

Original ✓

TP-00427

TP-00427

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-00427
Classification No. Final	Edition No. 1
Field edited map	
LOCALITY	
State Florida	
General Locality Dade County	
Locality Biscayne Flats	
.....	
<hr/> 1971 TO 1975 <hr/>	
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>00427</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>00427</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB <u>PH-7113</u>		
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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>
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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 Cdr. James Collins							
I. INSTRUCTIONS DATED							
1. OFFICE		2. FIELD					
General Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000, 12/9/75 Supplement I, 11/4/74 Supplement III, 10/24/74 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:		OTHER (Specify)					
<input checked="" type="checkbox"/> 1927 NORTH AMERICAN							
2. VERTICAL:		OTHER (Specify)					
<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							
3. MAP PROJECTION Transverse mercator		4. GRID(S)					
5. SCALE 1:10,000		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;"> STATE Florida </td> <td style="width:50%;"> ZONE East </td> </tr> <tr> <td>STATE</td> <td>ZONE</td> </tr> </table>		STATE Florida	ZONE East	STATE	ZONE
STATE Florida	ZONE East						
STATE	ZONE						
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS		NAME	DATE				
1. AEROTRIANGULATION METHOD: Analytic		V. McNeel	6/73				
LANDMARKS AND AIDS BY		Inapplicable					
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat		E. Allen	6/73				
PLOTTED BY		Inapplicable					
CHECKED BY		Inapplicable					
3. STEREOSCOPIC INSTRUMENT COMPILATION		Inapplicable					
PLANIMETRY BY							
CHECKED BY							
INSTRUMENT:		Inapplicable					
SCALE:							
CONTOURS BY							
CHECKED BY							
4. MANUSCRIPT DELINEATION METHOD: Graphic		P.J. Dempsey	4/75				
PLANIMETRY BY		C. Lewis					
CHECKED BY		5/75					
CONTOURS BY		Inapplicable					
CHECKED BY							
SCALE: 1:10,000		Inapplicable					
CHECKED BY							
5. OFFICE INSPECTION PRIOR TO FIELD EDIT							
BY		J. McClure					
6. APPLICATION OF FIELD EDIT DATA		11/75					
CHECKED BY		P.J. Dempsey					
BY		12/75					
7. COMPILATION SECTION REVIEW		C. Lewis					
BY		1/76					
8. FINAL REVIEW		Brant-Battley					
BY		1/76					
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH							
BY							
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH		Brant					
BY		2/76					
11. MAP REGISTERED - COASTAL SURVEY SECTION		R. T. CATOR					
BY		7/76					

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

TP-00427

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 6" focal length K&L cameras		TYPES OF PHOTOGRAPHY LEGEND (C) <u>COLOR</u> (P) PANCHROMATIC (I) <u>INFRARED</u> 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 75th & 60th	<input checked="" type="checkbox"/> DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
73L(C)2878R-2882R	3/18/73	0923	1:20,000	The stage of tide is inapplicable for the color photography.	
74C(C)2900-2901	12/2/74	1159	1:40,000		
71L9076R-9079R	8/16/71	1040	1:20,000	See the following page for tidal information.	
72K6275R-6281R	2/14/72	1046	1:20,000		

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

There is no MHWL on this map.

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

The source of the MLW line is the tide-coordinated infrared photography listed under item 1, except for the MLWL discussed in the Field Edit Report, dated May 21, 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	TP-00424	EAST	TP-00428	SOUTH	TP-00430	WEST	TP-00426
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 - 00427

LOCATION AND PHOTOGRAPHY	TIDE STATIONS <i>(In operation at time of photography)</i>	STAGE OF TIDE	MEAN RANGE
72L9076R-9079R	Ragged Keys	+0.13 MLW	1.64'
72K6275R-6281R	Ragged Keys	-0.02 MHW	

REMARKS:

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

TP-00427

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 ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None	
3. VERTICAL CONTROL RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None	
4. LANDMARKS AND AIDS TO NAVIGATION RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	R.R. Wagner	5/75
5. GEOGRAPHIC NAMES INVESTIGATION TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input checked="" type="checkbox"/> SPECIFIC NAMES ONLY BY <input type="checkbox"/> NO INVESTIGATION	R.R. Wagner	5/75
6. PHOTO INSPECTION CLARIFICATION OF DETAILS BY	R.R. Wagner	5/75
7. BOUNDARIES AND LIMITS SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Refer to field report		

3. PHOTO NUMBERS (Clarification of details)

73L2882R, 71L9079R

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

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

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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

7. SUPPLEMENTAL MAPS AND PLANS

Sketchbook submitted with TP-00427

Sketchbook submitted with TP-00428

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

Sketchbook submitted with TP-00428

*Field report is bound with this Descriptive Report.

