# TP-00147

### 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-00147
Classification No. Final Edition No1
Field edited map
LOCALITY
State Florida
General Locality Brevard County
Locality . Mullet Creek
19 70 TO 1971
REGISTRY IN ARCHIVES
DATE

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

NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	TYPE OF SURVEY	SURVEY TP-00147
MATIONAL COMMIN.	XX ORIGINAL	MAP EDITION NO. (1)
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS Final
DESCRIPTIVE REPORT - DATA RECORD	! <sup>-</sup>	(03.0
PHOTOGRAMMETRIC OFFICE	☐ REVISED	
Photogrammetrice		NG MAP EDITION
Rockville, Maryland	TYPE OF SURVEY	JOB PH
OFFICER-IN-CHARGE	D RESURVEY	MAP CLASS
Commander Wesley V. Hull	REVISED	19TO 19
1. INSTRUCTIONS DATED	<u> </u>	
1. OFFICE	2.	FIELD
General Instructions-OFFICE-NOS Coop-	Aerial Photogra	phy, 9/2/69
erative Coastal Boundary Mapping, Job	Supplement I, 1	
PH-7000, 6/19/73	Supplement II,	3/26/70
OFFICE-Supplement I, 8/19/73	Supplement III,	8/10/72
NOTE: Office and Field Edit Instruc-	Field Edit (PH-	
tions (1973) incorporate applicable, prior operational instructions.		r Florida Coastal
prior operational instructions.	Zone Mapping, 1	913
II. DATUMS		
1. HORIZONTAL: X 1927 NORTH AMERICAN	OTHER (Specify)	
TO HOME THE SAME THE	OTHER (See alter)	
MEAN HIGH-WATER	OTHER (Specify)	
2. VERTICAL: XX4EAN LOW-WATER MEAN LOWER LOW-WATER		
MEAN SEA LEVEL	ļ	•
3. MAP PROJECTION	4. 0	GRID(S)
	STATE	ZONE
Transverse Mercator	Florida	East
5. SCALE	STATE	ZONE
1:10.000		
OPERATIONS	NAME	DATE
1. AEROTRIANGULATION BY	I.I. Saperstei	
METHOD: Analytic LANDMARKS AND AIDS BY		
2. CONTROL AND BRIDGE POINTS PLOTTED BY	P.J. Dempsey	1/71
метнор: Coradomat снескер ву	Inapplicable	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	M.C. Webber	3/71
COMPILATION CHECKED BY INSTRUMENT: B-8 CONTOURS BY	J.C. Richter Inapplicable	3/71
scale: 1:10,000 CHECKED BY	THEPPITCABLE	
4. MANUSCRIPT DELINEATION PLANIMETRY BY	M. C. Webber	3/71
Shoreline:Graphic	J.C. Richter	3/71
CONTOURS BY	Inapplicable	
Interior:Orthophoto mosaic CHECKED BY	T	1.793
THY THE THE BY	J. Taylor	4/71
scale: 1:10,000 CHECKED BY	J.P. Battley	4/71
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	J.P. Battley J.C. Richter	<u> </u>
6. APPLICATION OF FIELD EDIT DATA	77 0 11 11	7/71
CHECKED BY	M.C. Webber	
	M.C. Webber P.J. Dempsey	10/71
7. COMPILATION SECTION REVIEW BY 8. FINAL REVIEW BY		10/71 11/71
7. COMPILATION SECTION REVIEW BY  8. FINAL REVIEW BY  9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	P.J. Dempsey J.P. Battley	11/71
7. COMPILATION SECTION REVIEW BY 8. FINAL REVIEW BY	P.J. Dempsey	10/71 11/71 6/74

