

00425

00425

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-00425

Classification No. Final Edition No. ... 1

Field Edited Map

LOCALITY

State ... Florida

General Locality ... Dade County

Locality ... Virginia Key to Key Biscayne

1971 TO 1975

REGISTRY IN ARCHIVES

DATE

| | | | |
|--|--|---|--|
| NOAA FORM 76-36A (3-72) | | U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN. | |
| DESCRIPTIVE REPORT - DATA RECORD | | TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED | |
| PHOTOGRAMMETRIC OFFICE Rockville, Maryland | | SURVEY TP. <u>00425</u> MAP EDITION NO. <u>1</u> MAP CLASS I Final JOB PH- <u>7113</u> | |
| OFFICER-IN-CHARGE Commander James Collins | | LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED | |
| JOB PH- <u>7113</u> MAP CLASS <u>Final</u> SURVEY DATES: 19__ TO 19__ | | | |
| I. INSTRUCTIONS DATED | | | |
| 1. OFFICE | | 2. FIELD | |
| General-Instructions-OFFICE-NOS Cooperative Coastal Boundry Mapping Job PH-7000 June 19, 1973 OFFICE-Supplement I, Aug. 19, 1973 NOTE: Office and field edit instructions (1973) incorporate applicable prior operational instructions OFFICE-Supplement II, Sept. 24, 1973 | | Aerial Photography 9/2/69 Supplement I 1/28/70 Supplement II 3/26/70 Supplement III 8/10/70 Field Edit (PH-7000, General Instruction for Florida Coastal Zone Mapping) (1973) | |
| II. DATUMS | | | |
| 1. HORIZONTAL: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN | | OTHER (Specify) | |
| 2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input checked="" type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL | | OTHER (Specify) | |
| 3. MAP PROJECTION Transverse Mercator | | 4. GRID(S) STATE Florida ZONE East | |
| 5. SCALE 1:10,000 | | STATE ZONE | |
| III. HISTORY OF OFFICE OPERATIONS | | | |
| OPERATIONS | | NAME | |
| 1. AEROTRIANGULATION METHOD: LANDMARKS AND AIDS BY | | V. McNeel-I.O. Raborn Inapplicable | |
| 2. CONTROL AND BRIDGE POINTS METHOD: PLOTTED BY CHECKED BY | | D. Phillips-J. Taylor Inapplicable Inapplicable | |
| 3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: CONTOURS BY SCALE: CHECKED BY | | Inapplicable Inapplicable Inapplicable | |
| 4. MANUSCRIPT DELINEATION Shoreline: Graphic METHOD: Interior: Orthophotomosaic SCALE: 1:10,000 | | PLANIMETRY BY CHECKED BY XXXXXXXXXX BY CHECKED BY HYDRO SUPPORT DATA BY CHECKED BY | |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY | | J. P. Battley, Jr. 1/74 | |
| 6. APPLICATION OF FIELD EDIT DATA CHECKED BY | | J. Taylor P. Dempsey 10/74 10/74 | |
| 7. COMPILATION SECTION REVIEW BY | | P. Dempsey-C. Lewis 1/77-3/77 | |
| 8. FINAL REVIEW BY | | D. Brant 3/77 | |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY | | D. Brant 4/77 | |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY | | D. Brant 4/77 | |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION BY | | J. P. Battley, Jr. 7-77 | |

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

TP-00425

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

| | | | | | |
|---|-----------|--|----------|---|--|
| CAMERA(S) Wild RC-8 B, E, K. & L - 6" Focal Length | | TYPES OF PHOTOGRAPHY LEGEND | | TIME REFERENCE | |
| TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY | | (C) <u>COLOR</u> (P) <u>PANCHROMATIC</u> (I) <u>INFRARED</u> | | ZONE Eastern | <input checked="" type="checkbox"/> STANDARD |
| | | | | MERIDIAN 75th | <input type="checkbox"/> DAYLIGHT |
| NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE | |
| 71-E(C) 9202-9206 | 2 Mar 71 | | 1:20,000 | Inapplicable | |
| 71-E(C) 9586 | 8 Mar 71 | | 1:30,000 | Inapplicable | |
| 73-L(C) 2884 & 2886 | 8 Mar 73 | | 1:20,000 | Inapplicable | |
| 75-B-8022, 8024, 8026 | 24 Nov 75 | | 1:30,000 | | |
| 75-B-8179 | 24 Nov 75 | | 1:15,000 | | |
| 71-K-5657R-5658R | 24 Feb 71 | | 1:30,000 | The stage of tide for the color & panchromatic photography is inapplicable. Refer to Form 76-36B-1 for tidal information. | |
| 71-K-5802R-5805R | 2 Mar 71 | | 1:30,000 | | |

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the MHWL is the tide-coordinated, black-and-white photography listed in item 1. The rectified color photography listed 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 were also used to update cultural shoreline features. The MHWL on the Atlantic Ocean side of Virginia Key between 25°44'15" and 25°45' was compiled from office interpretation of the 1975 photography. (See addendum to compilation report.)

