

TP-00145

TP-00145

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-00145..

Classification No. Final Edition No. ...1.....

Field Edited Map

## LOCALITY

State ... Florida.....

General Locality Brevard County.....

Locality .... Fisherman Point to Malabar..

19 69 TO 1970

## REGISTRY IN ARCHIVES

DATE .....

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
<b>DESCRIPTIVE REPORT - DATA RECORD</b>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
PHOTOGRAMMETRIC OFFICE  Rockville, Maryland OFFICER-IN-CHARGE  Commander Wesley V. Hull		SURVEY TP. <u>00145</u>  MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB PH. <u>6910</u>	
PHOTOGRAMMETRIC OFFICE  Rockville, Maryland OFFICER-IN-CHARGE  Commander Wesley V. Hull		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
<b>I. INSTRUCTIONS DATED</b>			
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, 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	
<b>II. DATUMS</b>			
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 checked="" type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify) Mean Water level (refer to the Record of Decisions)	
3. MAP PROJECTION  Transverse Mercator		4. GRID(S) STATE <u>Florida</u> ZONE <u>East</u> STATE _____ ZONE _____	
5. SCALE 1:10,000		STATE _____ ZONE _____	
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
OPERATIONS		NAME	
DATE			
1. AEROTRIANGULATION METHOD: Analytic LANDMARKS AND AIDS BY		I.I. Saperstein Inapplicable	
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat PLOTTED BY CHECKED BY		P. Dempsey Inapplicable	
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:10,000 PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY		J. Taylor J. Richter Inapplicable	
4. MANUSCRIPT DELINEATION Graphic: Shoreline METHOD: Interior: Orthophoto mosaic SCALE: 1:10,000 PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY HYDRO SUPPORT DATA BY CHECKED BY		J. Taylor J. Richter Inapplicable J. Taylor J.P. Battley	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		J.P. Battley	
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		M. Webber J.C. Richter	
7. COMPILATION SECTION REVIEW BY		J.C. Richter	
8. FINAL REVIEW BY		J.P. Battley	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY			
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		D. Brant	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		R. J. Larkin	

## COMPILATION SOURCES

TP-00145

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 E&L 6" focal length		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED B&W		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				ZONE Eastern	<input checked="" type="checkbox"/> STANDARD
				MERIDIAN 60th & 75th	<input checked="" type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
73E (C) 5788-5791	2/10/70	13:47	1:40,000	The stage of tide is inapplicable for color photography.	
70L6882R-5886R	8/14/70	17:30	1:25,000	+0.13MHW(1)	
70L6405R-6409R	8/12/70	11:18	1:25,000	+0.14MLW(3) -0.26MLW(4)	
70L8929R & 8930R	2/10/70	12:11	1:20,000	-0.16MLW(2) -0.16MHW(2)	
69L3376R & 3377R	8/23/69	10:20	1:30,000	-0.31MHW(4)	

REMARKS (1) Canova Beach Tide Station (2) Eau Gallie Tide Station  
(3) Sebastian Inlet Tide Station (4) Sebastian Indian River Tide Station

## 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 on a small portion of 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).  
(Photography dated 8/25/69)

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

The source of the mean low-water line (Atlantic shore) is the tide coordinated black and white infrared photography listed in item 1. The mean low-water line on the photography was verified by foreshore profiles determined by the field edit of 1971. There is no mean low-water line shown in the Indian River.

## 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 & the Atlantic Ocean	Atlantic Ocean	TP-00146	TP-00144

## REMARKS

Final junctions were made in the Coastal Mapping Section.

