original

TP-00144

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey Coastal Boundary

Job No. PH-6910 *Map No.* TP-00144

Classification No. Final *Edition No.* 1

Field Edited Map

LOCALITY

State Florida

General Locality Brevard County

Locality Crane Creek to Turkey Creek

1969 TO 1971

REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-775

TP-00144

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT · DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TP-00144

MAP EDITION NO. (1)

MAP CLASS Final

JOB PH-6910

PHOTOGRAMMETRIC OFFICE: Rockville, Maryland

OFFICER-IN-CHARGE: Commander Wesley V. Hull

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH-____

MAP CLASS ____

SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
General-Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000, June 19, 1973 OFFICE-Supplement I, August 19, 1973 NOTE:Office and Field Edit Instructions (1973) incorporate applicable prior operational instructions. OFFICE-SupplementII, Sept. 24, 1973	Aerial photography 9/2/69 Supplement I, 1/28/70 Supplement II, 3/26/70 Supplement III, 8/10/72 Field Edit(PH-7000-General Instructions for Florida Coastal Zone Mapping) 1973

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [X] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify): Mean water-level (refer to the Record of Decisions bound with this report).

3. MAP PROJECTION

4. GRID(S): STATE: Florida; ZONE: East

5. SCALE: 1:10,000 — STATE: ; ZONE:

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	I.I. Saperstein	12/70
	LANDMARKS AND AIDS BY	Inapplicable	
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat	PLOTTED BY	P.J. Dempsey	1/71
	CHECKED BY	Inapplicable	3/
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	J.C. Richter	3/71
	CHECKED BY	J.P. Battley,Jr.	3/71
INSTRUMENT: B-8	CONTOURS BY	Inapplicable	
SCALE: 1:10,000	CHECKED BY		
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	J.C. Richter	3/71
Shoreline:Graphic	CHECKED BY	J.P.Battley,Jr.	3/71
METHOD:	CONTOURS BY	Inapplicable	
Interior:Orthophoto Mosaic	CHECKED BY		
	~~HYDRO SUPPORT~~ DATA BY	J. Taylor	4/71
SCALE: 1:10,000	CHECKED BY	J.P.Battley,Jr.	4/71
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	J.P.Battley,Jr.	4/71
6. APPLICATION OF FIELD EDIT DATA	BY	J.C. Richter	7/71
	CHECKED BY	J.P.Battley,Jr.	7/71
7. COMPILATION SECTION REVIEW	BY	R.A. Youngblood	8/71
8. FINAL REVIEW	BY	J.P. Battley,Jr.	10/71
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	D. Brant	6/74
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	K.J. Coats	8-12-74

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00144

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 Camera
E&L 6" focal lenght

TIDE STAGE REFERENCE
- ☐ PREDICTED TIDES
- ☐ REFERENCE STATION RECORDS
- ☒ TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED B&W

TIME REFERENCE
ZONE: Eastern — ☒ STANDARD
MERIDIAN: 60th&75th — ☒ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
70E(C)5790 & 5791	2/10/70	10:46	1:40,000	The stage of tide is inapplicable for color photography Range 0.30
69L3376 & 3377	8/23/69	10:20	1:30,000	*-0.31MHW

REMARKS
*Sebastian, Indian River

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the mean high-water line is the tide-coordinated black and white infrared photography listed in item 1.

The source of the mean water-level line shown along the shores of Crane Creek and Turkey Creek is the tide coordinated black and white infrared photography listed in item 1. (Refer to the Record of Decisions, bound with this report.)

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

There is no mean low-water line shown on this map.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS *(List only those surveys that are sources for photogrammetric survey information.)*

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED
Inapplicable					

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-00143	TP-00145	No contemporary survey.	No contemporary survey.

REMARKS
Final junctions were made in the Coastal Mapping Section.

* U. S. GOVERNMENT PRINTING OFFICE: 1974-768-078

NOAA FORM 76-36C
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00144

HISTORY OF FIELD OPERATIONS

I. [X] FIELD INSPECTION OPERATION *See below [X] FIELD EDIT OPERATION.

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		W.H. Shearouse	5/71
2. HORIZONTAL CONTROL	RECOVERED BY	W.H. Shearouse	5/71
	ESTABLISHED BY	Inapplicable	
	PRE-MARKED OR IDENTIFIED BY	Inapplicable	
3. VERTICAL CONTROL	RECOVERED BY	W.H. Shearouse	4/71
	ESTABLISHED BY	Inapplicable	
	PRE-MARKED OR IDENTIFIED BY	W.H. Shearouse	4/71
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (*Triangulation Stations*) BY	W.H. Shearouse	4/71
	LOCATED (*Field Methods*) BY	W.H. Shearouse	5/71
	IDENTIFIED BY	W.H. Shearouse	5/71
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION: [ ] COMPLETE [X] SPECIFIC NAMES ONLY [ ] NO INVESTIGATION — BY	W.H. Shearouse	5/71
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	W.H. Shearouse	5/71
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

None

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME
	*Refer to Field Inspection Report.