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

The source of the MLWL is the tide-coordinated, black-and-white infrared photography listed under item 1. The MLWL on the Atlantic Ocean side of Virginia Key between 25°44'15" and 23°45' was compiled from office interpretation of the 1975 photography. (See addendum to compilation report.)

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-00422&TP-00423 | Atlantic Ocean | TP-00427&TP-00428 | TP-00424 |

REMARKS

Final junctions were made in the Coastal Mapping Section

TIDE - COORDINATED PHOTOGRAPHY

TP -00425

| LOCATION AND PHOTOGRAPHY | TIDE STATIONS (In operation at time of photography) | STAGE OF TIDE | MEAN RANGE |
|---|--|---------------|------------|
| ATLANTIC SHORELINE | | | |
| 71K 5802-5805 | Miami, Biscayne Bay | +0.18 MHW | 2.14 |
| 71K 5657-5658R | North Miami, Biscayne Creek | +0.50 MLW | 2.19 |
| 71K 5658 | Ragged Keys, Biscayne Bay | +0.22 MLW | 1.64 |
| INTERIOR WATERS | | | |
| 71K 5802-5805R | Miami, Biscayne Bay | +0.18 MHW | 2.14 |
| 71K 5657-5658R | North Miami, Biscayne Creek | * +0.50 MLW | 2.19 |
| 71K 5658R | Ragged Keys, Biscayne Bay | +0.22 MLW | 1.64 |
| 71K 5817R | Miami, Biscayne Bay | +0.26 MHW | 2.14 |
| REMARKS: | | | |
| Where the MHWL was obscured by vegetation, such as mangrove, the apparent shoreline was delineated. | | | |
| * - The stage of the tide tolerance is greater than ± 0.30 ft. specified in the instructions for some of the photography used in compiling portions of the MHW and MLW lines: The horizontal positions of these lines was verified by field edit. | | | |
| REMARKS: | | | |

HISTORY OF FIELD OPERATIONS

1. ☒ FIELD INSPECTION OPERATION Dec. 1975
*March 1971 ☒ FIELD EDIT OPERATION Aug. 1974

| OPERATION | NAME | DATE |
|-------------------------------------|--|----------------|
| 1. CHIEF OF FIELD PARTY | R.R. Wagner | |
| 2. HORIZONTAL CONTROL | RECOVERED BY R.R. Wagner | Feb. Aug. 74 |
| | ESTABLISHED BY Inapplicable | |
| | PRE-MARKED OR IDENTIFIED BY Inapplicable | |
| 3. VERTICAL CONTROL | RECOVERED BY R.R. Wagner | Feb. 1974 |
| | ESTABLISHED BY Inapplicable | |
| | IDENTIFIED BY R.R. Wagner | Feb. 1974 |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY R.R. Wagner | Feb. 1974 |
| | LOCATED (Field Methods) BY R.R. Wagner | Feb. Aug. 1974 |
| | IDENTIFIED BY R.R. Wagner | Feb. Aug. 1974 |
| 5. GEOGRAPHIC NAMES INVESTIGATION | TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION | |
| 6. PHOTO INSPECTION | CLARIFICATION OF DETAILS BY R.R. Wagner | Feb. Aug. 1974 |
| 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 report | 73L(C) 2884R* | KB 9 (DC) |
| | | 73L(C) 2885R* | MI 15 (DC) |
| | | 73L(C) 2886R* | MI 8 (DWC), MI 12 (DWC) |
| | | 73L(C) 2888R* | MI 6 (DWC), V 316 |
| | | | * Contact color prints |
| 3. PHOTO NUMBERS (Clarification of details) 71E9202 thru 9205, 73L2886, 73L2884 | | | |
| 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED Refer to addendum | | | |
| PHOTO NUMBER | OBJECT NAME | PHOTO NUMBER | OBJECT NAME |
| 71E9203 | Helipad Lights | | |
| 5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE | | 6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE | |
| 7. SUPPLEMENTAL MAPS AND PLANS None | | | |
| 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) Sketchbook with sextant fixes, one planetable sheet * - The field report is bound with this Descriptive Report | | | |

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

TP-00425

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

| COMPILATION STAGES | | | DATE MANUSCRIPT FORWARDED | |
|---|-----------|--|---------------------------|---------------|
| DATA COMPILED | DATE | REMARKS | MARINE CHARTS | HYDRO SUPPORT |
| MHWL, MLWL, Shoreline & foreshore features | Oct. 1973 | No copies of TP-00425 were furnished to the | | |
| Application of field edit | 10/74 | Marine Chart Division before final review. | | |
| New orthophotomosaic with 1975 photography; | 12/76 | | | |
| Revised shoreline compilation | 3/77 | Copy furnished for chart adequacy survey OPR-511-PE-77 | | |

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

| NUMBER | CHART LETTER NUMBER ASSIGNED | DATE FORWARDED | REMARKS |
|--------|---------------------------------|-------------------|---|
| | | 3/9/77 | 5 digitized pages of Form 76-40 have been |
| | | | forwarded to the Marine Chart Division as |
| | | | a final report. |
| | | | |
| | | | |
| | | | |
| | | | |

