

Original ✓

TP-00436

TP-00436

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-7113	Map No. ... TP-00436
Classification No. Final	Edition No. 1
Field Edited Map	
LOCALITY	
State ... Florida	
General Locality ... Dade County	
Locality ... Petrel Point to Swan Key	
.....	
<div style="border: 1px solid black; padding: 5px; display: inline-block;">19 71 TO 19 74</div>	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.					
DESCRIPTIVE REPORT - DATA RECORD		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"> TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED </td> <td style="width:50%;"> SURVEY TP. <u>00436</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB <u>PH-7113</u> </td> </tr> </table>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>00436</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB <u>PH-7113</u>		
TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>00436</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB <u>PH-7113</u>						
PHOTOGRAMMETRIC OFFICE Rockville, Maryland		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> LAST PRECEDING MAP EDITION </td> </tr> <tr> <td style="width:50%;"> TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED </td> <td style="width:50%;"> JOB <u>PH-</u> MAP CLASS <u></u> SURVEY DATES: 19 <u></u> TO 19 <u></u> </td> </tr> </table>		LAST PRECEDING MAP EDITION		TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB <u>PH-</u> MAP CLASS <u></u> SURVEY DATES: 19 <u></u> TO 19 <u></u>
LAST PRECEDING MAP EDITION							
TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB <u>PH-</u> MAP CLASS <u></u> SURVEY DATES: 19 <u></u> TO 19 <u></u>						
OFFICER-IN-CHARGE Commander James Collins							
I. INSTRUCTIONS DATED							
1. OFFICE		2. FIELD					
General Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000, December 9, 1975 Supplement I, November 4, 1974 Supplement III, October 24, 1974 Note: Office and field edit instructions (1975) incorporate applicable prior operational instructions.		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)					
3. MAP PROJECTION Transverse Mercator		4. GRID(S) <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">STATE Florida</td> <td style="width:50%;">ZONE East zone</td> </tr> <tr> <td>STATE</td> <td>ZONE</td> </tr> </table>		STATE Florida	ZONE East zone	STATE	ZONE
STATE Florida	ZONE East zone						
STATE	ZONE						
5. SCALE 1:10,000							
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS		NAME	DATE				
1. AEROTRIANGULATION METHOD: _____ BY _____ LANDMARKS AND AIDS BY _____		V. McNeel	5/74				
2. CONTROL AND BRIDGE POINTS METHOD: _____ PLOTTED BY _____ CHECKED BY _____		J. Perrow D. Phillips Inapplicable	5/74 6/74				
3. STEREOSCOPIC INSTRUMENT COMPILATION _____ PLANIMETRY BY _____ CHECKED BY _____ INSTRUMENT: _____ CONTOURS BY _____ SCALE: _____ CHECKED BY _____		Inapplicable Inapplicable					
4. MANUSCRIPT DELINEATION METHOD: Graphic SCALE: _____ PLANIMETRY BY _____ CHECKED BY _____ CONTOURS BY _____ CHECKED BY _____ HYDRO SUPPORT DATA BY _____ CHECKED BY _____		S. Solbeck & G. Tolzman P. Dempsey Inapplicable Inapplicable	7/74 8/74				
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY _____		P. Dempsey	8/74				
6. APPLICATION OF FIELD EDIT DATA BY _____ CHECKED BY _____		Rich & Lewis C. Lewis	5/75 5/75				
7. COMPILATION SECTION REVIEW BY _____		J.P. Battley	6/75				
8. FINAL REVIEW BY _____		D.M. Brant	8/75				
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY _____							
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY _____		D.M. Brant	1/76				
11. MAP REGISTERED - COASTAL SURVEY SECTION BY _____		R. CATPR	7/76				

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

TP-00436

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 L & K 6" focal length		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		(C) COLOR R (P) PANCHROMATIC (I) <u>INFRARED</u>		ZONE Eastern MERIDIAN 60th & 75th <input checked="" type="checkbox"/> STANDARD <input checked="" type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
73L2899R-2904R	3/18/73	0944	1:20,000	The stage of tide is inapplicable for the color photography.	
72K6437R-6441R	2/15/72	1007	1:20,000		
71L8549R-8552R	8/6/71	1530	1:20,000	Refer to page 5 for tide information.	
72K6356R-6357R	2/14/72	1345	1:20,000		
REMARKS					

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the MHW line is the tide-coordinated black-and-white infrared photography listed in item 1. The rectified color photography was used as an aid in interpreting cultural features and compiling the limits of vegetation.