RECORD OF SURVEY USE

TP-00427

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No copies of this map 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
		11/17/75	One(1) Form 76-40 was submitted to the Marine Chart Division for final report.

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 11/17/753. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

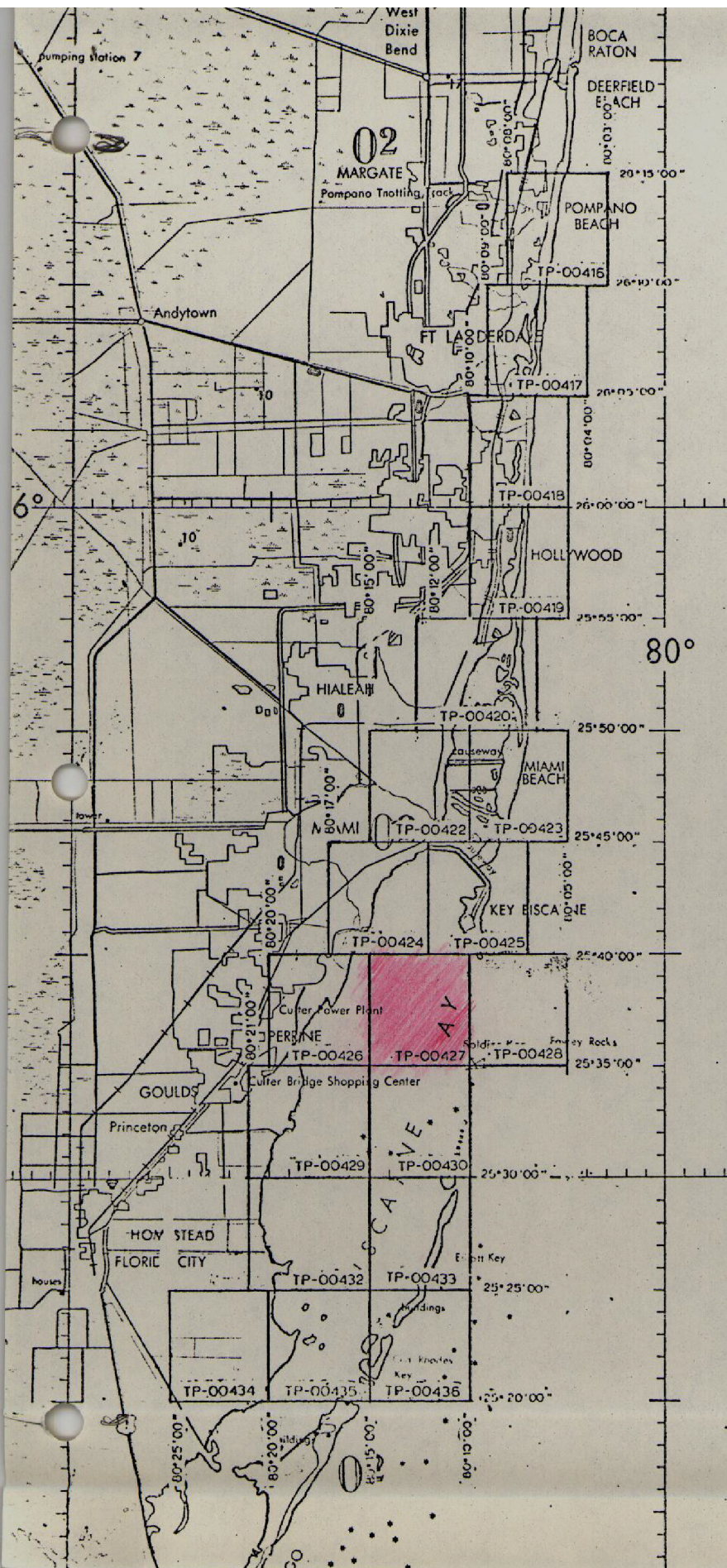
III. FEDERAL RECORDS CENTER DATA

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	



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
TP-00436	5

Total 76

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

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

Coastal Zone Map TP-00427 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.