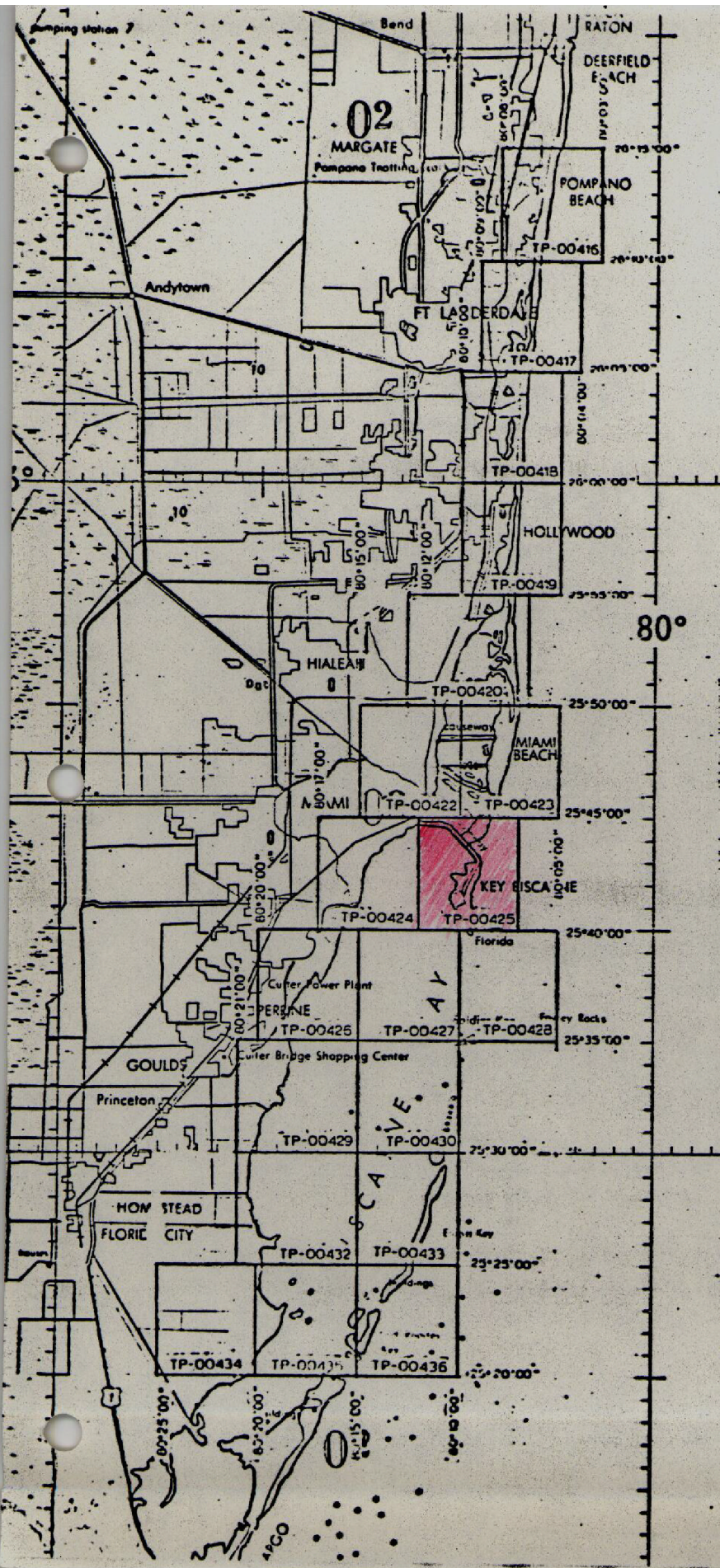
2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 3/9/773. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

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 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-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

SUMMARY
for
TP-00425

Coastal Zone Map TP-00425 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-00425 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-00425 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.

DENO 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.

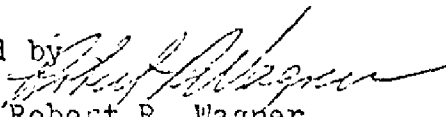
Control Pt. 7

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

JCBS PH-7010 and PH-7113

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

1. HORIZONTAL CONTROL

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

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

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

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

2.

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

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

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

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

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

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

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

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

2. TIDE COORDINATED PHOTOGRAPHY

As directed by telephone, the following nine tide

3.

stations were manned.

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

Photography obtained was based on the first seven gages. Lines 30-5 and 30-6 would have been based on TURKEY POINT and CARD SOUND. These lines were not photographed. Also, high-water only was obtained for line 30-4, based on CUTLER.

Recordings entered in the tide volumes, Form 277, were at 5 minute intervals near and during photography; otherwise 15 minute interval. Wet staff readings--crest, trough and mean--were recorded while photography was in progress. Tolerances of ± 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 PORT EVERGLADES) was photographed at 1103 to 1106 hrs. with the camera end overlap setting at 80%.

(3) Line 30-2, based on BISCAYNE BAY, MIAMI and BISCAYNE CREEK, NORTH MIAMI, was photographed at 1254 to 1300 hrs. when the BISCAYNE BAY, MIAMI reading was 4.6 ft. and the BISCAYNE CREEK staff read 5.6 ft.

(4) Line 30-3, based on the same stations, was photographed at 1305 to 1311 with the staff readings unchanged from line 30-2.