Where the shoreline is obscured by vegetation such as mangrove, the apparent shoreline symbol was used.

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

The source of the MLW line is the tide-coordinated black-and-white infrared photography listed under item 1.

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-00433	No contemporaneous Survey	No contemporaneous Survey	TP-00435

REMARKS

Final junctions were made in the Coastal Mapping Section.

NOAA FORM 76-36B(1)
(7-75)

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

TIDE - COORDINATED PHOTOGRAPHY
TP - 00436

LOCATION AND PHOTOGRAPHY	TIDE STATIONS <i>(In operation at time of photography)</i>	STAGE OF TIDE	MEAN RANGE
ATLANTIC OCEAN			
71L8549R-8552R	Ocean Reef	-0.05 MLW	2.33'
72K6356R-6357R	Ocean Reef	+0.03 MLW	2.33'
72K6437R-6441R	Ocean Reef	0.00 MHW	2.33'
BISCAYNE BAY			
71L8549R-8552R	Turkey Pt., Biscayne Bay	+0.05 MLW	1.60'
72K6356R	East Arsenicker C.S.	-0.16 MHW	0.91'
72K6356R-6357R	Ragged Keys	+0.33 MLW	1.64'
72K6437R-6441R	East Arsenicker C.S.	+0.15 MHW	0.91'

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

TP-00436

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION *☒ FIELD EDIT OPERATION October 1974

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R.R. Wagner	10/74
2. HORIZONTAL CONTROL	RECOVERED BY R.R. Wagner ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	10/74
3. VERTICAL CONTROL	RECOVERED BY R.R. Wagner ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	10/74
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY R.R. Wagner IDENTIFIED BY	11/75
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY R.R. Wagner	10/74
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

All BM's are tidal marks

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Refer to Field Report	73L2901R	BM1, BM2, BM3, BM3
		73L2900R	BM1, BM9
		73L2899R	BM2

3. PHOTO NUMBERS (Clarification of details)

72K6438, 6440, 6441 data also for TP-00433, 6442
73L2899R thru 2901 R, 2904

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

There are no landmarks on this map. Non-floating aids were located by theodolite

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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)

Sketchbook with data for TP-00433 and TP-00436.

*The field report is bound with this Descriptive Report

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

TP-00436

RECORD OF SURVEY USE

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
		11/17/75	one form 76-40 was submitted to Marine Chart Division as final report

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 11/17/75
 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	

SUMMARY
for
TP-00427 thru TP-00430
TP-00432, thru TP-00436

Coastal Zone Map TP-00436 is one of nine (9), 1:10,000 scale (shoreline type) maps in Job PH-7113. These maps will not be published. Interior detail is limited to a narrow zone of planimetry usually back from the shoreline to and including the first road. Other maps in Job PH-7113 will be published with an orthophoto interior.

A layout for Job PH-7113 (revised since the aerotriangulation operation) will show the location of individual maps. A copy of this layout is included in this Descriptive Report.

These maps are intended for planning purposes for the State of Florida and for the construction and maintenance of NOS nautical charts.