PHOTO NUMBER	STATION DESIGNATION
70R5790	L171,F33
70E5791	P60,P132,10.55(FSRD) M171, PETER WRIGHT

3. PHOTO NUMBERS (*Clarification of details*)

70E5789 thru 5791

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Aids to navigation are plotted on FIELD EDIT SHEET No. 2.

PHOTO NUMBER	OBJECT NAME
70E5790	RADIO MAST (MELBOURNELOR FLORIDA STATE POLICE RADIO MAST 1960)
70E5791	RADIO MAST(MELBOURNE WMBM RADIO TOWER 1948)

PHOTO NUMBER	OBJECT NAME
	MICROWAVE TOWER (MELBOURNE SOUTHERN BELL MICROWAVE TOWER, 1960)

5. GEOGRAPHIC NAMES: [ ] REPORT [X] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (*Sketch books, etc.* **DO NOT** *list data submitted to the Geodesy Division*)

*See Field Inspection Report bound with this report.
Sketchbook No. 1, Graphic Sextant fixes.

*U.S. GOVERNMENT PRINTING OFFICE: 1974 - 768-078

NOAA FORM 76-36D
(3-72)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

TP-00144

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No copies of Map TP-00144 were furnished to the Marine Chart Division prior to final review.				

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1	769 74	6/28/74	Final - One report was submitted for map TP00144

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 6/28/74
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ☐ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☐ COMPUTER READOUTS.
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS *(This section shall be completed each time a new map edition is registered)*

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
SECOND EDITION	TP - _____ (2)	PH - _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
THIRD EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
	TP - _____ (3)	PH- _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
FOURTH EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY
	TP - _____ (4)	PH - _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL

NOAA FORM 76-36D

☆U. S. GOVERNMENT PRINTING OFFICE: 1973--778075/1077 REGION NO. 6

Record of Decisions
Pertaining to Symbolization of the MHW, MLW, and MWL Datums
Map TP-00144

Shoreline Delineation

This map does not extend to the Atlantic Ocean. The water areas it covers are Crane Creek, Turkey Creek, and a portion of Indian River. The tidal datum in Indian River was established by observations at Melbourne Tide Station (just north of this map) and Palm Bay Tide Station (just east of this map).

Since the mean range at both stations was approximately 0.2 foot, the standard mean high-water line symbolization was used for delineating the Indian River mean high-water line. The mean low-water line was not mapped because Federal/State boundary problems are not applicable to those waters and for charting purposes, the lines would be synonymous because of the map scale and slope of the beach.

Restrictions in the entrances to Crane Creek and Turkey Creek which reduce the range of the tide from Indian River's 0.2 foot mean range to a significantly lesser range in the creeks, were noted on the aerial photographs and NOS charts. In this situation, the mean high/low-water datums converge and, for mapping purposes, the mean high- and mean low-water lines are indistinguishable. As a consequence, special treatment was given to the portrayal of the shoreline of Crane and Turkey Creeks; the mean water-level line was mapped in lieu of the mean high-water line and shown by a distinctive symbol, except in areas where there are manmade features such as bulkheads which were portrayed by a solid line, or where vegetation such as mangrove obscures the shoreline and then the apparent shoreline symbol was used. The shoreline symbolizations at the heads of Crane and Turkey Creeks were left open to indicate the interior limits of field inspection up these creeks.