(5) Line 30-4, based on BISCAYNE BAY, MIAMI and BISCAYNE BAY, CUTLER, was photographed at 1319 to 1325, when the MIAMI staff read 4.5 and CUTLER read 4.8 ft.

This ends the high-water photography.

3. FORESHORE PROFILES

Ten planetable beach profiles were run within the limits of Job PH-7113. They cover a linear distance of approximately 40 miles. The northerly one is at triangulation station PCMPANO 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, 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

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

21. Area Covered

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

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

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

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

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

22. Method

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

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

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

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

23. Adequacy of Control

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

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

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

- Irving 1971
- Mangrove (USE) 1930 Sub Point A
- Sands Cut RM2, 1849-1947 Sub station

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

- Rubi, 1930-1948 Reset
- Man, 1930
- Angelfish Key RM3, 1853
- Narrow Point, 1854
- Long Sound 1961
- Snipe Pt., 1934, substation
- Knowlson, 1935, substation
- Hull Key, 1852
- Rock Harbor 2, 1961
- Lower Sound Point, 1853 substation
- Sub Station, Key Largo Cable Visions Inc., Taller Mast, 1961
- Largo, 1962
- Low 2, RM2, 1934
- Planter 2, RM4

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

Tavernier 1935
Snake 1934 Sub. Sta.

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

Cape Florida Old Tower 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

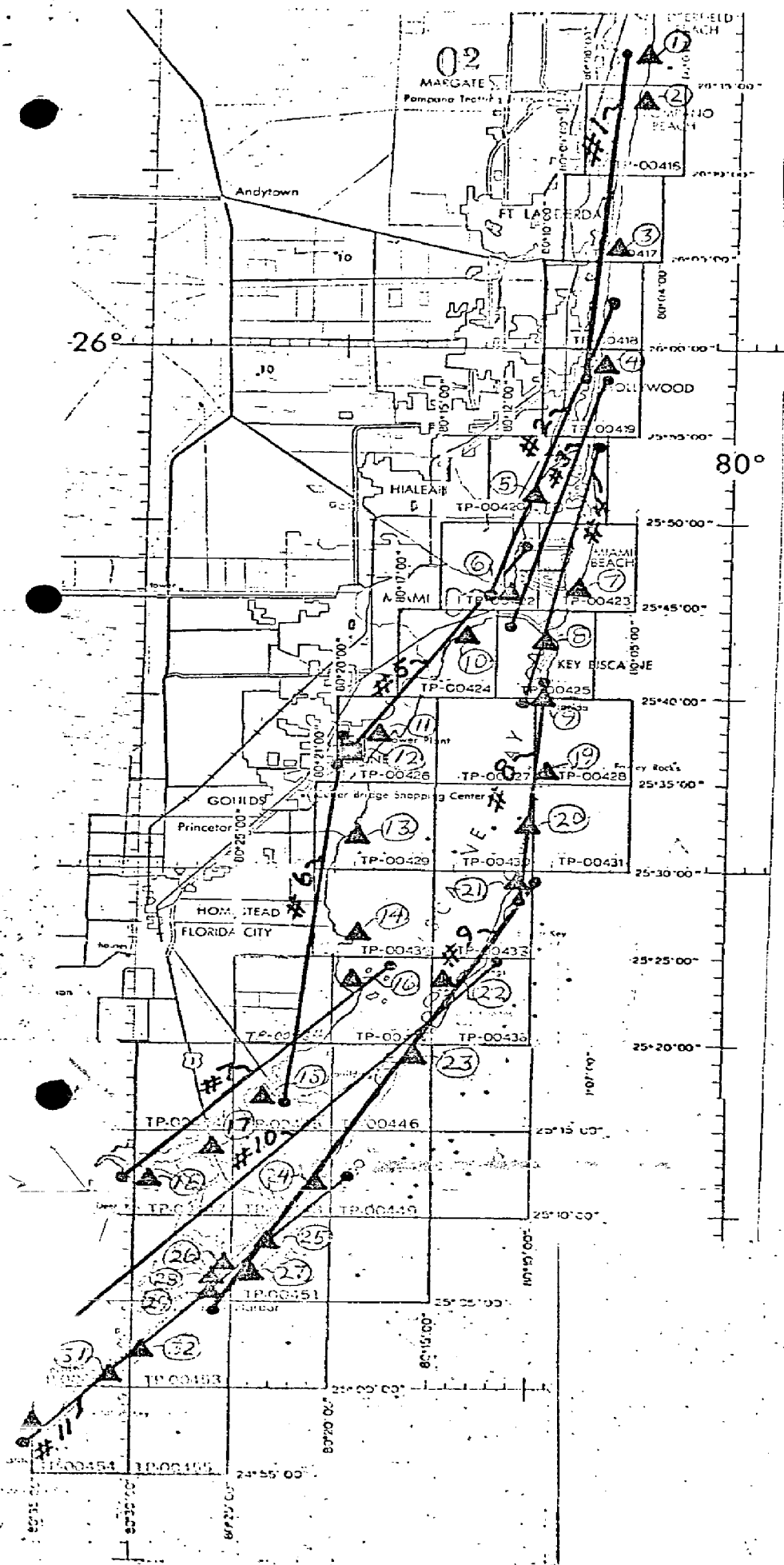
The quality and definition of the photography was adequate.