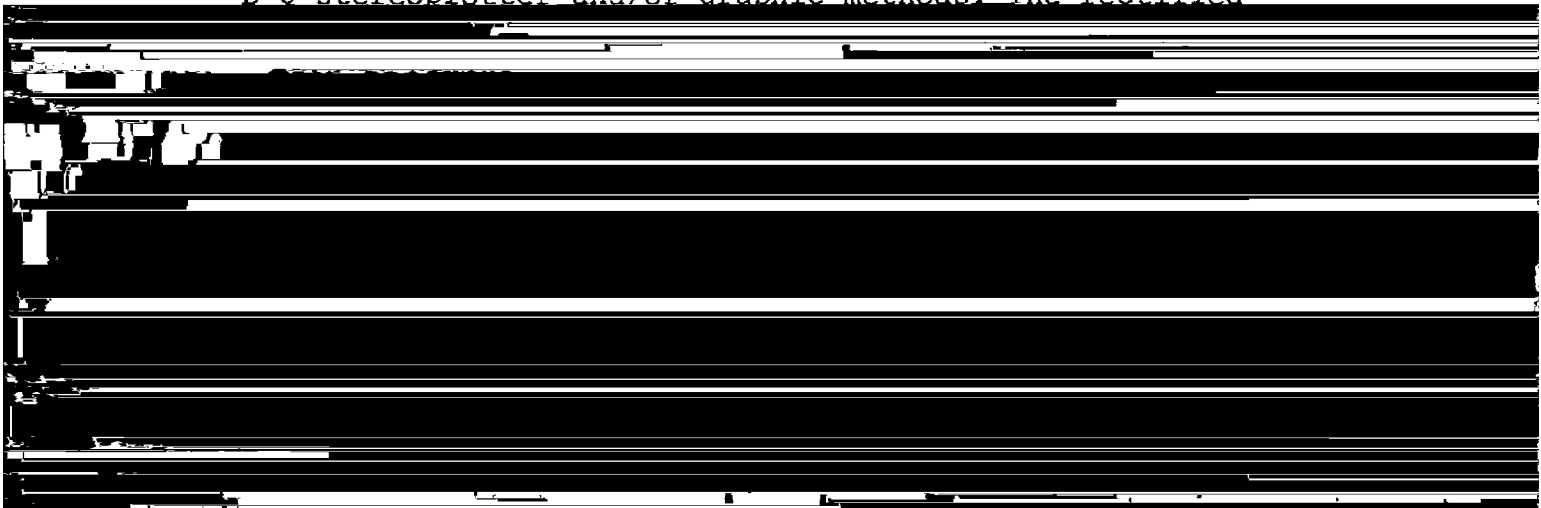
The area is covered by aerial photography taken in 1971, 1972, and 1973 on color and black-and-white infrared film. The black-and-white infrared film was tide coordinated.

The field operations consisted of the following:

1. Premarking of horizontal control for aerotriangulation.
2. Establishment of tidal datums.
3. Field Edit.

Horizontal control was extended by analytical aerotriangulation method using the STK stereocomparator.

The shoreline and alongshore details were compiled from tide-coordinated, black-and-white infrared photography using a B-8 stereoplotter and/or graphic methods. The rectified



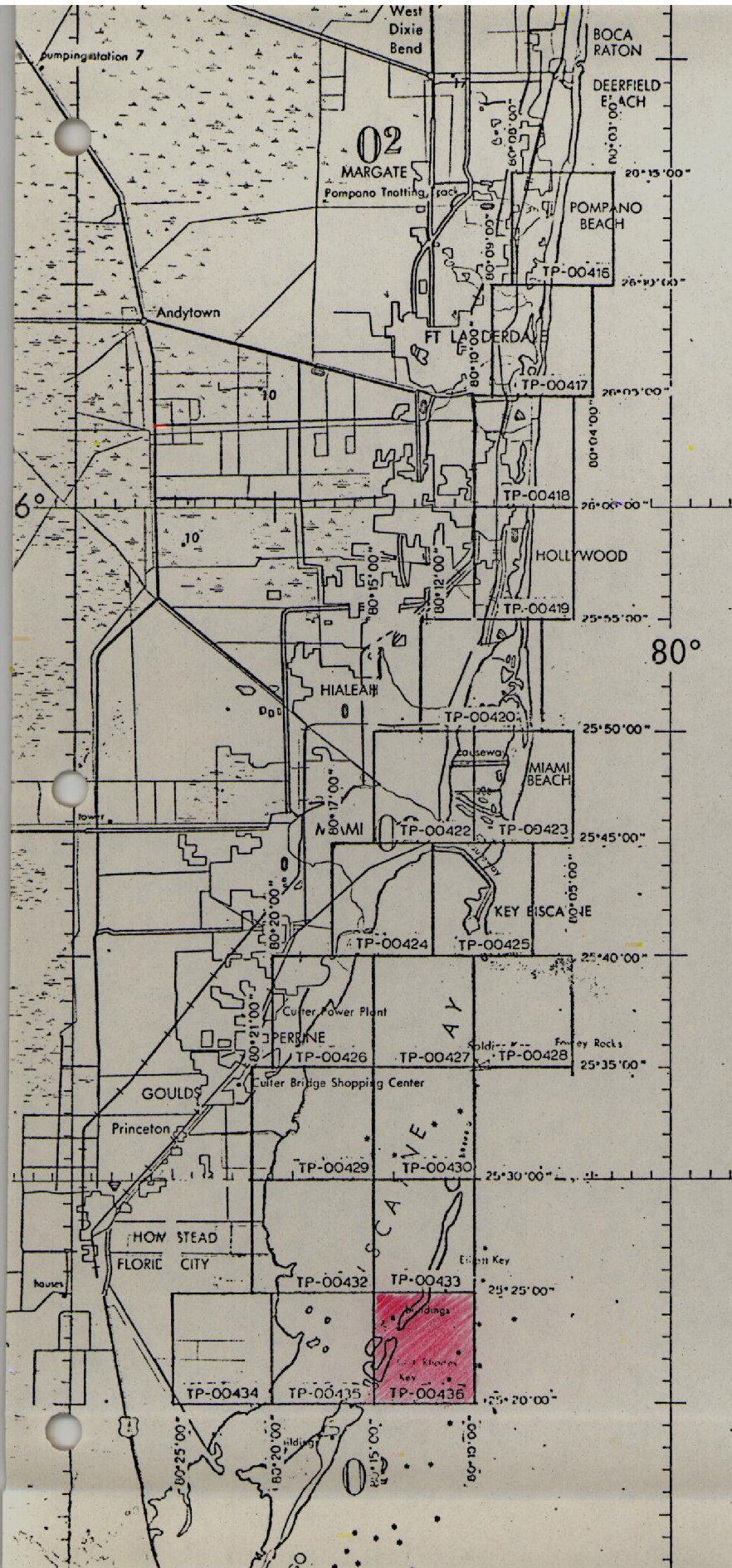
A registration copy of each map is prepared. The registration copy shows additional offshore details such as shoal and shallow lines used by the Marine Chart Division but not required on the Coastal Zone Maps. This copy of the map is labeled "Registration Copy" in the title block.

