

Original ✓

TP-00432

TP-00432

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey ..... Coastal Zone Map	
Job No. ..PH-7113.....	Map No. TP-00432.....
Classification No. Final	Edition No. ...1.....
Field Edited Map	
LOCALITY	
State .....Florida.....	
General Locality ....Dade County.....	
Locality ..Turkey Point.....	
.....	
<div style="border: 1px solid black; padding: 5px; text-align: center;">19<sub>71</sub> TO 19<sub>75</sub></div>	
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, MD		SURVEY TP. <u>00432</u>  MAP EDITION NO. ( )  MAP CLASS <u>Final</u>  JOB PH. <u>7113</u>	
OFFICER-IN-CHARGE  Cdr. James Collins		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>			
<b>1. OFFICE</b>		<b>2. FIELD</b>	
General Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000 12/9/75 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	
<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 type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Transverse Mercator		4. GRID(S) STATE Florida ZONE East	
5. SCALE 1:10,000		STATE ZONE	
<b>III. HISTORY OF OFFICE OPERATIONS</b>			
OPERATIONS		NAME	
DATE			
1. AEROTRIANGULATION BY V. McNeel METHOD: Analytic LANDMARKS AND AIDS BY 5/74			
2. CONTROL AND BRIDGE POINTS PLOTTED BY D. Phillips METHOD: Coradomat CHECKED BY V. McNeel 6/74 5/74			
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY Inapplicable COMPILATION CHECKED BY INSTRUMENT: CONTOURS BY Inapplicable SCALE: CHECKED BY			
4. MANUSCRIPT DELINEATION PLANIMETRY BY A. Tolzman 10/74 CHECKED BY P. Dempsey 10/74 METHOD: Graphic CONTOURS BY Inapplicable SCALE: 1:10,000 CHECKED BY HYDRO SUPPORT DATA BY Inapplicable CHECKED BY			
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY J. Battley, Jr. 11/74			
6. APPLICATION OF FIELD EDIT DATA BY S. Solbeck 5/75 CHECKED BY C. Lewis 6/75			
7. COMPILATION SECTION REVIEW BY J. Battley, Jr. 7/75			
8. FINAL REVIEW BY D. Brant 3/76			
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY			
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY D. Brant 4/76			
11. MAP REGISTERED - COASTAL SURVEY SECTION BY R. CATOR 7/76			

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

## COMPILATION SOURCES

TP-00432

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8

E&amp;L 6" focal length camera

TYPES OF PHOTOGRAPHY  
LEGEND

## TIME REFERENCE

## TIDE STAGE REFERENCE

☐ PREDICTED TIDES☐ REFERENCE STATION RECORDS☒ TIDE CONTROLLED PHOTOGRAPHY

(C) COLOR IR

(P) PANCHROMATIC

(I) 'INFRARED' B&amp;W

## ZONE

Eastern

MERIDIAN

60th

☐ STANDARD☒ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
73E(C)9024R-9026R	6/6/73		1:40,000	The stage of tide is inapplicable for color photography.
71L8586R-8593R	8/7/71	1228-1231	1:30,000	-0.10MHW Turkey Pt.
71L8786R-8791R	8/11/71	0851-0855	1:30,000	Biscayne Bay +0.03 Turkey Pt. MLW

## 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 for interpreting culture features and compiling the limits of shoal and shallow areas for Nautical Charts. The 1973 color photography was also used to update culture shoreline.

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 photography listed above, except for the MLW line located by planetable, at Pelican Bank, dated February 1975.

## 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-00429	TP-00433	TP-00435	None

REMARKS Final junctions were made in the Coastal Mapping Section.

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

TP-00432

## HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION \*1971☒ FIELD EDIT OPERATION 1975

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

TP-00432

## RECORD OF SURVEY USE

I. MANUSCRIPT COPIES<sup>1</sup>

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No map copies were furnished to Marine Charts 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	3 Forms 76-40 submitted to the 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-00432 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 color photography was used as an aid in interpreting cultural features and compiling the limits of vegetation. The interior details were compiled from a stereoscopic examination of the color photography without field edit.

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

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.