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

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 ± 0.3 ft. for mean high-water and ± 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) 1201 to 1210 hrs. based on PORT EVERGLADES staff reading of 1.7 ft.

(2) Line 30-1, based on LAKE WORTH PIER, photographed in its entirety from 1228 to 1241 hrs. when the tide reading was 1.4/1.3 ft.

(3) An 8 mile segment of line 30-1, based on BAHIA MAR YACHT CLUB, was photographed at 1444 to 1449 hrs. when the tide staff read 1.7 ft.

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 FORT 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

3

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 Finial 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

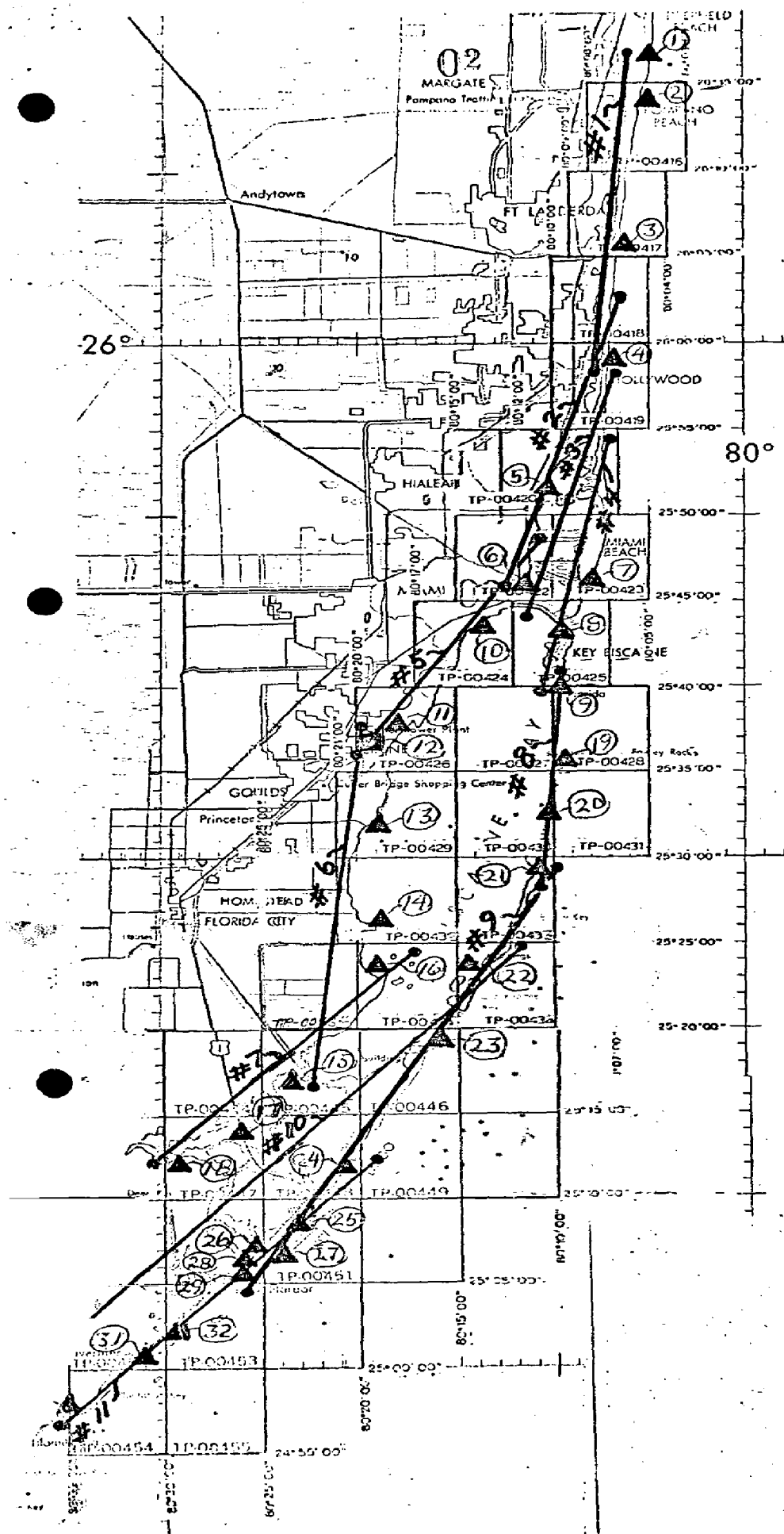
Approved and forwarded:

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

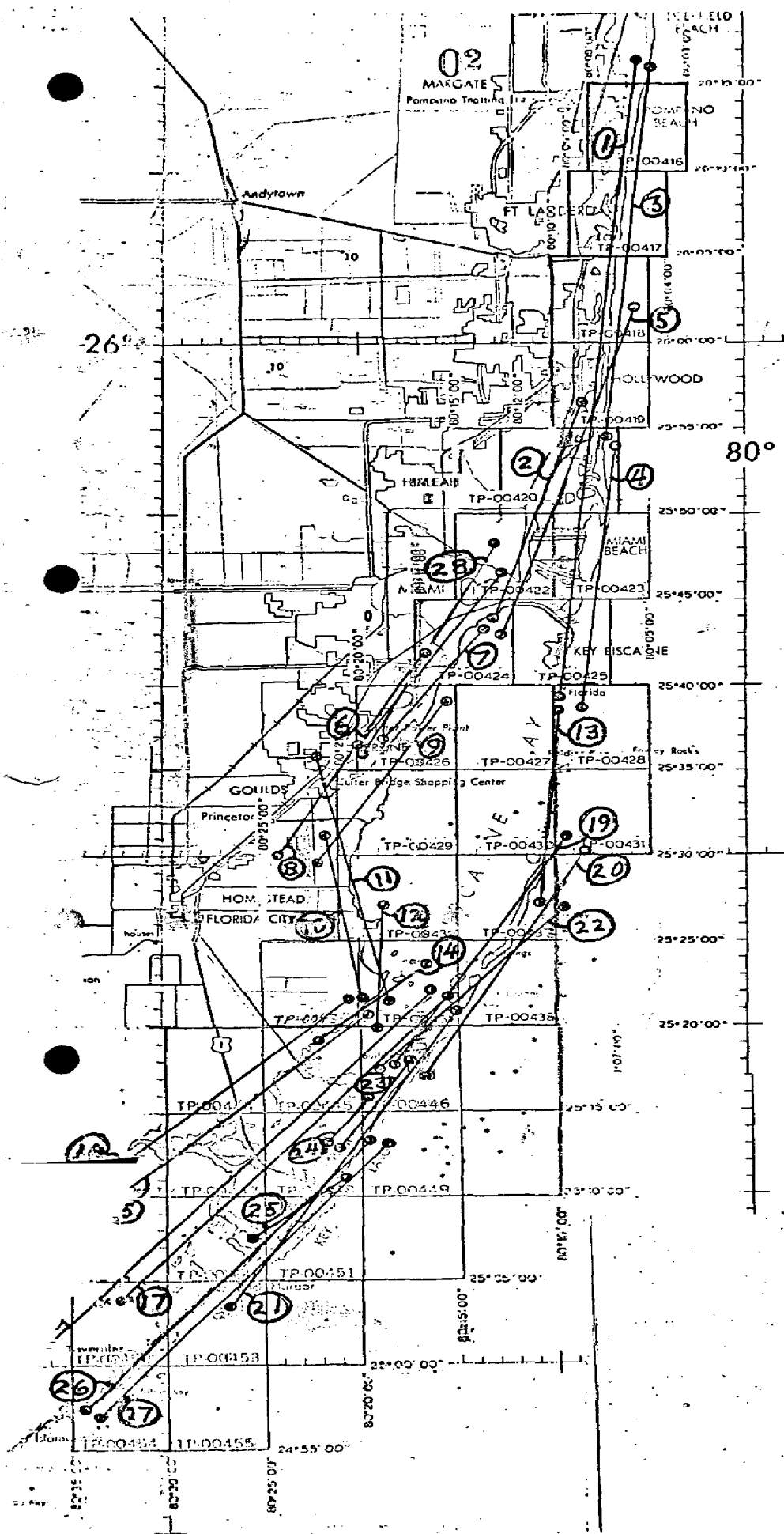
30.	(967101)	Low 2, RM 2, 1934	0.042	0.215
31.	(692100)	Tavernier, 1935	0.308	-1.325
32.	(793101)	Planter 2, RM 4	-1.476	1.087
33.	(695101)	Snake, 1934, subpoint	0.128	0.174

