

00422

00422

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-00422 .....

Classification No. Final ..... Edition No. .... 1 .....  
Field Edited Map

### LOCALITY

State ..... Florida .....

General Locality .... Dade County .....

Locality ..... Miami .....

19 71 TO 1975

### REGISTRY IN ARCHIVES

DATE .....

|  |  |   |   |
|--|--|---|---|
| NOAA FORM 76-36A<br>(3-72)   |  | U. S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.   |   |
| <b>DESCRIPTIVE-REPORT - DATA RECORD</b>  |  | TYPE OF SURVEY<br><input checked="" type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED   |   |
| PHOTOGRAMMETRIC OFFICE<br><br>Rockville, Maryland<br>OFFICER-IN-CHARGE<br><br>Commander James Collins  |  | SURVEY TP. 00422<br><br>MAP EDITION NO. (1)<br><br>MAP CLASS Final<br><br>JOB PH. 7113  |   |
| PHOTOGRAMMETRIC OFFICE<br><br>Rockville, Maryland<br>OFFICER-IN-CHARGE<br><br>Commander James Collins  |  | LAST PRECEDING MAP EDITION<br><br>TYPE OF SURVEY<br><input type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED  |   |
| JOB PH. 7113   |  | MAP CLASS Final<br><br>SURVEY DATES:<br>19__ TO 19__  |   |
| <b>I. INSTRUCTIONS DATED</b>   |  |   |   |
| <b>1. OFFICE</b><br><br>General-Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping JOB PH-7000. June 19, 1973<br>OFFICE-Supplement I, August 19, 1973<br>NOTE: OFFICE and field edit Instructions (1973) incorporate applicable prior operational instructions.<br>OFFICE: Supplement II, Sept. 24, 1973 |  | <b>2. FIELD</b><br><br>Aerial photography 912169<br>Supplement I 1/28/70<br>Supplement II 3/26/70<br>Supplement III 8/10/72<br>Field Edit (PH-7000, General Instructions for Florida Coastal Zone Mapping 1973. |   |
| <b>II. DATUMS</b>  |  |   |   |
| <b>1. HORIZONTAL:</b> <input checked="" type="checkbox"/> 1927 NORTH AMERICAN  |  | OTHER (Specify)   |   |
| <b>2. VERTICAL:</b><br><input checked="" type="checkbox"/> MEAN HIGH-WATER<br><input checked="" type="checkbox"/> MEAN LOW-WATER<br><input type="checkbox"/> MEAN LOWER LOW-WATER<br><input type="checkbox"/> MEAN SEA LEVEL   |  | OTHER (Specify)   |   |
| <b>3. MAP PROJECTION</b><br><br>Transverse Mercator  |  | <b>4. GRID(S)</b><br><br>STATE Florida ZONE East  |   |
| <b>5. SCALE</b><br>1:10,000  |  | STATE ZONE  |   |
| <b>III. HISTORY OF OFFICE OPERATIONS</b>   |  |   |   |
| OPERATIONS   |  | NAME  | DATE                                      |
| <b>1. AEROTRIANGULATION</b> BY<br>METHOD: Analytic LANDMARKS AND AIDS BY   |  | V. McNeel-Ivy Raborn<br>N/A   | 3/73-6/76                                 |
| <b>2. CONTROL AND BRIDGE POINTS</b> PLOTTED BY<br>METHOD: Coradomat CHECKED BY   |  | E. Allen<br>C. Lewis  | 4/73<br>7/73                              |
| <b>3. STEREOSCOPIC INSTRUMENT</b> PLANIMETRY BY<br>COMPILATION CHECKED BY<br><br>INSTRUMENT: CONTOURS BY<br>SCALE: 1:10,000 CHECKED BY   |  | C. Lewis<br>N/A<br>N/A  | 7/73<br><br>7/73                          |
| <b>4. MANUSCRIPT DELINEATION</b> PLANIMETRY BY<br>Shoreline Graphic CHECKED BY<br>METHOD: Interior:Orthophotomosaic <del>XXXXXXXXXX</del> CHECKED BY<br>SCALE: HYDRO SUPPORT DATA BY<br>CHECKED BY   |  | C. Lewis-J. McClure<br>P. Dempsey-P. Dempsey<br>J. Taylor<br>J. P. Battley, Jr.<br>N/A<br>N/A   | 7/73-11/76<br>9/73-1/77<br>11/76<br>11/76 |
| <b>5. OFFICE INSPECTION PRIOR TO FIELD EDIT</b> BY   |  | J. P. Battley, Jr.  | 9/73                                      |
| <b>6. APPLICATION OF FIELD EDIT DATA</b> BY  |  | H. S. Jones   | 10/73                                     |
| <b>7. COMPILATION SECTION REVIEW</b> BY  |  | C. Lewis-P. Dempsey   | 1/75-2/77                                 |
| <b>8. FINAL REVIEW</b> BY  |  | P. Dempsey  | 2/77                                      |
| <b>9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH</b> BY  |  | D. Brant  | 5/77                                      |
| <b>10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH</b> BY  |  | D. Brant  | 6/77                                      |
| <b>11. MAP REGISTERED - COASTAL SURVEY SECTION</b> BY  |  | J. P. Battley, Jr.  | 7-79                                      |

TP-00422

## COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

|  |            |                                |          |   |  |
|--|------------|--------------------------------|----------|---|--|
| CAMERA(S) RC-8<br>E, B, & K - 6" Focal Length        |            | TYPES OF PHOTOGRAPHY<br>LEGEND |          | TIME REFERENCE  |  |
| TIDE STAGE REFERENCE                                 |            | (C) <u>COLOR</u>               |          | ZONE  | <input checked="" type="checkbox"/> STANDARD |
| <input type="checkbox"/> PREDICTED TIDES             |            | (P) <u>PANCHROMATIC</u>        |          | Eastern   |  |
| <input type="checkbox"/> REFERENCE STATION RECORDS   |            | (I) <u>INFRARED</u>            |          | MERIDIAN  | <input type="checkbox"/> DAYLIGHT            |
| <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY |            |                                |          | 75th  |  |
| NUMBER AND TYPE                                      | DATE       | TIME                           | SCALE    | STAGE OF TIDE   |  |
| 71E(C)9537   | 8 Mar 71   | 1227                           | 1:30,000 | The stage of tide is in-applicable for the color photography. |  |
| 71E(C)9563-9565                                      | 8 Mar 71   | 1305                           | 1:30,000 |   |  |
| 71E(C)9585   | 8 Mar 71   | 1325                           | 1:30,000 |   |  |
| 73E(C)9040R  | 16 June 73 | 0840                           | 1:40,000 |   |  |
| 75B7973, 75, 77                                      | 24 Nov. 75 | 1005                           | 1:30,000 |   |  |
| 75B8016, 18, 20                                      | 24 Nov. 75 | 1020                           | 1:30,000 |   |  |
| 75B(C)8175, 77                                       | 24 Nov. 75 | 1140                           | 1:15,000 |   |  |
| 71K5847R   | 2 Mar. 71  | 1319-1325                      | 1:30,000 | Refer to 76-36B1 for tide information                         |  |
| 71K5817R-5820R                                       | 2 Mar. 71  | 1255                           | 1:30,000 |   |  |
| 71K5662R-5666R                                       | 24 Feb. 71 | 1258                           | 1:30,000 |   |  |

## 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 for interpreting culture features and compiling the limits of shoal and shallow areas for Nautical Charts. The 1973 color photography and the 1975 panchromatic photography was used to update culture shoreline.

Where the shoreline is obscured by vegetation such as mangrove, the apparent shoreline is mapped.

