**NOAA FORM 76-35**

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

**DESCRIPTIVE REPORT**

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Coastal Boundary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job No.</td>
<td>PH-7433</td>
</tr>
<tr>
<td>Map No.</td>
<td>TP-00434</td>
</tr>
<tr>
<td>Classification No.</td>
<td>Final</td>
</tr>
<tr>
<td>Edition No.</td>
<td>1</td>
</tr>
<tr>
<td>Field Edited Map</td>
<td></td>
</tr>
</tbody>
</table>

**LOCALITY**

<table>
<thead>
<tr>
<th>State</th>
<th>Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Locality</td>
<td>Dade Country</td>
</tr>
<tr>
<td>Locality</td>
<td>Model, Land, Canal</td>
</tr>
</tbody>
</table>

1972 TO 1975

**REGISTRY IN ARCHIVES**

DATE

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*U.S. GOVERNMENT PRINTING OFFICE: 1973-781-776*
**DESCRIPTIVE REPORT - DATA RECORD**

**PHOTOGRAMMETRIC OFFICE**
Rockville, Maryland

**OFFICER-IN-CHARGE**
Commander James Collins

<table>
<thead>
<tr>
<th>TYPE OF SURVEY</th>
<th>SURVEY TP.</th>
<th>MAP EDITION NO.</th>
<th>MAP CLASS</th>
<th>JOB</th>
<th>PH.</th>
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<tbody>
<tr>
<td>ORIGINAL</td>
<td>00434</td>
<td>(1)</td>
<td>Final</td>
<td></td>
<td>7113</td>
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**LAST PRECEDING MAP EDITION**

<table>
<thead>
<tr>
<th>TYPE OF SURVEY</th>
<th>JOB</th>
<th>PH.</th>
<th>MAP CLASS</th>
<th>SURVEY DATES:</th>
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<tbody>
<tr>
<td>ORIGINAL</td>
<td></td>
<td></td>
<td></td>
<td>19_ TO 19_</td>
</tr>
</tbody>
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**I. INSTRUCTIONS DATED**

**1. OFFICE**

**2. FIELD**
Aerial photography 9/2/69 
Supplement 1, 1/28/70 
Supplement II, 3/26/70 
Supplement III, 8/10/72 
Field Edit (PH–7000 General Instructions for Florida Coastal Zone Mapping) 1973

**II. DATUMS**

<table>
<thead>
<tr>
<th>1. HORIZONTAL:</th>
<th>OTHER (Specify)</th>
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<tbody>
<tr>
<td>1927 NORTH AMERICAN</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>2. VERTICAL:</th>
<th>OTHER (Specify)</th>
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<tbody>
<tr>
<td>MEAN HIGH-WATER</td>
<td></td>
</tr>
<tr>
<td>MEAN LOW-WATER</td>
<td></td>
</tr>
<tr>
<td>MEAN LOWER LOW-WATER</td>
<td></td>
</tr>
<tr>
<td>MEAN SEA LEVEL</td>
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</table>

**III. HISTORY OF OFFICE OPERATIONS**

**OPERATIONS**

<table>
<thead>
<tr>
<th>OPERATIONS</th>
<th>NAME</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AEROTRIANGULATION</td>
<td>V. McNeel</td>
<td>6/74</td>
</tr>
<tr>
<td>METHOD: Analytic</td>
<td>LANDMARKS AND AIDS</td>
<td>Inapplicable</td>
</tr>
</tbody>
</table>

| 2. CONTROL AND BRIDGE POINTS | R. Robertson | 7/74 |
| METHOD: Calcomp | PLOTTED BY | CHECKED BY | Inapplicable |

| 3. STEREOSCOPIC INSTRUMENT COMPOSITION | | |
| INSTRUMENT: | PLANE METRY | CHECKED BY | Inapplicable |
| SCALE: | CHECKED BY | Inapplicable |

| 4. MANUSCRIPT DELINEATION | P. Gibson | 1/75 |
| Shoreline: Graphic | PLANIMETRY | CHECKED BY | Inapplicable |
| METHOD: | CONTOURS | CHECKED BY | Inapplicable |
| SCALE: 1:10,000 | HYDRO SUPPORT DATA | CHECKED BY | Inapplicable |

| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT | J. Battley, Jr. | 1/75 |
| METHOD: | | |

