

original

TP-00143

TP-00143

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-00143

Classification No. Final Edition No. 1

Field Edited Map

LOCALITY

State Florida

General Locality Brevard County

Locality Satellite Beach to

Melbourne

19 69 TO 1971

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TP-00143 MAP EDITION NO. (1) MAP CLASS Final JOB PH-6910	
DESCRIPTIVE REPORT - DATA RECORD							
PHOTOGRAMMETRIC OFFICE Rockville, Maryland				LAST PRECEDING MAP EDITION			
OFFICER-IN-CHARGE Commander Wesley V. Hull				TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> 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-Supplement II, September 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: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input checked="" type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify) Mean water-level (Refer to Record of Decisions bound with this report).			
3. MAP PROJECTION Transverse Mercator				4. GRID(S)			
				STATE Florida		ZONE East	
5. SCALE 1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY				I.I. Saperstein		5/71	
				Inapplicable			
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomato CHECKED BY				P. Dempsey		5/71	
				Inapplicable			
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: B-8 SCALE: 1:10,000				J.C. Richter		7/71	
				J.P. Battley		7/71	
				Inapplicable			
4. MANUSCRIPT DELINEATION PLANIMETRY BY Shoreline: Graphic CHECKED BY METHOD: Interior: Orthophoto mosaic SCALE:				J.C. Richter		7/71	
				J.P. Battley		7/71	
				Inapplicable			
				J. Taylor		7/71	
				J.P. Battley		7/71	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				J.P. Battley		8/71	
6. APPLICATION OF FIELD EDIT DATA BY				J.C. Richter		12/71	
				J.P. Battley		12/71	
7. COMPILATION SECTION REVIEW BY				P. Dempsey		2/72	
8. FINAL REVIEW BY				J.P. Battley		3/72	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY							
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				D. M. Brant		5/74	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				K. J. Baker		8-12-74	

TP-00143

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 E&L cameras 6" focal length		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR		ZONE	<input checked="" type="checkbox"/> STANDARD <input checked="" type="checkbox"/> DAYLIGHT
<input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		(P) PANCHROMATIC (I) INFRARED B&W		Eastern MERIDIAN 75th&60th	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
70L(C)003A	11/5/70	13:03	1:40,000	The stage of tide is	
70E(C)5792 & 5793	2/10/70	13:48	1:40,000	inapplicable for the	
70E(C)5762 & 5763	2/19/70	13:10	1:40,000	color photography.	
69L3378R - 3380R	8/23/69	10:20	1:30,000	(1)-0.3MHW	
70L6862R-6864R	8/14/70	17:17	1:25,000	(5)+0.06MHW(4)-0.10MWL	
70L6880R & 6881R	8/14/70	17:30	1:25,000	(5)+0.13MHW(4)-0.11MWL	
70L6410R	8/12/70	11:20	1:25,000	(1)-0.26MLW	
70L6551R	8/14/70	9:46	1:25,000	(5)+0.12MLW(6)0.00MWL	
69L3434R & 3435R	8/23/69	11:27	1:30,000	(2)+0.14MLW(3)-0.02MWL	

REMARKS

See page 3 for tide stations

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 mean water-level line was mapped in lieu of the mean high-water line along the shores of the Indian and Banana Rivers north of Eau Gallie Causeway (refer to Record of Decisions). The source of the mean water-level line is the tide coordinated black and white infrared photography.

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

The source of the mean low-water (Atlantic shore) is the tide coordinated black and white infrared photography listed in item 1. This photography was supplemented by foreshore profiles determined by field edit.

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 TP-00141	EAST	SOUTH TP-00144	WEST No contem-
TP-00142	Atlantic Ocean	TP-00145	porary survey.

REMARKS

Final junctions were made in the Coastal Mapping Section.