* Decision Responsibility for Shoreline Symbolization

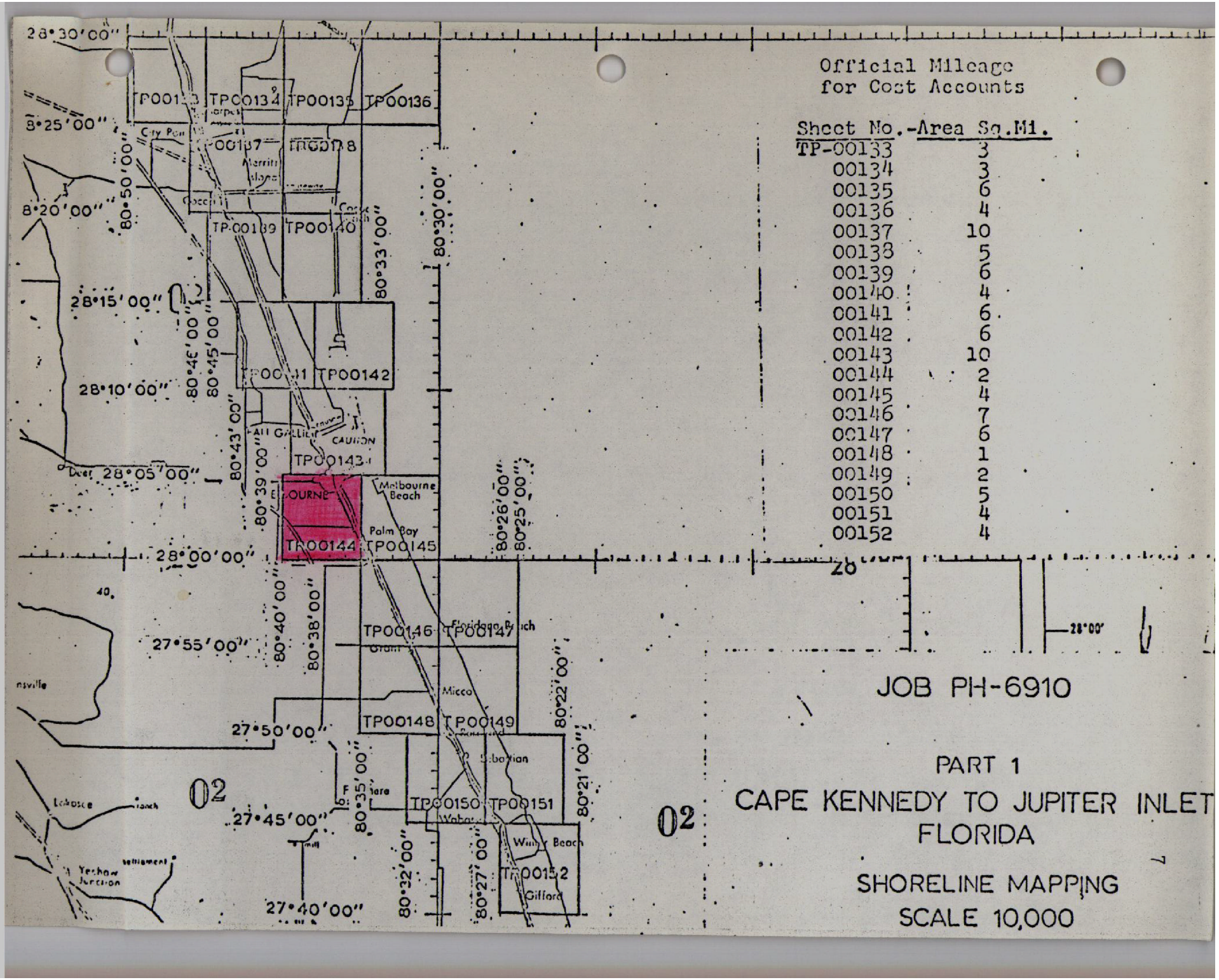
Specific decisions as to where the various symbols would be used for mapping the mean high-water line, mean water-level line, apparent shoreline, etc., were made November 22, 1972, in Rockville, Maryland, by competent technical and legal officials of NOS and NOAA. NOS was officially represented by Cdr. Wesley V. Hull, Chief, Coastal Mapping Division, and Mr. Carroll I. Thurlow, Chief, Tidal Datum Planes Section of the Oceanographic Division. The official NOAA representative was Mr. Carl Johnson, Staff Attorney, Office of General Counsel.

* See Review Report for clarification of date.

They also examined photographs and field edit reports with respect to inland penetration of small streams and drainages and concluded that those features were properly delineated and symbolized on the map.

Archiving

A copy of this report shall be included in Descriptive Report TP-00144 which will be permanently filed in the NOS Archives.


Official Mileage
for Cost Accounts
Sheet No.-Area Sq.Mi.
TP-00133 3
00134 3
00135 6
00136 4
00137 10
00138 5
00139 6
00140 4
00141 6
00142 6
00143 10
00144 2
00145 4
00146 7
00147 6
00148 1
00149 2
00150 5
00151 4
00152 4
JOB PH-6910
PART 1
CAPE KENNEDY TO JUPITER INLET
FLORIDA
SHORELINE MAPPING
SCALE 10,000
28°30'00"
28°25'00"
28°20'00"
28°15'00"
28°10'00"
28°05'00"
28°00'00"
27°55'00"
27°50'00"
27°45'00"
27°40'00"
80°50'00"
80°45'00"
80°43'00"
80°39'00"
80°38'00"
80°35'00"
80°33'00"
80°30'00"
80°26'00"
80°25'00"
80°22'00"
80°21'00"
80°32'00"
80°27'00"
TP00133
TP00134
TP00135
TP00136
TP00137
TP00138
TP00139
TP00140
TP00141
TP00142
TP00143
TP00144
TP00145
TP00146
TP00147
TP00148
TP00149
TP00150
TP00151
TP00152
Melbourne Beach
Palm Bay
Micco
Gifford
02
02

SUMMARY
TP-00133 thru TP-00152

Coastal Zone Map TP-00144 is one of twenty (20) similar maps in project PH-6910, Part I. The layout of sheets (page 6 of this report) will show its location. These maps are intended for planning purposes by the State of Florida and for the compilation of NOS Nautical Charts.

The area is covered by aerial photography taken in 1969 and 1970 on color and black and white infrared film. The infrared film was tide coordinated.

Field operations consisted of the establishment of tidal datums, control recovery, pre-marking of control, and field edit. Data for the compilation of tide stations and tidal bench marks were furnished by the Tidal Datum Planes Section. Condensed descriptions of both tidal and geodetic bench marks shown on this map were furnished by the Coastal Surveys Section.

Horizontal control was extended by analytical aerotriangulation methods using the stereo comparator. This provided control for the orthophoto mosaic and compilation.

Shoreline and alongshore features were compiled from tide-coordinated black and white infrared photography using a stereo plotter and graphic methods. The interior of the maps are depicted by an orthophoto mosaic.