| 6. APPLICATION OF FIELD EDIT DATA | P. Gibson | 3/75 |
| METHOD: | | |

| 7. COMPILATION SECTION REVIEW | J. Battley, Jr. | 4/75 |
| METHOD: | | |

| 8. FINAL REVIEW | D. Brant | 8/75 |
| METHOD: | | |

| 9. DATA FORWARD TO PHOTOGRAMMETRIC BRANCH | | |
| METHOD: | | |

| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH | D. Brant | 4/76 |
| METHOD: | | |

| 11. MAP REGISTERED - COASTAL SURVEY SECTION | R. CATA | 7/76 |
| METHOD: | | |
### Compilation Sources

#### Camera (s)
- Wild RC-8
  - E&L 6" focal length

**Tide Stage Reference**
- Predicted Tides
- Reference Station Records
- Tide Controlled Photography

#### Types of Photography
- **Legend**
  1. Color
  2. Panchromatic
  3. Infrared
  4. B&W

#### Time Reference
- Eastern Standard Meridian Daylight
- 75th-60th

#### Number and Type | Date | Time | Scale | Stage of Tide
---|---|---|---|---
73E(C)9024R | 6/6/73 | 9:22 | 1:40,000 | The stage of tide is inapplicable for color photography. 
73L(C)2941-2943R | 3/18/73 | 10:20 | 1:40,000 |
72K6582R-6584R | 2/20/72 | 9:50 | 1:30,000 | +0.17MLW Wednesday Pt. 
72K6387-6388R | 2/14/72 | 14:35 | 1:30,000 | -0.20MHW

**Remarks**

#### Source of Mean High-Water Line
- The map was field edited in 1975.
- 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.
- Where the shoreline is obscured by vegetation such as mangrove, the apparent shoreline symbol was used.

#### 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.

#### Contemporary Hydrographic Surveys
(List only those surveys that are sources for photogrammetric survey information.)

<table>
<thead>
<tr>
<th>Survey Number</th>
<th>Date(s)</th>
<th>Survey Copy Used</th>
<th>Survey Number</th>
<th>Date(s)</th>
<th>Survey Copy Used</th>
</tr>
</thead>
</table>

#### Final Junctions
- **North:** TP-00432 | None
- **South:** TP-00445 | TP-00435

**Remarks**
Final junctions were made in the Coastal Mapping Section.
**HISTORY OF FIELD OPERATIONS**

1. **FIELD INSPECTION OPERATION**
   - NAME: R.R. Wagner
   - DATE: 2/75

2. **HORIZONTAL CONTROL**
   - RECOVERED BY: R.R. Wagner
   - ESTABLISHED BY: Inapplicable

3. **VERTICAL CONTROL**
   - RECOVERED BY: R.R. Wagner
   - ESTABLISHED BY: Inapplicable
   - PRE-MARKED OR IDENTIFIED BY: R.R. Wagner
   - DATE: 2/75

4. **LANDMARKS AND AIDS TO NAVIGATION**
   - RECOVERED (Triangulation Stations) BY: None
   - LOCATED (Field Methods) BY: None
   - IDENTIFIED BY: None

5. **GEOGRAPHIC NAMES**
   - INVESTIGATION:
     - COMPLETE
     - SPECIFIC NAMES ONLY
     - NO INVESTIGATION

6. **PHOTO INSPECTION**
   - CLARIFICATION OF DETAILS BY: R.R. Wagner
   - DATE: 2/75

7. **BOUNDARIES AND LIMITS**
   - SURVEYED OR IDENTIFIED BY: Inapplicable

**SOURCE DATA**

1. **HORIZONTAL CONTROL IDENTIFIED**
   - PHOTO NUMBER: Refer to Field Report
   - STATION NAME: 73L(C)2941R
   - STATION DESIGNATION: R701(DC)

2. **VERTICAL CONTROL IDENTIFIED**

3. **PHOTO NUMBERS (Classification of details)**
   - 72K6387R, 73L(C)2942R, 72K6583R

4. **LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED**
   - There are no landmarks and aids to navigation on this map.