Tide Stations

- (1) Sebastian, Indian River
- (2) Port Canaveral
- (3) Titusville, Indian River
- (4) Eau Gallie, Indian River
- (5) Canova Beach
- (6) Orsino Causeway

TP-00143

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION *See below ☒ FIELD EDIT OPERATION, October 1971

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	W.H. Shearouse	10/71
2. HORIZONTAL CONTROL	RECOVERED BY W.H. Shearouse ESTABLISHED BY N.A. PRE-MARKED OR IDENTIFIED BY W.H. Shearouse	4/71 8/71
3. VERTICAL CONTROL	RECOVERED BY W.H. Shearouse ESTABLISHED BY N.A. PRE-MARKED OR IDENTIFIED BY W.H. Shearouse	4/71 10/71
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY W.H. Shearouse LOCATED (Field Methods) BY None IDENTIFIED BY W.H. Shearouse	10/71
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input checked="" type="checkbox"/> SPECIFIC NAMES ONLY BY W.H. Shearouse <input type="checkbox"/> NO INVESTIGATION	10/71
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY W.H. Shearouse	10/71
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
None			
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	*Refer to Field Inspection Report	70L6686	Y215
		70L6687	RM2(USE),C216,R230,T230
		70L6688	TIDAL 1
		70L6690	10.54(SRD),ABC(SRD),
			E304,F304
		70L7261	E230,G230,L230,M230(SRD)
		70L7262	U32,R229
		70L7709	A230,C230
		70L7710	V32
3. PHOTO NUMBERS (Clarification of details)		70L7711	EAU GALLIE TANK RM1, TIDAL 1
70E5763;70E5792,5793			

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED
Refer to Field Edit Report

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
70E5793	TANK	70E5792	INDIAN RIVER LIGHT 2
		70E5793	EAU GALLIE, CHANNEL DAYBEACON 9
			EAU GALLIE CHANNEL DAYBEACON 11
			BANANA RIVER DYBN. 1

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE 6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS
Melbourne and South Brevard Street Map

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)
Refer to Field Inspection Report bound with this report.
Sketchbook Vol. 11.

NOAA FORM 76-36D
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

RECORD OF SURVEY USE

TP-00143

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No map copies furnished for Nautical Chart use 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 TP-00143

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)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

6

Record of Decisions
Pertaining to Symbolization of the MHW, MLW, and MWL Datums
Map TP-00143

Shoreline Delineation

The mean low-water and mean high-water tidal datums were determined along the outer coast (Atlantic Ocean) from tide observations at Canova Beach Tide Station (shown on this map), and Port Canaveral Tide Station (north of this map). The interior water areas shown on this map are Indian River, Banana River, Eau Gallie River and Elbow Creek.

Special treatment was given to the portrayal of the shoreline of the inland waters. The mean high-water line was delineated where the periodic tide was measurable (mean range of 0.2 ft. or greater). Where the periodic tide was masked by nontidal effects and the range was less than 0.2 ft., the mean high/low-water datums converge and become indistinguishable; for those water areas, the mean water-level line was mapped in lieu of the mean high-water line and shown by a distinctive symbol.

On this map, Eau Gallie Causeway was determined as the point of change between delineation of mean high-water and mean water-level lines. The mean water-level line shall be mapped north of the causeway and the mean high-water line south of the causeway. The point of change was based on tidal datum determinations at Palm Bay, Melbourne, Eau Gallie, and Pineda Tide Stations. The datums in Indian River and Banana River, north of the Eau Gallie Causeway, were established by observations at the Eau Gallie Tide Station (shown on this map) and Carters Cut Tide Station (not shown) respectively. South of the causeway, datums for Indian River, Eau Gallie River, and Elbow Creek were determined from observations at the Melbourne Tide Station (also shown on this map). Since the mean range at Melbourne Tide Station was approximately 0.2 foot, the standard mean high-water line symbolization was used for delineating the Indian River, Eau Gallie River, and Elbow Creek mean high-water lines, except for areas where vegetation, such as mangrove, obscures the shoreline, and then the apparent shoreline symbol was used. The mean low-water line was not mapped for interior water areas, 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.

* Decision Responsibility for Shoreline Symbolization

Specific decisions as to where the mean high-water line symbol and the mean water-level symbol would be used for mapping the shoreline and extensions of the symbolizations up creeks and drainages which empty into the Banana and Indian Rivers were made October 20,

* See Review Report for clarification of date.

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. Hugh J. Dolan, Staff Attorney, Office of General Counsel. They based their decisions on an examination and evaluation of tide station records, aerial photographs, and field edit records and reports.

Archiving

A copy of this report shall be included in Descriptive Report TP-00143 which will be permanently filed in the NOS Archives.