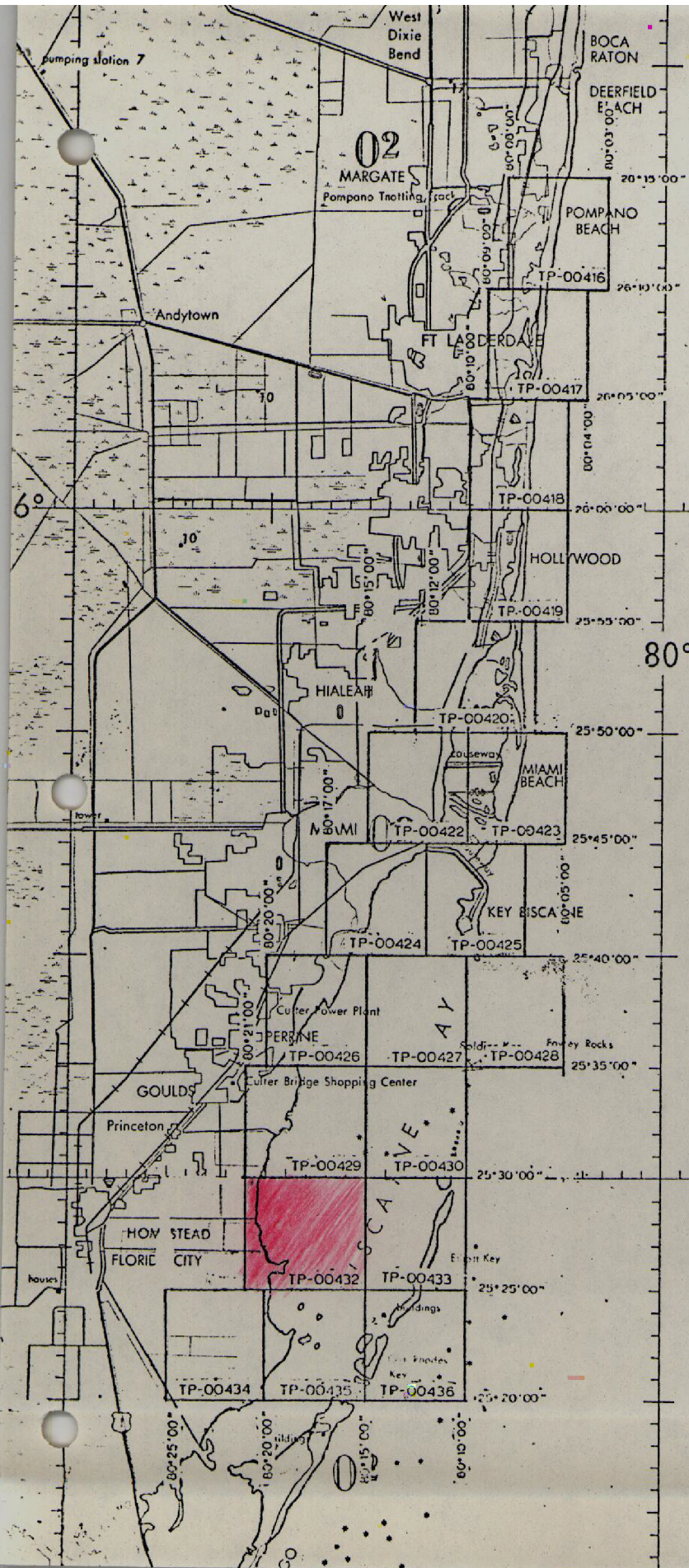
The following items will be registered in the NOS Archives.

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
<u>TP-00432</u>	4
TP-00433	3
TP-00434	1
TP-00435	5
TP-00436	5

Total 76

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



## 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

As directed by telephone, the following nine tide

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 for line 30-4, based on CUTLER.

Recordings entered in the tide volumes, Form 277, were at 5 minute intervals near and during photography; otherwise 15 minute interval. Wet staff readings--crest, trough and mean--were recorded while photography was in progress. Tolerances of  $\pm 0.3$  ft. for mean high-water and  $\pm 0.1$  ft. for mean low-water were observed. Eastern Standard Time was used.

Photography was obtained on 2 days: Low-water February 24 and high-water March 2. Lines 30-1, 30-2 and 30-3 were flown at low-water. Lines 30-1, 30-2, 30-3, and 30-4 were flown at high.

Low-water photography Feb. 24. (Time furnished by Photographer.)

- (1) Segment of Line 30-1 approximately 4 miles north and 4 miles south of Port Everglades inlet (or entrance)

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 stage on a nearby tide gage. The other 3 were similarly accomplished two or three days after photography, with information as to tide level being obtained from the Weather Service's remote recorder in Miami Beach via telephone, in 2 instances.