All line work is scribed, approved symbols are shown in the marginal data.

Explanatory notes relating to datum determinations approved by a special ad hoc committee are shown on the reverse side of the maps.

All maps are published by the NOS and were printed in threee colors by the Reproduction Division. A special registration copy was prepared to meet the requirements for Nautical Charts. This registration copy shows additional offshore details not shown on the published map and will be noted "Registration Copy" under the title block.

The following items will be registered in the Bureau Archives:

1. A plastic copy of the published map (1:10,000 scale).

2. A stable base positive of the registration copy (1:10,000 scale).

3. The Descriptive Report.

All negatives will be filed with the Reproduction Division.

All field data such as Forms 152, field edit photographs, profiles, field edit ozalids, etc., are filed in the Federal Records Center.

FIELD REPORT
PREMARKING HORIZONTAL CONTROL
JOB PH-6910, CAPE KENNEDY TO JUPITER INLET, FLORIDA

In accordance with Instructions - FIELD - Supplement I, Job PH-6910; Coastal Boundary Mapping, Cape Kennedy to Jupiter Inlet, Florida, twenty-two horizontal control stations were recovered and paneled in accordance with practices in use at this time. All stations were premarked for 1:40,000 scale photography.

White polyethylene plastic sheeting was used for all but 2 stations. Sketches on the CSI cards show the pattern used in each instance but most stations were paneled with a 5-ft. square target placed directly over the station mark and 3 runner-type wing panels 3.5/4' X 20' approximating 120° angles around the square.

TRIPOD 3, 1963 and WHITE 2, 1966 were premarked with black plastic, the center panel being 10' X 10' and the wing panels 8' X 20'. The ground surface at these 2 locations was considered too white for the white targets to be seen, hence the use of black material.

In addition to the sketches shown on the CSI cards the station locations have been spotted on USGS Quadrangle maps which are transmitted as part of the job data.

A recap, showing the stations as numbered on the job control diagram, the TP-map number and the quadrangle map on which it falls, follows:

STATION No.	NAME		MAP NO.	USGS QUADRANGLE
1	CENTRAL	1950	TP-00136	CAPE CANAVERAL
2	ARTESIA	1953	"	" "
3	POSE	1966	TP-00138	COCOA BEACH
4	MUNSON	1940	TP-00139	"
5	PATRICK N. BASE	1960	TP-00140	" "
6	TRIPOD 3	1963	TP-00142	TROPIC
7	COLLEGE 2	1934	TP-00143	"
8	TURKEY CREEK	1934	TP-00144	MELBOURNE EAST
9	VALKARIA	1966	TP-00146	GRANT
10	SLIP 2	1934	TP-00149	SEBASTIAN NW
11	SEBASTIAN 2	1934	TP-00150	SEBASTIAN
12	SCORPION 2	1961	TP-00153	VERO BEACH
13	RICMAR 2	1960	TP-00154	INDRIO
14	PIERCE 2	1963	TP-00155	FORT PIERCE
15	WHITE 2	1966	TP-00156	" "

STATION NO.	NAME		MAP NO.	USGS QUADRANGLE
16	WALTON	1930	TP-00157	ANKONA
17	REFUGE 2 RM # 4	1967	TP-00160	ST. LUCIE INLET
18	SEAWALL	1934	TP-00159	" " "
19	PINE	1929	TP-00162	GOMEZ
20	CISTERN	1956	TP-00163	HOBE SOUND
21	RADAR	1954	TP-00164	JUPITER
22	GOLF RM # 1	1934	South of TP-00164	RIVIERA BEACH

Targets were visited after photography and found to be in good condition. No center panels were damaged except GOLF RM 1 and it was only slightly torn on its north edge. Images of all targets should be visible on the photographs.

Submitted 2/24/70

William H. Shearouse

William H. Shearouse
Chief, Photo Party 60

Photogrammetric Plot Report
Cape Kennedy to Jupiter Inlet, Florida (Part 1)
Job PH-6910
April, 1971

21. Area Covered

This report covers the area south from Cape Kennedy to an area about eight miles north of Fort Pierce Inlet. The job consists of twenty one (21) 1:10,000 scale sheets, TP-00133 thru TP-00153.

22. Method

Six (6) strips of photographs were bridged using analytical aerotriangulation methods. Strip 23 proved inadequate for bridging. Strip 23A, therefore, was flown at a later date farther west in order to include more land area to strengthen the photogrammetry. A cross flight, 24, was also flown at this time to include the cape area. Ties were made between strips. Points were located to rectify the photographs for mosaics. In addition, points were located to ratio high and low water photography. The attached sketch of the strips bridged shows the placement of triangulation used in the final strip adjustment. Closures to control have been shown on the readouts. All bridge points have been plotted on the Coradimat on Florida East Zone plane coordinates.

23. Adequacy of Control

Horizontal control that fell on strips 21A, 22, 25, and 26 was premarked. Strips 23A and 24 were flown at a later date, and all control that fell on these two strips were transferred from the earlier pre-marked photography. It is noted that stations SCORPOIN 2, 1961 and RIOMAR 2, 1960 (terminal for Strip 26) do not appear on the attached sketch, as these stations are on or south of TP-00153. The control was adequate for bridging all strips.