## 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-00420 | TP-00423 | TP-00424; TP-00425 | None |

## 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 - 00422

| LOCATION AND PHOTOGRAPHY | TIDE STATIONS<br>(In operation at time of photography) | STAGE OF TIDE | MEAN RANGE |
|--------------------------|--|---------------|------------|
| 71K5817R-5820R           | Miami, Biscayne Bay                                    | + 0.26 MHW    | 2.14'      |
| 71K5847R                 | Miami, Biscayne Bay                                    | + 0.15 MHW    | 2.14'      |
| 71K5662R-5666R           | Miami, Biscayne Bay                                    | - 0.06 MLW    | 2.14'      |

REMARKS:

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

TP-00422

## HISTORY OF FIELD OPERATIONS

1. ☒ FIELD INSPECTION OPERATION \* Mar. 1971  
Dec. 1975 ☒ FIELD EDIT OPERATION Aug. 1973

| OPERATION                           | NAME  | DATE                 |
|-------------------------------------|---|----------------------|
| 1. CHIEF OF FIELD PARTY             | R. R. Wagner  |                      |
| 2. HORIZONTAL CONTROL               | RECOVERED BY G. Jamerson<br>ESTABLISHED BY Inapplicable<br>PRE-MARKED OR IDENTIFIED BY Inapplicable   | 9/73                 |
| 3. VERTICAL CONTROL                 | RECOVERED BY R. R. Wagner<br>ESTABLISHED BY Inapplicable<br>XXXXXXXXXX IDENTIFIED BY R. R. Wagner   | 6/73<br>9/73         |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY G. Jamerson<br>LOCATED (Field Methods) BY R. R. Wagner<br>IDENTIFIED BY R. R. Wagner  | 9/73<br>9/73<br>9/73 |
| 5. GEOGRAPHIC NAMES INVESTIGATION   | TYPE OF INVESTIGATION<br><input type="checkbox"/> COMPLETE<br><input type="checkbox"/> SPECIFIC NAMES ONLY BY<br><input checked="" type="checkbox"/> NO INVESTIGATION |                      |
| 6. PHOTO INSPECTION                 | CLARIFICATION OF DETAILS BY R. R. Wagner  | 9/73                 |
| 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     |
|--------------|------------------------|--------------|-------------------------|
|              | Refer to field Reports | 71E9563      | D 269                   |
|              |                        | 71E9564      | B 243                   |
|              |                        | 71E9565      | N 1 (FGS), D 243, M 119 |
|              |                        | 71E9585      | MH 16 (USE), RIVET      |

3. PHOTO NUMBERS (Clarification of details) 71E9565, 71E9563, 71E9585, 73L3019 submitted with TP-00423, 71K5665R, 71K5664R, 71E9584 submitted with TP-00423

## 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Refer to Supplement 2.

| PHOTO NUMBER | OBJECT NAME  | PHOTO NUMBER | OBJECT NAME |
|--------------|--|--------------|-------------|
| 71E9563      | Miamarina North Pier Lt.<br>Miamarina South Pier Lt. |              |             |

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

## 7. SUPPLEMENTAL MAPS AND PLANS

General Highway Map Dade County, Revised 9/71 for Rd. numbers.

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

\* The field reports are bound with this Descriptive Report.

Sketchbook pages for aids.

## RECORD OF SURVEY USE

TP-00422

## I. MANUSCRIPT COPIES

| COMPILATION STAGES  |           |   | DATE MANUSCRIPT FORWARDED |               |
|---|-----------|---|---------------------------|---------------|
| DATA COMPILED   | DATE      | REMARKS   | MARINE CHARTS             | HYDRO SUPPORT |
| Original Compilation of Shoreline and Fore-shore Features | July 1973 | Map Class III<br>Horizontal Control adequate        |                           |               |
| Shoreline and Foreshore features revised from field edit  | Oct. 1973 | Manuscript not registered<br>See compilation report |                           |               |
| Revise compilation with Nov. 1975 photography             | Nov. 1976 | Class I   |                           |               |
|   |           |   |                           |               |

## II. LANDMARKS AND AIDS TO NAVIGATION

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

| NUMBER | CHART LETTER<br>NUMBER ASSIGNED | DATE<br>FORWARDED | REMARKS   |
|--------|---------------------------------|-------------------|---|
|        |                                 | 3/9/77            | 6 Digitized pages of form 76-40 have been forwarded to the Marine Chart Division as a final report. |
|        |                                 |                   |   |
|        |                                 |                   |   |
|        |                                 |                   |   |
|        |                                 |                   |   |
|        |                                 |                   |   |

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 3/9/773. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

## III. FEDERAL RECORDS CENTER DATA

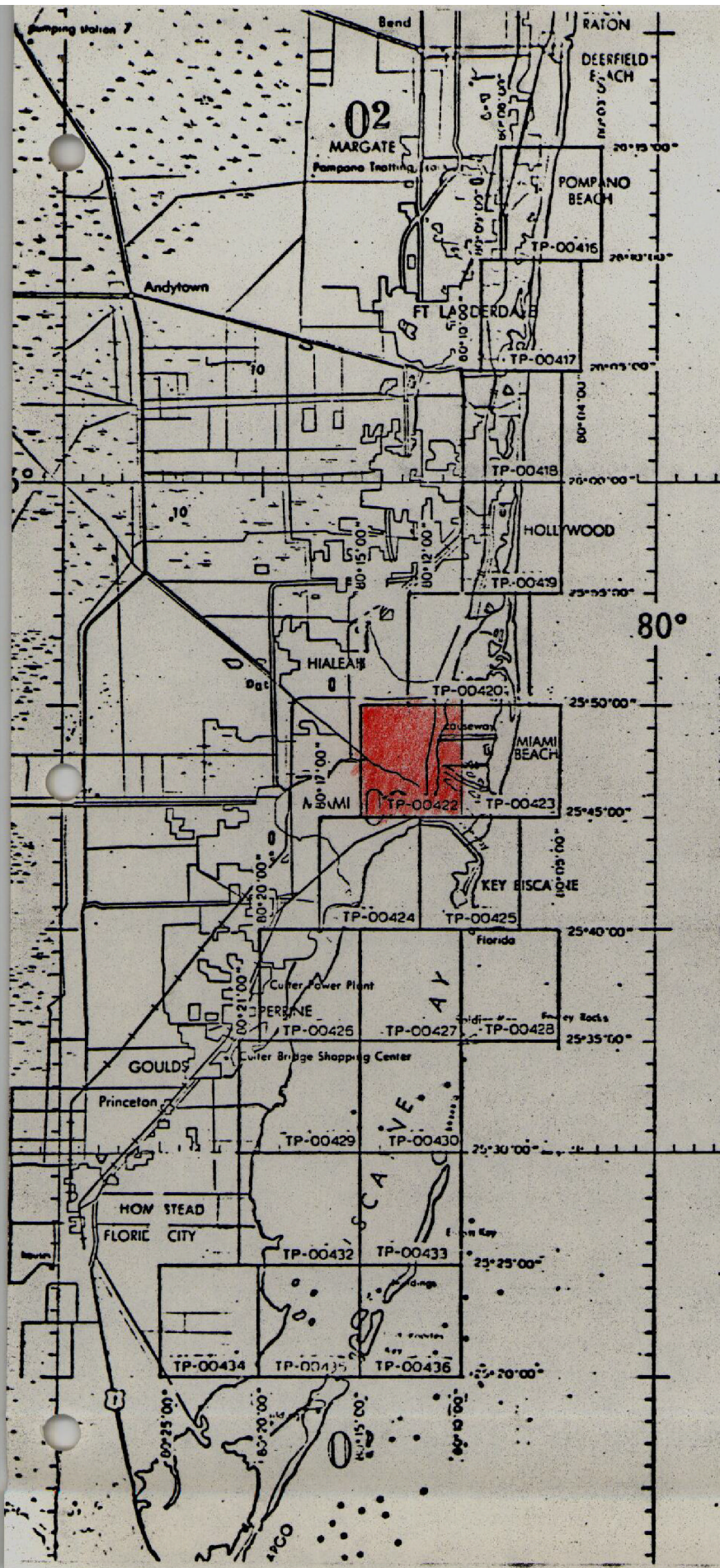
1. ☐ BRIDGING PHOTOGRAPHS; ☐ DUPLICATE BRIDGING REPORT; ☐ COMPUTER READOUTS.  
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.  
3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.  
ACCOUNT FOR EXCEPTIONS:

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<br>TP - _____ (2) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br>MAP CLASS<br><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<br>TP - _____ (3) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br>MAP CLASS<br><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<br>TP - _____ (4) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br>MAP CLASS<br><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-713  
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



7

SUMMARY  
for  
TP-00422

Coastal Zone Map TP-00422 is one of nineteen (19) 1:10,000 scale maps in job PH-7113. Maps TP-00416 through TP-00420 and TP-00422 through TP-00426 are published maps in three colors. The interior of these maps is shown with an orthophotomosaic. Maps TP-00427 through TP-00430 and TP-00432 through TP-00436 are mapped as shoreline type maps and will not be published. The interior of these shoreline type maps is limited to a narrow zone of planimetry usually back from the shoreline to and including the first road.

The original compilation of map TP-00422 was interrupted because of a new adjustment of horizontal control, poor quality of photography, and new construction in the area. A detailed account of these delays is outlined in the Compilation Report and Addendum to the Compilation Report.

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

The 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 with aerial photography taken in 1971, 1973, and 1975 on panchromatic, color, and black-and-white infrared film. The 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 methods using the STK stereo comparator.

