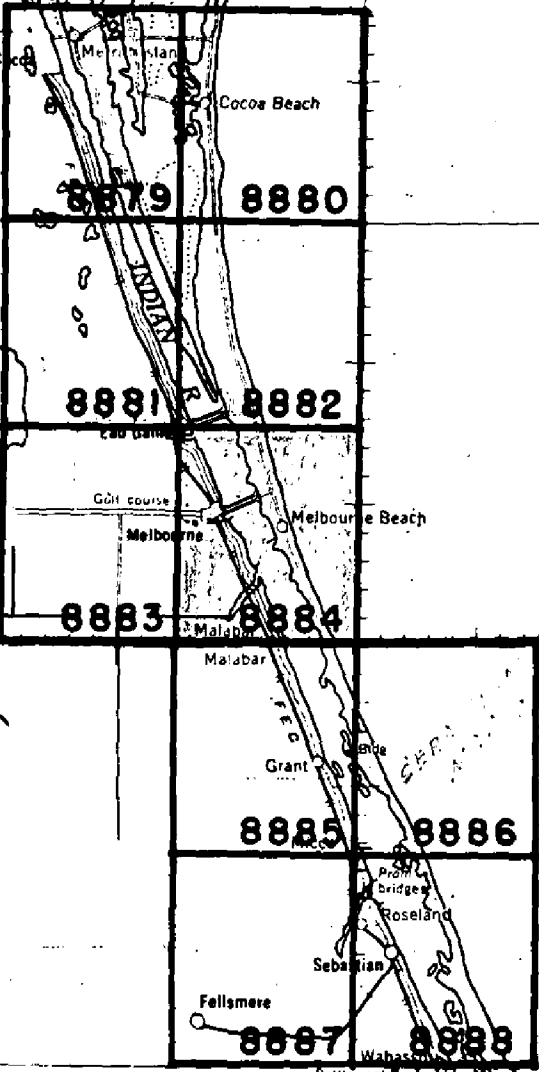
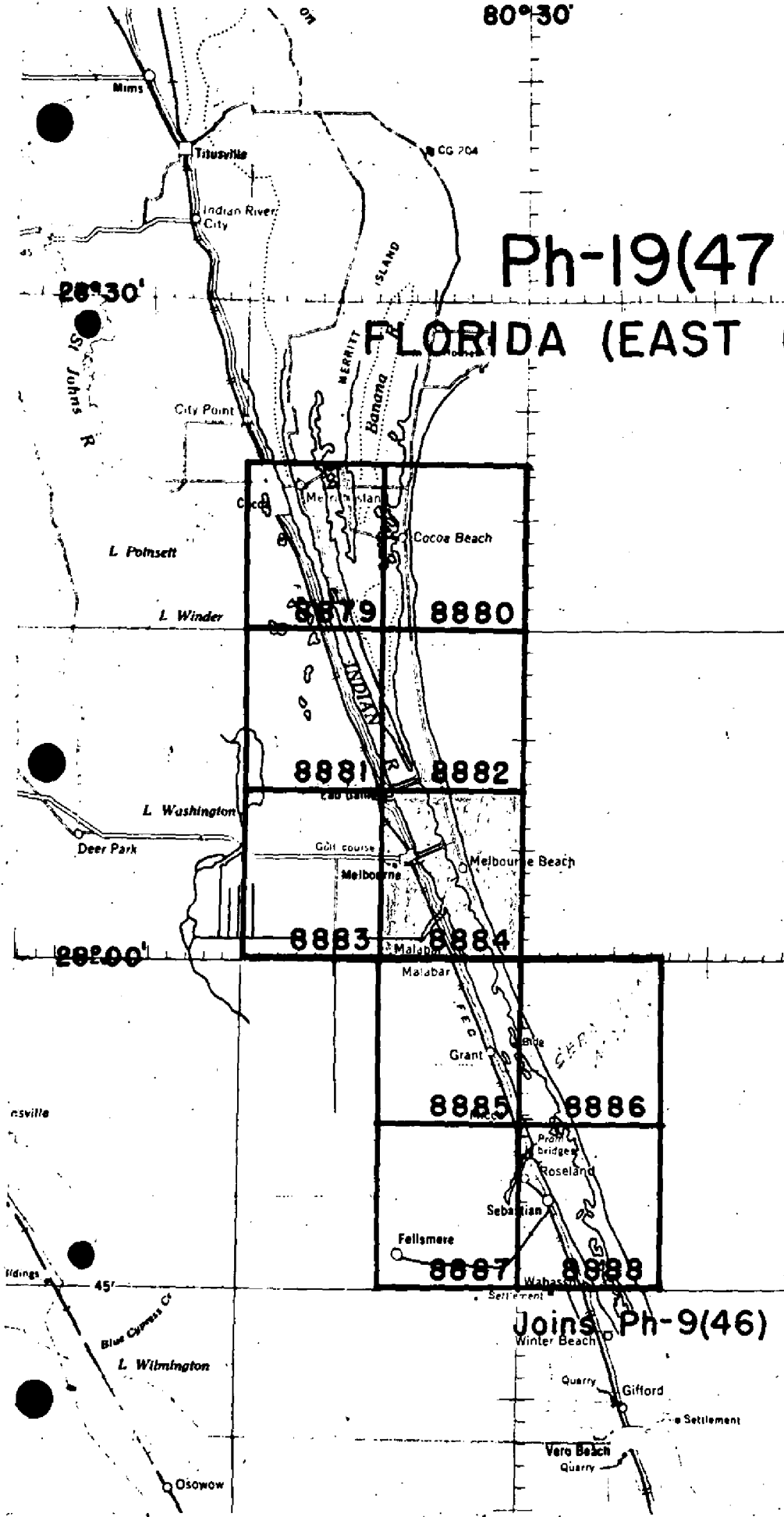
Ph-19(47)