Sheet No. -Area Sq. Mi.

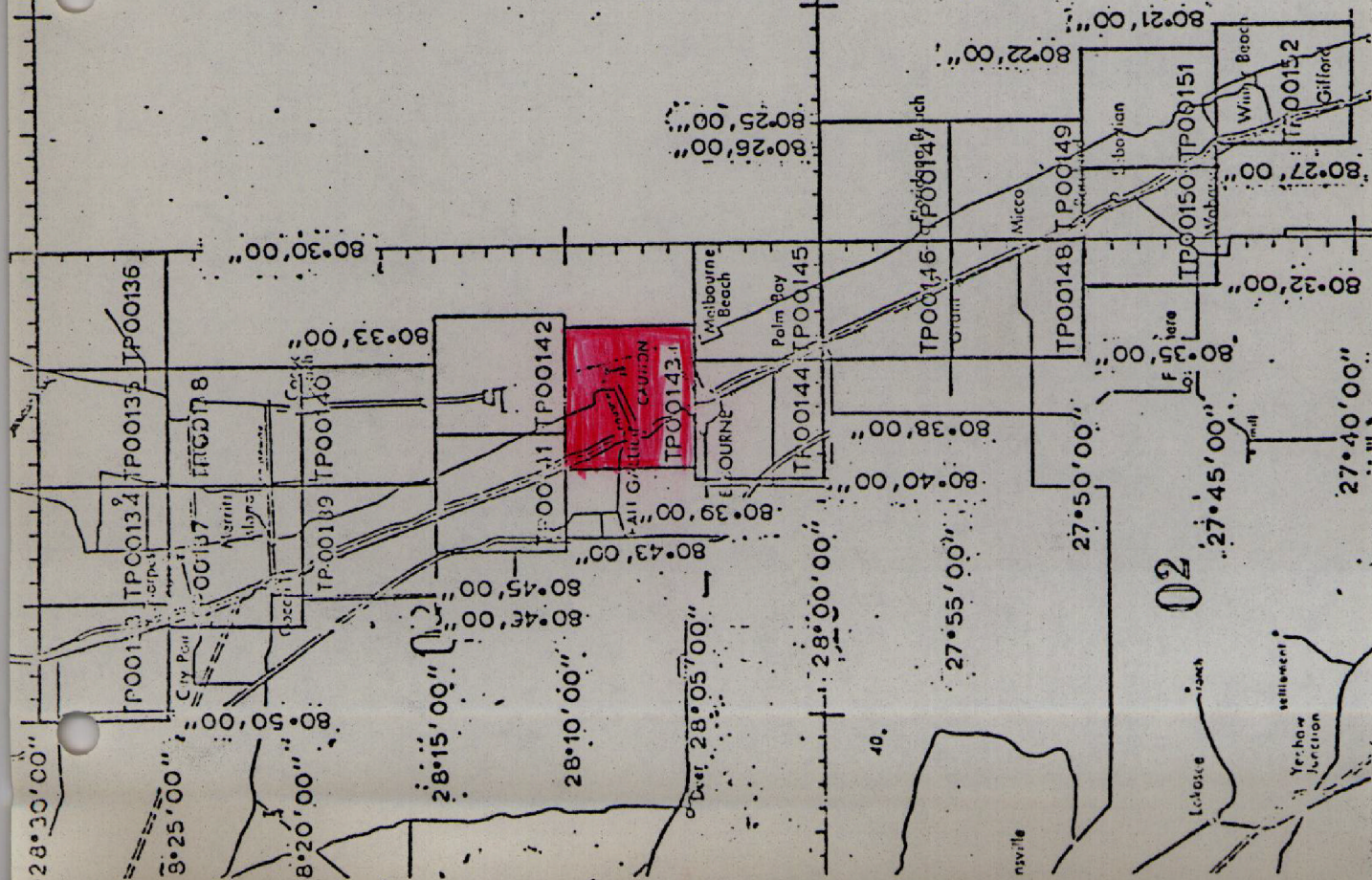
445276240199450433

PART 1

CAPE KENNEDY TO JUPITER INLET
FLORIDA

SHORELINE MAPPING
SCALE 10,000

8



SUMMARY
TP-00133 thru TP-00152

Coastal Zone Map TP-00143 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 three 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.