**SUPPLEMENTAL MAPS AND PLANS**

5. **GEOGRAPHIC NAMES:**
   - REPORT: X NONE
6. **BOUNDARY AND LIMITS:**
   - REPORT: X NONE

8. **OTHER FIELD RECORDS**
   - Sketch books, etc. DO NOT list data submitted to the Geodetic Division
   - *Refer to Field report bound with this Descriptive Report.*
**NOAA FORM 76-36D**

**RECORD OF SURVEY USE**

### I. MANUSCRIPT COPIES

<table>
<thead>
<tr>
<th>Compilation Stages</th>
<th>Date Manuscript Forwarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Compiled</td>
<td>Date</td>
</tr>
</tbody>
</table>

No map copies were sent to Marine Charts prior to final review.

### II. LANDMARKS AND AIDS TO NAVIGATION

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

<table>
<thead>
<tr>
<th>Number</th>
<th>Chart Letter</th>
<th>Number Assigned</th>
<th>Date Forwarded</th>
<th>Remarks</th>
</tr>
</thead>
</table>

There are no landmarks and aids to navigation on this map.

**2. REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED:**

**3. REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED:**

### III. FEDERAL RECORDS CENTER DATA

1. ☑ Bridging Photographs; ☑ Duplicate Bridging Report; ☑ Computer Readouts.
2. ☑ Control Station Identification Cards; ☑ Form Nos 567 Submitted by Field Parties.
3. ☑ Source Data (except for Geographic Names Report) as listed in Section II, NOAA Form 76-36C. Account for Exceptions:

**4. DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED:**

### IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

**SECOND EDITION**

- **Survey Number:** TP - __________
- **Job Number:** PH - __________
- **Type of Survey:**
  - □ Revised
  - □ Resurvey
  - □ Map Class
  - □ II.
  - □ III.
  - □ IV.
  - □ V.
  - □ Final

**DATE OF PHOTOGRAPHY:**

**DATE OF FIELD EDIT:**

**THIRD EDITION**

- **Survey Number:** TP - __________
- **Job Number:** PH - __________
- **Type of Survey:**
  - □ Revised
  - □ Resurvey
  - □ Map Class
  - □ II.
  - □ III.
  - □ IV.
  - □ V.
  - □ Final

**DATE OF PHOTOGRAPHY:**

**DATE OF FIELD EDIT:**

**FOURTH EDITION**

- **Survey Number:** TP - __________
- **Job Number:** PH - __________
- **Type of Survey:**
  - □ Revised
  - □ Resurvey
  - □ Map Class
  - □ II.
  - □ III.
  - □ IV.
  - □ V.
  - □ Final

**DATE OF PHOTOGRAPHY:**

**DATE OF FIELD EDIT:**
SUMMARY
for
TP-00427 thru TP-00430
TP-00432 thru TP-00436

Coastal Zone Map TP-00434 is one of nine (9), 1:10,000 scale (shoreline type) maps in Job PH-7113. These maps will not be published. Interior detail is limited to a narrow zone of planimetry usually back from the shoreline to and including the first road. Other maps in Job PH-7113 will be published with an orthophoto interior.

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

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

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

The field operations consisted of the following:

1. Premarking of horizontal control for aerotriangulation.

2. Establishment of tidal datums.

3. Field Edit.

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

The shoreline and alongshore details were compiled from tide-coordinated, black-and-white infrared photography using a B-8 stereoplotter and/or graphic methods. The rectified color photography was used as an aid in interpreting cultural features and compiling the limits of vegetation. The interior details were compiled from a stereoscopic examination of the color photography without field edit.

All line work is scribed, approved symbols are shown in the marginal data of the map.
A registration copy of each map is prepared. The registration copy shows additional offshore details such as shoal and shallow lines used by the Marine Chart Division but not required on the Coastal Zone Maps. This copy of the map is labeled "Registration Copy" in the title block.

The following items will be registered in the NOS Archives.

1. A stable base copy of the Registration Copy.

2. The Descriptive Report.

All negatives are filed in the Reproduction Division.

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

JOBS PH-7010 and PH-7113

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

1. HORIZONTAL CONTROL

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

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

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

POMPANO 192E was marked by a triangle painted on the macadam (station is in a parking area) over the station mark. Paint used was Pittsburg flourescent 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 substation.
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. 6-foot squares were used as wing panels believing these would withstand more wind. The Commander of ESSA 88 reported these targets in good condition at time of bridging photography, only one wing panel being damaged.