FLORIDA (EAST COAST)

C
E
N

28°30'

28°00'



Joins Ph-9(46)

- LEGEND**
- TO BE STARTED
 - IN PROGRESS
 - ≡ COMPLETED 1946
 - ✕ NOT APPLICABLE

Summary to Accompany T-8884

Topographic map T-8884 is one of 10 similar maps in Project Ph-19(47). It covers part of Indian River, Florida. 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 the contours on the photographs by planetable methods. The manuscript is at a scale of 1:20,000. The entire map was field edited. The map is to be published by the Geological Survey at a scale of 1:24,000 as a standard topographic quadrangle. Material to be registered under T-8884 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-8884

"MELBOURNE BEACH"

N28°00.0 - W80°30'.0

PROJECT PH-19(47)

8 JULY 1948

1. DESCRIPTION OF THE AREA

This quadrangle lies within Brevard County on the east coast of Florida. The area contains approximately 25.0 square statute miles of land. Elevations range from sea level to 36 feet on the highest ridge, just west of Indian River near the south limit of the quadrangle.

Florida Highway A1A runs the full length of the quadrangle on the strip of land bounded by the Atlantic Ocean and the Indian River. Highway U.S.No.1 runs the full length of the quadrangle along the west bank of the Indian River. Florida Highway 516 connects Routes U.S.No.1 and Florida A1A at Indialantic, Florida Route 192 junctions with U.S.No.1 and Florida Highway 516 and continues west to the west limit of the quadrangle. Several improved roads run in an east to west direction with numerous unimproved roads and trails from them. Almost the entire area is covered with palm, live oak, and scrub palmetto, with mangrove, water hyacinths, and marsh grass in the marshes along Indian River and along the banks of the several creeks which empty into Indian River.

There are no cultivated areas of any commercial value in the area bounded by the Indian River and the Atlantic Ocean.

There are a few citrus groves and vegetable farms and some grazing land in the southern portion of the quadrangle, bounded on the east by Indian River, which have considerable commercial value.

The incorporated towns of Melbourne and Melbourne Beach, and the unincorporated towns of Indialantic, Malabar and Palm Bay lie in this area.

2. COMPLETENESS OF FIELD INSPECTION

The field inspection was done in accordance with Project Ph-19(47) Instructions dated 13 May 1948 and other general instructions.

The field inspection was done on photographs 47-J-374, 47-J-375, 47-J-376, 47-J-377, 47-J-378, 47-J-427, 47-J-428, 47-J-454, 47-J-455, 47-J-456 and 47-J-457. It is believed to be adequate and complete.

The main roads mentioned in the description of the area are the only hard surface roads. The remainder of the roads are shell, marl and sand surfaced.

3. INTERPRETATION OF THE PHOTOGRAPHS

The photographs are clear and easily interpreted. The light gray areas are, in most instances, palmetto and are classified as brush, all exceptions are clearly noted. All the dark areas are palm, live oak, and mangrove trees and are dense enough to be classified as trees. Intermittent ponds, creeks and ditches with water are black or dark gray. Sand spots, sand, cleared areas, and spoil banks appear white.