The procedure was to drive a stake to water level near shore and obtain the tide gage reading at that time by radio from a nearby gage. This elevation thus became the bench mark to determine the horizontal position of mean high- and mean low-water lines from a planetable setup. Points occupied were triangulation stations or recoverable photo-topo points. The planetable was oriented to magnetic north with azimuth to an identifiable point. One variation from this is at profile No. 7 where no distant azimuth was visible and the profile was laid out to parallel a beach groin that should be clearly visible on the low-water photographs.

No profiles were run in Job PH-7010 since the infrared photography was obtained several months ago.

In addition to sketches at some of the occupied points, USGS quad maps show the approximate locations of the profiles along with premark target locations.

Submitted 3/25/71

*William H. Shearouse*  
William H. Shearouse  
Chief, Photo Party 60

*No planetable beach profiles were available at the time of compilation or review.*



Photogrammetric Plot Report  
Hillsboro Inlet to Card Sound, Florida  
Job PH-7113  
and  
Card Sound to Plantation Key, Florida  
Job PH-7119

21. Area Covered

This report covers an area on the east coast of Florida immediately south of Hillsboro Inlet to the southwestern end of Plantation Key. Job PH-7113 and Job PH-7119 are combined in this one report because the southern portion of Job PH-7113 is included in the block adjustment of Job PH-7119.

Job PH-7113 consists of twenty (20) 1:10,000 scale sheets: TP-00416 through TP-00420, and TP-00422 through TP-00436.

Job PH-7119 consists of twelve (12) 1:10,000 scale sheets: TP-00444 through TP-00455.

Subsequent to the initial bridging in this area, three small areas were re-bridged using new photography. The reports are attached:

- (1) Port Everglades, Florida
- (2) Miami to Mangrove Point, Florida
- (3) Hollywood to Miami Beach, Florida

22. Method

Eleven (11) strips of photography were bridged using aerotriangulation methods. Tie points were made between strip No. 1 of PH-7113 and strip No. 2 of the Jupiter Inlet to Hillsboro Inlet, Florida report to the north of this area.

Due to the placement of control in relation to flight lines and due to large areas of water coverage, two block adjustments were made. Strip No. 2, No. 3, and No. 4 comprised one block. Strip No. 7, No. 9, No. 10, and No. 11 comprised the other block. Attached is a sketch showing the location of the strips and the blocks.

Image points were located to rectify photographs for orthophoto, nautical, and small craft charts. All points were drilled by the PUG method. Closure to control has been noted on the read-outs. A sketch is attached which shows the control used in the strip and block adjustments. All points were plotted on the Florida East Zone Plane Coordinate System using the Coradomat Plotter or the Calcomp Plotter.

Ratio points were located on twenty-eight (28) strips of infrared contact prints. Additional ratio points were located on contact prints which have a large portion of water coverage so that they could be individually enlarged to scale. A sketch showing the location of the infrared photographs is attached.

### 23. Adequacy of Control

The control was adequate. Horizontal control was pre-marked on strip No. 1, No. 2, No. 3, No. 4, No. 5, and No. 6. Because of the placement of flight lines in relation to control, it was necessary to extend Strip No. 5 one model past its terminal control station in order to have an area of common coverage with strip No. 6. Tie points were located in this area and tie point 544801 was used as a terminal control point for strip No. 6.

Most of the horizontal control for Strip No. 7, No. 8, No. 9, No. 10, and No. 11 was pre-marked for color photography which was flown on August 4, 1971, and August 11, 1971. This photography was not used for bridging. The positions of the pre-marked control stations were transferred, using PUG methods, to color infrared photography which was flown on March 5, 1973, and March 18, 1973.

The following control station positions were transferred from photographs 71L(C)8370 through 71L(C)8382:

Irving 1971

Mangrove (USE) 1930 Sub Point A

Sands Cut RM2, 1849-1947 Sub station

The following control station positions were transferred from a roll of color photography which was not indexed (Spot No.100-691A) LC-20:

Rubi, 1930-1948 Reset

Man, 1930

Angelfish Key RM3, 1853

Narrow Point, 1854

Long Sound 1961

Snipe Pt., 1934, substation

Knowlson, 1935, substation

Hull Key, 1852

Rock Harbor 2, 1961

Lower Sound Point, 1853 substation

Sub Station, Key Largo Cable Visions Inc., Taller Mast, 1961

Largo, 1962

Low 2, RM2, 1934

Planter 2, RM4

The following control station positions were transferred from photographs 72L(C)8691R thru 72L(C)8698R:

Tavernier 1935  
Snake 1934 Sub. Sta.