The shoreline and alongshore details were compiled on both types of maps from tide-coordinated, black-and-white infrared photography using a B-8 stereoplotter and/or graphic methods. The 1975 panchromatic photography was used to update culture shoreline.

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



A registration copy of each type map is prepared. It shows additional offshore details such as shoal and shallow lines, useful to 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 and will be registered in the NOS Archives.

The following items for map TP-00422 will be registered in the NOS Archives:

1. A plastic copy of the published map
2. A stable base positive copy of the Registration Copy
3. A continuous tone negative of the orthophotomosaic
4. The Descriptive Report

All negatives are filed in the Reproduction Division.

All field records such as field edit sheets, discrepancy prints, field edit data, and control forms are filed in the National Archives.



FIELD REPORT PH 7113

I. HORIZONTAL CONTROL.

Seven control points were premarked for this project.

Control Pt. 1

DANIA 2 1934 was marked direct with array No. 1 and 3 wing panels.

DANIA RM 3 was marked direct with array No. 1 and no wing panels.

Control Pt. 2

CLUB 1934 was marked direct with array No. 1. No wing panels could be placed on the roof.

CLUB RM 1 is the center of a chimney. Form 152 was submitted for RM 1 in case the wind removed the panel for CLUB 1934.

Control Pt. 3

BASE (USE) 1934 marked direct with array No. 2 and two wing panels.

DINO 1967 marked direct with array No. 1 and one wing panel.

Control Pt. 4

CAPE FLORIDA OLD TOWER, FINIAL 1853 was identified by a Sub Pt. using array No. 1 and two wing panels.

Control Pt. 5

LIBRARY 1934 was marked direct with array No. 1 with one wing panel. The wingpanel is on a lower roof than the station.

Control Pt. 6

PAN AMERICAN 1935 was identified by Sub Points. Point A is marked by array No. 1 and no wing panel. Point B is the center of a shaft on the penthouse roof.

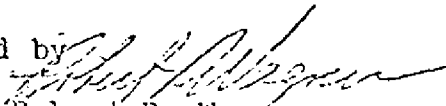
Control Pt. 7

NACO 1934 was identified by two sub points. Sub point A is marked by array No. 1 with one wing panel. Sub Point B is marked by array No. 2 and two wing panels.

II. Foreshore Profiles

Not required.

Submitted by

  
Robert R. Wagner  
Chief, Photo Party 66  
12/01/75



## 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.

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

HALLAND 1928 was marked by a painted target substation placed on the light brown sand of a public beach. He 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".

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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) 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 with 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 NORTH 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 an 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, USCS 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

Photogrammetric Plot Report  
Miami Harbor Area  
Fort Lauderdale to Key Biscayne, Florida  
PH-7113  
June 30, 1976

21. Area Covered

This report covers the area along the east coast of Florida from Ft. Lauderdale to Key Biscayne, and is covered by six 1:10,000 scale sheets TP-00419, TP-00420, and TP-00422 thru TP-00425 and Chart 547.

22. Method

Two strips of 1:30,000 scale black-and-white photography were bridged by analytic aerotriangulation methods to control two strips of 1:10,000 and four strips of 1:15,000 scale color photography. The two strips of 1:30,000 scale black-and-white photography were controlled by field identified control paneled in 1975. Old control, which was office identified, was floated for checks. Ties were made between all strips. The attached sketch shows the flight lines of all the strips and the placement of field identified control. This job was adjusted on the old control.

Positions were determined for field identified, nonfloating aids to navigation. Positions for key landmarks (determined by previous surveys) were also checked and positioned during bridging operations.

Common points were transferred from the previous survey to this survey by the compilation section. Strip number one checked in excellent with the previous survey but strip two in the adjustment ranged from 0 to 10 feet in checking with this survey. The compilation section also tied the two 1:60,000 scale photographs to the bridging photography. Data were furnished to the compilation section for plotting in the Florida East Zone.

23. Adequacy of Control

The control was adequate.

24. Supplemental Data

USCS quadrangles were used to provide vertical control for the adjustment.

25. Photography

The photography was adequate as to coverage and overlap, and definition for bridging operations. It may be necessary for the compilation section to have the photo lab remake some of the color photography because of its poor quality.

Respectfully submitted,

*Ivey O. Raborn, Jr.*

Ivey O. Raborn, Jr.

Approved and Forwarded:

*John D. Perrow, Jr.*

John D. Perrow, Jr.  
Chief, Aerotriangulation Section



LIST AND ACCURACY OF CONTROL USED IN STRIP ADJUSTMENT

|          | <u>POINT</u> | <u>X - Error</u> | <u>Y - Error</u> |
|----------|--------------|------------------|------------------|
| STRIP #1 | 103101       | - 0.7            | 0                |
|          | 103102       | - 0.4            | - 0.5            |
|          | 106110       | + 2.0            | + 2.0            |
|          | 108101       | + 1.0            | - 0.6            |
|          | 108102       | + 1.7            | - 1.0            |
|          | 111111       | + 2.5            | - 1.3            |
|          | 111112       | + 2.8            | + 1.3            |
|          | 111113       | 0                | + 2.0            |
|          | 111114       | 0                | + 0.5            |
|          | 111101       | - 0.6            | + 0.8            |
|          | 111110       | 0                | + 1.3            |
|          | 111115       | - 1.0            | + 2.9            |
|          | 111116       | 0                | - 0.8            |
|          | 115100       | 0                | - 0.3            |
|          | 115101       | 0                | - 1.2            |
|          | 115102       | + 1.6            | + 2.0            |
| STRIP #2 | 202100       | 0                | 0                |
|          | 202101       | - 1.0            | + 1.0            |
|          | 202100       | - 0.7            | 0                |
|          | 202101       | - 1.2            | + 0.7            |
|          | 205110       | 0                | + 1.0            |
|          | 115100       | - 0.8            | - 0.4            |
|          | 115101       | 0                | - 0.9            |
|          | 115102       | + 1.0            | + 0.5            |
|          | 210110       | + 2.6            | + 1.4            |
|          | 502110       | - 5.0            | + 3.7            |
|          | 405110       | + 0.5            | - 0.7            |
|          | 406110       | + 1.8            | - 1.2            |
|          | 407100       | - 0.5            | + 0.3            |
|          | 407110       | 0                | + 0.4            |
|          | 408100       | - 1.0            | + 0.5            |
|          | 508110       | + 1.5            | - 1.0            |
|          | 407111       | 0                | - 0.4            |
|          | 220101       | + 0.3            | - 0.3            |

Photogrammetric Plot Report  
Miami to Mangrove Point, Florida  
October 1973

21. Area Covered

The area covered by this report is along the west side of Biscayne Bay from Miami to Mangrove Point. This area is covered by nine 1:10,000 scale sheets TP-00420, TP-00422 thru TP-00424, TP-00426, TP-00429, TP-00432, TP-00434, and TP-00435.

22. Method

Two strips of 1:40,000 scale false color photography were bridged by aerotriangulation methods. The strips were controlled by transferred targets and pass points from color photography at different scales. The attached sketch shows the flight line of the photography and the placement of control used in this adjustment. Data for plotting the points were furnished to the Compilation Section.

23. Adequacy of Control

The control was adequate. Stations Point View SS #1 and Causeway could not be used in the adjustment because they did not meet National Map Accuracy Standards. This is the result of trying to transfer the stations from different scale and different year photography.

24. Supplemental Data

USGS quadrangles were used to provide vertical control for the adjustment.