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

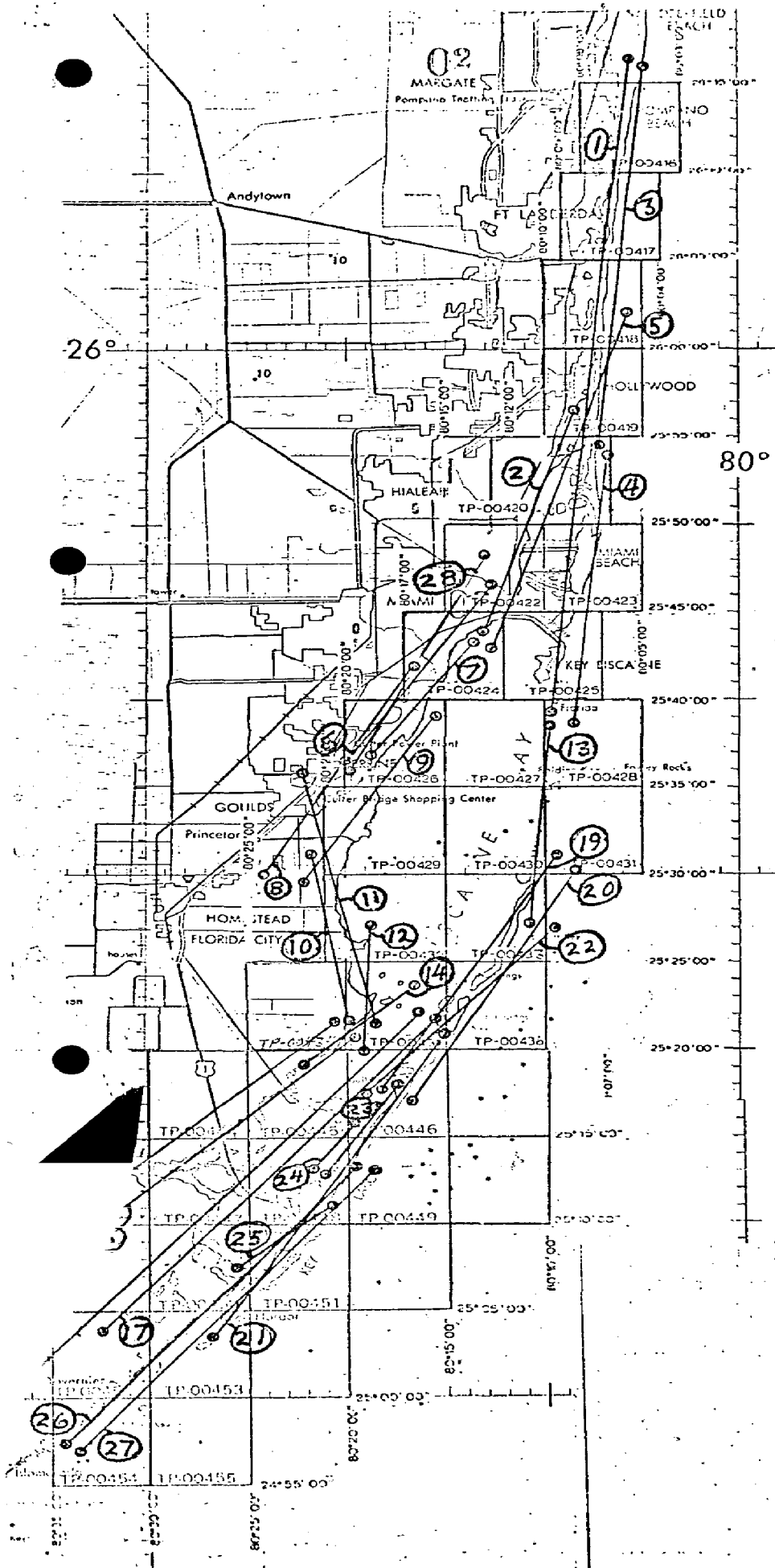
| | | | <u>residuals</u> | |
|-----|----------|--|------------------|--------|
| 1. | (027100) | Turtle 1929 | -0.706 | -0.115 |
| 2. | (023102) | Pompano, 1928, subpoint B | 1.488 | -0.229 |
| 3. | (029100) | South Jetty, 1938 | -1.134 | 0.176 |
| 4. | (034101) | Halland, 1928 | 0.317 | -0.007 |
| 5. | (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