4. HORIZONTAL CONTROL

The total horizontal control recovered and identified for this quadrangle consists of 13 U.S.C. & G.S. triangulation stations and 5 U.S.E.D. triangulation stations. Identification is on nine single lens photographs: 47-J-374, 47-J-375, 47-J-376, 47-J-377, 47-J-378, 47-J-454, 47-J-455, 47-J-456, 47-J-457. The 13 U.S.C. & G.S. triangulation stations identified are: AIRWAY BEACON 16; ANP 2 1934; BLUE 2 1934; DOME, MELBOURNE HOTEL 1930; FLAGPOLE, MELBOURNE BEACH PIER 1930; INDIALANTIC HOTEL WATER TANK 1930; LIGHTED BEACON, EAU GALLIE 1930; MALABAR 2 1930; PETER WRIGHT 1877, 1906; STEEL 2 1934; TANK MELBOURNE 1930; TURKEY CREEK 1877, 1906; WINTER 1930. The U.S.E.D. triangulation stations identified are: FISH 1945; FUN 1945; PRM DD 1930; SQUAT 1945; TRACT 1945. Nine U.S.C. & G.S. triangulation stations: (AP 48 1934; AP 48A 1934; AP 49 1934; AP 50 1934, AP 51 1934; INDIALANTIC TANK 1934; MELBOURNE TANK 1934; WJMV RADIO ANTENNA 1948; WMMB RADIO ANTENNA 1948;) were recovered but not identified on the photographs. Two U.S.E.D. triangulation stations: (INDIAN RIVER SOUTH LIGHT 2 1940; and ASPENWALD 2 1937;) were recovered but not identified on the photographs

5. VERTICAL CONTROL

Two U.S.C. & G.S. bench marks, two U.S.E.D. bench marks, and three U.S.C. & G.S. triangulation stations for which the U.S.E.D. has established elevations, fall within the limits of this quadrangle. The two U.S.C. & G.S. bench marks, (F 33 1933; G 33 1933) two U.S.E.D. bench marks (EDM 7 1940; BALLARD 1940) and the three U.S.C. & G.S.

triangulation stations (ANT 2 1934; BLUE 2 1934; STEEL 2 1934) were recovered and used to establish vertical control. A fly level line, of 54 points and 30 miles long, was run along the principal roads and trails to provide a base for planetable contouring. Temporary bench marks were established at identifiable photo points and marked with either a bottle cap or a wooden stake. All level lines were closed within the required limits of accuracy and records carefully checked. All lines with closures greater than 0.3 foot were adjusted. Level points are shown on contour photographs with a dot, labeled with the quadrangle designation "MB" and numbered consecutively in blue ink with elevations shown to the nearest hundredth of a foot.

6. CONTOURS AND DRAINAGE

Contouring was done by a four man party, using planetable methods on single lens photographs 47-J-374, 47-J-375, 47-J-376, 47-J-377, 47-J-378, 47-J-427, 47-J-428, 47-J-454, 47-J-455, 47-J-456, 47-J-458.

All planetable traverses of three set-ups or more were tied back to level points with a closure of 0.5 foot or less and adjusted.

All contouring was done by Wilber H. Nelson, Engineering Aid.

7. MEAN HIGH WATER LINE

The ocean beach is a comparatively steep slope, the entire length of the quadrangle, and places the high water line close to the five foot contour. It is identified on the photographs at intervals, by a red dashed line.

There is no evident mean high water line on either side of the Indian River, therefore it has been indicated as apparent shoreline.

8. LOW WATER LINE

The low water line is very close to the mean high water line along the Atlantic Ocean. It is identified on the photographs at intervals by a green dotted line.

Along the shores of the Indian River the low water line is generally parallel and very close to the mean high water line. No attempt was made to delineate the low water line.

9. WHARVES AND SHORELINE STRUCTURES

All wharves and shoreline structures have been indicated on the photographs.

10. DETAILS OFFSHORE FROM HIGH WATER LINE

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

✱

11. LANDMARKS AND AIDS TO NAVIGATION

Two lights along the Intracoastal Waterway were identified and indicated for pricking on the photographs. These lights were not pricked, since the prick point would obscure them, and it was thought more feasible to leave them visible.

The position of Indian River South Light 2 should be checked during the radial plot, since this was at one time located as a triangulation station.

A total of eleven daybeacons at the entrances to the Melbourne yacht basin and the Eau Gallie yacht basin have been recommended for charting.

Two range lights at the entrance to the Melbourne yacht basin are recommended for charting; Lighted Beacon, Eau Gallie; Indialantic Hotel Water Tank and Melbourne Municipal Water Tank are also recommended for charting.

Two new radio towers within the limits of the quadrangle are recommended for charting: Station WMMB at Lat. $28^{\circ}05'$ - Long. $80^{\circ}36'$ and Station WJMB at Lat. $28^{\circ}04'$ - Long. $80^{\circ}36'$.

Two landmarks are recommended for deletion. They are: GARAGE E. GABLE at Lat. $28^{\circ}03.4'$ - Long. $80^{\circ}35.4'$ and HOTEL DOME at Lat. $28^{\circ}05.1'$ - Long. $80^{\circ}36.0'$. *See Review Report*

12. HYDROGRAPHIC CONTROL

No hydrographic control signals were required for this quadrangle.

13. LANDING FIELDS AND AERONAUTICAL AIDS

No landing fields are located in this quadrangle. Airway Beacon 16 is located in the northwest section of the quadrangle. It has been identified on photograph No. 47-J-457.

14. ROAD CLASSIFICATION

All roads are classified in accordance with Photogrammetry Instructions No.10 as amended 24 October 1947.