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

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

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

2. TIDE COORDINATED PHOTOGRAPHY

As directed by telephone, the following nine tide
stations were manned.

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

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

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

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

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

(1) Segment of Line 30-1 approximately 4 miles north and 4 miles south of Port Everglades inlet (or entrance) 1201 to 1210 hrs. based on PORT EVERGLADES staff reading of 1.7 ft.

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

(3) An 8 mile segment of line 30-1, based on BAHIA MAR YACHT CLUB, was photographed at 1444 to 1449 hrs. when the tide staff read 1.7 ft.
(4) An 8 mile segment of line 30-1, based on ANDREWS AVENUE BRIDGE was photographed at 1511 to 1515 hrs., when the staff read 118 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 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 FCHPANU and the southernmost one is near the Cape Florida lighthouse on Key Biscayne. Mr. Phil Walbolt ran 7 of the 10 during the period of photography, basing tide stage on a nearby tide gage. The other 3 were similarly accomplished two or three days after photography, with information as to tide level being obtained from the Weather Service's remote recorder in Miami Beach via telephone, in 2 instances.

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

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

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

Submitted 3/25/71
William H. Shearouse
William H. Shearouse
Chief, Photo Party 60

No planetable beach profiles were available at the time of compilation or review.
Photogrammetric Plot Report
Hillsboro Inlet to Card Sound, Florida
Job PH-7113
and
Card Sound to Plantation Key, Florida
Job PH-7119

21. Area Covered

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

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

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

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

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

22. Method

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

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

Image points were located to rectify photographs for orthophoto, nautical, and small craft charts. All points were drilled by the PUG method. Closure to control has been noted on the read-outs. A sketch is attached which shows the control used in the strip and block adjustments. All points were plotted on the Florida East Zone Plane Coordinate System using the Coradomat Plotter or the Calcomp Plotter.
Ratio points were located on twenty-eight (28) strips of infrared contact prints. Additional ratio points were located on contact prints which have a large portion of water coverage so that they could be individually enlarged to scale. A sketch showing the location of the infrared photographs is attached.

23. Adequacy of Control

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

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

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

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

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

- Rubi, 1930-1948 Reset
- Man, 1930
- Angelfish Key RM3, 1853
- Narrow Point, 1854
- Long Sound 1961
- Snipe Pt., 1934, substation
- Knowlson, 1935, substation
- Hull Key, 1852
- Rock Harbor 2, 1961
- Lower Sound Point, 1853 substation
- Sub Station, Key Largo Cable Visions Inc., Taller Mast, 1961
- Largo, 1962
- Low 2, RM2, 1934
- Planter 2, RM4
The following control station positions were transferred from photographs 72L(C)8691R thru 72L(C)8698R:

Tavernier 1935
Snake 1934 Sub. Sta.

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

Cape Florida Old Tower 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

Approved and forwarded:

John D. Perrow, Jr.
Chief, Aerotriangulation Section
JOB PH-7113
AND
JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