The following items will be registered in the NOS Archives.

1. A stable base copy of the Registration Copy.
2. The Descriptive Report.

All negatives are filed in the Reproduction Division.

Field records such as field edit sheets, discrepancy prints, field edit photographs, and other field records are filed in the National Archives.



JOB PH-7113
HILLSBORO INLET to CARD SOUND
FLORIDA
SHORELINE MAPPING
SCALE 1:10,000

MILEAGE FOR COST ACCOUNTS	
Sheet No.	Sq. Miles
TP-00416	3
TP-00417	3
TP-00418	3
TP-00419	8
TP-00420	10
TP-00422	4
TP-00423	6
TP-00424	4
TP-00425	6
TP-00426	4
TP-00427	1
TP-00428	1
TP-00429	4
TP-00430	1
TP-00432	4
TP-00433	3
TP-00434	1
TP-00435	5
<u>TP-00436</u>	5
Total	76

REVISED 5-1-75
REVISED 7-11-74

The combined field report for Jobs PH-7010 and 7113 and the field report for Job PH-7119 are included in this Descriptive Report in order to account for the foreshore profiles. Refer to the review report for explanation.

FIELD REPORT

JOBS PH-7010 and PH-7113

In accordance with Instructions - FIELD - PH-7010, Aerotriangulation Control, and Instructions - FIELD - Job PH-7113; Horizontal Control for Aerotriangulation and Field Support for Aerial Photography; Coastal Boundary Mapping, Florida, the following report is submitted.

1. HORIZONTAL CONTROL

The two jobs are treated as one for report purposes, targets on Job PH-7010 being replaced in approximately the same positions as they were in November 1970.

Twenty-one stations were premarked for 1:30,000 scale color photography. Where feasible, Array No. 1 was used, being a 9-foot triangle with 3 runners or wing panels of 2 x 20 ft. dimensions. Several variations were used as the area is highly developed, particularly in the southern part, and space was not always available. The CSI cards are believed to be adequate to explain the variations but some discussion is in order.

From north to south the first 8 stations are Array No. 1 with varying degrees of angle between the wing panels.

POMPANO 1928 was marked by a triangle painted on the macadam (station is in a parking area) over the station mark. Paint used was Pittsburg fluorescent TANGERINE (very close to what we call fire orange) and should show well on the color photographs. (This paint was used on two other stations and we would be interested to know how it turns out.) In addition, a white 9-ft. triangle was placed on top of a nearby flat-roofed building approximately 10 feet high, which is a sub-station.

2.

HALLAND 1928 was marked by a painted target substation placed on the light brown sand of a public beach. We used a white plastic target and painted it. No room was available for wing panels at this small beach.

CAPE FLORIDA OLD TOWER FINIAL 1883 was marked by a single white triangle. No room was available for wing panels.

CAUSEWAY 1934 was marked by a painted triangle placed on the west end of a bridge under construction. The bridge is real white and the color should show "like a light".