15. BRIDGES

Clearance of all bridges over navigable waters were checked with the U. S. Engineers "List of Bridges Over Navigable Waters in the U.S.", 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 two discrepancies. The F.E.C.RR bridge over Crane Creek at Melbourne was found to have a vertical clearance of 14.4 ft. and a horizontal clearance of 44.0 ft. instead of a clearance of 12.5 ft. vertically and a clearance of 40.0 ft. horizontally as reported by the "List of Bridges Over Navigable Waters in the U.S."

Due to the type of construction of the bridge over the Indian River at Melbourne the vertical clearance varies from 8.8 ft. near the fenders at the turntable of the bridge to 14.8 ft. near the fenders at the extremities of the bridge.

The city of Melbourne bridge over Crane Creek at Melbourne no longer exists.

Discrepancies will be reported in a special project report.

16. BUILDINGS AND STRUCTURES *Filed in Div. Photogrammetry General Files.*

All buildings to be shown have been circled in red ink. New buildings have been blocked in red ink and circled. Buildings and other details to be deleted have been crossed out in green ink.

17. BOUNDARY MONUMENTS AND LINES

Five section corners were recovered and are identified on photographs 47-J-376, 47-J-456, 47-J-457. This quadrangle lies within precincts Nos. 5, 6, 7, and 17 of Brevard County.

18. GEOGRAPHIC NAMES

This is the subject of a Special Report, Project Ph-19(47) which is to be submitted to the Washington Office at a later date. *Filed in Geographic Name Section, Div. of Charts.*

19. TOPOGRAPHIC STATIONS

Four new topographic stations were established in this area along the Atlantic Ocean and are identified on photographs 47-J-375, 47-J-376, 47-J-377 and 47-J-378.

Seven topographic stations were established along the shores of the Indian River. These consist of permanent natural objects or standard topographic station monuments.

20. JUNCTION WITH ADJOINING QUADRANGLES

A junction was made with quadrangle T-8882 to the north, quadrangle T-8885 to the south and quadrangle T-8883 to the west. All junctions are in good agreement. There is no adjoining quadrangle to the east.

Submitted by:

Wilber H. Nelson
Wilber H. Nelson
Engineering Aid.

Approved and forwarded:

George E. Morris, Jr.
George E. Morris, Jr.
Chief of Party

MAP T-8884 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	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
STEEL 2, 1934	G.P.s. P.153	N.A. 1927	28 00	29.531				909.0	(937.9)		
WINTER, 1930	" P. 179	"	80 31	47.338				1293.3	(345.9)		
ANT 2, 1934	" P.153	"	28 01	55.102				1696.1	(150.8)		
TURKEY CREEK, PIER, West End, 1877	" P. 153	"	80 32	25.605				699.4	(939.4)		
MELBOURNE BEACH	"	"	28 03	34.332				1056.8	(790.1)		
PIER, West End, FLAGPOLE, 1930	" P.707	"	80 33	13.800				376.9	(1261.6)		
INDIALANTIC TANK, (d.tn.) 1934	" P.152	"	28 02	23.891				735.4	(1111.5)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	80 34	48.538				1325.7	(313.1)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	28 04	05.17				159.1	(1687.8)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	80 34	05.15				140.6	(1497.7)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	28 05	08.808				271.1	(1575.8)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	80 34	06.952				189.8	(1448.3)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	28 05	08.551				263.2	(1583.7)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	80 34	06.605				180.3	(1457.8)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	28 07	02.571				79.1	(1767.8)		
INDIALANTIC HOTEL, WATER TANK CENTER, 1934	" P.191	"	80 34	30.409				830.0	(807.7)		
INDIAN RIVER SOUTH	"	"	28 07	25.188				775.3	(1071.6)		
LIGHT 2, 1940	P.559	"	80 36	53.541				1461.2	(176.3)		
AIRWAY BEACON NO. 16 (SOUTH OF EAW GALLIE) 1934	"	"	28 05	59.002				1816.2	(30.7)		
AIRWAY BEACON NO. 16 (SOUTH OF EAW GALLIE) 1934	"	"	80 37	21.147				577.3	(1060.6)		
AP 51, (FGS) 1934	Fla. G.S.	"	28 05	17.374				534.8	(1312.1)		
MELBOURNE TANK, 1934	G.P.s. P.152	"	80 36	36.658				1000.8	(637.2)		
MELBOURNE TANK, 1934	G.P.s. P.152	"	28 05	02.084				64.1	(1782.8)		
MELBOURNE TANK, 1934	G.P.s. P.152	"	80 36	53.443				1459.1	(179.0)		