NDAA FORM 76-36B (3-72)		· <u>-</u>	NATIONAL OCEAN	NC AND ATMOSE	ARTMENT OF COMMERCE
מו במן מת	CQ.	MPILATION S	OURCES	N.A	ATIONAL OCEAN SURVEY
TP-00147  1. COMPILATION PHOTOGRAPHY					
CAMERA(S) WILD RU-8	<del>-</del>	I		1	
E&L 6" focal leng	rth		F PHOTOGRAPHY .EGEND	TIM	E REFERENCE
TIDE STAGE REFERENCE	5011	1		ZONE	·- <u> </u>
PREDICTED TIDES		(C) COLOR		Eastern	1 XXSTANDARD
REFERENCE STATION RECOR		(P) PANCHROMATIC  (I) INFRARED B&W		MERIDIAN	₹₹DAYLIGHT
TIDE CONTROLLED PHOTOGR	APHY	(I) INFRAF	NSG D&W	60th&75	5th
NUMBER AND TYPE	DATE	TIME	SCALE		AGE OF TIDE
70L(C)5785-5786	2/10/70	13:43	1:40,000	inapplic	ge of tide is cable for notography
70L6890R-6891R 70L6400R-6401R	8/14/70 8/12/70	17:33 11:15	1:25,000		W(1)-0.23MHW(2 W(3)
REMARKS (1) Canova Be Tide Stat		-	2) Sebasti h Tide Stat		n River
The shoreline was	field edite	ed in 197	1.		
3. SOURCE OF MEAN LOW-WATER The soure and date shore) is the tide listed in item 1. of 1971 verified to is no mean low-water Creek.	e of the mea e coordinate Foreshore the mean low	an low-wa ed black profiles w-water l	ter line (a and white i determined ine on the	nfrared p by the f photograp	photography field edit phs. There
4. CONTEMPORARY HYDROGRAP	HIC SURVEYS (List			photogrammetric	survey information.)
Inapplicable	JUNIETCO		TO THOMBEN	r. r. c (3)	JURYET COPT USED
5. FINAL JUNCTIONS		,			<u> </u>
NORTH Atlantic Ocean	EAST Atlantic Oc		отн TP-00149	west TI	P-00146
REMARKS Final junctions we	ere made in	the Coas	tal Mapping	Section.	

			,		
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 Report bound v	with this	report.		

NOAA FOR (3-72)	RM 76-36D						N.A	TIONAL	CEANIC			T OF COMMERCE ADMINISTRATION
ΨP <b>_</b> (	00147				RECO	RD OF SUI	RVE	USE				
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	DATA COMPI	LED	T	DA	TE		REN	MARKS		<del>                                     </del>	-	HYDRO SUPPORT
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fina	al revi	ew.	_									
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î. REP	ORTS TO MA	RINE CH	ART DIV	ISION, N	IAUTICAL	DATA BRAI T	NCH					
NUMBER	_	LETTE			ARDED				RE	MARKS		
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	REPORT TO											· · · · · · · · · · · · · · · · · · ·
	REPORT TO				DIVISION	, AERONAU	TICAL	DATA SE	CTION.	DATE FO	RWARDED:	
	1. Serioging Photographs; Duplicate Bridging Report; Computer Readouts.											
	CONTROL S											
3. 🗁	SOURCE DA ACCOUNT F				Names Re	port) AS LIS	TEDI	N SECTIOI	N II, NOA	A FORM 7	6-36C.	
4. [	DATA TO F	EDERAL	RECOR	DS CENT	TER. DAT	E FORWARD	ED:					_
IV. SURV	EY EDITIONS	(This se	ction sh	all be co	mpleted e	ach time a ne	w map	edition is	registere	d)		
SECOND	TD	NUMBEI			B NUMBE	R		-	☐ R	TYPE O	F SURVEY	SURVEY .
EDITION	DATEO	FPHOTO	GRAPH	Υ 04	TE OF F	ELD EDIT		<u>□</u> .n.		MAP . □₁∨	CLASS	☐ FINAL
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EDITION	DATEO	F PHOTO	GRAPH	Y D/	TE OF FI	ELD EDIT		Πu	<b></b>		CLASS	Π

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# Record of Decisions Pertaining to Symbolization of the MHW and MLW Datums Map TP-00147

# Shoreline Delineation

The mean low-water and mean high-water datums were determined along the outer coast (Atlantic Ocean) from tide observations at Canova Beach Tide Station (north of this map) and Vero Beach Tide Station (south of this map). The interior water area shown on this map is Mullet Creek.

The tidal datum in Mullet Creek was established from observations at Palm Bay Tide Station (north of this map) and at Micco Tide Station (south of this map). Since the mean range at those stations was approximately 0.2 foot, the standard mean high-water line symbolization was used for delineating the Mullet Creek mean high-water line, except for areas where vegetation, such as mangrove, obscured the shoreline, and then the apparent shoreline symbol was used. The mean low-water line was not mapped in this interior water area because Federal/State boundary problems are not applicable to it, and, for charting purposes, the lines would be synonymous because of the map scale and slope of the beach.