TP-00145

## HISTORY OF FIELD OPERATIONS.

I. ☒ FIELD INSPECTION OPERATION \*See Below ☒ FIELD EDIT OPERATION.

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	W.H. Shearouse	May 1971
2. HORIZONTAL CONTROL	RECOVERED BY W.H. Shearouse	May 1971
	ESTABLISHED BY Inapplicable	
	PRE-MARKED OR IDENTIFIED BY Inapplicable	
3. VERTICAL CONTROL	RECOVERED BY W.H. Shearouse	April 1971
	ESTABLISHED BY Inapplicable	
	PRE-MARKED OR IDENTIFIED BY W.H. Shearouse	April 1971
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY W.H. Shearouse	April 1971
	LOCATED (Field Methods) BY W.H. Shearouse	May 1971
	IDENTIFIED BY W.H. Shearouse	May 1971
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input checked="" type="checkbox"/> SPECIFIC NAMES ONLY BY <input type="checkbox"/> NO INVESTIGATION	W.H. Shearouse May 1971
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY W.H. Shearouse	May 1971
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	PHOTO NUMBER	STATION DESIGNATION
	Refer to field report	70E5788	J171;V229;J304;H304
		70E5789	Z229;Y229;Z304;G304
		70E5790	X167;Y167;ANT2; DOLITE 2; TURKEY CREEK

3. PHOTO NUMBERS (Clarification of details)

70E5788 thru 5791

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

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

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
70E5789	MICROWAVE TOWER ( F.S.R. TOWER)		

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

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

\*Refer to Field Report bound with this report.  
Sketchbook No. 1, Graphic Sextant fixes (book covers TP-00144 t& TP-00145).