MAP T-8884 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 α -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)	
MELBOURNE, MUNICIPAL OFFICE CENTER, 1934	G.P.s. P.191	N.A. 1927	28 05	02.083				64.1	(1782.8)	
AP 50, 1934 (FGS)	Fla. G.S.	"	80 36	53.599				1463.3	(174.8)	
AP 48, (FGS) 1934	"	"	28 05	06.251				192.4	(1654.5)	
AP 49 - (FGS) 1934	"	"	80 36	30.646				836.7	(801.4)	
MELBOURNE HOTEL, DOME, 1930	G.P.s. P.706	"	28 04	41.933				1290.8	(556.1)	
PETER WRIGHT 1877	"	"	80 37	19.422				530.3	(1107.9)	
FISH (USED) 1945	U.S. Eng.	"	28 04	41.027				1262.9	(584.0)	
EUN (USED) 1945	U.S. Eng.	"	80 36	17.401				475.1	(1163.1)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	28 04	42.970				1322.7	(524.2)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	80 36	12.338				336.9	(1301.3)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	28 04	51.301				1579.1	(267.8)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	80 36	08.406				229.5	(1408.6)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	28 04	39.611				1219.3	(627.6)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	80 34	34.539				943.1	(695.2)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	28 04	41.584				1280.0	(566.9)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	80 35	55.797				1523.4	(114.8)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	28 03	25.970				799.4	(1047.5)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	80 33	55.819				1524.4	(114.2)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	28 03	41.945				1291.1	(555.8)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	80 35	45.862				1252.4	(386.1)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	28 07	28.915				890.1	(956.9)	
ELBOW CREEK LIGHTED BEACON, 1930	G.P.s. P.706	"	80 37	25.198				687.7	(949.8)	
AP 48-A (FGS) 1934	Fla. G.S.	"	1,361,316.09					401.1	(2646.9)	
		"	625,273.58					1607.4	(1440.6)	

MAP T-8884

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
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
PERM-DD, (USE) 1930	U. S. ENG.	N. A. 1927	1,347,167.61	643, 831. 90	7,167.61 (2832.39)	3,831.90 (6168.10)		2184.7 (863.3)	1168.0 (1880.0)	
TRACT (USED) 1945	"	"	1,368,797.13	633,560.49	8,797.13 (1202.87)	3,560.49 (6439.51)		2681.4 (366.6)	1085.2 (1962.8)	
SQUAT (USED) 1945	"	"	1,336,941.64	649,322.43	6,941.64 (3058.36)	9,322.43 (677.57)		2115.8 (932.2)	2841.5 (206.5)	
ASPENWALL 2, (USE) 1937	"	"	1,377,562.00	621,696.23	7,562.00 (2438.00)	1,696.23 (8303.77)		2304.9 (743.1)	517.0 (2531.0)	
ELBOW CREEK BEACON, 1940 (nd)	P.559	NA 1927	28° 07' 28.913"	80 37 25.197	Same station as Ear Galle, Lighted Beacon, 1930"					
Malabar 2, 1930			28 01 02.556	80 33 59.542				78.7	1626.6	
Malabar 5, 1948			28 01 02.221	80 33 51.551				68.4	1626.9	

16.
COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE T-8884

26 AND 27. CONTROL AND RADIAL PLOT:

A special report on the main radial plot written by M.M. Slavney, Photogrammetric Engineer, was submitted to the Washington Office December 7, 1948. *Filed in Div. of Photogrammetry*

28. DELINEATION:

The photographs were clear and of good scale. The field inspection was adequate for an accurate delineation of the map manuscript.

The compilation for the most part was done by C.H. Baldwin and completed by I.I. Saperstein. The following work was done by C.H. Baldwin:

1. All detail points radially cut in.
2. All detail east of the Indian River.
3. All shoreline, roads, ditches, and drainage, with few exceptions.
4. Delineation of buildings in Melbourne.

The following work was done by I.I. Saperstein.

1. All vegetation classification and contouring west of the Indian River.
2. Boundaries and section lines
3. Delineation of buildings south of Melbourne
4. Geographic Names.

In some instances contours were altered slightly to conform to the drainage. These discrepancies have been noted on the discrepancy overlay.

All topographic stations were pricked on the office photographs and cut in radially.

29. SUPPLEMENTAL DATA:

The following city plans were used to supplement the photographs and were helpful in determining section lines and boundaries:

- A. Dolph's map of Eau Gallie and Melbourne
- B. Map of the City of Melbourne, 1940.
- C. Map of Indialantic By-the-Sea, Melbourne, Fla.
Filed in Div. Photogrammetry General Files.

30. MEAN HIGH-WATER LINE:

The mean high-water line was delineated on the manuscript according to the field inspector's notes. However, the compiler is doubtful if the shoreline along the Indian River is apparent in all or most areas. Under the stereoscope, a few stretches of shoreline appear very definite, especially where a bluff runs along the shore. A few instances have been shown on the discrepancy overlay. The shoreline in the Indian River should be checked by the field editor.

31. LOW WATER AND SHOAL LINES:

The low-water line along the Atlantic Ocean beach is only about 8 meters from the mean high-water line and has not been delineated. However, appropriate notations have been made on the map manuscript. (See Field Inspection Report, Item 8).