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

INFRA-RED CONTACT
PRINTS RATIOED FOR
COMPILATION

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 |

FLORIDA- NOAA Coastal Boundary Mapping Program

Horizontal Control

Map TP-00425

| Station | NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths |
|---------------------------------|---|
| KEY BISCAYNE NORTH BASE 1849 | <p data-bbox="673 430 1193 535"><i>GPS Pg 506 PCS 126 -</i> <i>* BK 423, Pg. 20 -</i></p> <p data-bbox="641 619 1347 693">* - Copy of unadjusted field horizontal control was used.</p> |

| Geodetic Bench Mark | Elevations (feet) | Condensed Description |
|------------------------|-------------------|--|
| | SLD 1929 | |
| ✓ V 316 | | C&GS disk stamped V 316 1970; 120 ft. E of road centerline, 1.9 ft. NW of NW gate post in chain link fence around power sub-station. |
| ✗ MI 6 (DWC) | | Dade County Engineer's 1-inch brass plug stamped DWC BM MI 6; set in top of NW end of SW concrete guard rail to Bear Cut Bridge over Biscayne Bay. |
| ✗ MI 8 (DWC) | | Dade County Engineer's 1-inch brass plug stamped DWC BMI 8; 37 ft. E of S-bound lane of causeway centerline, 39.5 ft. N of driveway centerline, 1.1 ft. SE of metal witness post. |
| ✗ MI 12 (DWC) | | Dade County Engineer's 1-inch brass plug stamped DC BM MI 12; 251 ft. N of junction center of S-bound lane of causeway and driveway leading W to fire station, 29 ft. E of S-bound lane centerline of causeway, 1.5 ft. E of metal witness post. |
| ✗ MI 15 (DC) | | Dade County Engineer's 1-inch brass plug stamped DC BM 15 MI; 23 ft. E of centerline of S-bound lane of Blvd., 22.6 ft. W of centerline of N-bound lane of Blvd., 1.2 ft. S of metal witness post. |
| ✗ KB 9 (DC) | | Dade County Engineer's PK nail stamped DADE COUNTY KB 9; set in top of N concrete wall of concrete manhole with metal cover, 18 ft. W of main road centerline. |

✗ 5/27/77
J-21

COMPILATION REPORT

TP-00425

October 1973

This report will detail the methods used to compile TP-00425.

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 in March 1973 and a manuscript was compiled in October 1973.

Copies of the manuscript were sent for edit in January 1974 and edit was completed in August 1974.

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 October 1973.

31. Delineation

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

The natural shoreline, MHWL and MLWL were compiled using ratioed, tide-coordinated, black-and-white infrared photography.

Man made features and alongshore features were compiled from rectified black-and-white prints of the color photography and supplemented by the ratioed, infrared and color contact prints.

Interior features were depicted by an orthophotomosaic from rectified black-and-white print of the color photography.

Due to the importance of proper interpretation and symbolization of features, a field edit will be made.

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 orthophotomosaic.

35. Shoreline and Alongshore Detail

See Item 31 in reference to delineation and field edit.

36. Offshore Details

No unusual problems were encountered.

37. Landmarks and Aids

All landmarks and aids to navigation will be located during field edit.

38. Control for Future Surveys - None39. Junctions

Refer to Form 73-36B (Data Record).

40. Horizontal and Vertical Accuracy

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

41. thru 45. Inapplicable

46. Comparison with Existing Maps

USGS Quad Key Biscayne, Florida - 1:24,000 - 1969

47. Comparison with Existing Nautical Charts

847-SC - 11th Edition - August 5, 1972

No significant differences were noted.

Items to be Applied to Nautical Charts Immediately - None

Items to be Carried Forward - None

Submitted by:


G. Fromm

Approved and Forwarded:


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

TP-00425
Addendum to Compilation Report
March 1977

TP-00425 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 tone 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 have been submitted.

The three aids on TP-00425 north of latitude 25°44' were the only aids photoidentified in 1976. The aids south of latitude 25°44' were field identified in 1974 and were positioned by photogrammetric methods using the November 1975 photography.

A new orthophotomosaic was prepared in November 1976 using 1975 panchromatic photography bridged in August 1976.

The manuscript was recompiled in December 1976. With one area of exception, the lines of mean high water and mean low water were compiled from tide-coordinated, black-and-white infrared aerial photographs taken in March 1971. Sufficient detail from the 1975 bridging photography was compiled to control the infrared photography. The MHWL and MLWL on the Atlantic Ocean side of Virginia Key between 25°44'15" and 25°45' was compiled from office interpretation of the 1975 panchromatic photography. This was necessitated by the addition of numerous groins, built after the tide-coordinated photography was taken, altering the shoreline.

All field edit data was applied to the new compilation including the area referred to in "Addendum #1" of the field edit report dated October 18, 1974. The small island referred to in this report was not compiled. A low water line was shown with the notation, "Area subject to constant change."

The 1971 and later triangulation stations were not mapped pending a final adjustment.

Submitted by:
J. P. Battley, Jr.
J. P. Battley, Jr.
Chief, Coastal Mapping Section

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° 44' to 25° 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. Apcco 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 height.

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

Field Edit Report, Map TP-00425, Job PH 7113

51. METHODS

The shorelines of the Atlantic Ocean and Biscayne Bay were inspected by a small boat while cruising just offshore and walking along the shoreline. Notes regarding apparent and fast shoreline, piers and other shoreline features were made on the rectified photographs and Discrepancy Print.

One water tank and one stack are recommended for charting along with a large building as landmarks. The water tank and stack were submitted at an earlier date for the Miami Harbor Chart.

Forms 76-40 are submitted for the nonfloating aids. All aids were located by sextant except the two helipad lights which were identified on Photo 71E9203 and crib light which is a triangulation station.