PAN AMERICAN 1935 was marked by 2 white triangles placed on the lower level of the 3-level, flat-topped building, one on the east side and one on the south. They are approximately 18 to 20 feet above ground. Two triangles were used "to be sure".

BLACK POINT 3 and NARROW POINT are in the water and approximately 50 feet offshore. Triangles were built over the station marks and about 3 feet above estimated mean high-water level. 8-foot squares were used as wing panels believing these would withstand more wind. The Commander of ESSA 88 reported these targets in good condition at time of bridging photography, only one wing panel being damaged.

All targets were taken up after photography except the two in the water. All were found in good condition, although we had to make repairs to a few during the period they were on the ground due to wind damage. Only station CLOISTER was vandalized and it was not bothered after it was replaced. This is rather remarkable considering some of the locations.

USGS quad maps showing approximate locations of targets have been submitted.

We were advised by the Commander of aircraft that Line 30-1, Job PH-7113, was photographed February 24 and the other lines on both Jobs on March 8.


2. TIDE COORDINATED PHOTOGRAPHY

3.

stations were manned.

- (1) Lake Worth, Atlantic Ocean
- (2) Andrews Avenue Bridge, Fort Lauderdale
- (3) Bahia Mar Yacht Club, Fort Lauderdale
- (4) Port Everglades
- (5) Biscayne Creek, North Miami
- (6) Biscayne Bay, Miami
- (7) Biscayne Bay, Cutler
- (8) Biscayne Bay, Turkey Point
- (9) Card Sound

Photography obtained was based on the first seven gages. Lines 30-5 and 30-6 would have been based on TURKEY POINT and CARD SOUND. These lines were not photographed. Also, high-water only was obtained



4.

- (4) An 8 mile segment of line 30-1, based on ANDREWS AVENUE BRIDGE was photographed at 1511 to 1515 hrs., when the staff read 1.8 ft.
- (5) Line 30-2, based on BISCAYNE BAY, MIAMI, and flown south to north, was photographed at 1259 to 1305 hrs., when the staff read 2.2 feet.
- (6) Line 30-3, based on BISCAYNE BAY, MIAMI and BISCAYNE CREEK, NORTH MIAMI, flown south to north, was photographed at 1319 to 1324 hrs, when the BISCAYNE Bay, Miami staff read 2.1 and the BISCAYNE CREEK staff read 3.1, both ends of the line being within tolerance.
- (7) Line 30-2 was then photographed again, based on BISCAYNE CREEK, NORTH MIAMI, and flown from north to south at 1330 to 1336 hrs when the staff reading was 3.1.

This ended the low-water photography.

High-water photography, March 2.

- (1) Line 30-1, based on LAKE WORTH PIER, was photographed at 1039 to 1055 hrs., when the gage reading was 4.2 feet. However, we were advised that parts of this line were re-photographed at approximately 1144 to 1149 hrs. in the Miami Beach area and at 1242 to 1245 hrs. in the Hollywood area. Tide was within tolerance at all times.
- (2) A segment of line 30-1, based on ANDREWS AVENUE BRIDGE (as well as BAHIA MAR and PORT EVERGLADES) was photographed at 1103 to 1106 hrs. with the camera end overlap setting at 80%.
- (3) Line 30-2, based on BISCAYNE BAY, MIAMI and BISCAYNE CREEK, NORTH MIAMI, was photographed at 1254 to 1300 hrs. when the BISCAYNE BAY, MIAMI reading was 4.6 ft. and the BISCAYNE CREEK staff read 5.6 ft.
- (4) Line 30-3, based on the same stations, was photographed at 1305 to 1311 with the staff readings unchanged from line 30-2.
- (5) Line 30-4, based on BISCAYNE BAY, MIAMI and BISCAYNE BAY, CUTLER, was photographed at 1319 to 1325, when the MIAMI staff read 4.5 and CUTLER read 4.8 ft.

This ends the high-water photography.

3. FORESHORE PROFILES

Ten planetable beach profiles were run within the limits of Job PH-7113. They cover a linear distance of approximately 40 miles. The northerly one is at triangulation station POMPAHO and the southernmost one is near the Cape Florida lighthouse on Key Biscayne. Mr. Phil Walbolt ran 7 of the 10 during the period of photography, basing tide

FIELD REPORT

JOB PH-7119

This report is on work done in accordance with Instructions-Field-Job PH-7119; Horizontal Control for Aerotriangulation and Field Support for Aerial Photography; Coastal Boundary Mapping, Card Sound to Plantation Key, Florida, dated January 31, 1972. The field work was done during the period 7-23 February 1972.