25. Photography

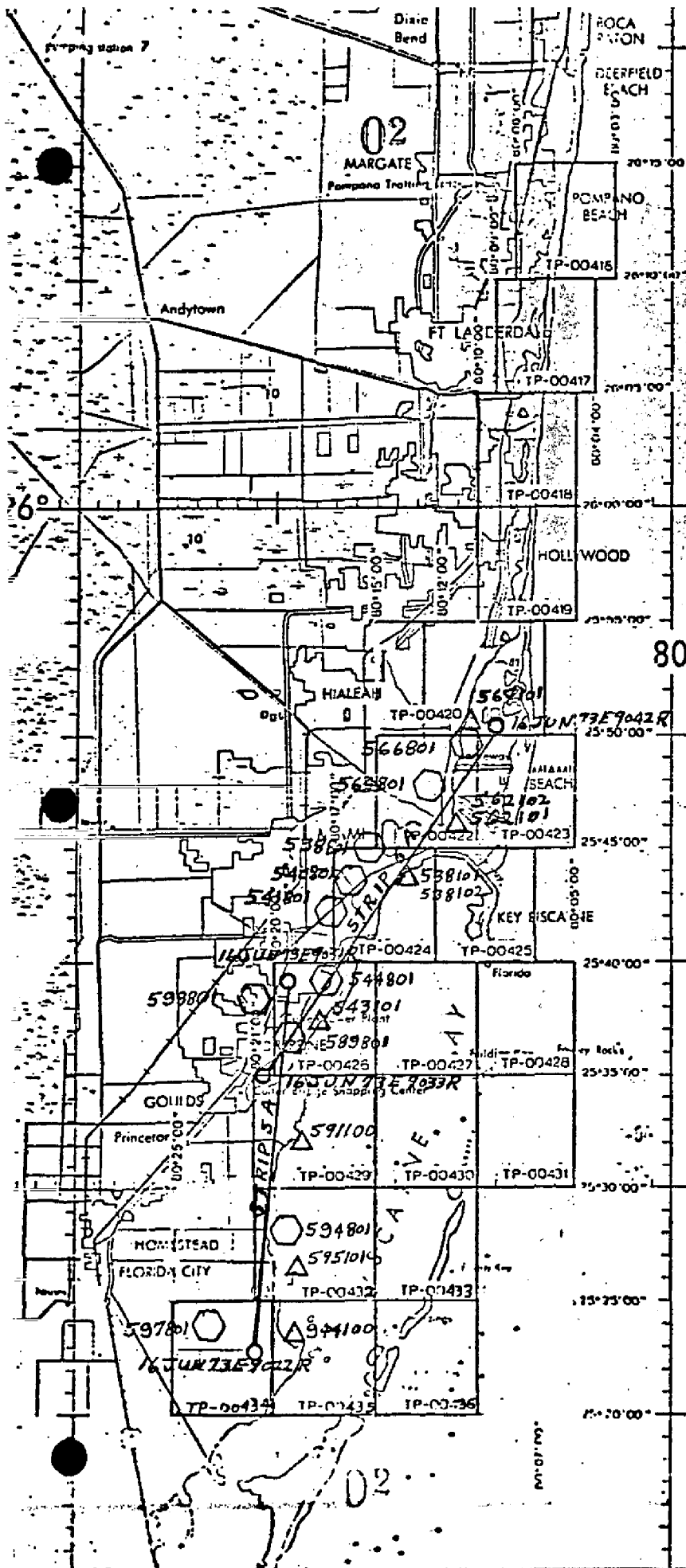
The photography was adequate.

Respectfully submitted,

*Ivey O. Raborn*  
Ivey O. Raborn

Approved and Forwarded:

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



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

| Sheet No. | Sq. Miles |
|-----------|-----------|
| TP-00416  | 3         |
| TP-00417  | 3         |
| TP-00418  | 3         |
| TP-00419  | 8         |
| TP-00420  | 2         |
| TP-00     |           |
| TP-00422  | 4         |
| TP-00423  | 6         |
| TP-00424  | 4         |
| TP-00425  | 6         |
| TP-00426  |           |
| TP-00427  |           |
| TP-00428  |           |
| TP-00429  | 4         |
| TP-00430  | 2         |
| TP-00431  | 2         |
| TP-00432  | 1         |
| TP-00433  | 3         |
| TP-00434  | 1         |
| TP-00435  |           |
| TP-00436  | 6         |
| TP-00437  | 4         |
| TP-00438  |           |

Total 72

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. The 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.

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,<br>1849                                     | -0.158           | 0.033  |
| 9.  | (201101) | Cape Florida Old Tower<br>Finial, subpoint A                         | -0.156           | 0.002  |
| 10. | (538102) | Pan American, 1935,<br>Target 2                                      | 0.000            | 0.000  |
| 11. | (534101) | Naco 1934, subpoint A  | 0.000            | 0.000  |
| 12. | (544801) | Tie point from strip #5<br>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,<br>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-<br>station                                   | -0.215           | -0.201 |
| 19. | (878101) | Irving, 1971, substation   | 0.687            | -0.080 |
| 20. | (875102) | Mangrove (USE), 1930,<br>subpoint B                                  | -0.826           | 0.125  |
| 21. | (872101) | Sands Cut RM 2, 1849-1947<br>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<br>substation **                             |                  |        |
| 28. | (923101) | Sub Station Key Largo Cable<br>Visions Inc., Taller Mast,<br>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