There are no shoals visible on the photographs.

32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

See Field Inspection Report, Item 10.

33. WHARVES AND SHORELINE STRUCTURES:

All wharves and shoreline structures have been delineated on the map manuscript according to the field inspector's notes.

34. LANDMARKS AND AIDS TO NAVIGATION:

Four landmarks have been recommended for charting and two for deletion. Form 567 has been submitted for these landmarks. *Copies attached.*

Those aids to navigation that were pricked on the photographs by the field inspector were transferred to the office photographs and cut in radially.

The theodolite cuts to Indian River South Lt. 2 confirmed its position as being identical with that of the triangulation station of that name established in 1940. Triangulation station "Lighted Beacon Eau Gallie" was pricked direct and cut in radially. It confirmed the plotted position.

All other aids to navigation were plotted on the map manuscript from theodolite angles submitted by the field party.

Form 567 was submitted for all aids.

Form 524 was submitted for each aid except "Indian River South Lt. 2" and "Lighted Beacon Eau Gallie" for which Form 526 was submitted for each. *Forms 524 Filed in Division Photogrammetry General Files.*

35. HYDROGRAPHIC CONTROL:

See Field Inspection Report, Item 12.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

There are no landing fields within ^{west} the limits of this quadrangle. Airway Beacon 16 appears in the northeast part of the quadrangle. Its position has been previously established by triangulation.

37. SECTION CORNERS AND LINES:

A section line ozalid print has been prepared for the field editor to check. Discrepancies have been noted on this print.

Precinct lines have been shown on this ozalid print.

Section and precinct lines will be inked on the map manuscript after field edit.

38. BOUNDARIES:

All city boundaries have been omitted until after the field editor checks the section lines in this quadrangle. Most of the boundaries depend on the adequacy of section lines.

39. GEOGRAPHIC NAMES: *219 ✓*

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

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

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

A comparison was made with Planimetric Maps No. 4555 and 4556.

The shoreline is in good agreement with the following exceptions:

- A. Part of Turkey Creek that was open water is now marsh.
- B. That portion of Elbow Creek shown on this quadrangle has been built up since the time Planimetric Map 4556 was compiled.

Many of the streets have been omitted in Indialantic on the map manuscript. These streets are now grown over. Much of the marsh area shown on Planimetric Map 4555 is now intermittent ponds. A new bridge has been constructed across the Indian River at Melbourne to replace the one shown on the planimetric map.

45. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Nautical Chart 845, bearing a print date of March 3, 1947.

The shoreline is in good agreement with the following exceptions:

- A. Small islets on the chart at approximate Latitude $28^{\circ} 04.'5$, Longitude $80^{\circ} 35.'8$ have disappeared, and replaced with a marsh spit.
- B. Marsh has grown up in Turkey Creek at approximate Latitude $28^{\circ} 01.'5$, Longitude $80^{\circ} 35.'4$.

The bridge over Indian River at Melbourne has been rebuilt.

Many of the streets in Indialantic have grown over and have been omitted from the map manuscript.

New piers have been added around Melbourne. Much of the marsh area shown on the chart has now been mapped as intermittent ponds.

The map compilation should supersede the charted information.

Respectfully submitted,

C.H. Baldwin,
Cartographic Aid

Iwing J. Saperstein
I.I. Saperstein,
Cartographic Aid

Approved and Forwarded:

Ross A. Gilmore
Ross A. Gilmore, 4/8/49
Chief of Party.

FIELD EDIT REPORT
QUADRANGLE T-8884
PROJECT Ph-19(47)

Field edit of this quadrangle was accomplished in compliance with Field Edit Instructions dated 24 August 1945 and Supplement I dated 4 February, 1946. Actual field work was started 23 June 1949 and completed 30 June, 1949.

46. METHODS:

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

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. Black ink was used for all work on the photographs. Violet ink was used to answer questions on the discrepancy prints.

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

47. ADEQUACY OF COMPILATION:

The map 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 maps accuracy tests was not available.

49. TOPOGRAPHIC EXPRESSION:

The topographic expression of the quadrangle is considered adequate.

-2-

50. BOUNDARY MONUMENTS AND SECTION LINES:

The position of one section corner was corrected. Several additional corners and points on lines were recovered and identified and Form 524 submitted. Additional information secured from property owners and Frank P. Schuster, Brevard County Surveyor, has been inked on the section line discrepancy print.

51. TOPOGRAPHIC STATIONS:

Two additional topographic stations were identified on the photographs and Form 524 submitted.

52. LANDMARKS AND AIDS TO NAVIGATION:

The four objects previously listed on Form 567 as landmarks for charts are the most prominent objects in the area.

In regards to the stack near Malabar it is not recommended as a landmark.