## RECORD OF SURVEY USE

TP-00145

## I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No copies of Map TP-00145 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 TP-00145

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	

Record of Decisions  
Pertaining to Symbolization of the MHW, MLW, and MWL Datums  
Map TP-00145

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 (north of this map) and Vero Beach Tide Station (south of this map). The interior water areas shown on this map are Indian River, Palm Bay, and Turkey Creek.

The tidal datums in Indian River and Palm Bay were established by observations at Palm Bay Tide Station (shown on this map). Since the mean range at that station was approximately 0.2 foot, the standard mean high-water line symbolization was used for delineating the Indian River and Palm Bay mean high-water lines, 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 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 entrance to Turkey Creek which reduce the ebb and flow of the tide from Palm Bay's and Indian River's 0.2 foot range to a significantly lesser range in the creek, were noted on the aerial photographs and Bureau Charts where U.S. 1 highway bridge separates Palm Bay from Turkey Creek. 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 shoreline in Turkey Creek; 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 then portrayed by a solid line.

\* 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-00145 which will be permanently filed in the NOS Archives.



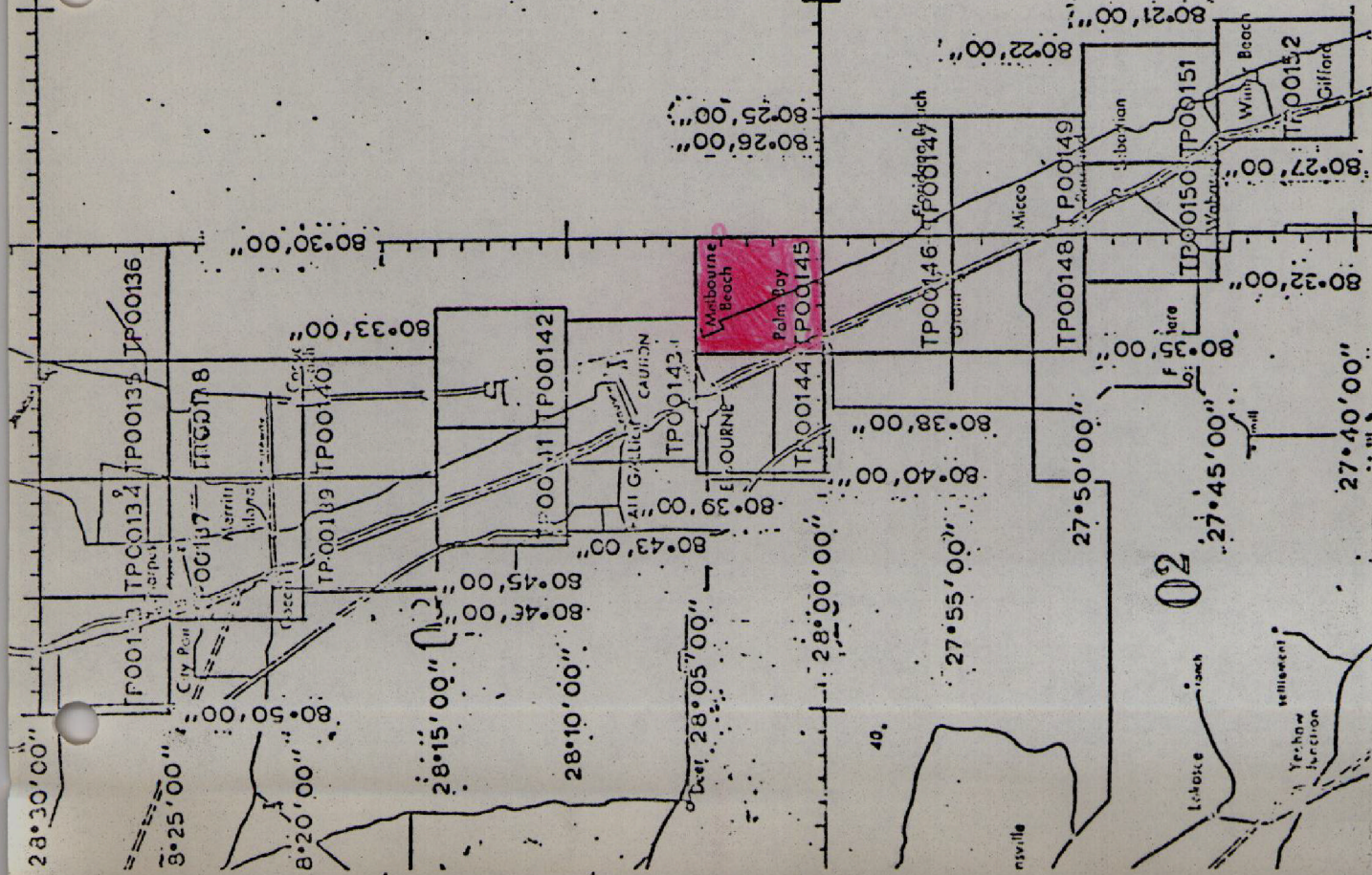
Sheet No. -Area Sq. Mi.