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:

STATION No.	NAME	MAP NO.	USGS QUADRANGLE
1	CENTRAL	1950 TP-00136	CAPE CANAVERAL
2	ARTESIA	1953 "	" "
3	POSE	1966 TP-00138	COCCA BEACH
4	MUNSON	1940 TP-00139	" "
5	PATRICK N. BASE	1960 TP-00140	" "
6	TRIPCD 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	ARIZONA
17	REFUGE 2 RM # 4	1967	TP-00160	ST. LUCIE INLET
18	SEWALL	1934	TP-00159	" " "
19	PINE	1929	TP-00162	GOVEZ
20	CISTERN	1956	TP-00163	HOEE 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

-2-


Strip 23A -- 70-L(C)-9991A thru 004A
Strip 24 -- 70-L(C)-007A thru 015A
Strip 25 -- ~~7068~~-E(C)-5760 thru 5768
Strip 26 --- 70-E(C)-5772 thru 5794

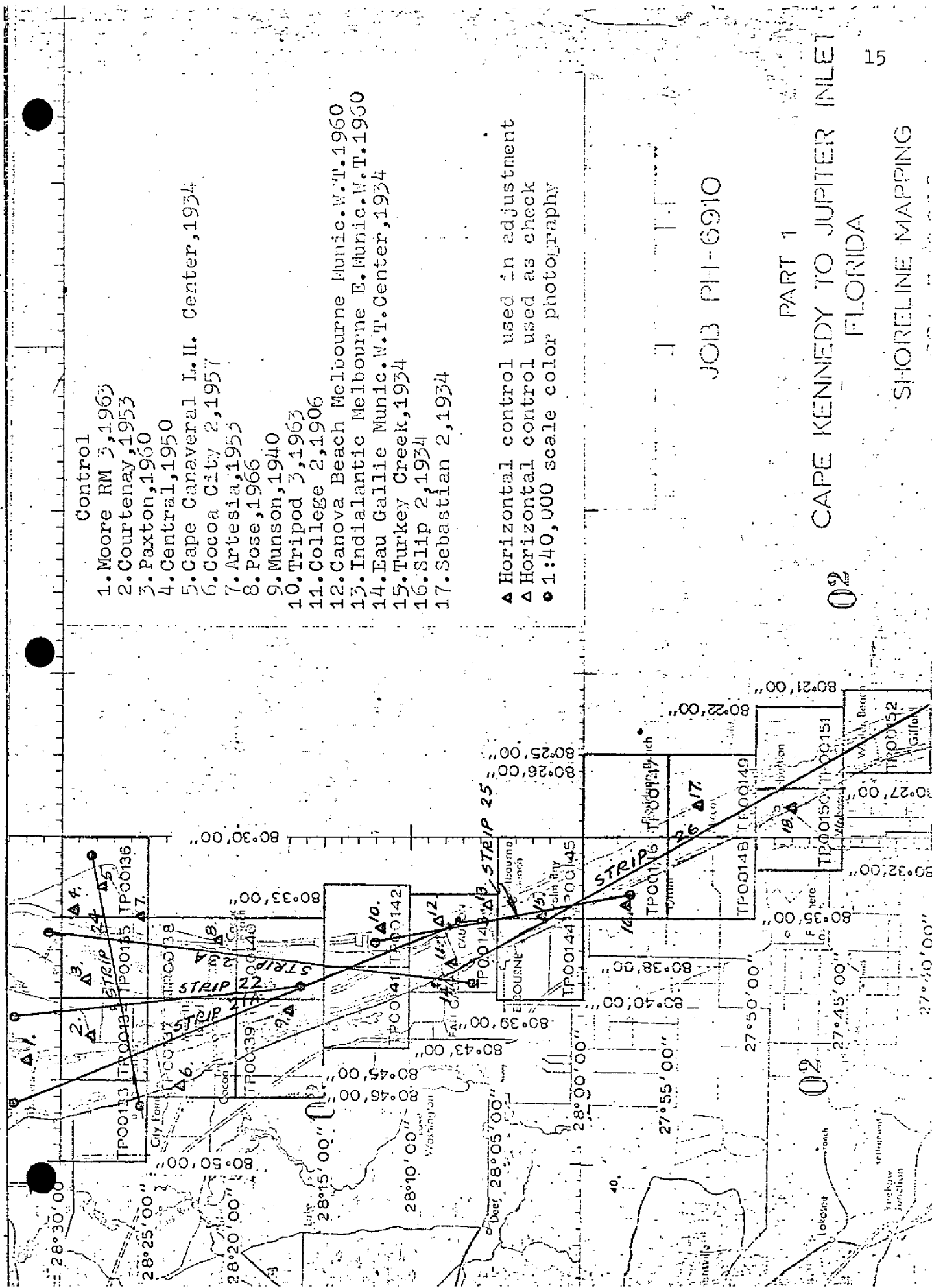
The definition and quality of the photography were good.