# \* Decision Responsibility for Shoreline Symbolization

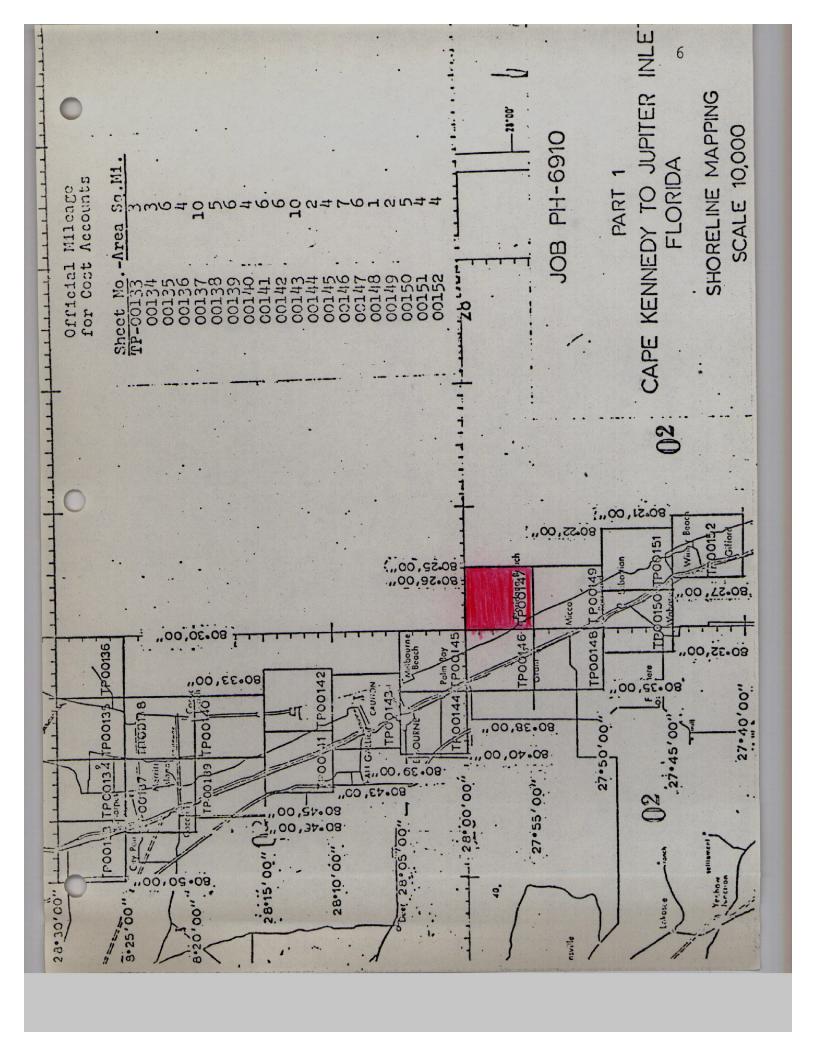
Specific decisions as to where the various symbols would be used for mapping the mean high-water line, mean water-level line, apparent shoreline, etc., were made November 22, 1972, in Rockville, Maryland, by competent technical and legal officials of NOS and NOAA. NOS was officially represented by Cdr. 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.

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-00147 which will be permanently filed in the NOS archives.

\* See Review Report for clarification of date.



# SUMMARY TP-00133 thru TP-00152

Coastal Zone Map TP-001 47 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 tidecoordinated 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, CAPS 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.