** means not used in adjustments

JOB PH-7113
AND
JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

INFRA-RED CONTACT
PRINTS RATIOED FOR
COMPILATION



INFRA-RED CONTACT PRINTS

1. 71K 5632R - 5660R MLW
2. 71K 5662R - 5672R MLW
3. 71K 5750R - 5766R MHW
4. 71K 5795R - 5806R MHW
5. 71K 5815R - 5829R MHW
6. 71L 8501R - 8509R MLW
7. 71L 8512R - 8520R MLW
8. 71L 8571R - 8580R MHW
9. 71L 8523R - 8530R MLW
10. 71L 8783R - 8791R MHW
11. 71L 8584R - 8593R MHW
12. 71L 8532R - 8537R MLW
13. 71L 9067R - 9080R MLW
14. 71L 8337R - 8341R MHW
15. 72K 6287R - 6298R MHW
16. 72K 6572R - 6584R MLW
17. 72K 6546R - 6563R MLW
18. 72K 6311R - 6330R MHW
19. 71L 8544R - 8559R MLW
20. 71L 8648R - 8662R MLW
21. 72K 6480R - 6499R MHW
22. 71L 8697R - 8705R MHW
23. 72K 6344R - 6350R MLW
24. 72K 6253R - 6255R MLW
25. 72K 6420R - 6423R MHW
26. 72K 6501R - 6515R MHW
27. 72K 6368R - 6382R MLW
28. 71K 5847R - 5856R MHW

Photogrammetric Plot Report
Biscayne Bay
Addendum to PH-7113
February 1975

21. Area Covered

This report covers sheets TP-00427, TP-00428, TP-00430, TP-00431, and a portion of TP-00425 on Biscayne Bay, Florida, at 1:10,000 scale.

22. Method

One strip of 1:40,000-scale photography was bridged by analytic aerotriangulation method and adjusted to ground on Florida State Plane Coordinate System East Zone. This strip of photography was bridged to provide horizontal and vertical control for graphic compilation. The adjustment on IBM 6600 utilized 4 horizontal control stations, with 7 as checks and 8 vertical control stations. All horizontal control used were points transferred from strips 4 and 8, of Hillsboro Inlet to Card Sound, Florida, with the exception of Cape Florida Old Tower Finial, 1883 (883100) and Mangrove (USC) 1930 Substation B (875102) which were read direct. Plotting of manuscript sheets will be done by the compilation section.

23. Adequacy of Control

All control was adequate and held well within the accuracy required by National Standards of Map Accuracy at 1:10,000 scale.

24. Supplemental Data

NOS Nautical Chart was used to obtain elevations for vertical adjustments of bridge.

25. Photography

RC-10 color film positives were adequate as to coverage, overlay, and definition.

Submitted by,

Robert E. Kelly
Robert E. Kelly

Approved and Forwarded:

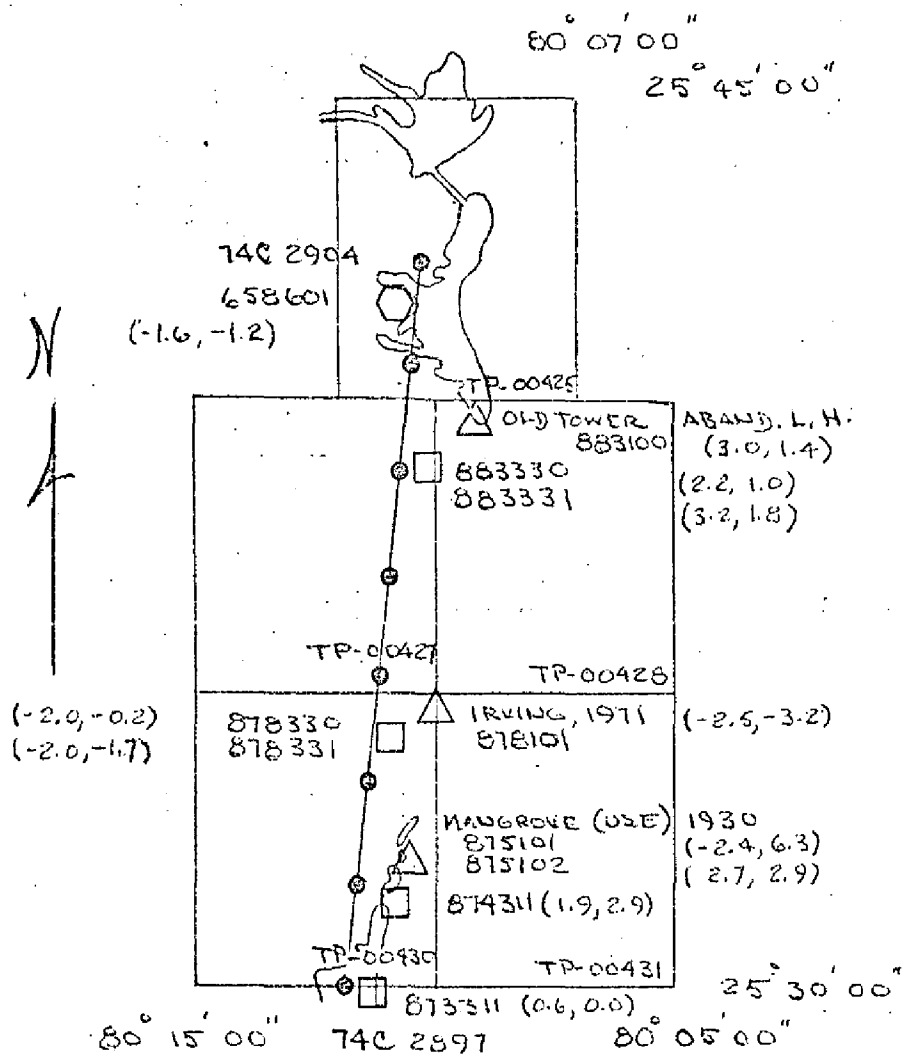
John D. Perrow, Jr.
John D. Perrow, Jr.