TP-00133	00134	00135	00136	00137	00138	00139	00140	00141	00142	00143	00144	00145	00146	00147	00148	00149	00150	00151	00152
3	3	3	4	10	5	6	4	6	6	10	2	4	7	6	1	2	5	4	4

PART 1

CAPE KENNEDY TO JUPITER INLET  
FLORIDA

SHORELINE MAPPING  
SCALE 10,000





SUMMARY  
TP-00133 thru TP-00152

Coastal Zone Map TP-00145 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.

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	COCCA 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-C0157	ANKONA
17	REFUGE 2 RM # 4	1967	TP-C0160	ST. LUCIE INLET
18	SEWALL	1934	TP-C0159	" " "
19	PINE	1929	TP-C0162	GOMEZ
20	CISTERN	1956	TP-C0163	HOEE SOUND
21	RADAR	1954	TP-C0164	JUPITER
22	GOLF RM # 1	1934	South of TP-C0164	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 -- ~~7069~~-E(C)-5760 thru 5768  
Strip 26 --- 70-E(C)-5772 thru 5794

The definition and quality of the photography were good.

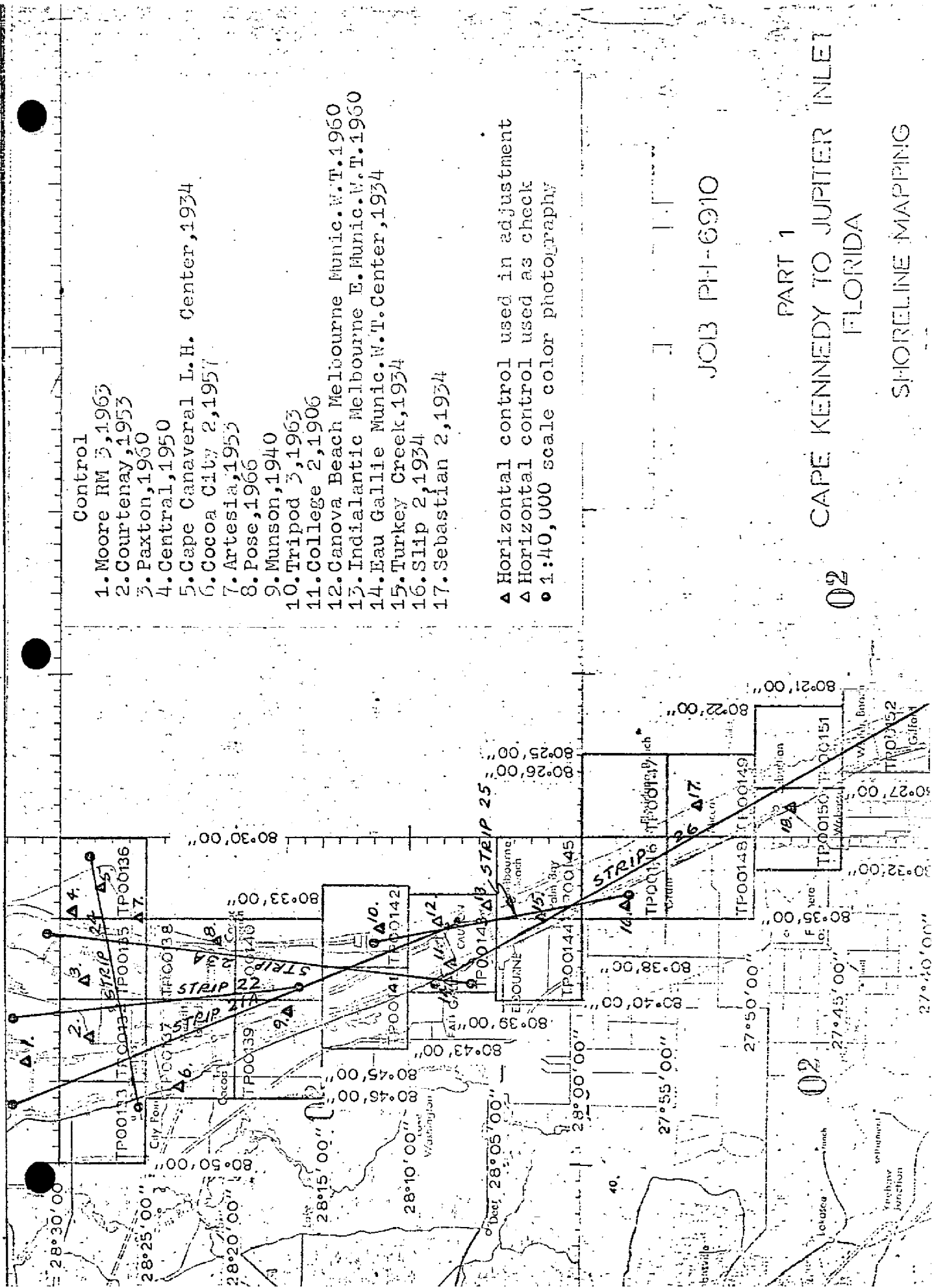
Respectfully submitted:

  
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, 1955
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

JO13 PH-6910

PART 1

CAPE KENNEDY TO JUPITER INLET  
FLORIDA

02

SHORELINE MAPPING

## FLORIDA-- NOAA Coastal Boundary Mapping Program

Horizontal Control

Map TP-00145

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
ANT 2, 1934	Book 420, pp. 1, 20, G.P. Fla. Vol. 1, P.C. Fla. E. zone, p. 18.
DOLITE 2, 1966	Write Director, National Geodetic Survey
TURKEY CREEK, 1877	Book 420, pp. 2, 20, G.P. Fla. Vol. 1, p. 153, P.C. Fla. E. zone, p. 18.
WINTER, 1930	Book 420, pp. 1, 21, G.P. Fla. Vol. 1, p. 179, P.C. Fla. E. zone, p. 46.
STEELE, 1934	Book 420, pp. 2, 3, 21, G.P. Fla. Vol. 1, p. 704, P.C. Fla. E. zone, p. 157.