TRIPCD 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:

STATICN No.	NAME		MAP NO.	USGS QUADRANGLE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	CENTRAL ARTISIA PCSE MUNSON PATRICK N. BASE TRIPCD 3 COLLEGE 2 TURKEY CREEK VALKARIA SLIP 2 SEBASTIAN 2 SCCRPICN 2 RICMAR 2 PIERCE 2	1950 1953 1966 1940 1960 1963 1934 1934 1934 1961 1960 1963	TP-00144 TP-00146 TP-00149 TP-00150 TP-00153 TP-00154 TP-00155	CAPE CANAVERAL  COCCA BEACH  TROPIC  MELEOURNE EAST GRANT SEBASTIAN NW SEBASTIAN VERO BEACH INDRIO FORT PIERCE
15	WHITE 2	1 <del>966</del>	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	SEVALL	1934	TP-CO159	D R D
19	PINE	1929	TP-00162	GCAMZ
20	CISTERN	1956	TP-00163	HOER SCUND
21 ·	RADAR	1954	TP-C0164	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 GCLF 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 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. Hethod

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. Thes 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 SCORFOIN 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 -- 69-E(C)-4185 thru 4194 -- 68- 1886

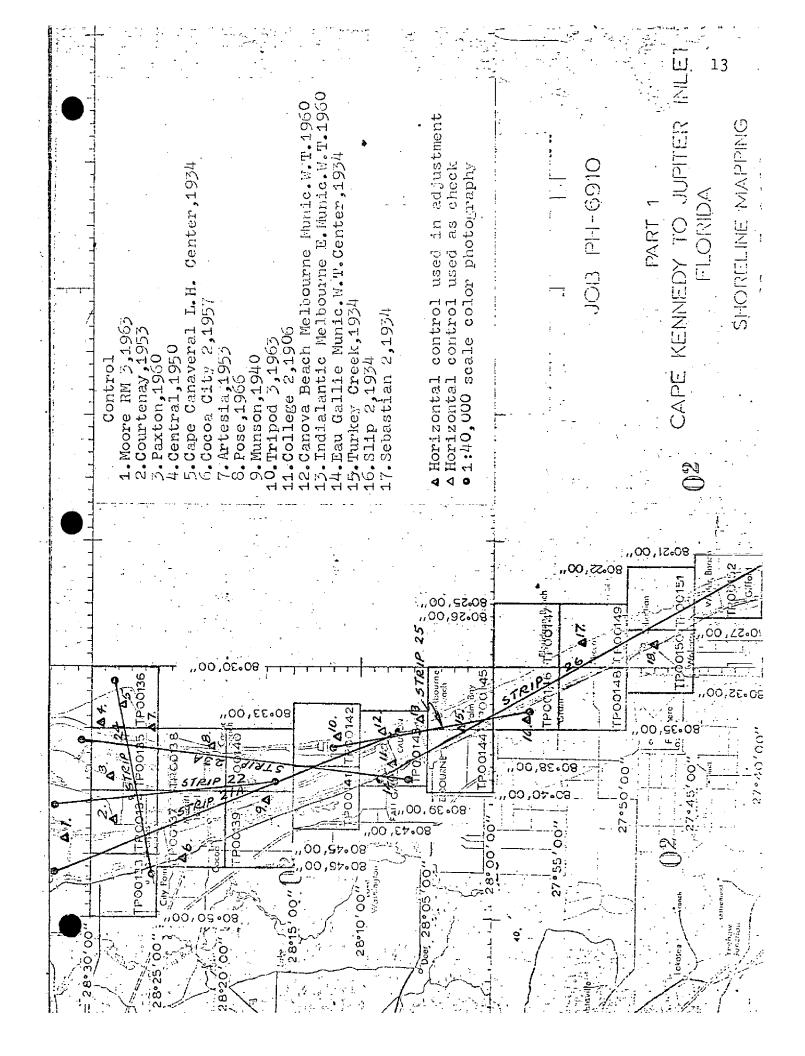
```
Strip 23A -- 70-L(C)-9991A thru 004A Strip 24 -- 70-L(C)-007A thru 015A Strip 25 -1029-E(C)-5760 thru 5768 Strip 26 --- 70-E(C)-5772 thru 5794
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The definition and quality of the photography were good. Respectfully submitted:

Juma & Sascistas I. I. / Saperstein

Approved and forwarded:

Henry P. Eichert, Chief Aerotriangulation Section



# Vertical Control – Geodetic

Map	TP-	00147
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Geodetic	Elevations (feet)				
Bench Mark	SLD 1929	Condensed Description			
A 305	10.673	C&GS disk stamped A 305 1970; 64 ft. W road centerline, 41 ft. S road centerline leading to Sunnyland Beach, 3.5 ft. N of N face of concrete block fence.			
P 304	11.863	C&GS disk stamped P 304 1970; 100 ft. S centerline Carmen St., 32 ft. W road centerline, 1.2 ft. S of power pole.			
N 304	11.913	C&GS disk stamped N 304 1970; 133 ft. S of Cortez St. centerline, 32 ft. W road centerline, 1.5 ft. S of power pole.			
		•			
	·				

# Compilation Report TP-00147

# 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 mosaic 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 Atlantic shore and in the interior waters of Mullet Creek. Where the mean high-water line was obscured by vegetation the apparent shoreline symbol was used.

Due to surf conditions (Atlantic shore) on the tide coordinated black and white infrared photography, the mean low-water line was not compiled. Foreshore profiles are requested to verify the interpretation of the mean low-water line on the photography.

The photography was adequate.

## 36. Offshore Details

No unusual problems were encountered.

### 37. Landmarks and Aids to Navigation

There are nonnonfloating aids or landmarks on map TP-00147.

38. Control for Future Surveys - None.

#### 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 has been made with USGS Quadrangle Sebastian N.W. Fla., scale 1:24,000, edition of 1951.

There were no unusual changes in this area. This Quadrangle was used for Geographic names.