Chief, Aerotriangulation Section

BISCAYNE BAY ADDENDUM TO PH-7113

24

FEBRUARY, 1975



TP-00427
Compilation Report
April 1975

31. Delineation

All features were delineated by graphic compilation. Control for compilation consisted of map points determined in aerotriangulation.

There was no MHW line on this compilation. The MLW line was compiled using ratioed tide-coordinated black-and-white infrared photography.

Houses, platforms, and piers were compiled from rectified black-and-white prints of color photography.

32. Control - See Photogrammetric Plot Report

33. Supplemental Data - None

34. Contours and Drainage - Inapplicable

35. Shoreline and Alongshore Features - Inapplicable

36. Offshore Details

Shoal areas and channel lines were delineated from the rectified prints of the color photography. Several areas of low water were added from the tide-coordinated photography.

37. Landmarks and Aids

No landmarks were located in compilation. Six daybeacons and three lights were noted from Chart 848 and light list. These aids will be located or identified in field edit.

38. Control for Future Surveys - None.

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

40. Horizontal and Vertical Accuracy

This map complies with the accuracy requirements for the Florida Coastal Zone Mapping Program, PH-7000.

41. thru 45. Inapplicable

46. Comparison with Existing Maps

A comparison was made with the following USGS Quads:

Key Biscayne, Florida, 1962 (photorevised 1969) 1:24,000.
Soldier Key, Florida, 1956, 1:24,000.

No significant differences were noted.

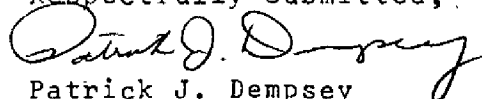
47. Comparison with Nautical Charts

A comparison was made with the following Nautical Charts:

848, 1:40,000, 14th edition, April 1973;
1248, 1:80,000, 11th edition, July 1970;
11451, 1:80,000, 12th edition, September 1974.

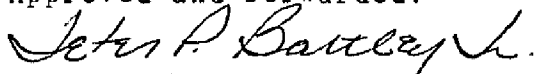
No significant differences were noted.

Respectfully submitted,



Patrick J. Dempsey
Carto (Photo)

Approved and forwarded:



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

Addendum
to
Compilation Report

Additional 1974 photography was necessary for the compilation of offshore details on maps TP-00427, TP-00428, and TP-00430. This photography was used in compiling offshore buildings, piers, and shoal areas. Control was extended by aerotriangulation (Refer to the Addendum to Photogrammetric Plot Report bound in this Descriptive Report).

FIELD EDIT REPORT, MAP TP-00427, JOB PH 7113

51. METHODS

There is no fast or apparent shoreline, horizontal or vertical control on this manuscript.

Eight aids were located by sextant cuts. There are no landmarks on this manuscript.

Block ledge LT~~2~~ was computed based on old datum and should be re-computed using new datum. The data for this aid will be submitted with TP-00430.