CONTROL STATION
USED IN THE
ADJUSTMENTS
### CONTROL STATIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>Code</th>
<th>Station</th>
<th>Year</th>
<th>Residuals 1</th>
<th>Residuals 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>(027100)</td>
<td>Turtle 1929</td>
<td></td>
<td>-0.706</td>
<td>-0.115</td>
</tr>
<tr>
<td>2.</td>
<td>(023102)</td>
<td>Pompano, 1928, subpoint B</td>
<td></td>
<td>1.488</td>
<td>-0.229</td>
</tr>
<tr>
<td>3.</td>
<td>(029100)</td>
<td>South Jetty, 1938</td>
<td></td>
<td>-1.134</td>
<td>0.176</td>
</tr>
<tr>
<td>4.</td>
<td>(034101)</td>
<td>Halland, 1928</td>
<td></td>
<td>0.317</td>
<td>-0.007</td>
</tr>
<tr>
<td>5.</td>
<td>(567101)</td>
<td>Causeway, 1934</td>
<td></td>
<td>0.027</td>
<td>-0.012</td>
</tr>
<tr>
<td>6.</td>
<td>(562101)</td>
<td>Point View, 1934</td>
<td></td>
<td>0.000</td>
<td>-0.181</td>
</tr>
<tr>
<td>7.</td>
<td>(207100)</td>
<td>Base, 1934</td>
<td></td>
<td>0.112</td>
<td>0.142</td>
</tr>
<tr>
<td>8.</td>
<td>(204100)</td>
<td>Key Biscayne North Base, 1849</td>
<td></td>
<td>0.158</td>
<td>0.033</td>
</tr>
<tr>
<td>9.</td>
<td>(201101)</td>
<td>Cape Florida Old Tower Finial, subpoint A</td>
<td></td>
<td>-0.156</td>
<td>0.002</td>
</tr>
<tr>
<td>10.</td>
<td>(538102)</td>
<td>Pan American, 1935, Target 2</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>11.</td>
<td>(534101)</td>
<td>Naco 1934, subpoint A</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>12.</td>
<td>(544801)</td>
<td>Tie point from strip #5 used as control for strip#6</td>
<td></td>
<td>-0.157</td>
<td>0.025</td>
</tr>
<tr>
<td>13.</td>
<td>(591100)</td>
<td>Black Point 3</td>
<td></td>
<td>0.351</td>
<td>-0.066</td>
</tr>
<tr>
<td>14.</td>
<td>(595101)</td>
<td>Turkey Point No. 2, 1930, RM No. 2</td>
<td></td>
<td>-0.229</td>
<td>0.073</td>
</tr>
<tr>
<td>15.</td>
<td>(940100)</td>
<td>Narrow Point 1854</td>
<td></td>
<td>-1.808</td>
<td>1.267</td>
</tr>
<tr>
<td>16.</td>
<td>(944100)</td>
<td>Man 1930</td>
<td></td>
<td>0.222</td>
<td>-0.009</td>
</tr>
<tr>
<td>17.</td>
<td>(960100)</td>
<td>Long Sound, 1961</td>
<td></td>
<td>0.168</td>
<td>-0.075</td>
</tr>
<tr>
<td>18.</td>
<td>(936101)</td>
<td>Snipe Point, 1934, substation</td>
<td></td>
<td>-0.215</td>
<td>-0.201</td>
</tr>
<tr>
<td>19.</td>
<td>(878101)</td>
<td>Irving, 1971, substation</td>
<td></td>
<td>0.687</td>
<td>-0.080</td>
</tr>
<tr>
<td>20.</td>
<td>(875102)</td>
<td>Mangrove (USE), 1930, subpoint B</td>
<td></td>
<td>-0.826</td>
<td>0.125</td>
</tr>
<tr>
<td>21.</td>
<td>(872101)</td>
<td>Sands Cut RM 2, 1849-1947</td>
<td></td>
<td>0.296</td>
<td>-0.049</td>
</tr>
<tr>
<td>22.</td>
<td>(901100)</td>
<td>Rubi, 1930-1947, reset</td>
<td></td>
<td>-0.192</td>
<td>-0.134</td>
</tr>
<tr>
<td>23.</td>
<td>(905101)</td>
<td>Angelfish Key RM 3, 1853</td>
<td></td>
<td>-0.303</td>
<td>-0.242</td>
</tr>
<tr>
<td>24.</td>
<td>(914101)</td>
<td>Knowlison, 1935 substation</td>
<td></td>
<td>0.153</td>
<td>-0.155</td>
</tr>
<tr>
<td>25.</td>
<td>(919100)</td>
<td>Hull Key, 1852</td>
<td></td>
<td>-0.053</td>
<td>0.103</td>
</tr>
<tr>
<td>26.</td>
<td>(922100)</td>
<td>Rock Harbor 2, 1961</td>
<td></td>
<td>0.364</td>
<td>-0.284</td>
</tr>
<tr>
<td>27.</td>
<td>(022101)</td>
<td>Lower Sound Point, 1853 substation **</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>(923101)</td>
<td>Sub Station Key Largo Cable Visions Inc., Taller Mast, 1961 **</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>(924100)</td>
<td>Largo, 1962</td>
<td></td>
<td>-0.210</td>
<td>0.103</td>
</tr>
<tr>
<td></td>
<td>Reference</td>
<td>Location Details</td>
<td>Value 1</td>
<td>Value 2</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------</td>
<td>-----------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>(967101)</td>
<td>Low 2, RM 2, 1934</td>
<td>0.042</td>
<td>0.215</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>(692100)</td>
<td>Tavernier, 1935</td>
<td>0.308</td>
<td>-1.325</td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>(793101)</td>
<td>Planter 2, RM 4</td>
<td>-1.476</td>
<td>1.087</td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>(695101)</td>
<td>Snake, 1934, subpoint</td>
<td>0.128</td>
<td>0.174</td>
<td></td>
</tr>
</tbody>
</table>