The Bench Marks were identified on contact color prints because the rectified prints were not available.

Five triangulation stations were recovered.

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

One new name is recommended for charting. "Bill Baggs Cape Florida State Recreation Area" covers the southern part of Key Biscayne. (See Discrepancy Print.)

There are no tide gages within the limits of this manuscript.

Approximate latitude $25^{\circ}44.3$ north was field edited in February 1974 and submitted to Rockville for the revision at Miami Harbor Chart.

On August 8, a small island was located by planetable on the east side of Key Biscayne. There are two other small areas that are just below MHW, based on data from Miami Harbor Entrance gage BM 9. The area is small without any vegetation. It should be noted that the HW photographs dated 2 March 1971 and photographs dated 8 March 1973 taken near MHW do not show this island. The island located by planetable does not agree with MLW photographs dated 24 February 1971. It is believed that this area is moving and is the result of large amount of dredging around Miami Beach and will not remain very long after the dredging is completed. The MLW was located by planetable August 12 and this area shows movement from the LW photographs dated 24 February 1971.

52. ADEQUACY of COMPILATION

Adequate after application at field edit.

53. MAP ACCURACY

No test required.


54. RECOMMENDATIONS

None.

55. EXAMINATION of PROOF COPY

Not required.

Submitted 8/13/74


Robert R. Wagner
Chief, Photo Party 60

ADDENDUM #1 FOR TF#00425

Mr. R Brewer requested this Party to inspect a small island on the east side of Key Biscayne, that was located by plane table when the original field edit was done. The Field Edit Report stated that this island would not last long. On October 15, 1974 the area was inspected near MLW and the MLWL has changed in shape and position. On October 18, 1974 this area was inspected at 0.4 feet below MHW, based on Tidal BM#19 of Miami Harbor Entrance gage, and no land area was visible. It was also noted on October 18 that the main beach shoreline has eroded about 10 feet.



Robert R. Wagner
Chief, Photo Party 60

Oct 18, 1974

Review Report
Coastal Zone Map TP-00425
June 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 previous reports.

The Class III map for Coastal Zone Map TP-00425 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 Geological Survey map of Key Biscayne, Fla. 1:24,000 scale, 1962 photo revised 1969.

No significant changes were found.

Comparison was made with Nautical Chart 11467, 1:40,000 scale, 17th Edition, dated July 8, 1978. The following differences were found:

Chart 11467 shows an islet and an area of MLW east of Key Biscayne at approximately lat. $25^{\circ}42.4'$ and long. $80^{\circ}09'$ while map TP-00425 shows an area of MLW and several obstructions that are not shown on the chart. This area is considered subject to constant change. Refer to the Field Edit report for description of field work.

Map TP-00425 shows individual rocks and a large area of MLW at the north end of Key Biscayne and east of North West Point. Chart 11467 shows rock ledge and no MLW.

Map-TP-00425 shows numerous piling and groins along the west shore of Key Biscayne. The chart does not show these features.

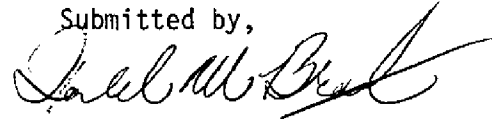
Chart 11467 shows extensive area of MLW in the vicinity of West Point. TP-00425 shows this area as shallow.

63. thru 65. - Inapplicable

66. Adequacy of Results and Future Surveys

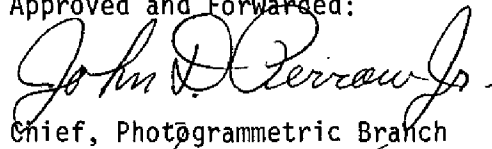
Coastal Zone Map TP-00425 complies with the instructions for NOS Cooperative Coastal Boundary Mapping, Job PH-7000 and the National Standards of Map Accuracy.

Submitted by,

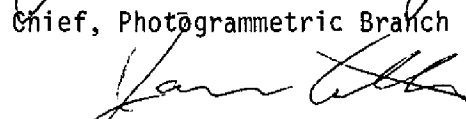


Donald M. Brant

Approved and Forwarded:



Chief, Photogrammetric Branch



Chief, Photogrammetry Division

March 24, 1977

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-7113 (Florida)
TP-00425

| | |
|---|----------------------------|
| Atlantic Ocean | Rickenbacker Causeway |
| Bear Cut | South Basin |
| Bill Baggs Cape Florida State Recreation Area | Southwest Point |
| Biscayne Bay | The Pines Canal |
| Cape Florida Channel | Virginia Beach |
| Crandon County Park | Virginia Beach County Park |
| Crandon Marina | Virginia Key |
| Duck Lake | West Point |
| Harbor Point | |
| Hurricane Harbor | |
| Key Biscayne (City) | |
| Key Biscayne (Island) | |
| Lamar Lake | |
| Northwest Point | |

Approved by:

C. E. Harrington
C. E. Harrington
Staff Geographer (C51x2)

76-40

PHOTOGRAMMETRIC BRANCH
COASTAL MAPPING DIVISIONNATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USATERMINAL
VERSION
09/20/76