Turkey Pt. 2, RM2 was transferred from photograph 71E(C)9595.

Cape Florida Old Tower Final Sub Station A was transferred from photograph 71E(C)9201.

Lower Sound Point 1853 sbu. station was not used in the adjustment because the field party advised that it was questionable and should be used with caution. Sub. station Key Largo Visions, Inc., Taller Mast, 1961, could not be used because one of its azimuth stations (Key Largo Cable Visions, Inc. Shorter Mast) appears to have a bad published position. To date, this has not been resolved by the Geodesy Division. Turkey Point 2, RM2 was a very poor point to transfer, and, therefore, it was not used as control in the block adjustment in that area.

Part-way through the compilation phase of this project, it was determined that the published control positions in the area of this report were in error approximately - 4 feet in X and -10 ft. in Y. Therefore, Strip No. 1, No. 2, No. 3, No. 4, No. 5, No. 6, and No. 8 are adjusted to the old published control positions. This area includes T-sheets TP-00416 through TP-00420 and TP-00422 through TP-00432.

Strip No. 7, No. 9, No. 10, and No. 11 are adjusted to new preliminary control positions which were furnished by Geodesy on May 29, 1974. Geodesy Division stated this preliminary control will be within one (1) foot of the final adjustment. They also said to base non-main scheme stations on the nearest main scheme stations. This was approved by the Coastal Mapping Division.

Since stations established in 1971 and later have positions which were determined by a different adjustment than stations which were established before 1971, it was necessary that the corrections for non-main scheme stations of 1971 and later be based on the new preliminary control of the nearest main scheme stations of 1971 and later. In like manner, pre-1971 non-main scheme stations are based on the amount of change of the nearest pre-1971 main scheme station.

The compiler was advised to make a graphic adjustment on TP-00430 so it will junction well with TP-00433. Also, TP-00432 should be graphically adjusted so it will junction well with TP-00433, TP-00434, and TP-00435.

A listing of closures to control is included on an attached sheet of control stations. The station with the largest residual is Narrow Point 1854, with 1.808 feet in X and 1.267 feet in Y.

24. Supplemental Data

USGS Topographic Quadrangles and NOS Nautical Charts were used to obtain vertical control for bridging.

25. Photography

The following RC-8 color photography was used for bridging:

1:20,000 scale

Strip No. 4 71E(C)9201-9215  
Strip No. 8 73L(C)2871-2884R  
Strip No. 9 73L(C)2893-2924R

1:30,000 scale

Strip No. 1 71E(C)9120-9135  
Strip No. 2 71E(C)9562-9574  
Strip No. 3 71E(C)9576-9586  
Strip No. 5 71E(C)9536-9545  
Strip No. 6 71E(C)9588-9602

1:40,000 scale

Strip No. 7 73L(C)2935-2945R  
Strip No. 10 73L(C)2952-2968R  
Strip No. 11 73L(C)2785-2797R

The quality and definition of the photography was adequate.