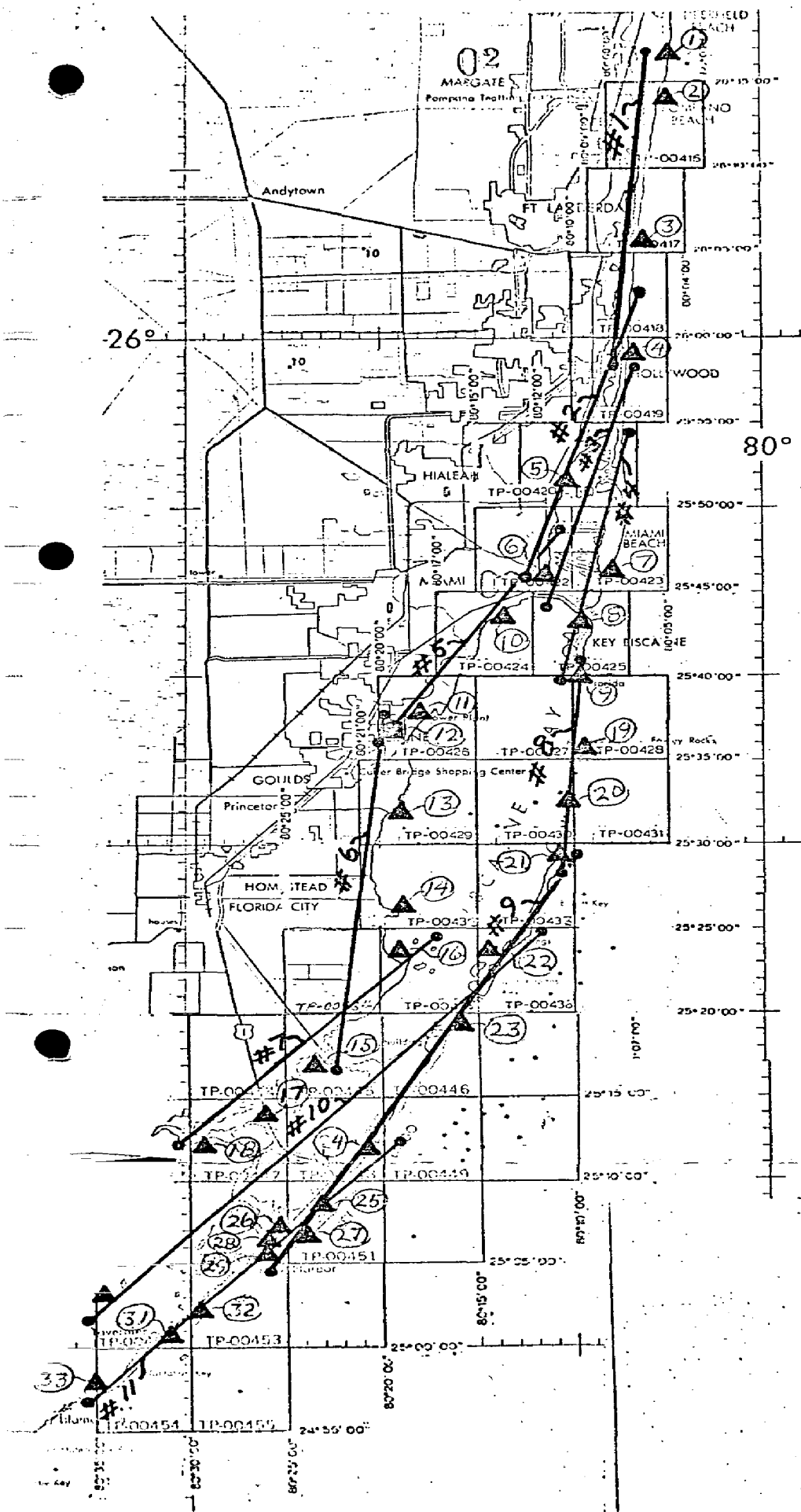
## INFRA-RED CONTACT PRINTS

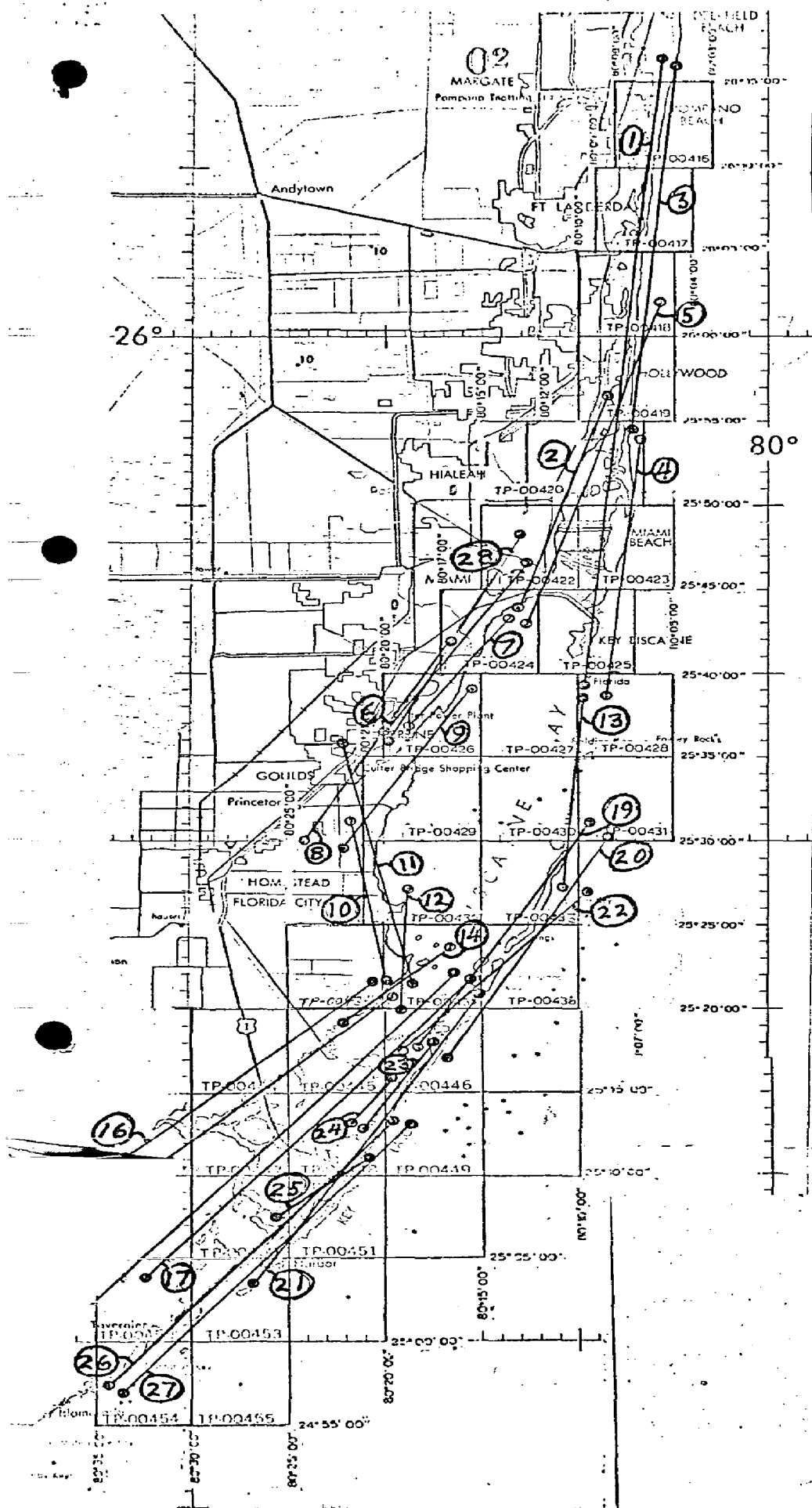
1. 71K 5632R - 5660R MLW
2. 71K 5662R - 5672R MLW
3. 71K 5750R - 5766R MHW
4. 71K 5795R - 5806R MHW
5. 71K 5815R - 5829R MHW
6. 71L 8501R - 8509R MLW
7. 71L 8512R - 8520R MLW
8. 71L 8571R - 8580R MHW
9. 71L 8523R - 8530R MLW
10. 71L 8783R - 8791R MHW
11. 71L 8584R - 8593R MHW
12. 71L 8532R - 8537R MLW
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

JOB PH-7113  
AND  
JOB PH-7119

HILLSBORO INLET  
TO  
PLANTATION KEY,  
FLORIDA

CONTROL STATIONS  
USED IN THE  
ADJUSTMENTS





JOB PH-7113  
AND  
JOB PH-7119

HILLSBORO INLET  
TO  
PLANTATION KEY,  
FLORIDA

INFRA-RED CONTACT  
PRINTS RATIOED FOR  
COMPILATION

## FLORIDA- NOAA Coastal Boundary Mapping Program

Horizontal Control

Map TP-00422

| Station                                      | NOS Geodetic Data Reference for<br>Description, Positions, Coordinates<br>and Azimuths  |
|--|---|
| CONGRESS, 1934                               | Book 423, P9, 18 G.P.-Fla. Vol. 1, P. 136, P.C. Fla. E Zone, P. 13  |
| FIRE, 1935                                   | Book 423, P8, G.P.-Fla. Vol. 1, P. 451, P.C. Fla. E Zone, P. 118  |
| MIAMI-BEVERLY TERRACE HOTEL, CUPOLA, 1935    | Book 423, P8, 21 G.P.-Fla. Vol. 1, P. 463, P.C. Fla. E Zone, P. 122 (Now the United Methodist Church Retirement Home Day Care Center) |
| MIAMI, CITY ICE COMPANY ALUMINUM STACK, 1935 | Book 423, P12, G.P.-Fla. Vol. 1, P. 461, P.C. Fla. E Zone, P. 122 (Now the National Brewery)  |
| MIAMI, COURTHOUSE, 1928                      | Florida Vol. II G.P. & P.C. Page 563  |
| MIAMI EVERGLADES HOTEL TOWER, 1928           | Book 423, P10, G.P.-Fla. Vol. 1, P. 380, P.C. Fla. E Zone, P. 97  |
| MIAMI NEWS TOWER, 1928                       | Book 423, P9, 26 G.P.-Fla. Vol. 1, P. 456, P.C. Fla. E Zone, P. 129 (Now the Freedom Tower, Cuban Refugee Center)                     |
| MIAMI - ROOSEVELT HOTEL YELLOW CHIMNEY, 1935 | Book 423, P9, 21 G.P.-Fla. Vol. 1, P. 462, P.C. Fla. E Zone, P. 122 (Now the Lindsey Hopkins Vocational Educ. Center)                 |
| MIAMI, SEARS ROEBUCK CO TOWER, 1934          | Book 423, P9, 21 G.P.-Fla. Vol. 1, P. 456, P.C. Fla. E Zone, P. 120   |
| MIAMI, TEMPLE BAPTIST CHURCH, DOME, 1935     | Book 423, P12, 22 G.P.-Fla. Vol. 1, P. 460, P.C. Fla. E Zone, P. 121  |
| MIAMI HIGH SCHOOL EAST FLAGPOLE, 1935        |   |
| LIBRARY, 1934                                |   |



## FLORIDA - NOAA Coastal Boundary Mapping Program

Vertical Control - Geodetic

Map TP - 00422

| Geodetic<br>Bench Mark | Elevations (feet) | Condensed Description  |
|------------------------|-------------------|--|
|                        | SLD<br>1929       |  |
| N 1 (FGS) X            |                   | Fla. Geod. Sur. disk stamped N 1; 1.5 ft. W of S-bound lane centerline, 0.2 ft. below level of Blvd.   |
| RIVET X                |                   | A 1 in. brass rivet; 6.2 ft. W of W curb, 3.2 ft. S of N end of guard rail.  |
| MH 16 (USE) X          |                   | USE disk stamped MH 16 1962 JAX. FLA; set in top of bulkhead, 6 ft. W of E end of bkhd.  |
| M 119 X                |                   | C&GS disk stamped M 119 1965; at the W edge of sidewalk, 5.2 ft. W of W curb, 6.5 ft. E-SE of 3 in. metal post supporting traffic control box. Note: 119 is the only thing readable on disk. |
| B 243 X                |                   | C&GS disk stamped B 243 1965; set in top & center of a 4x4 ft. concrete sq. block, 42 ft. NW of N corner of 3 story warehouse.   |
| D 243 X                |                   | C&GS disk stamped D 243 1965; 25.5 ft. W of centerline, 4.8 ft. N of fence post.   |
| D 269 X                |                   | C&GS disk stamped D 269 1966; set vertically in SW face of SW leg of 1st concrete pier NW of the track.  |

## COMPILATION REPORT

TP-00422

JULY 1973

This report will detail the methods used to compile TP-00422.