## FLORIDA - NOAA Coastal Boundary Mapping Program

Vertical Control - Geodetic

Map TP - 00145

Geodetic Bench Mark	Elevations (feet)	Condensed Description
	SLD 1929	
Z 229	18.028	C&GS disk stamped Z 229 1965; top E end S concrete abutment of bridge, 8 ft. E of E rail.
TURKEY CREEK	1.775	C&GS disk not stamped; in rock ledge, about 12 ft. west of edge of ledge.
Y 229	17.100	C&GS disk stamped Y 229 1965; on top E end catch basin, 18 ft. S road centerline, 22 ft. NW of S end pipe culvert.
J 171	22.582	C&GS disk stamped J 171 1958; 34 ft. NE of NE rail, 4 ft. N of wooden witness post, in concrete post projecting 4 inches.
V 229	25.991	C&GS disk stamped V 229 1965; 52 ft. NW highway centerline, 50 ft. SW of SW rail, 11 ft. E power pole.
X 167	14.117	C&GS disk stamped X 167 1956; 32 ft. E highway centerline, 34 ft. SW of SW corner of house No. 1401.
Y 167	14.022	C&GS disk stamped Y 167 1956, 28 ft. N highway centerline, 7 ft. E power pole.
ANT 2	18.356	C&GS disk stamped ANT 2 1934; 34 ft. W highway centerline, 155 ft. N of concrete power pole, 2 ft. N. witness post.
DOLITE 2	16.972	C&GS disk stamped DOLITE 2 1966; 34 ft. W fence, 42 ft. S fence, 74 ft. NE building 00001.
Z 304	16.788	C&GS disk stamped Z 304 1970; 81 ft. N street centerline, 1.9 ft. SE of SE corner fence.
G 304	16.916	C&GS disk stamped G 304 1970; 32 ft. E highway centerline, 3 ft. S of guy pole.

## FLORIDA - NOAA Coastal Boundary Mapping Program

Vertical Control - Geodetic

Map TP - 00145

Geodetic Bench Mark	Elevations (feet)	Condensed Description
	SLD 1929	
H 304	15.715	C&GS disk stamped H 304 1970; 30 ft. W highway centerline, 2 ft. N of power pole.
J 304	18.537	C&GS disk stamped J 304 1970; 31 ft. W highway centerline, 1.5 ft. N of power pole.

Compilation Report  
TP-00145

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 shore of the Atlantic Ocean and also, along the shores of the Indian River. The shoreline in the small portion of Turkey Creek on this map was mapped with the mean water-level line (refer to the Record of Decisions bound with this report).

Due to heavy surf condition (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 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. Chartist objects which were not visible on the photography were called to the attention of the field editor.

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 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:

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



Field Edit Report, Map TP-00145, Job PH-6910

51. METHODS

Shoreline of the Atlantic Ocean was verified visually while driving, or walking where necessary, along the beach at proper stages of tide. The Indian River shoreline was verified visually from a small boat while cruising just offshore. The apparent, or lightweight, shoreline should be drafted where marsh or mangrove has been classified on the field photographs in the river area. No discrepancies or inadequacies were found.

One landmark is recommended and Form 567 is submitted.

Sextant fixes were taken at each daybeacon. They were plotted on FIELD EDIT SHEET NO. 2 (which covers Maps TP-00144 and TP-00145) and Form 567 prepared.

The Coast Guard has in recent years replaced the wooden daybeacon piles with concrete piles in the Intracoastal Waterway in this general area and the new positions are somewhat different from those presently charted. Positions were lined out on the Form 567 furnished by Rockville and a new form prepared indicating the necessity for a revised position.

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

All triangulation stations were searched for and reported on Form 526.

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 specified.

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. No new names were found.

Submitted 5/19/71

*William H. Shearouse*

William H. Shearouse  
Chief, Photo Party 60

TP-00145

Remarks: Application of Field Edit

Foreshore profiles determined by field edit verified the tidal datum lines along the Atlantic Ocean on the tide coordinated black and white infrared photography.

Review Report TP-00145  
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 USGS quadrangle 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. A "pier ruins" and outline of piling is shown on the Nautical Chart 845-SC (Latitude 28°0.2' and the west shore of the Indian River). The published map shows two piling and is labeled "numerous stakes".

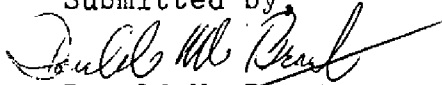
2. Privately maintained daybeacons at Cape Malabar on west shore of the Indian River are shown on Nautical Chart 845-SC. These daybeacons are not shown on the published map, nor are they listed in the 1974 C.G. Light List. These objects are not visible on the photography.

3. A "spire" is shown on Nautical Chart 845-SC (latitude 28°03.5' and longitude 80°35" south west of Crab Point). This "spire" is not shown on the published map and it was not reported by the field edit of 1971. This spire is visible on the 1970 photography.