** means not used in adjustments
<p>| 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 |</p>
<table>
<thead>
<tr>
<th>Station</th>
<th>NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 1972</td>
<td>*</td>
</tr>
<tr>
<td>QUARRY 2 1972</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>* Unadjusted Field Data was used.</td>
</tr>
</tbody>
</table>
31. **Delineation**

The tidal datum lines on this map were compiled by graphic methods from the tide-coordinated black-and-white infrared photography. This photography was controlled by map points determined by aerotriangulation and planimetric detail compiled from the rectified prints of the color infrared photography.

The rectified prints of the color photography were used for the compilation of manmade shoreline, interior details, and offshore details such as shallow and shoal areas.

32. **Control**

Horizontal control was adequate (see Photogrammetric Plot Report).

33. **Supplemental Data** - None

34. **Contours and Drainage**

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

35. **Shoreline and Alongshore Detail**

The photography was adequate for the delineation and interpretation of the shoreline and alongshore details. There were no specific features or areas called to the attention of the field editor for verification.

36. **Offshore Details**

No unusual problems were encountered.

37. **Landmarks and Aids** - None

38. **Control for Future Surveys** - None

39. **Junctons**

Refer to form 76-36B (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

Comparisons were made with the following existing USGS quadrangles maps at a scale of 1:24,000:

Arsenicker Keys, Fla., 1956, photorevised 1969;

The only significant difference noted was several cooling channels for a power plant in the vicinity of S. Turkey Point.

47. Comparison with Nautical Charts

A comparison was made with the following charts:

11451(formerly 141-SC) 12th Edition October 1974, 1:80,000
849, 6th edition, August 1972, 1:40,000

Immediately North of Model C Canal, a new canal.

Respectfully submitted;

Peter N. Gibson
Cartographer (Photo)

Approved by:

Chief, Coastal Mapping Section
FIELD EDIT REPORT, MAP TP-00434 JOB PH 7113

51. METHODS

The shoreline was inspected from a small boat while cruising just offshore. Notes regarding apparent and fast shoreline were made on the rectified photographs.

Two triangulation stations were recovered.

One bench mark was identified.

There are no tide gages that fall with in the limits of this manuscript.

There are no aids or landmarks on this manuscript.

One name, "CARD SOUND ROAD" is recommended for charting.

Field edit notes will be found on the discrepancy print, field edit sheet and the rectified photographs.

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 2/25/75

Robert R. Wagner
Chief, Photo Party 60
March 3, 1976

GEOGRAPHIC NAMES
FINAL NAME SHEET
PH-7113 (Biscayne Bay, Florida)
TP-00434

Card Sound
Model C Canal

Approved by:

Chas. E. Harrington
Staff Geographer C51x2
Review Report  
Coastal Zone Map TP-00434  
April 1976

61. General

The map manuscript for Coastal Zone Map TP-00434 was inspected as a Class III map (compilation, discrepancy print, and report) and reviewed as a Class I map by the Quality Control Group. The review consisted of an examination of the map manuscript, the field edit and its application, the reproduction negatives, and the Descriptive Report.

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

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

62. Cartographic Comparison

Comparisons were made with the following existing USGS quadrangle maps at a scale of 1:24,000:

Arsenicker Keys, FL, 1956, photorevised 1969;  

No significant changes were found.

Comparison was made with the following Nautical Chart:

11463 (formerly 849), 7th Edition, 1:40,000 scale, dated Aug. 3, 1974

No significant changes were found.

63. thru 65. Inapplicable

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00434 complies with the instructions for NOS Cooperative Boundary Mapping, Job PH-7000, and the National Standards of Map Accuracy.

Submitted by,

[Signature]
Donald M. Brant

Approved and forwarded:

[Signature]
Chief, Photogrammetric Branch

[Signature]
Chief, Coastal Mapping Division
1 Discrepancy Print
1 Field Edit sheet (stable base)

Photography:
72K6387R and 6583R
73L(C)2942R