1. PREMARKING OF CONTROL

Four stations were paneled for 1:30,000 scale photography. The locations are shown on the chart section accompanying this report.

2. AEROTRIANGULATION PHOTOGRAPHY

Flight lines are shown on the chart. Color photography was accomplished on February 19, 1972 between the approximate times of 1045 and 1230 hours. The skies were exceptionally clear for this area and the ground winds was from the northwest at 20-25 knots all morning. These lines were also flown on February 14, but the photography was unacceptable because of a bad film emulsion.

3. TIDE-COORDINATED PHOTOGRAPHY

Locations of the tide staffs are shown on the chart. The job was completed; photography taken on the 12, 14, 15, 16, and 20, of February. Lines 20-2 and 30-3 were also photographed and portions of the other lines were also partially photographed during August 1971.

Recordings entered in the tide volumes, Form 277, were at 5 minute intervals during photography and at 15 minute intervals near photography. An exception to this is the readings for the MANATEE CREEK and BARNES SOUND staff where the tide varies only a few hundredths of a foot per day. Tolerances of ± 0.30 foot for MHW, ± 0.20 foot for MWL, and ± 0.10 foot for MLW were observed. Wet staff readings - crest, mean, and trough - were recorded while photography was in progress. Eastern Standard Time was used.

Line 20-1. MHW Completed at 1050 on February 14 when the RAGGED KEYS staff read 3.38-3.26. MLW Completed at 1500 on February 14 when the staff read 1.80.

Line 20-2. MHW Flown at 1035-1052 on 16 February when the OCEAN REEF staff read 4.75-4.61. This line was also flown at 1006 on February 15, but the pilot recommended it be rescheduled. MLW Flown at 1338-1350 on February 14 when the staff read 2.31-2.32.

Line 30-1. This line is controlled by three staffs, the MANATEE CREEK staff has a MWL datum and the EAST ARSENICKER and CARD SOUND staffs have mean high and mean low datums. MHW The line was flown at 1120-1142 on 14 February. At this time the EAST ARSENICKER staff read 3.95-3.86 and the MANATEE CREEK staff read 3.54-3.57(MWL). The line was flown again at 1445 on 14 February when the CARD SOUND staff read 3.8 and the MANATEE CREEK staff read 3.60. MLW Was flown at 945-1000 on 20 February when the CARD SOUND staff read 3.2 and the EAST ARSENICKER staff read 2.78-2.81.

Line 30-2. MHW It was completed at 1250 on February 14 when the TAVERNIER, FLA. BAY staff read 3.05 (MWL Range), the BARNES SOUND staff read 3.92, the MANATEE CREEK staff read between 3.6 and 3.5, the CARD SOUND staff read 4.0 and the EAST ARSENICKER staff read 3.65. MLW Completed at 0945 on February 20 when the CARD SOUND staff read 3.20 and the EAST Arsenicker staff read 2.77-2.78.

The BARNES SOUND staff read 0.31 foot higher than its 3.61 Mean Water Level. Since the shoreline in this area is overhung with mangrove this section of the line was not rescheduled.

Line 30-3 (ATLANTIC SIDE). MHW Completed at 1107 on February 16 when the TAVERNIER, HAWK CHANNEL staff read 4.62-4.43. MLW Completed at 1412 on February 14 when the staff read 2.30-2.28.

Line 30-3 (Florida Bay Side). MWL The north side was completed on February 12 at 1150 hrs. when the BARNES SOUND staff read 3.78 and the TAVERNIER, FLA. BAY staff read 2.72. The south end was in range at 1412 on February 14 when 30-3(ATLANTIC SIDE) MLW was flown. The south half was also in range at 1107 on February 16 when 30-3 MHW was flown although the staff was not manned at that time.

4. ADDITIONAL PHOTOGRAPHY

Special photography over Florida's test area was flown between 1005 and 1240 on 20 February with various films. The staff at the EAST ARSENICKER gage was observed and its value recorded at 5 minute intervals during this period. The staff at the

mouth of the northern cut (MANGROVE POINT) was observed and its value recorded at 5 minute intervals from 1135 to 1300 hours. The latter staff values are listed in the EAST ARSENICKER Form 277.