Due to the unusual problems encountered in the bridging and compilation of this map, an accounting is submitted with this report for the record.

Bridging photography and tide-coordinated infrared photography was originally flown in 1971. An orthophotomosaic was prepared from the color photography taken in March 1971 and a manuscript was compiled in July 1973 utilizing all 1971 photography available. During compilation, a strip of photography was flown on the 16th of June 1973. This was processed and one photo, 73-E(C) 9040, was used to update the compilation and mosaic as discussed in item 35 of this report. As this photography was color infrared, difficulty was encountered in achieving a tone match with the 1971 photography.

The manuscript was sent for field edit in July 1973 and returned with edit in September 1973.

All progress on PH-7113 was halted, pending a decision on a datum adjustment of horizontal control by Geodesy (see plot report dated July 1974).

With this delay, it was apparent that cultural shoreline changes and the relocation of fixed aids to navigation might make this map manuscript obsolete before it could be published.

The following report is for the compilation that was completed in July 1973.

### 31. Delineation

Features delineated were the MHWL, MLWL, identifiable landmarks and aids, applicable foreshore and alongshore man made features. Features behind the shoreline are depicted by the orthophotomosaic. Sufficient detail was compiled from the bridging photography to control the ratio infrared MHW and MLW tide-coordinated photography.

Due to the importance of proper interpretation and symbolization, all shoreline is to be field edited.

### 32. Control

Horizontal control was adequate. (See Photogrammetric Plot Report.)

33. Supplemental Data: None

34. Contours and Drainage

Contours are inapplicable. Drainage is depicted by the orthophoto-mosaic.

35. Shoreline and Alongshore Details

The Biscayne Bay shoreline and offshore islands were delineated from office interpretation of the tide-coordinated infrared MHWL and MLWL ratio photographs listed on Compilation Sources Form 76-36b. In areas where the shoreline was difficult to interpret, contact color photographs 71-E-9563 through 9565 were viewed stereoscopically, for verification of compiled features.

The orthophotomosaic was updated at Claughton Island (25°46'00" and 80°11'00") and on the bulkhead shoreline SW of Claughton Island (25°45'10" and 80°11'45") using 1973 photography. Photograph 73-E-9040R was rectified, and the appropriate areas spliced into the continual tone, and a new half tone made. This process was necessary to depict a newly constructed bulkhead shoreline on Claughton Island, a fixed bridge connecting the island with the mainland to the west, (Brickell Park) and two newly constructed bulkheads and filled-in land (south-west of Claughton Island).

36. Offshore Details

Not applicable.

37. Landmarks and Aids to Navigation

Seven landmarks were plotted from Geodetic control. Additional landmarks: landmark buildings, and all aids to navigation will be located during field edit.

38. Control for Future Surveys: None

39. Junctions

North, TP-00420; south, TP-00424 and TP-00425; east, TP-00423; west, no contemporary survey.

40. Horizontal and Vertical Accuracy

Complies with the accuracy requirements for the Florida Coastal Zone Mapping Program.

41. thru 45. Inapplicable.

46. Comparison with Existing Maps

Comparison was made with the following USGS quadrangle:

Miami, Florida, scale 1:24,000, 1962 photo revised 1969.

Significant differences were found at Claughton Island (previously known as Burlingame I.)

47. Comparison with Nautical Charts

Comparison was made with the following:

847-SC, scale 1:40,000, 11th Edition, dated August 1972

547, scale 1:10,000, 13th Edition, dated November 1972

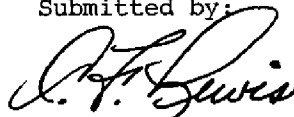
NC-1248, scale 1:80,000, 14th Edition, dated October 1972.

Significant differences were noted at Claughton I. on Chart 847-SC. (Chart 547 showed the correct delineation of Claughton I., although the bridge to the mainland, Brickell Park, was shown to be under construction.)

Items to be applied to nautical charts immediately: Those changes made on the orthophotomosaic, previously discussed under Item 35.

Items to be carried forward: None.

Submitted by:

  
C. F. Lewis

Approved and forwarded by:



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

TP-00422  
Addendum to Compilation Report  
February 1977

TP-00422 is one of six maps (TP-00419, 420 and TP-00422 thru 425), in PH-7113 that upon examination of the half tone, were rejected because of poor image and tonal quality of the photography used to prepare the orthophotomosaics. Fourteen other maps in the project were approved.

As these six maps cover an area of heavy marine activity, (North Miami Beach, south to Key Biscayne including Miami Harbor), it was decided that they should have uniformly the best image quality possible. In addition, due to a large amount of construction throughout the area, the need for contemporary photography was evident.

Consequently, photography was flown for the entire area in November 1975 and bridged in June 1976 (see Plot Report). Prior to bridging, 132 aids to navigation were photoidentified in the field on the 1975 photography (see field report dated 3/30/76). Their positions were determined during bridging and with the addition of 11 other aids located by sextant fixes, good positioning was achieved for aids on the six maps. New 76-40 forms will be submitted.

With the acquisition of the 1975 panchromatic photography a new orthophotomosaic was prepared. The delineation of the shoreline and alongshore features, as originally compiled, had to be revised for various reasons and is herein discussed for TP-00422.

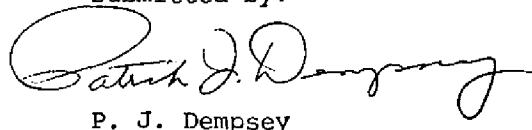
The lines of mean high water and mean low water were compiled from tide-coordinated, black-and-white, infrared aerial photographs taken in February and March 1971. Sufficient detail from the 1975 bridging photography was compiled to control the infrared photography.

The original compilation report outlines the methods used, including the use of 1973 color photography to update man made changes in the shoreline. (See item 35 of original report.)

The interior waters of this map continued to show man made changes to cultural shoreline that occurred with the 1973 photography.

As the field edit was completed in September 1973 using the 1971 and 1973 photography, some field classification of the type of shoreline had to be revised by office interpretation of the November 1975 photography. This was exclusively the changing of "fast" shoreline (MHWL), to bulkheads or man made shoreline for shoreline bordering Biscayne Bay.

Submitted by:

  
P. J. Dempsey

Field Edit Report, Map TP-00422, Job PH-7113

51. METHODS

The shorelines of Biscayne Bay and Miami River were verified visually from a small boat while cruising just offshore. Notes regarding apparent and fast shoreline, piers and other shoreline features were made on the photographs. The unlabeled areas are bulkheaded since this was the prominent feature.

In the area from Miami River, south, notes will be found on the discrepancy print referring to the 1973 photographs. A call to the Rockville office stated that these features are on the 1973 photographs and to refer to them as such. The 1973 photographs were not available for field use.

Six landmarks are recommended for charting. One charted landmark is recommended for deletion because of the poor condition of the tank. Forms 76-40 are submitted.

Forms 76-40 are submitted for 48 nonfloating aids. Three of the aids were not in place at the time of survey. Fourty-three aids were located by sextant or theodolite. Two aids were photo-identified.

All bench marks were searched for as stated in the instruction, before the instructions were amended, and reported on form 76-89 and 685A. Seven bench marks were identified.

One tide gage, Miami Biscayne Bay, was identified on photograph 71E9585.

All triangulation stations plotted on the manuscript were searched for. Forms 526 are submitted for stations lost or destroyed, and for stations whose descriptions required modification.

A General Highway Map Dade County, Revised 9/71 obtained from the Florida State Road Department is submitted for road numbers for TP-00422 and TP-00423.

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

The low water was verified when the tide ranged from 0.3 to 0.6 above mean low water <sup>at</sup> the Miami, Biscayne Bay, gage bench mark. Small changes and additions were made.

52. ADEQUACY OF COMPILATION

Adequate after application of field edit.

53. MAP ACCURACY

No test required.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Not required.

Submitted 9/28/73

  
Robert R. Wagner  
Chief, Photo Party 60

## REPORT JOB PH 7113, SUPPLEMENT 2

The field work was done from March 22 to March 26, 1976. The location of fixed aids were from approx.  $25^{\circ} 44'$  to  $25^{\circ} 57'$  with 143 aids in this area. One hundred and thirty two were photo identified, ten were located by fixes and one aid Biscayne Bay Daybn 46 did not appear on the photographs and was not in place at the time of field inspection. Biscayne Bay Daybn 44 was not in place at the time of field work, but was at the date of photographs. The aids located by fixes could not be seen on the photographs are were believed to have been moved. In addition some signs, markers and piles that are not in the light list were also identified. Apeco Marina Channel Daybn 7 does not have a name on the pile, but has a range daymark as shown in the light list. Biscayne Bay Daybn 8 was laying on its side and also marked with a bouy. The daybn can be place in its former position. Forms 76-40 are submitted for the aids and the date of location is the date of the photographs for all aids identified. This was done because with the aids being in the water it is next to impossible to tell if they have been moved. With the exception of Miamarian North and South Lights (pier), the aids were not pricked. The prick holes would destroy the images. Just the number of the daybn appears along side of the images of the daybn and Lt. with the number appears along side of the Lights.