Point on Range - Melbourne Harbor:

WJMV Radio Tower, 1948

to 62° 24' 30"

Melbourne Harbor Range

to 19° 03' 00"

WMMB Radio Tower, 1948

(These angles are the mean of 3 sets taken.)

Mr. W. B. Masland, Harbor Master of Melbourne Harbor, requests that a note appear on the new charts indicating the channel depths of entrance to Melbourne Harbor. He states that the depths shown on the old charts are so displaced that they do not show the correct depths.

-3-

53. MEAN HIGH-WATER LINE:

The mean high-water line has been delineated on the following photographs: 47J-374 to 47J-378 inclusive, 47J-454 and 47J-455.

54. ROADS:

All roads have been classified in compliance with Photogrammetry Instructions No. 10, dated 14 April, 1947 and amendment dated 24 October, 1947.

*Photogr. Instr. #10, 29 + 21
filed in Div. Photogr. office
files.*

55. BUILDINGS:

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

56. WOODLAND COVER:

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

57. EXAMINATION OF PROOF COPY:

It is believed that Frank P. Schuster, registered land surveyor and Brevard County engineer of Titusville, Florida, is best qualified to examine a proof copy of this quadrangle.

Respectfully submitted,

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

Approved and forwarded:

Ross A. Gilmore
Ross A. Gilmore, 8/2/48
Chief of Party.

SUPPLEMENTAL REPORT
TO
ACCOMPANY

QUADRANGLE T-8884

(1). Some changes in classification of vegetation were made along the southwest junction in order to conform and make junction with T-8883, even though the field editor made no changes in this area on T-8884.

(2). The shoreline was changed to conform to the field editor's notes. In many cases where the field editor has noted apparent shoreline there is a 15, 20, and 25-foot bluff along the shore which makes the compiler doubtful of the shoreline inspection in those areas.

3. SECTION CORNERS AND LINES:

The plane coordinate positions for the three easternmost section corners $\frac{21}{28}|\frac{22}{27}$, $\frac{28}{33}|\frac{27}{34}$, R37E, T27S, and $\frac{33}{4}|\frac{34}{4}$ R37E T28S) shown on the

"Topographic Map of Lands to be Occupied by Melbourne Field" were discarded in favor of the positions for these corners located by the field editor.

It is believed the plane coordinate positions are in error.

Respectfully submitted,

Irving I. Saperstein

Irving I. Saperstein,
Cartographic Aid

Approved and Forwarded:

Ross A. Gilmore

Ross A. Gilmore, 1/23/49
Chief of Party

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

7-8374

NONFLOATING AIDS ~~OR LANDMARKS~~ FOR CHARTS

TO BE CHARTED ~~OR CHARTED~~
STRIKE OUT ONE

Melbourne, Florida

26 May 1944

I recommend that the following objects which have ~~0444/1140~~ been inspected from seaward to determine their value as landmarks be charted on ~~(0444/1140)~~ the charts indicated.

The positions given have been checked after listing by

Charles H. Baldwin

Tampa Photogrammetric Office George E. Morris, Jr. Chief of Party.

Lieut. Comdr.

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE		LONGITUDE							
			D. M. METERS	S	D. P. METERS	W.						
INDIAN RIVER SOUTH LIGHT 5	Black square daymark with yellow border on pile structure.		28 04	80 35	571	1927	MA	May 1948	X		845	
INDIAN RIVER SOUTH LIGHT 2	Red triangle with yellow border on white dolphin.		28 07	80 36	1463.2		Triang.	1930	X			
MELBOURNE DAYBEACON 6	Red pile with pointer, red reflector.		28 04	80 35	1109		Radial	May 1948	X			
MELBOURNE DAYBEACON 8	Red pile with pointer, red reflector.		28 04	80 35	1347		"	"	X			
MELBOURNE DAYBEACON 10	Red pile with pointer, red reflector.		28 04	80 35	1515		"	"	X			
MELBOURNE DAYBEACON 12	Red pile with pointer, red reflector.		28 04	80 35	1569		"	"	X			
MELBOURNE DAYBEACON 7	Black pile with pointer, green reflector.		28 04	80 35	1106		"	"	X		24	

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

7-8874

NONFLOATING AIDS ON ~~MANUALS~~ FOR CHARTS

TO BE CHARTED
~~TO BE CHARTED~~

STRIKE OUT ONE

Melbourne, Florida

26 May 1945

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

The positions given have been checked after listing by

Charles H. Baldwin

Tampa Photogrammetric Office

George E. Morris, Jr. Chief of Party
Miami, Conn.