25. Photography

All photography the subject of this report is 1:40,000 scale color as follows:

Strip 21A -- 69-E(C)-4247 thru 4261
Strip 22 -- 69-E(C)-4185 thru 4194

Strip 23A -- 70-L(C)-9991A thru 004A
Strip 24 -- 70-L(C)-007A thru 015A
Strip 25 -- 70-E(C)-5760 thru 5768
Strip 26 --- 70-E(C)-5772 thru 5794

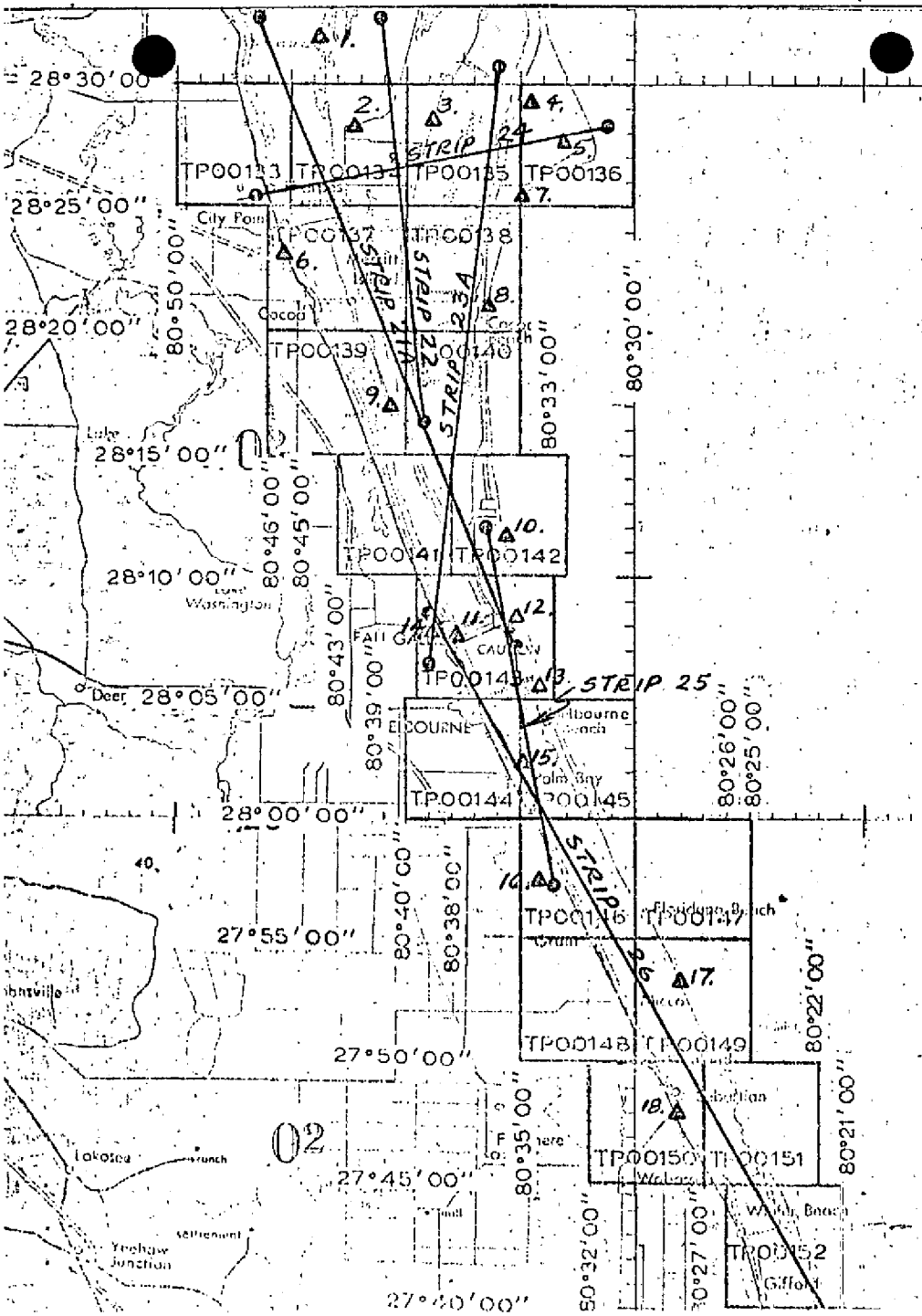
The definition and quality of the photography were good.