One building on 75B8183 is recommended for charting due to its heigh.

Cdr. Reinke, NOAA Ship Base requested three points for location in the bridge. They are on photo 75B8188 and forms 152 is submitted for Sb 1, SB 2 and SB 3.

It was noted that wood piles with white bird dropping showed up better on the photos when the camera was in line with the sun. This gave a good reflected image on the photograph.

Submitted By

*Robert R. Wagner*  
Robert R. Wagner  
Chief, Photo Party 66  
3/30/76



Review Report  
Coastal Zone Map TP-00422  
May 1979

61. General

The numerous delays in the compilation of Coastal Zone Map TP-00419, TP-00420, and TP-00422 thru TP-00426 are adequately explained in the Compilation Reports.

The Class III map for Coastal Zone Map TP-00422 was inspected prior to field edit. This inspection comprised an examination of the manuscript, photography discrepancy print, and report.

The review for this map consisted of an examination of the Class I manuscript, the field edit and its application, the reproduction negatives, and descriptive report.

The proof copy was edited by the Quality Control Group prior to publication. This edit comprised a thorough inspection of map details to verify the accuracy 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 Geological Survey map and NOS charts:

- Miami, Florida, 7.5 minutes, 1962 photo revised 1969
- Significant differences covered in compilation report.
- NOS chart 11467, 17th Edition, 7/8/78 - 1:40,000 scale
- NOS chart 11468, 20th Edition, 3/17/79 - 1:10,000 scale

Coastal Zone Map TP-00425 shows no piling offshore from bulkhead.

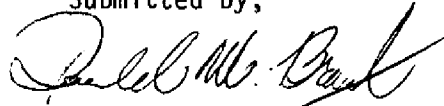
The other significant differences are covered in the Compilation Report.

63. thru 65. - Inapplicable

66. Adequacy of Results and Future Surveys


Coastal Zone Map TP-00422 complies with the instructions for NOS Cooperative Coastal Boundary Mapping, Job PH-7000 and the National Standards of Map Accuracy.

Submitted by,

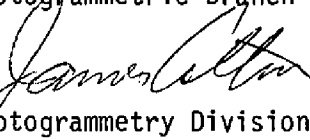


Donald M. Brant

Approved and Forwarded:



Chief, Photogrammetric Branch



Chief, Photogrammetry Division

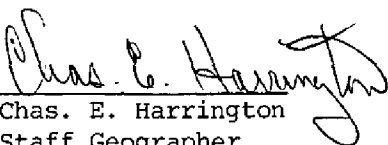
April 11, 1977

GEOGRAPHIC NAMES  
FINAL NAME SHEETS  
PH-7013 (Florida)

TP-00422

|                         |                              |
|-------------------------|------------------------------|
| Allapattah              | Point View                   |
| Bay Point               | Port of Miami (Dodge Island) |
| Bayshore                | Sabal Lake                   |
| Biscayne Bay            | San Marco Island             |
| Biscayne Island         | Seaboard Coast Line (RR)     |
| Brickell Point          | Seybold Canal                |
| Buena Vista             | Shenandoah                   |
| Claughton Island        | Venetian Islands             |
| Edison Center           | Wagner Creek                 |
| Florida East Coast (RR) | Watson Park                  |
| Lemon City              |                              |
| Miami                   |                              |
| Miami River             |                              |
| Palm Island             |                              |

Prepared by:

  
Chas. E. Harrington  
Staff Geographer





\* SVY IP-00422 \* RPT UNIT CMD ROCKVILLE, MD. \* PAGE 3 OF 6 \*  
\* JOB PH-7113 \* NONFLOATING AIDS FOR CHARTS \* STATE FLORIDA \*  
\* PRJ 833205 \* TO BE CHARTED \* LOCALITY MIAMI \* ORIGINATING ACTIVITY \*  
\* DFN NA 1927 \* DATE 05/16/77 \* COMPILATION \*  
\* THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS \*

\* CHARTING\* RECORD REASON FOR DELETION \* POSITION CODES\* METHOD AND DATE \*  
\* NAME \* PUT TRIANGULATION NAMES IN ( ) \* LATITUDE DM G-C \* OF LOCATION \* CHARTS \*  
\* \* \* LONGITUDE DP SEQ \* OFFICE \* FIELD \* AFFECTED \*

|           |               |          |           |              |           |
|-----------|---------------|----------|-----------|--------------|-----------|
| * LIGHT * | * 25 46 23.51 | * 723.5  | * NOT *   | * P-5        | * 11451 * |
| * 55 *    | * 80 10 59.24 | * 1650.7 | * DGT2D * | * 11/24/75 * | * 11467 * |
| * DYBN *  | * 25 46 14.59 | * 449.0  | * NOT *   | * 75BC8175 * | * 11468 * |
| * 1 *     | * 80 11 03.79 | * 105.6  | * DGT2D * | * DITTO *    | * DITTO * |
| * DYBN *  | * 25 46 16.52 | * 508.4  | * NOT *   | * P-5        | * 11451 * |
| * 57 *    | * 80 10 55.91 | * 1597.9 | * DGT2D * | * 11/24/75 * | * DITTO * |
| * LIGHT * | * 25 46 11.72 | * 360.6  | * NOT *   | * 75BC8187 * | * DITTO * |
| * 59 *    | * 80 10 55.18 | * 1537.6 | * DGT2D * | * DITTO *    | * DITTO * |
| * DYBN *  | * 25 45 54.16 | * 1666.6 | * NOT *   | * P-5        | * 11451 * |
| * 61 *    | * 80 10 58.53 | * 1631.0 | * DGT2D * | * 11/24/75 * | * DITTO * |
| * DYBN *  | * 25 45 45.32 | * 1394.6 | * NOT *   | * 75BC8177 * | * 11451 * |
| * 1 *     | * 80 11 07.90 | * 220.1  | * DGT2D * | * P-5        | * 11451 * |
| * DYBN *  | * 25 45 46.45 | * 1429.4 | * NOT *   | * 11/24/75 * | * DITTO * |
| * 2 *     | * 80 11 05.75 | * 160.2  | * DGT2D * | * 75BC8178 * | * DITTO * |
| * DYBN *  | * 25 46 02.40 | * 73.9   | * NOT *   | * DITTO *    | * DITTO * |
| * 3 *     | * 80 11 16.71 | * 465.6  | * DGT2D * | * P-5        | * 11451 * |
| * LIGHT * | * 25 45 46.61 | * 1249.7 | * NOT *   | * 11/24/75 * | * DITTO * |
| * 63 *    | * 80 11 04.31 | * 120.1  | * DGT2D * | * P-5        | * 11451 * |
| * LIGHT * | * 25 45 35.82 | * 1102.3 | * NOT *   | * 11/24/75 * | * DITTO * |
| * 64 *    | * 80 11 07.20 | * 200.6  | * DGT2D * | * 75BC8178 * | * DITTO * |