LISTING

* SVY TP-00425 * RPT UNIT CMD ROCKVILLE, MD. * PAGE 4 OF 5 *
* JOB PH-7113 * NONFLOATING AIDS FOR CHARTS * STATE FLORIDA *
* PRJ 833205 * TO BE CHARTED * LOCALITY VA. KEY TO CAPE FLA. * ORIGINATING ACTIVITY *
* DTM NA 1927 * DATE 03/21/77 * COMPILATION *

* THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS *

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

* * BISCAYNE BAY * * * *
* * BISCAYNE CHANNEL * * * *

* DYBN * 25 40 20.53 631.7 NOT * 7588028 *
* 24 * 80 11 02.48 69.2 DGTZD* 11/24/75 * 11465 *

* CRIB * 25 40 17.35 533.9 NOT * DITTO *
* LIGHT * BISCAYNE BAY OMNIRANGE CRIB LT * 80 10 40.19 1120.8 DGTZD* * DITTO *

* DYBN * 25 41 02.70 83.1 NOT * DITTO *
* 2 * CAPE FLORIDA CHANNEL DAYBEACON * 80 10 47.14 1314.5 DGTZD* * DITTO *

* LIGHT * 25 41 04.95 152.3 NOT * DITTO *
* 26 * SOUTHWEST POINT LIGHT * 80 11 02.30 64.1 DGTZD* * DITTO *

* DYBN * 25 41 22.81 701.9 NOT * 7588026 *
* 28 * SOUTHWEST POINT DAYBEACON * 80 11 02.57 71.7 DGTZD* 11/24/75 * DITTO *

* LIGHT * 25 42 33.21 1021.9 NOT * DITTO *
* 30 * WEST POINT LIGHT * 80 10 59.40 1656.0 DGTZD* * DITTO *

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

* * * * *
* * * * *

* POSITIONS DETERMINED BY * ROBERT R. WAGNER * FIELD REPRESENTATIVE *
* AND/OR VERIFIED BY * JOHN W. MCCLURE * OFFICE COMPILER *
* FIELD AND OFFICE * MICHAEL W. JOHANIK * DIGITIZER *
* ACTIVITIES * JAMES H. TAYLOR * DATA PROCESSER *

* SVY TP-00425 * RPT UNIT CMD ROCKVILLE, MD. * PAGE 2 OF 5
* JOB PH-7113 * NONFLOATING AIDS FOR CHARTS * STATE FLORIDA
* PRJ 833205 * TO BE CHARTED * LOCALITY VA. KEY TO CAPE FLA. * ORIGINATING ACTIVITY *
* DTM NA 1927 * DATE 03/21/77 * COMPILATION *

* THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS *

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

| | | | | | | | | | |
|-----------------------------|---|-------------|--------|-------|---|----------|---|---|-------|
| BISCAYNE BAY | | | | | | | | | |
| CRANDON PARK MARINA CHANNEL | | | | | | | | | |
| DYBN | * | 25 43 10.16 | 312.6 | NOT | * | 7588024 | * | * | * |
| 3 | * | 80 10 10.64 | 296.6 | DGTZD | * | 11/24/75 | * | * | 11465 |
| DYBN | * | 25 43 04.89 | 150.5 | NOT | * | DITTO | * | * | * |
| 4 | * | 80 10 03.90 | 108.7 | DGTZD | * | | * | * | DITTO |
| DYBN | * | 25 43 32.24 | 992.1 | NOT | * | DITTO | * | * | * |
| 5 | * | 80 09 32.28 | 899.8 | DGTZD | * | | * | * | DITTO |
| LIGHT | * | 25 43 33.69 | 1036.7 | NOT | * | DITTO | * | * | * |
| 6 | * | 80 09 35.28 | 983.4 | DGTZD | * | | * | * | DITTO |
| DYBN | * | 25 43 30.21 | 929.6 | NOT | * | DITTO | * | * | * |
| 7 | * | 80 09 29.57 | 824.3 | DGTZD | * | | * | * | DITTO |
| DYBN | * | 25 43 31.24 | 961.3 | NOT | * | DITTO | * | * | * |
| 8 | * | 80 09 33.75 | 940.8 | DGTZD | * | | * | * | DITTO |
| RANGE | * | 25 43 22.86 | 703.4 | NOT | * | DITTO | * | * | * |
| FRT LT | * | 80 09 24.06 | 670.7 | DGTZD | * | | * | * | DITTO |
| RANGE | * | 25 43 21.29 | 655.1 | NOT | * | DITTO | * | * | * |
| R-LT | * | 80 09 22.60 | 630.0 | DGTZD | * | | * | * | 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 MICHAEL W. JOHANIK JAMES H. TAYLOR | FIELD REPRESENTATIVE OFFICE COMPILER DIGITIZER DATA PROCESSOR |

National Archives Data
for
TP-00425

- 1 Discrepancy print (paper copy)
- 2 Field Edit sheets (stable base copy)
- 1 Planetable sheet (stable base copy)
- 5 Forms 76-40 (Nonfloating Aids or Landmarks for Charts)
- 1 Form 76-36C (History of Field Operation)

Photographs (portions)

- 73 L 2884 and 2886
- 71 E 9203 thru 9206
- 71 E 9586