Respectfully submitted:

I. I. Saperstein

Approved and forwarded:

Henry P. Eichert, Chief
Aerotriangulation Section



Control

1. Moore RM 3,1963
2. Courtenay,1953
3. Paxton,1960
4. Central,1950
5. Cape Canaveral L.H. Center,1934
6. Cocoa City 2,1957
7. Artesia,1953
8. Pose,1966
9. Munson,1940
10. Tripod 3,1963
11. College 2,1906
12. Canova Beach Melbourne Munic.W.T.1960
13. Indialantic Melbourne E.Munic.W.T.1960
14. Eau Gallie Munic.W.T.Center,1934
15. Turkey Creek,1934
16. Slip 2,1934
17. Sebastian 2,1934

▲ Horizontal control used in adjustment
△ Horizontal control used as check
● 1:40,000 scale color photography

02

JOB PH-6910

PART 1

CAPE KENNEDY TO JUPITER INLET
FLORIDA

SHORELINE MAPPING

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
MELBOURNE SOUTHERN BELL MICROWAVE TOWER, 1960	Write Director, National Geodetic Survey
PETER WRIGHT	" " " " "
MELBOURNE RADIO STATION WMMB TOWER, 1948	" " " " "
MELBOURNE FLORIDA STATE PATROL RADIO MAST, 1960	" " " " "

Geodetic Bench Mark	Elevations (feet) SLD 1929	Condensed Description
P 60	20.905	C&GS disk stamped P 60 1934; at base W abutment of steps, 1.2 ft. W of W face.
P 132	21.936	C&GS disk stamped P 132 1953; top E end N abutment of trestle.
PETER WRIGHT	20.118	C&GS disk stamped PETER WRIGHT 1906; 52 ft. E of SE corner of bldg., 17 ft. N of N of 3 palms.
10.55 (FLA. S.R.D.)	10.571	Fla. St. Rd. Dept. disk stamped 10.55; top W abutment of bridge, 13½ ft. S highway centerline.
F 33	18.494	C&GS disk stamped F 33 1933 18.537; 34 ft. E of E rail, 24 ft. SW of 14-inch palm, 2 ft. N of witness post.
M 171	21.411	C&GS disk stamped M 171 1958; 18 ft. E of E rail, 30 ft. N of street centerline.
L 171	21.690	C&GS disk stamped L 171 1958; 28 ft. E of E rail, 83 ft. NE of concrete signal base, 70 ft. SW of SW rail of spur track.

Compilation Report
TP-00144

31. Delineation

The land area of this map is shown by an orthophoto mosaic. The orthophoto mosaic was assembled with black and white rectified prints from the color photography. The rectified prints and mosaics were controlled by points determined by aerotriangulation.

The tidal datum lines and any offshore features on this map were compiled from office interpreted tide coordinated black and white infrared photography. The rectified color photography was used as an aid for interpreting culture features and compiling the limits of shallow and shoal areas for Nautical Charts. The tide coordinated black and white infrared photography was controlled by common planimetric features and map points determined by aerotriangulation.

32. Horizontal Control

Refer to the Photogrammetric Plot Report which is a part of this Descriptive Report.

33. Supplemental Data - None.

34. Contours and Drainage

Contours are inapplicable. Drainage is shown by the orthophoto mosaic.

35. Shoreline and Alongshore Detail

The mean high-water line was mapped along the west shore of a portion of the Indian River.

The mean water-level line was mapped along the shores of Crane Creek and Turkey Creek.

The offshore spoil banks are subject to continual change in size and position.

The photography was adequate for compilation.

36. Offshore Details

No unusual problems were encountered.

37. Landmarks and Aids to Navigation

The images of charted objects visible on the photography were compiled during compilation. Charted objects which were not visible on the photography were called to the attention of the field editor.

38. Control for Future Surveys

Tidal bench marks established by the tide observation party.

39. Junctions

Refer to Form 76-36B (Data Record).

40. Horizontal Accuracy

This map complies with the accuracy requirements for the Florida Coastal Zone Mapping Program as outlined by the project instructions for Job PH-7000.

41. thru 45. Inapplicable.

46. Comparison with Existing Maps

Comparison was made with USGS Quadrangle Melbourne East, Fla., scale 1:24,000, dated 1949, contour interval 5 feet.

No significant changes were noted.

47. Comparison with Nautical Charts

Comparison was made with Nautical Chart 845-SC, scale 1:40,000, 9th edition, July 25, 1970, corrected to August 29, 1970.

No significant changes were noted.

Items to be Applied to Nautical Charts Immediately - None.

Items to be Carried Forward - None.

Respectfully submitted,

John C. Richter

John C. Richter
Carto(Photo)

Approved and forwarded,

K. N. Maki

K. N. Maki
Chief, Coastal Mapping Section

Field Edit Report, Map TP-00144, Job PH-6910

51. METHODS

Shoreline delineation was visually verified from a small boat running close to shore. Notes were made on the ratioed photographs where changes of line weights, from the heavy mean water line to apparent shoreline or light weight line, is indicated by marsh and mangrove limits. Alongshore structures were also classified.

Landmarks presently charted should be retained and Form 567 is submitted. The "MICRO TOWER" shown on chart 845-SC with the P. A. circle should be changed to the conventional 2.5 mm size as its location is accurate. No new landmarks are recommended.

Sextant fixes were taken at each daybeacon. These were plotted on FIELD EDIT SHEET NO. 2 and Forms 567 prepared for them.

The daybeacons leading into the Melbourne harbor remain about as previously charted, except for No. 8, although the numbering system has changed. The Form 567 clarifies this. The range lights for this channel were relocated and a point on range determined by sextant fix. It is shown graphically on F. E. Sheet No. 2 but the azimuth was not determined.