5. FORESHORE PROFILES

Four planetable beach profiles were run within the limits of the job during the photography period of August 1971. The few small beaches found for the profiles were of coral, and since erosion is not considered a problem, these profiles were not rerun.

6. MONITORING OF TEMPORARY TIDE STAFFS IN THE JOB AREA

On February 15 verbal instructions were received from the Chief, Tidal Datum Planes: Temporary staffs were to be put in at 11 selected locations and observed every 12, 15, or 30 minutes through one high and one low water. All 11 need not be observed simultaneously and the actual location could be varied slightly. Four were observed on the 16th., two on the 17th., 1 on the 20th., and four on the 21st. The chart accompanying this report shows the exact location of each staff.

7. FIELD RECORDS

All CSI cards, Form 277's and a copy of the records from the 11 tide staffs were sent to C3413 on 13 March 1972. The original field records for the 11 staffs were forwarded to C3311 on 23 February 1972. Profiles and recovery notes were sent to C3413 on 1 March 1972 with the report for work done on this job in August 1971.

Submitted 14 March 1972

John C. Veselenak
John C. Veselenak
Chief, Photo Party 65

Horizontal Control

Map TP- 00436

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
<p>RUBI 1930-1947 RESET</p> <p>OLD RHODES 2 1934</p> <p>TON STAMPED 1934</p>	<p>*</p> <p>Book 424, P.7, 30, G, P, Fla. Vol.1, P.381, P.C.Fla.E.Zone P.98</p> <p>Book 424, P.7, 30, G, P, Fla. Vol.1, P.384, P.C.Fla.E.Zone P.99</p> <p>* Copy of unadjusted field horizontal control was used.</p>

Compilation Report
TP-00436
September 1974

31. Delineation

The tidal datum lines were compiled from office interpretation of the tide-coordinated, black-and-white infrared photography. This photography was controlled by common planimetric detail compiled from the color photography and map points determined by aerotriangulation.

The rectified color infrared photography was used as an aid for interpreting culture features and compiling the channel lines, shoal, shallow lines, and small scattered mangrove islets.

The rectified color photography was also used for the compilation of the interior details.

32. Horizontal Control

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

33. Supplemental Data - None

34. Contours and Drainage

Contours are not applicable. Drainage was compiled from a stereoscopic examination of the rectified color photography.

35. Shoreline and Alongshore Detail

The black-and-white tide-coordinated infrared photography was adequate for the delineation of the MHWL and MLWL along the Atlantic Ocean and the interior waters.

Where the MHWL was obscured by vegetation, such as mangrove, the outer limits of vegetation was delineated and symbolized with the apparent shoreline symbol.

Verification by field edit is recommended.

36. Offshore Details

Verification of the MLWL to the north and east of Totten Key is requested because of doubtful interpretation of the black-and-white tide-coordinated infrared photography.

37. Landmarks and non-floating Aids

There are no charted landmarks on this map^{ap}. Non-floating aids to navigation will be located or verified during field edit.

38. Control for Future Surveys - None39. Junctions

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

40. Horizontal Accuracy

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

41. thru 45. Inapplicable

46. Comparison with Existing Maps

Comparison was made with the following USGS quadrangles:

Elliott Key, Fla., 1:24,000 scale, dated 1969
Pacific Reef, Fla., 1:24,000 scale, dated 1956

47. Comparison with Nautical Charts

Comparison was made with the following Nautical Charts:

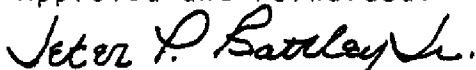
11463, 1:40,000 scale
141 SC

No significant changes were noted.

Submitted by


Stephen Solbeck

Approved and Forwarded:



J. P. Battley, Jr.

Chief, Coastal Mapping Section

Field Edit Report, Map TP-00436, Job PH 7113

51. METHODS

The shorelines of the Atlantic Ocean, Biscayne Bay and the smaller bodies of water were inspected from a small boat while cruising just offshore. Notes regarding apparent and fast shoreline, piers and other shoreline features were made on the rectified, HW photographs and the discrepancy print.

The MHWL was inked inside of the apparent shoreline in areas where it could be positively identified on the photographs. It is recommended that only the MHWL that is inked be used and not to extend the MHWL even if it appears to follow a photographic image.

There are no landmarks on this manuscript except for a number of small buildings along the shoreline.

Seven tide gages and one bench mark for each gage were identified on the rectified photographs. A number of the gages have only one bench mark with the gage close to it which may require the displacement of the gage symbol in compilation.