Respectfully submitted,

*Victor McNeel*  
Victor McNeel

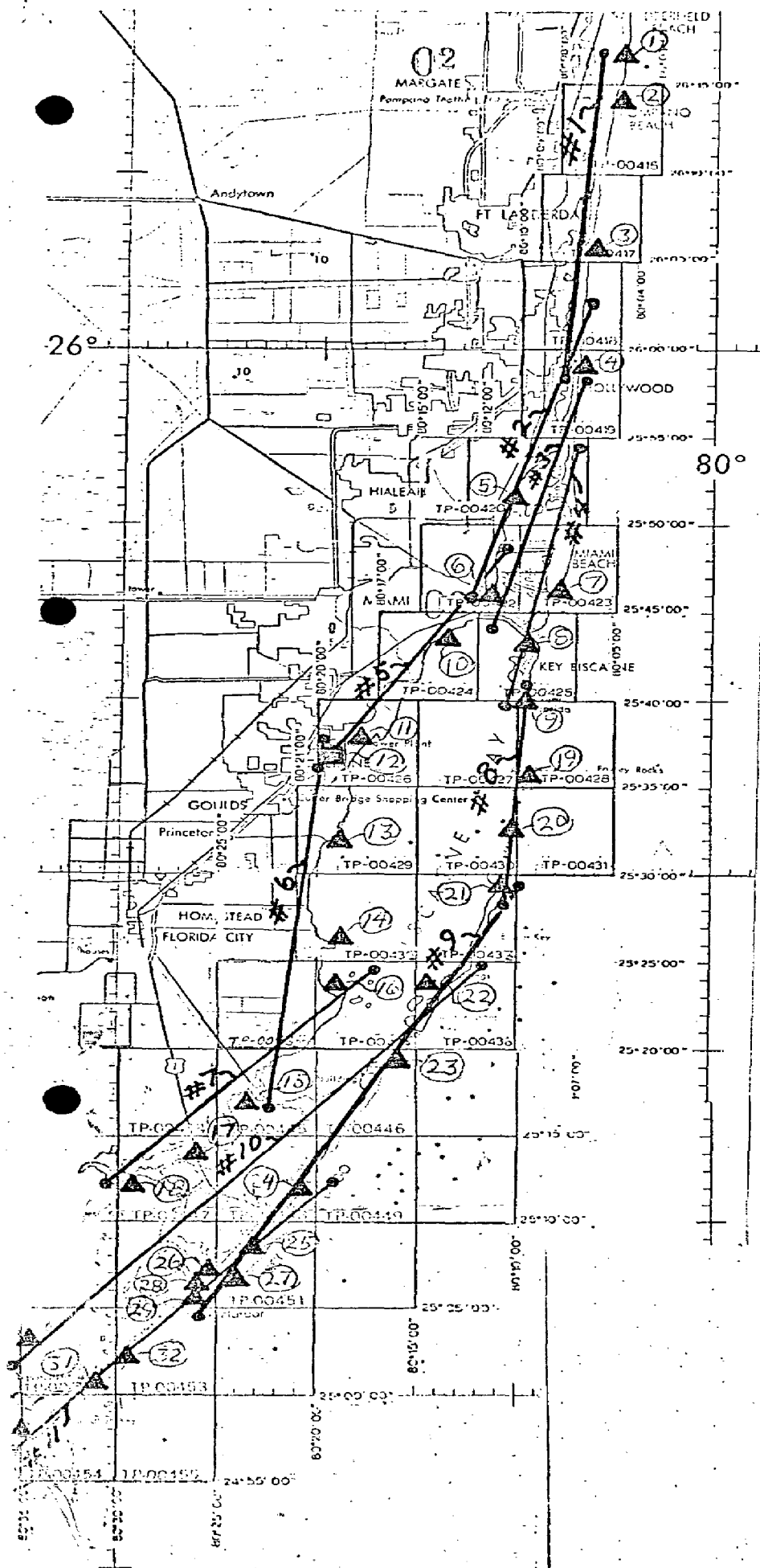
Approved and forwarded:

*John D. Perrow, Jr.*  
John D. Perrow, Jr.  
Chief, Aerotriangulation Section

JOB PH-7113  
AND  
JOB PH-7119

HILLSBORO INLET  
TO  
PLANTATION KEY,  
FLORIDA

CONTROL STATIONS  
USED IN THE  
ADJUSTMENTS





CONTROL STATIONS

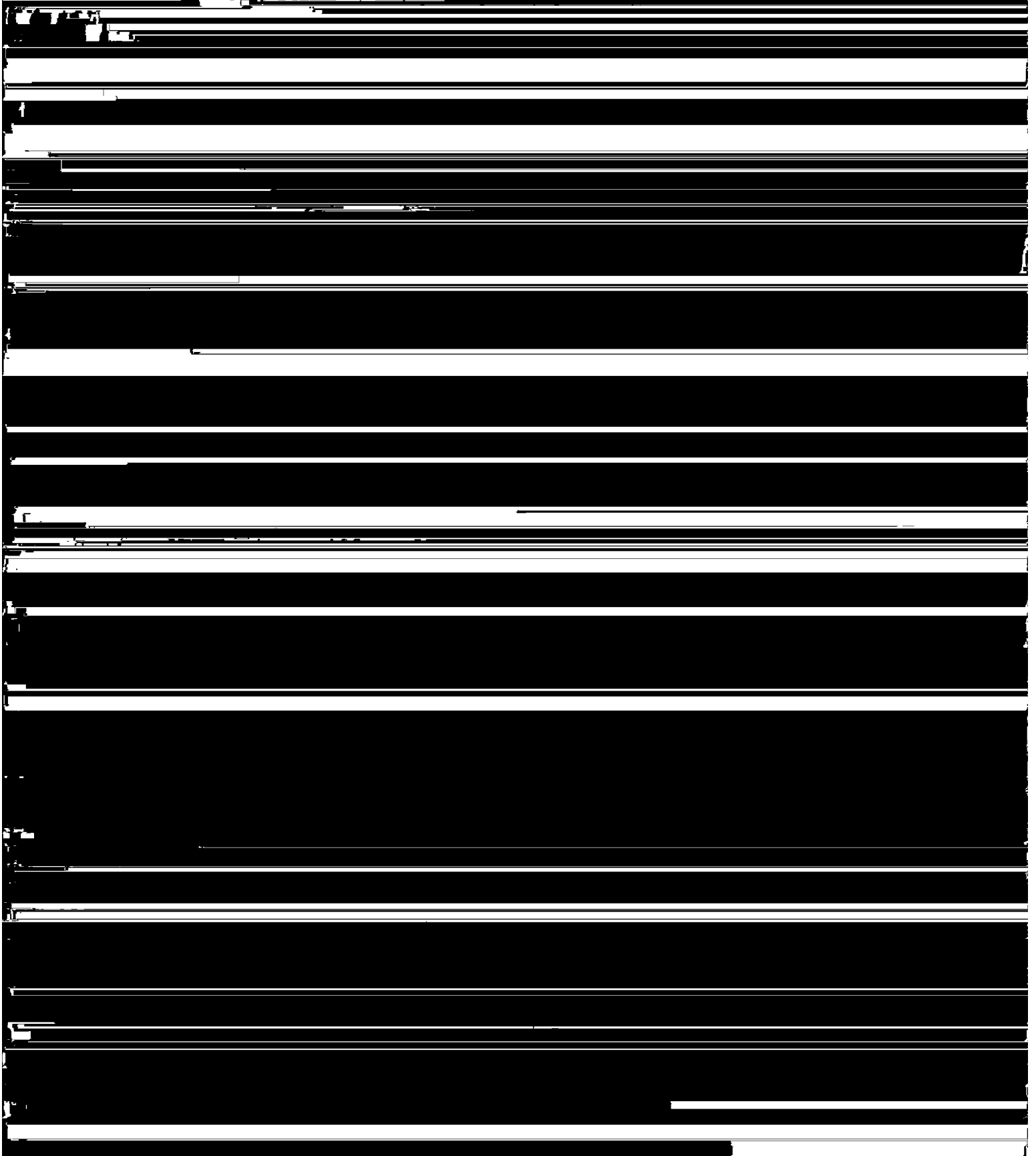
			<u>residuals</u>	
1.	(027100)	Turtle 1929	-0.706	-0.115
2.	(023102)	Pompano, 1928, subpoint B	1.488	-0.229
3.	(029100)	South Jetty, 1938	-1.134	0.176
4.	(034101)	Halland, 1928	0.317	-0.007
5.	(567101)	Causeway, 1934	0.027	-0.012
6.	(562101)	Point View, 1934	0.000	-0.181
7.	(207100)	Base, 1934	0.112	0.142
8.	(204100)	Key Biscayne North Base, 1849	-0.158	0.033
9.	(201101)	Cape Florida Old Tower Finial, subpoint A	-0.156	0.002
10.	(538102)	Pan American, 1935, Target 2	0.000	0.000
11.	(534101)	Naco 1934, subpoint A	0.000	0.000
12.	(544801)	Tie point from strip #5 used as control for strip #6	-0.157	0.025
13.	(591100)	Black Point 3	0.351	-0.066
14.	(595101)	Turkey Point No. 2, 1930, RM No. 2	-0.229	0.073
15.	(940100)			
	(602100)	Narrow Point 1854	-1.808	1.267
16.	(944100)	Man 1930.	0.222	-0.009
17.	(960100)	Long Sound, 1961	-0.168	-0.075
18.	(936101)	Snipe Point, 1934, sub- station	-0.215	-0.201
19.	(878101)	Irving, 1971, substation	0.687	-0.080
20.	(875102)	Mangrove (USE), 1930, subpoint B	-0.826	0.125
21.	(872101)	Sands Cut RM 2, 1849-1947 substation	0.296	-0.049
22.	(901100)	Rubi, 1930-1947, reset	-0.192	-0.134
23.	(905101)	Angelfish Key RM 3, 1853	-0.303	-0.242
24.	(914101)	Knowlson, 1935 substation	0.153	-0.155
25.	(919100)	Hull Key, 1852	-0.053	0.103
26.	(922100)	Rock Harbor 2, 1961	0.364	-0.284
27.	(022101)	Lower Sound Point, 1853 substation **		
28.	(923101)	Sub Station Key Largo Cable Visions Inc., Taller Mast, 1961 **		
29.	(924100)	Largo, 1962	-0.210	0.103