Daybeacons in the Intracoastal Waterway in this general area have been rebuilt in recent years using concrete piles instead of wood. Their positions have also changed somewhat as indicated by the sextant fixes. Lights found so far are the old type structure and the 1970 bridging positions were used in the fixes with good results.

Aids that "moved" were lined out on the Form 567 furnished from Rockville and listed on a new Form 567 indicating the necessity of a revised position.

Geodetic bench marks were searched for and identified on the ratio photographs and Forms 685A submitted.

Also, all triangulation stations were searched for and reported on Form 526. Station MELBOURNE MOTEL DOME 1930 should be removed from the map manuscript as it no longer exists.

Field edit notes will be found on the ratio photographs, the Discrepancy Print and the FIELD EDIT SHEET.

52. ADEQUACY OF COMPILATION

Adequate after application of field edit information.

53. MAP ACCURACY

No tests were required.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Not required.

56. GEOGRAPHIC NAMES

A complete names investigation was not made but no conflicts came to light during the course of the work, nor were any new names found.

Submitted 5/18/71

William H. Shearouse

William H. Shearouse
Chief, Photo Party 60

Review Report TP-00144
Coastal Zone Map
June 1974

61. General

This map was reviewed in the Coastal Mapping Section prior to its proof stage.

The proof copy of this map was examined by the Quality Control Group. During this examination any corrections to the compilation were noted and returned to the Coastal Mapping Section for application to the map.

The following major parts in the preparation of this map have been examined by the Quality Control Group and are adequate:

1. Field operations
2. Extension of control
3. Compilation
4. Descriptive Report

The shoreline on this map was symbolized in accordance with ongoing decisions set forth by officials of the National Ocean Survey. These decisions, however, were formalized and documented at the later date reflected in the Record of Decisions.

62. Registration Copy

A special Registration Copy of this map was prepared for Marine Chart use and checked by the Coastal Mapping Section. This Registration Copy shows additional offshore information (such as "shallow" and "shoal" areas) not shown on the published map.

63. thru 64. Inapplicable.

65. Cartographic Comparison

A comparison was made with map TP-00144 and the following USGS quadrangle:

Melbourne East,,Florida, 1949, photorevised 1970, scale 1:24,000.

No significant changes were noted.

A comparison was made with Map TP-00144 and Nautical Chart 845-SC, 12th edition, dated September 8, 1973.

The comparison showed differences in piers and pier ruins along the west shore of the Indian River. No mention was made by the field edit of 1971 about these differences.

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00144 complies with project instructions for NOS Cooperative Mapping, Job PH-7000. This map meets the National Map Accuracy Standards.

Submitted by,

Donald M. Brant

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

June 3, 1974

GEOGRAPHIC NAMES

FINAL NAMES SHEET

PH-6910 N(Florida)

TP-00144

Crane Creek

Florida East Coast RR

Indian River

Melbourne

Melbourne Causeway

Palm Bay

Turkey Creek

Approved by:

C. E. Harrington

C. E. Harrington
Staff Geographer

NOAA FORM 76-40
(2-71)
PRESCRIBED BY
PHOTOGRAMMETRY INSTRUCTION NO. 64.

U.S. DEPARTMENT OF COMMERCE-NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- ☐ FIELD INSPECTION
- ☐ FIELD EDIT
- ☐ COMPILATION
- ☐ FINAL REVIEW
- ☒ QUALITY CONTROL AND REVIEW

(See reverse for responsible personnel)

☒ TO BE CHARTED
☐ TO BE DELETED

ORIGINATING LOCATION: Rockville, Maryland

DATE: 6/5/74

The following objects have (have not) been inspected from seaward to determine their value as landmarks:

JOB NUMBER: PH- 6910
STATE: Florida

SURVEY NUMBER: T - TP-00144

DATUM: N.A. 1927

CHARTING NAME	DESCRIPTION	POSITION LATITUDE ° ′	LATITUDE ″ D.M. METERS	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P. METERS	METHOD AND DATE OF LOCATION (See instructions on reverse of this form) FIELD INSPECTION	COMPILATION	FIELD EDIT	CHARTS AFFECTED
LIGHT	MELBOURNE ENTRANCE RANGE FRONT LIGHT	28 04	30.89 951.0	80 35	58.53 1598.0			P-4 5/10/71	845-SC
LIGHT	MELBOURNE ENTRANCE RANGE REAR LIGHT	28 04	30.77 947.0	80 36	2.38 65.0			P-4 5/10/71	"
DYBN	MELBOURNE CHANNEL Daybeacon 1	28 04	31.22 961.0	80 35	40.65 1110.0		*	P-4 Verif. 5/10/71	"
DYBN	Daybeacon 2	28 04	32.71 1007.0	80 35	40.65 1110.0		*	P-4 Verif. 5/10/71	"
DYBN	Daybeacon 3	28 04	30.70 945.0	80 35	49.11 1341.0		*	P-4 Verif. 5/10/71	"
DYBN	Daybeacon 4	28 04	32.20 991.0	80 35	49.44 1350.0			P-4 5/10/71	"
DYBN	Daybeacon 5	28 04	30.23 930.5	80 35	54.9 1499.0		*	P-4 Verif. 5/10/71	"
DYBN	Daybeacon 6	28 04	31.84 980.0	80 35	55.54 1516.5		*	P-4 Verif. 5/10/71	"
DYBN	Daybeacon 8	28 04	32.36 996.0	80 35	57.28 1564.0			P-4 5/10/71	"
DYBN	INDIAN RIVER (SOUTH SECTION) Daybeacon 6	28 04	40.35 1242.0	80 35	20.80 568.0		*	P-4 Verif. 5/10/71	"