66. Adequacy of Results and Future Surveys

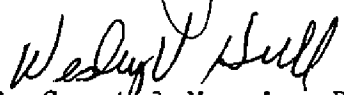
Coastal Zone Map TP-00145 complies with project instructions for NOS Cooperative Mapping, Job PH-7000. This map meets the National Map Accuracy Standards.

Submitted by

  
Donald M. Brant

Approved:

  
Chief, Photogrammetric Branch

  
Chief, Coastal Mapping Division

June 6, 1974

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

TP-00145

Atlantic Ocean

Bluefish Point

Cape Malabar

Castaway Point

Coconut Point

Crab Point

Fisherman Point

Florida East Coast RR

Indian River

Long Sandy Point

Malabar

Melbourne Beach

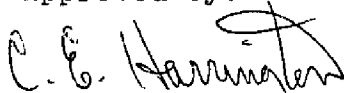
Palm Bay (city)

Palm Bay

Turkey Creek

Whitehouse Cove

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		METHOD AND DATE OF LOCATION		FIELD INSPECTION		FIELD EDIT	
TO BE CHARTED		TO BE DELETED		Rockville, Maryland		June 6, 1974			
PRESCRIBED BY PHOTOGRAMMETRY INSTRUCTION NO. 64.		SURVEY NUMBER		DATUM		LATITUDE		LONGITUDE	
FM- 6910		T- TP-00145		N.A. 1927		POSITION			
STATE: Florida		DESCRIPTION		LATITUDE		LONGITUDE			
CHARTING NAME				°		DM. METERS		°	
				DM. METERS		DM. METERS		DM. METERS	
	INTRACOASTAL WATERWAY EAU-GALLIE - ST. LUCIE INLET								
LIGHT 7	INDIAN RIVER (SOUTH SECTION)	28 04		4.5	80 34	59.44			P-4 Verif. 5/10/71 70E5788
DYBN 8		28 04		140.0	80 34	1623.0			"
DYBN 13		28 02		00.2	80 34	59.4			"
LIGHT 14		28 02		06.3	80 34	1621.0			"
DYBN 16		28 01		39.7	80 33	13.7			"
DYBN 17		28 00		1223.0	80 33	373.5			"
DYBN 18		28 00		18.3	80 32	4.8			"
	TUCKER CHANNEL (Private Aids)	28 00		562.0	80 31	131.0			"
		28 00		05.0	80 31	23.2			"
		28 00		153.0	80 31	635.0			"
		28 00		36.0	80 31	03.5			"
		28 00		1106.0	80 31	96.0			"
		28 00		00.9	80 31	46.3			"
		28 00		26.5	80 31	1266.0			"
		28 00		20.3	80 31	57.3			"
		28 00		624.6	80 31	1565.5			"
		28 00		19.8	80 31	57.3			"
		28 00		600.0	80 31	1565.5			"

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	J.C. Richter Copy checked after typing D. Brant
	FIELD INSPECTOR <input checked="" type="checkbox"/> FIELD INSPECTOR <input type="checkbox"/> FIELD EDITOR
	FIELD EDITOR
	COMPILER 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

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.'



RESPONSIBLE PERSONNEL			
TYPE OF ACTION	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	W.H. Shearouse	FIELD INSPECTOR	
3. Forms originated by Quality Control and Review Group and final review activities	J.C. Richter COPY checked after typing D. Brant	COMPILER <input type="checkbox"/> REVIEWER <input checked="" type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	

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1. Triangulation

2. Traverse

3. Intersection

4. Resection

a. Theodolite

b. Planetable

c. Sextant

#### EXAMPLES:

P - Photogrammetric  
1. Field identified

2. Theodolite

3. Planetable

4. Sextant

F. 3.c

P. 2

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

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

\* U.S. GOVERNMENT PRINTING OFFICE: 1971-760274/445 REG.#

TP-00145  
Data Forwarded to Federal Records Center

Field edit sheet dated May 1971

Field edit sheet #2 showing plotted positions of nonfloating  
aids for TP-00144 and TP-00145

1 Discrepancy Print

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

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

1 Sketchbook Vol. 1 (TP-00144 and TP-00145) is filed with TP-00145

Photography:

1:10,000 scale  
70E5788 thru 5791