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. Indiantantic 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

JOB PH-6910

PART 1

CAPE KENNEDY TO JUPITER INLET
FLORIDA

15

SHORELINE MAPPING

Horizontal Control

Map TP-00143

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
JESSUP, 1940	Book 419, P19, 52 G.P.-Fla. Vol. 1, P. 547, P. C. Fla. E Zone, P. 141
EAU GALLIE, MUNICI- PAL W.T., 1930	Book 419, P20, 52 G.P.-Fla. Vol 1, P. 191, P. C. Fla. E Zone, P.50
COLLEGE 2, 1906	Book 419, P24, 36, 51 G.P.-Fla. Vol. 1, P. 153, P.C. Fla. E Zone, P. 18
AIRWAY BEACON 16, 1934	Book 419, P36 G.P.-Fla. Vol. 1, P. 179, P.C. Fla. E Zone, P. 45
MELBOURNE TANK, 1934	Book 419, P25 G.P.-Fla. Vol. 1, P. 152, P. C. Fla. E Zone, P. 18
INDIALANTIC TANK, 1934	Book 419, P23 G.P.-Fla. Vol. 1, P. 152, P. C. Fla. E Zone, P. 18
INDIALANTIC, MELBOURNE EAST MUNICIPAL WATER TANK	Quad 280803, Vol. 2, P74
CANOVA BEACH, MELBOURNE MUNICI- PAL WATER TANK	Quad 280803, Vol. 2, P74
PATRICK S BASE, AZIMUTH MARK, 1953	Distribution of data is restricted. Write the Director, National Geodetic Survey, for information.

Compilation Report
TP-00143

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. Also, the mean high-water line was mapped along the shores of the Indian and Eau Gallie Rivers south from the Eau Gallie Causeway. The mean water-level line was mapped along the shores of the Banana and Indian Rivers north of Eau Gallie Causeway (refer to the Record of Decisions). Due to heavy surf conditions on the tide coordinated 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 photographs.

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. Chartist 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 Quadrangles Melbourne East, Melbourne West, Eau Gallie, Fla., edition of 1949, and Tropic, Fla., edition of 1951, scale 1:24,000, contour interval 5 feet.

No significant differences were noted.

47. Comparison with Nautical Charts

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

No significant differences 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:

Jeter P. Battley Jr.
J.P. Battley
Chief, Coastal Mapping Section

Field Edit Report, Map TP-00143, Job PH-6910

51. METHODS

Shoreline of the Atlantic Ocean was verified visually while driving, or walking where necessary, along the beach at the proper stages of tide. The Banana River and Indian River shoreline was verified visually from a small boat while cruising just offshore. No major inadequacies were found. Notes regarding apparent and "fast" shoreline, piers and other shoreline structures were made on the rectified photographs.

Five landmarks are recommended. Form 76-40 is submitted. Also submitted is Form 76-40 for the deletion of one landmark which appears on the 1970 edition of Chart 845-SC.

Forms 76-40 for the nonfloating aids are submitted covering those aids shown on Chart 845-SC and a new group of private aids not presently charted. These private aids appeared in a recent issue of the Notice to Mariners as being Coast Guard approved.

All known triangulation stations were searched for. Forms 526 were submitted to Rockville in April 1971.

Bench marks were searched for and reported on Form 685A. Those recovered were identified on contact photographs.

Highway numbers were obtained from signs, from General Highway maps and from the local State Department of Transportation office.

Names of the principal streets were obtained from signs and a city map.

Field edit notes will be found on rectified photographs, 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 required.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Not required.