\* TYPE OF ACTION \* NAMES OF RESPONSIBLE PERSONNEL \* ORIGINATOR \*

\* \* \* \* \*

POSITIONS DETERMINED AND/OR VERIFIED BY FIELD AND OFFICE ACTIVITIES

ROBERT R. WAGNER  
JOHN W. MCCLURE  
N/A  
JAMES H. TAYLOR

\* FIELD REPRESENTATIVE  
\* OFFICE COMPILER  
\* DIGITIZER  
\* DATA PROCESSER \*

| SVY  | TP-00422                         | * 3PT UNIV                    | CMD ROCKVILLE, MD. | * PAGE   | 4 OF 6            | * ORIGINATING ACTIVITY* | * COMPILATION |
|--|----------------------------------|-------------------------------|--------------------|----------|-------------------|-------------------------|---------------|
| * JOB  | PH-7113                          | * NONFLOATING AIDS FOR CHARTS | * STATE FLORIDA    | * DATE   | 05/16/77          | * ORIGINATING ACTIVITY* | * COMPILATION |
| * PRJ  | 033205                           | * TO BE CHARTED               | * LOCALITY MIAMI   |          |                   |                         |               |
| * DTH  | NA 1927                          |                               |                    |          |                   |                         |               |
| THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS |                                  |                               |                    |          |                   |                         |               |
| * CHARTING*  | RECORD REASON FOR OMISSION       | * DESCRIPTION                 | * POSITION         | * CODES* | * METHOD AND DATE | * CHARTS                | * CHARTS      |
| NAME   | * PUT TRIANGULATION NAMES IN ( ) | * LATITUDE                    | DM                 | * C-C    | * OF LOCATION     | * FIELD                 | * AFFECTED*   |
|  |                                  | * LONGITUDE                   | DP                 | * SEQ    | * OFFICE          |                         |               |
| BISCAYNE BAY   |                                  |                               |                    |          |                   |                         |               |
| DYBN   | * 25 45 24.03                    | 739.5                         | NOT *              |          | P-5               | 11451                   | *             |
| 65   | * 80 11 03.50                    | 97.5                          | DGT2D*             |          | 11/24/75          | 11467                   | *             |
| DITTO  |                                  |                               |                    |          |                   |                         |               |
| LIGHT  | * 25 45 08.49                    | 260.9                         | NOT *              |          | 75BC8178          | 11468                   | *             |
| 67   | * 80 11 03.00                    | 83.6                          | DGT2D*             |          | DITTO             | DITTO                   | *             |
| MIAMI HARBOR   |                                  |                               |                    |          |                   |                         |               |
| MIAMI MAIN CHANNEL   |                                  |                               |                    |          |                   |                         |               |
| LIGHT  | * 25 47 00.80                    | 24.6                          | NOT *              |          | P-5               | DITTO                   | *             |
| 22   | * 80 10 46.74                    | 1302.3                        | DGT2D*             |          | 11/24/75          | DITTO                   | *             |
| MUNICIPAL WHARF  |                                  |                               |                    |          |                   |                         |               |
| DYBN   | * 25 47 01.62                    | 49.9                          | NOT *              |          | 75BC8173          | DITTO                   | *             |
| 1  | * 80 10 45.03                    | 1254.6                        | DGT2D*             |          | DITTO             | DITTO                   | *             |
| DITTO  |                                  |                               |                    |          |                   |                         |               |
| DYBN   | * 25 47 06.41                    | 258.8                         | NOT *              |          | DITTO             | DITTO                   | *             |
| 3  | * 80 10 46.91                    | 1307.0                        | DGT2D*             |          | DITTO             | DITTO                   | *             |
| FISHERMANS CHANNEL   |                                  |                               |                    |          |                   |                         |               |
| DYBN   | * 25 45 56.08                    | 1725.7                        | NOT *              |          | P-5               | DITTO                   | *             |
| 8  | * 80 10 00.01                    | .3                            | DGT2D*             |          | 11/22/75          | DITTO                   | *             |
| DITTO  |                                  |                               |                    |          |                   |                         |               |
| DYBN   | * 25 45 54.31                    | 1671.2                        | NOT *              |          | 75BC7927          | DITTO                   | *             |
| 2  | * 80 10 09.86                    | 274.8                         | DGT2D*             |          | P-L-4-8           | DITTO                   | *             |
| DITTO  |                                  |                               |                    |          |                   |                         |               |
| DYBN   | * 25 45 55.39                    | 1704.5                        | NOT *              |          | 03/25/76          | DITTO                   | *             |
| 11   | * 80 10 12.34                    | 343.9                         | DGT2D*             |          | P-5               | DITTO                   | *             |
| DITTO  |                                  |                               |                    |          |                   |                         |               |
| DYBN   | * 25 46 03.16                    | 97.2                          | NOT *              |          | 11/24/75          | DITTO                   | *             |
| 12   | * 80 10 24.18                    | 673.8                         | DGT2D*             |          | 75BC8189          | DITTO                   | *             |

| TYPE OF ACTION       | * NAMES OF RESPONSIBLE PERSONNEL | * ORIGINATOR         |
|----------------------|----------------------------------|----------------------|
| POSITIONS DETERMINED | ROBERT R. WAGNER                 | FIELD REPRESENTATIVE |
| AND/OR VERIFIED BY   | JOHN W. MCCLURE                  | OFFICE COMPILER      |
| FIELD AND OFFICE     | N/A                              | DIGITIZER            |
| ACTIVITIES           | JAMES H. TAYLOR                  | DATA PROCESSER       |





\* SVY TP-00422 \* LANDMARKS FOR CHARTS \* RPT UNIT CMD ROCKVILLE, MD. \* PAGE 6 OF 6 \*  
\* JOB PH-7113 \* TO BE CHARTED \* \* STATE FLORIDA \*  
\* PRJ S33205 \* \* \* LOCALITY MIAMI \* \* ORIGINATING ACTIVITY \*  
\* DTM NA 1927 \* \* \* DATE 05/16/77 \* \* COMPILATION \*  
\* THE FOLLOWING OBJECTS HAVE BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS \*  
\* \* \* \* \*  
\* CHARTING\* RECORD REASON FOR DELETION \* POSITION CODES\* METHOD AND DATE \*  
\* NAME \* PUT TRIANGULATION NAMES IN ( ) \* LONGITUDE DP C-C \* OF LOCATION \* CHARTS \*  
\* \* \* \* \* SEQ \* OFFICE \* FIELD \* AFFECTED \*  
\* \* \* \* \*  
\* THE POSITIONS FOR THE FOLLOWING LANDMARKS, THAT ARE \*  
\* PUBLISHED TRIANGULATION STATIONS, WERE ERRONEOUSLY \*  
\* SUBMITTED IN APRIL 1975 WITH DIGITIZED VALUES. \*  
\* \* \* \* \*  
\* (MIAMI, SEARS ROEBUCK CO. \* 25 47 13.02 400.7 NOT TRIANG REC\* 11451 \*  
\* TOWER, 1934) HT=115(120) \* 80 11 22.61 629.9 DGTZD\* 11/24/75 \* 11467 \*  
\* \* \* \* \*  
\* (MIAMI, NEWS TOWER, 1926) \* 25 46 47.60 1464.8 NOT \* DITTO \* 11468 \*  
\* HT=257(262) \* 80 11 23.09 643.3 DGTZD\* \* DITTO \*  
\* \* \* \* \*  
\* (MIAMI, EVERGLADES HOTEL \* 25 46 35.96 1106.6 NOT \* DITTO \*  
\* TOWER, 1928) HT=305(313) \* 60 11 20.08 559.5 DGTZD\* \* DITTO \*  
\* \* \* \* \*  
\* (MIAMI, COURTHOUSE TOWER, \* 25 46 27.10 833.9 NOT \* DITTO \*  
\* 1926) HT=348(354) \* 80 11 43.36 1208.7 DGTZD\* \* DITTO \*  
\* \* \* \* \*  
\* THE FOLLOWING WERE POSITIONED BY \*  
\* AEROTRIANGULATION ANALYTIC BRIDGE. \*  
\* \* \* \* \*  
\* RADIO STATION WQAM TOWER \* 25 47 16.70 575.4 NOT \* 75808171 \*  
\* HT=385 \* 80 11 36.08 169.4 DGTZD\* 11/24/75 \* DITTO \*  
\* \* \* \* \*  
\* RADIO STATION WOON TOWER \* 25 46 09.82 302.2 NOT \* 75808175 \*  
\* HT=310(316) \* 80 11 54.38 1515.3 DGTZD\* 11/24/75 \* DITTO \*  
\* \* \* \* \*

\* TYPE OF ACTION \* NAMES OF RESPONSIBLE PERSONNEL \* ORIGINATOR \*  
\* \* \* \* \*  
\* OBJECTS INSPECTED FROM SEAWARD \* ROBERT R. WAGNER \* PHOTO FIELD PARTY \*  
\* \* \* \* \*  
\* POSITIONS DETERMINED \* ROBERT R. WAGNER \* FIELD REPRESENTATIVE \*  
\* AND/OR VERIFIED BY \* JOHN W. MCCLURE \* OFFICE COMPILER \*  
\* FIELD AND OFFICE \* N/A \* DIGITIZER \*  
\* ACTIVITIES \* JAMES H. TAYLOR \* DATA PROCESSER \*  
\* \* \* \* \*

## NATIONAL ARCHIVES DATA

TP-00422

1 Discrepancy (paper copy)

1 Field edit sheet (stable base copy)

1 Form 76-36C

7 Forms 76-40 (working copies)

Portions of field photographs:

71-E-9563

9565

9585

*pages from sketchbook*