30.	(967101)	Low 2, RM 2, 1934	0.042	0.215
31.	(692100)	Tavernier, 1935	0.308	-1.325
32.	(793101)	Planter 2, RM 4	-1.476	1.087
33.	(695101)	Snake, 1934, subpoint	0.128	0.174

\*\* means not used in adjustments

## INFRA-RED CONTACT PRINTS

1. 71K 5632R - 5660R MLW





## Horizontal Control

Map TP- 00432

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
TURKEY POINT 2 RM2, 1930	P.C. pg. 322 G.P. pg. 79 Des. Book 424, P. 5, 28, 29, 37, 39



Geodetic Bench Mark	Elevations (feet)	Condensed Description
	SLD 1929	
Z314 ✓		C&GS disk stamped Z 314 1970; 30 ft. E. of the bottom steps, 2 ft. W. of a slight turn in bulkhead, set in top of bulkhead.
F60(DC) ✓		Dade County Engineer brass plug stamped DC BM 60, set in bulkhead at S. end of dam ruins.
R318 ✓		C&GS disk stamped R 318 1970; 56 ft. N. of canal bank, 46 ft. N. of center line of road, set in a pipe .5 ft. W. of witness post.
Q318 ✓		C&GS disk stamped Q 318 1970; 9 ft. S of center line of path, set in a pipe .6 ft W of witness post.

Compilation Report  
TP-00432  
January 1975

31. Delineation

The MHWL, MLWL, and the apparent shoreline (limits of vegetation) were delineated from the tide-coordinated black-and-white infrared photography. This photography was controlled by map points determined by aerotriangulation and planimetric features compiled from the rectified prints of the color infrared photography.

Manmade features and alongshore features such as shallow and shoal areas were compiled from the rectified color photography.

Interior details were compiled from the rectified prints of the color infrared photography.

32. Control

Horizontal control was adequate for density and placement. Refer to the Photogrammetric Plot Report for a complete review of the control and methods used.

33. Supplemental Data - None

34. Contours and Drainage

Contours are inapplicable. Drainage was compiled from color infrared photography.

35. Shoreline and Alongshore Details

The majority of the shoreline on this map is apparent with few areas of MHWL and MLWL. The area adjacent to Turkey Point and Turtle Point has undergone considerable change since the 1971 tide-coordinated infrared photography. These were manmade changes such as canals and fill due to the construction of a nuclear power plant. For this area, the color infrared flown in 1973 was used to delineate this area.

36. Offshore Details

"Pelican Bank", east of Turkey Point, at approximately  $25^{\circ}71'$  lat.  $80^{\circ}17.5'$  long., is shown on Chart 141-SC as bare at MLW, with a light on its north side and a daybeacon on its south side. This area is beyond our photo coverage and will have to be located by field methods.

37. Landmarks and Aids

Two landmarks and one light were located during compilation and will be verified during field edit. Charted non-floating aids not visible on the photography will be located by field methods.

38. Control for Future Surveys - None39. Junctions

See Form 76-36B in this report.

40. Horizontal Accuracy

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

41. thru 45. Inapplicable

46. Comparison with Existing Maps

Comparison with USGS Quadrangle, Ansenicker Keys, scale 1:24,000, dated 1956.

47. Comparison with Nautical Charts

Comparison was made with 141-SC, 1:40,000 scale, 10th edition, dated September 23, 1972.

Items to be Applied to Nautical Charts Immediately - None

Submitted by,

*August M. Tolzman*  
A. Tolzman

Approved:

*J. P. Battley, Jr.*

J.P. Battley, Jr.  
Chief, Coastal Mapping Division

Field Edit Report

The shoreline of Rincón Bay was inspected by a small boat while

Review Report  
Coastal Zone Map TP-00432  
May 1976

61. General

The map manuscript for Coastal Zone Map TP-00432 was inspected as a Class III map (compilation, discrepancy print, and report) and reviewed as a Class I map by the Quality Control Group. The review consisted of an examination of the map manuscript, the field edit, and its application, the reproduction negatives, and the Descriptive Report.