No significant differences were noted.

# 47. Comparison with Nautical Charts

Comparison has been made with Nautical Chart 845-SC, Side A, scale 1:40,000, 9th Edition, July 1970, corrected to August 1970.

No significant differences were noted.

Items to be Applied to Nautical Charts Immediately - None.

Items to be Carried Forward - None.

Respectfully submitted,

M.C. WEBBER

M.C. Webber Carto(Photo)

Approved and forwarded:

Jeter H. Battley Jr J.P. Battley, Jr.

Chief, Coastal Mapping Section

# Field Edit Report, Map TP-00147, Job PH-6910

# 51. METHODS

Shoreline of the Atlantic Ocean was verified visually while driving or walking along the beach at proper stages of tide. No discrepancies or inadequacies were noted.

There are no landmarks or aids to navigation.

Only one triangulation station plots in the area and it could not be found.

Geodetic bench marks were recovered and identified on the ratio photographs. Forms 685A are submitted.

Field edit notes will be found on ratio photograph 70E5785, the FIELD EDIT SHEET and the Discrepancy Print.

# 52. ADEQUACY OF COMPILATION

Adequate after application of field edit information.

## 53. MAP ACCURACY

No tests were specified.

### 54. RECOMMENDATIONS

None.

# 55. EXAMINATION OF PROOF COPY

Not required.

### 56. GEOGRAPHIC NAMES

The name EVANS PINES is believed to be an old real estate development name and is now obsolete. The area is now known as Deerfield Groves. This is not considered to be permanent and it is recommended that no name be used. No other conflicts were detected.

Submitted 6/9/71

William H. Shearouse William H. Shearouse Chief, Photo Party 60 Remarks: Application of Field Edit for TP-00147

Foreshore profiles verified the tidal datum lines on the photography.

# Review Report TP-00147 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 partsein the preparation of this map have been examined by the Quality Control Group and are adequate:

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

The shoreline on this map was symbolized incaccordance 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 USGS Quadrangle Melbourne East Florida, 1949, photorevised 1970, scale 1:24,000.

No significant differences were noted.

A comparison was made with Nautical Chart 845-SC, 12th edition, dated September 8, 1973, scale 1:40,000.

No significant differences were noted.

# 66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00147 complies with project instructions for NOS Cooperative Mapping, Job PH-7000. This map meets the National Map Accuracy Standards.

S) Old 11. 1%

Donald M. Bran

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

Feb. 9, 1973

GEOGRAPHIC NAMES

FINAL NAMES SHEET

Ph-6910 N (Florida)

TP-00147

Atlantic Ocean

Evans Pines

Floridana Beach

Latham Island

Middle Gap

Mullet Creek

Approved by:

A. Joseph Wraight Chief Geographer

C. E. Harrington Cartographer

# TP-00147 Data Forwarded to Federal Records Center

- 1 Field Edit Sheet
- 1 Discrepancy Print
- 1 Planetable beach profile TP-00147 and TP-00149
- 1 Form 76-36C (History of Field Operations)

Photographs filed with TP-00146