56. GEOGRAPHIC NAMES

A complete names investigation was not required. Conflicts among names as they appear on the Preliminary Name Sheets are resolved as follows:

ELBOW CREEK
EAU GALLIE RIVER

This is a matter of placement as there is an Eau Gallie River and an Elbow Creek. The names are correctly placed on the Field Edit Sheet and the Preliminary Name Sheet has been corrected. This information comes from the names on the bridges over the respective bodies of water, the Melbourne City Engineering Department and other local sources.

EAU GALLIE
MELBOURNE

The name Eau Gallie no longer officially exists. By referendum approximately two years ago the people voted to consolidate the two cities and name the new area MELBOURNE. A map showing the city limits, etc is submitted. The City Engineers office says this map is correct.

MELBOURNE-EAU GALLIE AIRPORT
JOHN F. KENNEDY MEMORIAL AIRPORT
CAPE KENNEDY REGIONAL AIRPORT

The correct name as furnished by the Airport Manager's office is CAPE KENNEDY REGIONAL AIRPORT. Numerous signs in the Melbourne Area substantiate this.

The name EAU GALLIE BEACH should be removed from the Preliminary Name Sheet and Chart 845-SC and 1246. This name has not been applicable

for many years and must have been very narrowly known if ever correct.

The following new names correctly shown on the Advance Map Manuscript, but not on the Preliminary Name Sheet are recommended.

SATELLITE BEACH (an incorporated city)
INDIAN HARBOR BEACH (an incorporated city)
CANOVA BEACH (an unincorporated community)

They are well known in local usage and are shown on various maps without dispute.

The name PARADISE BEACH PARK is recommended. It is a recently constructed recreation facility and the name is without conflict.

Submitted 10/6/71

William H. Shearouse

William H. Shearouse
Chief, Photo Party 60

Remarks: TP-00143

Foreshore profiles verified the tidal datum lines on the photography.

Review Report TP-00143
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-00143 and the following USGS quadrangles:

Eau Gallie, Florida, 1949, photorevised 1970, scale 1:24,000
Tropic, Florida, 1949, photorevised 1970, scale 1:24,000
Melbourne, West, Florida, 1949, photorevised 1970, scale
1:24,000
Melbourne East, Florida, 1949, photorevised 1970, scale 1:24,000

No significant changes were noted.

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

The following differences were noted:


1. Wreck on chart latitude 28°08.7' longitude 80°36.4'. Not on map TP-00143.
2. Pier in ruins on chart latitude 28°06.5' longitude 80°37'. Pier on map TP-00143.
3. Pier in ruins on chart latitude 28°05.4' longitude 80°36.5'. No pier on map TP-00143.
4. Stakes shown on chart east shore Indian River south of Melbourne Causeway. No stakes are shown on map TP-00143.

No mention of these differences was made by the field edit of 1971.

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00142 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

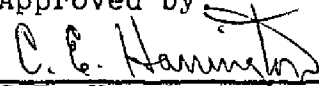
May 29, 1974

GEOGRAPHIC NAMES
FINAL NAMES SHEET
(PH-6910 N (Florida))

TP-00143

Atlantic Ocean	Melbourne Regional Airport
Banana River	Merritt Island
Canova Beach	Satellite Beach
Carters Cut	Tropic
Eau Gallie Bridge	Wells Point
Eau Gallie River	
Elbow Creek	
Florida East Coast RR	
Horse Creek	
Indialantic	
Indian Harbour Beach	
Indian River	
Mathers Bridge	
Melbourne	
Melbourne Causeway	

Approved by:


C.E. Harrington
Staff Geographer

U.S. DEPARTMENT OF COMMERCE-NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION									
NONFLOATING AIDS OR LANDMARKS FOR CHARTS									
ORIGINATING LOCATION					DATE				
Rockville, Maryland					5/29/74				
The following objects have (have not) been inspected from seaward to determine their value as landmarks:									
JOB NUMBER		SURVEY NUMBER		DATUM		METHOD AND DATE OF LOCATION			
PH-6910		T -		N.A. 1927		(See instructions on reverse of this form)			
STATE: Florida		TP-00143		POSITION					
CHARTING NAME	DESCRIPTION	LATITUDE		LONGITUDE		FIELD INSPECTION	COMPILATION	FIELD EDIT	CHARTS AFFECTED
		D.M. METERS	S	D.M. METERS	E				
	EAU GALLIE-ST LUCIE INLET EAU GALLIE CHANNEL								
DYBN 1	Daybeacon 1	28 07	22.18	80 36	58.37			P.4 9/30/71	845-SC
DYBN 3	Daybeacon 3	28 07	683.0	80 37	1593.0			"	"
DYBN 5	Daybeacon 5	28 07	24.06	80 37	10.00			"	"
LIGHT 6	Light 6	28 07	738.0	80 37	273.0			"	"
DYBN 7	Daybeacon 7	28 07	25.27	80 37	21.95			"	"
DYBN 9	Daybeacon 9	28 07	778.0	80 37	599.0			"	"
DYBN 11	Daybeacon 11	28 07	28.56	80 37	25.26			"	"
DYBN 13	Daybeacon 13	28 07	879.0	80 37	687.0			"	"
DYBN 15	Daybeacon 15	28 07	28.68	80 37	28.34			"	"
			883.0	80 37	771.0			P.1 9/30/71 70E5793	"
			30.60	80 37	31.44			"	"
			942.0	80 37	858.0			"	"
			29.72	80 37	35.58			"	"
			915.0	80 37	971.0			"	"
			26.87	80 37	38.69			P.4 9/30/71	"
			827.0	80 37	1056.0			"	"
			25.92	80 37	41.33			"	"
			798.0	80 37	1128.0			"	26

	NAME	TITLE
1. Objects inspected from seaward	W.H. Shearouse	<input type="checkbox"/> FIELD INSPECTOR <input checked="" type="checkbox"/> 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	Checked after typing D. Brant	<input type="checkbox"/> REVIEWER <input checked="" type="checkbox"/> 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:

- For 'Field Positions' enter the date of location.
- 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 'Thang, Rec. mo/day/yr.'

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

[illegible]

1. Objects inspected from seaward	W.H. Shearouse		<input type="checkbox"/> FIELD INSPECTOR <input checked="" type="checkbox"/> FIELD EDITOR
2. Positions determined and/or verified			FIELD INSPECTOR
	W.H. Shearouse		FIELD EDITOR
3. Forms originated by Quality Control and Review Group and final review activities	J. C. Richter		COMPILER
	Checked after typing D. Brant		<input type="checkbox"/> REVIEWER <input checked="" type="checkbox"/> 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

1. Triangulation

2. Traverse

3. Intersection

4. Resection

a. Theodolite

b. Planetable

c. Sextant

P - Photogrammetric

1. Field identified

2. Theodolite

3. Planetable

4. Sextant

EXAMPLES:

F. 3.c

P. 2

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.'

[illegible]

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

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

1. New Position Determined—Enter the applicable data by symbols as indicated below:

FIELD EDIT

F - Field

1. Triangulation

2. Traverse

3. Intersection

4. Resection

a. Theodolite

b. Planetable

c. Sextant

P - Photogrammetric

1. Field identified

2. Theodolite

3. Planetable

4. Sextant

EXAMPLES:

F. 3.c

P. 2

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.'

[illegible]

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
1. Objects inspected from seaward	W.H. Shearouse
2. Positions determined and/or verified	W.H. Shearouse
3. Forms originated by Quality Control and Review Group and final review activities	Checked after typing D. Brant

TITLE
<input type="checkbox"/> FIELD INSPECTOR <input checked="" type="checkbox"/> FIELD EDITOR
FIELD INSPECTOR
FIELD EDITOR
COMPILER
<input type="checkbox"/> REVIEWER <input checked="" type="checkbox"/> 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
1. Triangulation	1. Field identified
2. Traverse	2. Theodolite
3. Intersection	3. Planetable
4. Resection	4. Sextant
a. Theodolite	
b. Planetable	
c. Sextant	

Immediately beneath the data described above, enter the following:

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

TP-00143
Data Forwarded to Federal Records Center

1 Field Edit Sheet

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

7 Forms 76-40 (Non-floating Aids or Landmarks for Charts)

Photography:

1:10,000 scale
70E5763, 5792, and 5793

Contact scale
70L6686 thru 6690
70L7261 and 7262
70L7709 thru 7711

Sketchbook Vol. 10.