The proof copy of this map was 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

62. Cartographic Comparison

Comparison was made with the following USGS quadrangle map at a scale of 1:24,000:

Arsenicker Keys, Fl, 1956, photorevised 1969 and 1973.

No significant changes were noted.

Comparison was made with the following Nautical Chart:

11463 (formerly C&GS 849), 7th edition, dated August 3, 1974, 1:40,000 scale.

No significant changes were found.

63. thru 65. Inapplicable

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00432 complies with the instructions for NOS Cooperative Boundary Mapping, Job PH-7000, and the National Standards of Map Accuracy.

Submitted by

*Donald M. Brant*  
Donald M. Brant

Approved and forwarded:

*[Signature]*  
Chief, Photogrammetric Branch



March 3, 1976

GEOGRAPHIC NAMES  
FINAL NAME SHEET

PH-7113 (Biscayne Bay, Florida)  
TP-00432

Biscayne Bay

Biscayne National Monument

Convoy Point

Florida City Canal

Homestead Bayfront Park

Military Canal

Mowry Canal


North Canal

Pelican Bank

Turkey Point

Turtle Point

Approved by:

  
Chas. E. Harrington  
Staff Geographer C51x2



ORIGINATOR	
<input type="checkbox"/> PHOTO FIELD PARTY	
<input type="checkbox"/> HYDROGRAPHIC PARTY	
<input type="checkbox"/> GEODETIC PARTY	
<input type="checkbox"/> OTHER (Specify)	
FIELD ACTIVITY REPRESENTATIVE	
OFFICE ACTIVITY REPRESENTATIVE	
<input type="checkbox"/> REVIEWER	
<input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	

METHOD AND DATE OF LOCATION

Instructions No. 64,

FIELD (Cont'd)

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

#### 4. 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

#### 4. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis. 8-12-75

PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

2-711 WHICH IS OBSOLETE, AND DESTROYED UPON RECEIPT OF REVISION.

[illegible]

## RESPONSIBLE PERSONNEL

ORIGINATOR

- ☐ PHOTO FIELD PARTY  
☐ HYDROGRAPHIC PARTY  
☐ GEODETIC PARTY  
☐ OTHER (Specify)

FIELD ACTIVITY REPRESENTATIVE

OFFICE ACTIVITY REPRESENTATIVE

- ☐ REVIEWER  
☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

R. Wagner

P. Dempsey

## INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64.)

## FIELD (Cont'd)

## FIELD OBJECTS

(Including month, photograph used to object.)

B. Photogrammetric field position\*\* 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

## VERIFIED

by symbols as follows:

Photogrammetric

Visually

Field identified

Neodolite

Planetable

Extant

entry of method of field work.

## 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

## III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.  
8-12-75

\*\*PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

SUPERSEDES NOAA FORM 76-40 (2-71) WHICH IS OBSOLETE, AND EXISTING STOCK SHOULD BE DESTROYED UPON RECEIPT OF REVISION.

\* U.S. GOVERNMENT PRINTING OFFICE: 1974-565-073/1030 Region 6

[illegible]

## RESPONSIBLE PERSONNEL

TYPE OF ACTION	RESPONSIBLE PERSONNEL	ORIGINATOR
INSPECTED FROM SEAWARD	R. Wagner	<input checked="" type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
INS DETERMINED AND/OR VERIFIED	R. Wagner	FIELD ACTIVITY REPRESENTATIVE
ORIGINATED BY QUALITY CONTROL /VIEW GROUP AND FINAL REVIEW	P. Dempsey	OFFICE ACTIVITY REPRESENTATIVE
IES		<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

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

## FIELD

## FIELD (Cont'd)

## A. 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

## FIELD

## B. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field  
L - Located  
V - Verified  
P - Photogrammetric  
Vis - Visually  
5 - Field identified  
6 - Theodolite  
7 - Planetable  
8 - Sextant

A. Field positions\* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L  
8-12-75

FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

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

## 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

## III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.  
8-12-75

\*\*PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

## National Archives Data

TP-00432

1 Discrepancy print

1 Field edit sheet (stable base)

2 Plane table sheets dated 2/25/75

## Photography:

73E(RC)9024

9026

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

1 Page sextant fixes

3 Forms 76-40 (working copies)