Three triangulation stations were recovered. One of these is TON STAMPED ED 1934 is recommended to be shown on the manuscript.

Seven aids were located for this manuscript. Some are new fixed aids and do not appear in the Light List. The only name used is daybeacon or light.

Field edit notes will be found on the Discrepancy Print, Field Edit sheet and the photographs.

52. ADEQUACY of COMPILATION

Adequate after application of field edit.

53. MAP ACCURACY

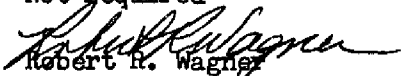
No test required.

54. RECOMMENDATION

None.

55. EXAMINATION of PROOF COPY

Not required


Robert R. Wagner
Chief, Photo Party 60

Remarks: Application of Field Edit for TP-00436

The following tide gages were deleted because they were not in operation for at least 30 days at the time of photography.

- Old Rhodes Key North Tide Gage
- Old Rhodes Key South Tide Gage
- Old Rhodes Key No.3 Tide Gage
- Rubicon Key Tide Gage

This accounts for the seven tide gages the field editor identified as stated in the Field Edit Report.

Review Report
Coastal Zone Map TP-00436
April 1976

61. General

The map manuscript for Coastal Zone Map TP-00436 was inspected in its Class III stage prior to field edit. This inspection comprised of an examination of the manuscript, photography, discrepancy print, and Descriptive Report (partial).

The review for Coastal Zone Map TP-00436 consisted of an examination of the Class I manuscript, the field edit and its application, the reproduction negatives, and the Descriptive Report.

The proof copy of the Coastal Zone Map TP-00436 was examined and edited by the Quality Control Group before making final copies. This edit comprised a thorough inspection of map details to verify the accuracy of reproduction with reference to the map manuscript and the quality of reproduction. In addition, the proof copy was examined by the following sections:

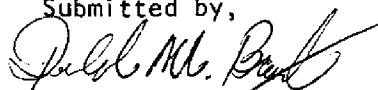
- Coastal Mapping - map details
- Staff Geographer - geographic names
- Coastal Surveys - horizontal and vertical control

63. thru 65. Inapplicable

66. Adequacy of Results and Future Surveys

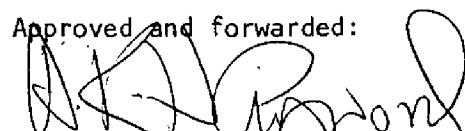
Coastal Zone Map TP-00436 complies with the instructions for NOS Cooperative Boundary Mapping, Job PH-7000, and the National Standards of Map Accuracy.

Submitted by,



Donald M. Brant

Approved and forwarded:


Chief, Photogrammetric Branch
Chief, Coastal Mapping Division

January 1976

GEOGRAPHIC NAMES

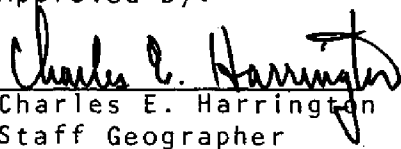
FINAL NAME SHEET

PH-7113 (Hillsboro Inlet to Card Sound, Fla.)

TP-00436

Adams Key	Old Rhodes Channel
Atlantic Ocean	Old Rhodes Key
Biscayne Bay	Old Rhodes Point
Biscayne National Monument	Petrel Point
Caesar Creek	Porgy Key
Caesar Creek Bank	Reid Key
Caesar Rock	Rubicon Keys
Christmas Point	Swan Key
Elliott Key	Totten Key
Hurricane Creek	
John Pennekamp Coral Reef State Park	
Jones Lagoon	
Jones Point	
Little Totten Key	
Meigs Key	
Old Rhodes Bank	

Approved by:


Charles E. Harrington
Staff Geographer

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	
POSITIONS DETERMINED AND/OR VERIFIED	R. Wagner
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	P. Dempsey

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'
(Consult Photogrammetric Instructions No. 64,

FIELD (Cont'd)	
<p>OFFICE</p> <p>I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75</p> <p>FIELD</p> <p>I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Visually 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection</p> <p>A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75</p> <p>*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</p>	<p>B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982</p> <p>II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75</p> <p>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75</p> <p>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</p>

TP-00436

National Archives Data

2 Discrepancy Prints

1 Field edit sheet (stable base copy)

1 Sketchbook

Photography:

73L(C) 2899R, 2900R, 2901, and 2904

72K6438R, 6440R, 6441R, 6442R