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward	W.H. Shearouse	☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified		FIELD INSPECTOR
	W.H. Shearouse	FIELD EDITOR
	J.C.Richter	COMPILER
3. Forms originated by Quality Control and Review Group and final review activities	Copy checked after typing D. Brant	☐ REVIEWER ☒ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon control established by photogrammetric methods. 'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE	TYPE OF ENTRIES
COMPILATION	Applicable to office identified and located objects only. Enter the number and date of the photograph used to identify the object.
FIELD INSPECTION AND FIELD EDIT	1. New Position Determined–Enter the applicable data by symbols as indicated below:

F – Field	P – Photogrammetric	EXAMPLES:
1. Triangulation	1. Field identified	
2. Traverse	2. Theodolite	F. 3.c
3. Intersection	3. Planetable	
4. Resection	4. Sextant	P.2
a. Theodolite		
b. Planetable		
c. Sextant		

Immediately beneath the data described above, enter the following:

a. For 'Field Positions' enter the date of location.

b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

2. Triangulation Station Recovered – Enter 'Triang. Rec. mo/day/yr.'

3. Position Verified – Enter 'Verif. mo/day/yr.'

* U.S. GOVERNMENT PRINTING OFFICE: 1971-769374/445 REG.#

NOAA FORM 76-40
(2-71)
PRESCRIBED BY
PHOTOGRAMMETRY INSTRUCTION NO. 64.

U.S. DEPARTMENT OF COMMERCE–NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- ☐ FIELD INSPECTION
- ☐ FIELD EDIT
- ☐ COMPILATION
- ☐ FINAL REVIEW
- ☒ QUALITY CONTROL AND REVIEW

(See reverse for responsible personnel)

☒ TO BE CHARTED
☐ TO BE DELETED

ORIGINATING LOCATION: Rockville, Maryland

DATE: June 1974

The following objects have (have not) been inspected from seaward to determine their value as landmarks:

JOB NUMBER: PH- 6910
STATE: Florida

SURVEY NUMBER: T - TP-00144

DATUM: N.A. 1927

CHARTING NAME	DESCRIPTION	POSITION LATITUDE ° ′	POSITION LATITUDE ″ D.M.METERS	POSITION LONGITUDE ° ′	POSITION LONGITUDE ″ D.P.METERS	METHOD AND DATE OF LOCATION (See instructions on reverse of this form) FIELD INSPECTION	COMPILATION	FIELD EDIT	CHARTS AFFECTED
RADIO TOWER	Skelton Steel (MELBOURNE RADIO STATION WMMB,1948) ht=234(239)	28 04	41.583 1280.0	80 35	55.794 1523.3		Triang.	Triang.Rec. 5/10/71	1246 845-SC
RADIO TOWER	FLA. HIGHWAY PATROL skeleton Steel ht=206(221)	28 03	41.9 1289.5	80 35	45.9 1253.0		*Survey TP-13103 10/17/67	P-4 Verif. 5/10/71	1246 845-SC
MICROWAVE TOWER	Skeleton steel ht=242 (259) (MELBOURNE SOUTHERN BELL MICROWAVE TOWER,1960)	28 04	48.649 1497.5	80 36	30.010 819.4		Triang.	Triang.Rec. 5/17/71	1246 845-SC
	*From TP-13103 location date-10/17/67								

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward	W.H. Shearouse	☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified		FIELD INSPECTOR
	W.H. Shearouse	FIELD EDITOR
	J. Richter	COMPILER
3. Forms originated by Quality Control and Review Group and final review activities	Copy checked after typing D. Brant	☐ REVIEWER ☒ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

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3. Intersection	3. Planetable	
4. Resection	4. Sextant	P.2
a. Theodolite		
b. Planetable		
c. Sextant		

Immediately beneath the data described above, enter the following:

a. For 'Field Positions' enter the date of location.

b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

2. Triangulation Station Recovered – Enter 'Triang. Rec. mo/day/yr.'

3. Position Verified – Enter 'Verif. mo/day/yr.'

U.S. GOVERNMENT PRINTING OFFICE: 1971-769374/445 REG. #6

TP-00144
Data Forwarded to Federal Records Center

1 Field edit sheet (dated May 1971)
Field edit sheet #2 showing plotted positions of nonfloating aids is lost.

1 Discrepancy Print

1 Form 76-36C(History of Field Operations)

3 Forms 76-40 (Nonfloating Aids or Landmarks for Charts)

1 Sketchbook Vol. 1 (TP-00144 and TP-00145)

Photography is filed with TP-00145

2 Graphic sextant fixes sheets