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED			
			LATITUDE		LONGITUDE										
			D. M.	METERS	D. P.	METERS									
MELBOURNE DAYBEACON 9	Black pile with pointer, green reflector.		26	04	944	80	35	NA	1927	Rediel 7-8884	May 1945	X			845
MELBOURNE DAYBEACON 11	Black pile with pointer, green reflector.		26	04	928	80	35						X		
MELBOURNE YACHT BASIN LIGHT, FRONT RANGE	Red light on 6.5 ft. iron pipe		26	04	947	80	35						X		
MELBOURNE YACHT BASIN LIGHT, REAR RANGE	Red light on top telephone pole.		26	04	941	80	37						X		
NAV GALLIE DAYBEACON 1	Black pile with pointer, green reflector.		26	07	684	80	37						X		
NAV GALLIE DAYBEACON 3	Black pile with pointer, green reflector.		26	07	748	80	37						X		
NAV GALLIE DAYBEACON 5	Black pile with pointer, green reflector.		26	07	792	80	37						X		

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating

GEOGRAPHIC NAMES

Survey No. T-8884

7 1/2' quad. Fla.

1	Name on Survey	Source											K				
		A	B	C	D	E	F	G	H	On Chart No.		U. S. Light List					
		7 1/2' quad. Fla.															
	Florida	✓														USGB	1
	Brevard County	✓															2
	Atlantic Ocean	✓															3
	Indian River	✓															4
	Intracoastal Waterway	✓														USGB	5
	Florida East Coast Railway	✓															6
	U.S. 1/ State No. 5																7
	State No. U.S. No. 192/ State No. 500																8
	State Nos. ALA, 514, 516																9
																	10
	Malabar	✓															11
	Cape Malabar	✓															12
	Turkey Creek	✓															13
	Palm Bay	✓															14
	Palm Bay	✓				(village)											15
	Castaway Point	✓															16
	Crane Creek	✓															17
	Memorial Park	No															18
	Melbourne Yacht Basin	No															19
	Melbourne	✓															20
	Melbourne Causeway	✓															21
	Wells Park	✓															22
	Bravard Hospital	No															23
	Melbourne - Eau Gallie Airport	No															24
	Eau Gallie	✓															25
	Elbow Creek	✓															26
	Aspenwald Point	No															27

GEOGRAPHIC NAMES

Survey No. T-8884

2	Name on Survey	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		30.
		A	B	C	D	E	F	G	H	K								
	<u>Wells Point</u>	✓																1
	<u>Indialantic</u>	✓																2
	<u>Fisherman Point</u>	✓															USGB	3
	<u>Melbourne Beach</u>	✓																4
	<u>Crab Point</u>	✓																5
	<u>Whitehouse Cove</u>	✓																6
	<u>Long Sandy Point</u>	✓																7
	<u>Bluefish Point</u>	✓																8
	<u>Carters Bulkhead</u>	✓																9
	<u>Mosier Hammock</u>	✓																10
	<u>Coconut Point</u>	✓																11
																		12
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																		27

Names underlined in red are approved. Based on previous usage and Names Report by Bass. 4/25/49 L. Heck

Review Report T-8884
Topographic Map
14 December 1949

62. Comparison with Registered Topo Surveys:

This survey supersedes common areas on T-1460 (1878) 1:20,000; T-4545 (1930) 1:20,000; T-4555 (1930) 1:20,000; T-4556 (1928) 1:20,000 for Nautical charting purposes.

63. Comparison with Maps of Other Agencies:

None

64. Comparison with Contemporary Hydro Surveys:

None

65. Comparison with Nautical Charts:

Additions and corrections made during review have been shown in red ink. The only changes that might affect the chart are very minor changes in the shoreline. No. 845, 8/9/48^{10, 800}. The clearances for the swing bridge at Melbourne should be corrected. ¹ The cable area near this bridge is not shown on the chart.

66. Adequacy of Results:

This map complies with national map accuracy standards.

67. Navigational Aids and Landmarks:

Aids and landmarks are listed on Form 567 and filed as Chart Letter 269(49) in the Division of Charts. (See carbon copies following Field *Edit* ~~Inspection~~ Report.)

68. Overlay:

An overlay has been prepared showing road classification, control, etc.

Reviewed by:

Jack L. Rihn
Jack L. Rihn
Cartographer

Approved by:

S. V. Griffith
Chief, Review Section
Division of Photogrammetry

H. R. Edmonston
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Division of Photogrammetry

W. M. Scaife
Chief, Division of Coastal Surveys

HISTORY OF HYDROGRAPHIC INFORMATION

T-8884, Florida

Hydrography was applied to this manuscript in accordance with Division of Photogrammetry request of December 16, 1949; 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-1416	(1978)	1:20,000
H-5034	(1930)	1:40,000
H-5039	(1930)	1:40,000
BP. 32212	(1938)	1:2,000 (U.S.E.)
BP. 33576	(1939)	1:2,000 (U.S.E.)
Chart 845	1:40,000, printed 1/23/50, corrected 2/6/50.	
Chart 1246	1:80,000, printed 4/4/49, corrected 2/6/50.	

The depth curves are drawn at 6, 12, 18, 30, and 60 feet.

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

R. E. Elkins
R. E. Elkins - 2/27/50
Nautical Chart Branch