The low water tide coordinated prints do not portray the MLW correctly. On May 21, 1975 the MLW was checked with the tide being .15 ft. above MLW based on Ragged Key tide gage, which is .02 ft. above the tide coordinated prints. The only MLW found was three small areas inked in violet on print 7119079R. Some of the areas that appears to bear on the low water prints were traversed across by a small skiff at 115 ft. above MLW based on Ragged Key tide gage.

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.

Submitted 6/02/75 by


Robert R. Wagner
Chief, Photo Party 60

January 23, 1976

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-7113 (Biscayne Bay, Florida)
TP-00427

Biscayne Bay

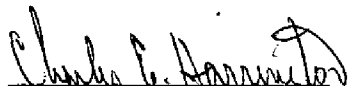
Biscayne Channel

Biscayne Flats

Black Ledge

Safety Valve

Approved by:



Charles E. Harrington
Staff Geographer-C-51x2

Review Report
Coastal Zone Map TP-00427
May 1976

61. General

The map manuscript for Coastal Zone Map TP-00427 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 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 maps at a scale of 1:24,000:

Key Biscayne, Florida, 1962 (photorevised 1969)
Soldier Key, Florida, 1956

No significant changes were noted.

Comparison was made with the following Nautical Chart:

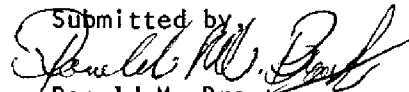
C&GS 848 (No. 1173) 15th edition, dated March 30, 1974, 1:40,000 scale

No significant changes were noted.

63. thru 65. Inapplicable

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00427 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

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.				U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION				NONFLOATING AIDS OR LANDMARKS FOR CHARTS				ORIGINATING ACTIVITY			
<input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> TO BE REVISED <input type="checkbox"/> TO BE DELETED		REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE					<input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)					
The following objects HAVE <input type="checkbox"/> HAVE NOT <input checked="" type="checkbox"/> been inspected from seaward to determine their value as landmarks.		JOB NUMBER	SURVEY NUMBER	DATUM				METHOD AND DATE OF LOCATION (See instructions on reverse side)				CHARTS AFFECTED			
OPR PROJECT NO.				N.A. 1927				OFFICE		FIELD					
CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)	LATITUDE		LONGITUDE		POSITION									
		° /	D.M. Meters	° /	D.P. Meters										
DYBN 16	BISCAYNE BAY-BISCAYNE CHANNEL	25 39	14.55	80 10	14.94					P-L-3-8 5/14/75		848-SC 1248 11451			
DYBN 18		25 39	14.02	80 10	14.71					"		"			
LIGHT 19		25 39	14.42	80 10	14.81					P-L-4-8 5/14/75		"			
DYBN 20		25 39	18.09		803.58					P-L-3-8 5/14/75		"			
DYBN 21		25 39	17.22		56.76					"		"			
LIGHT 23		25 39	498.19	80 11	172.93					P-L-4-8 5/14/75		"			
DYBN 22		25 39	18.85	80 11	11.17					P-L-3-8 5/14/75		"			
DYBN 1	SAFETY VALVE BANK DYBN 1	25 38	580.05	80 11	311.55					P-L-4-8 5/14/75		"			
LIGHT 2	BLACKLEDGE LIGHT 2	25 35	48.29		1.25					P-L-3-6 5/7/75		"			
			1485.97		34.86							31			

RESPONSIBLE PERSONNEL

TYPE OF ACTION

NAME

ORIGINATOR

OBJECTS INSPECTED FROM SEAWARD

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

POSITIONS DETERMINED AND/OR VERIFIED

R. Wagner

FIELD ACTIVITY REPRESENTATIVE

FORMS ORIGINATED BY QUALITY CONTROL
AND REVIEW GROUP AND FINAL REVIEW
ACTIVITIES

P. Dempsey

OFFICE ACTIVITY REPRESENTATIVE

- ☐ REVIEWER
☐ QUALITY CONTROL AND REVIEW GROUP
 REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64.)

OFFICE

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

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field
 L - Located
 V - Verified
 1 - Triangulation
 2 - Traverse
 3 - Intersection
 4 - Resection
 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.

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

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-00427

- 1 Discrepancy print
- 1 Field edit sheet (stable base copy)
- 1 Form 76-36C (History of Field Operations)
- 1 Form 76-40 (Working Copy)

Photography:

71L9079R
73L2882R