

original

TP-00416

TP-00416

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey <u>Coastal Boundary</u>	
Job No. <u>PH-7113</u>	Map No. <u>TP-00416</u>
Classification No. <u>Final</u>	Edition No. <u>1</u>
Field Edited Map	
LOCALITY	
State <u>Florida</u>	
General Locality <u>Broward County</u>	
Locality <u>Pompano Beach to</u>	
<u>Fort Lauderdale</u>	
<u>1971 TO 1973</u>	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY		SURVEY TP. <u>00416</u>	
DESCRIPTIVE REPORT - DATA RECORD				☒ ORIGINAL		MAP EDITION NO. ()	
				☐ RESURVEY		MAP CLASS <u>Final</u>	
				☐ REVISED		JOB <u>PH-7113</u>	
PHOTOGRAMMETRIC OFFICE				LAST PRECEDING MAP EDITION			
Rockville, Maryland				TYPE OF SURVEY		JOB <u>PH-</u>	
OFFICER-IN-CHARGE				☐ ORIGINAL		MAP CLASS	
Commander Wesley V. Hull				☐ RESURVEY		SURVEY DATES:	
				☐ REVISED		19 <u> </u> TO 19 <u> </u>	
I. INSTRUCTIONS DATED							
1. OFFICE				2. FIELD			
General-Instructions-OFFICE-NOS Coop- erative Coastal Boundary Mapping, Job PH-7000, June 19, 1973 OFFICE-Supplement I, Aug. 19, 1973 NOTE: Office and field edit instruc- tions (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, 8/10/72 Field Edit(PH-7000 General Instructions for Florida Coastal Zone Mapping) 1973			
II. DATUMS							
1. HORIZONTAL: ☒ 1927 NORTH AMERICAN				OTHER (Specify)			
2. VERTICAL: ☒ MEAN HIGH-WATER ☒ MEAN LOW-WATER ☐ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION				4. GRID(S)			
Transverse Mercator				STATE		ZONE	
5. SCALE				Florida		East	
1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY				V. McNeel		6/72	
METHOD: Analytic LANDMARKS AND AIDS BY				Inapplicable			
2. CONTROL AND BRIDGE POINTS PLOTTED BY				D. Phillips		8/72	
METHOD: Coradomat CHECKED BY				Inapplicable			
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY				Inapplicable			
COMPILATION CHECKED BY				Inapplicable			
INSTRUMENT: CONTOURS BY				Inapplicable			
SCALE: CHECKED BY				Inapplicable			
4. MANUSCRIPT DELINEATION PLANIMETRY BY				H.S. Jones		4/73	
Shoreline: Graphic CHECKED BY				J.P. Battley		5/73	
METHOD: CONTOURS BY				J. Taylor		11/72	
Interior: Orthophoto mosaic CHECKED BY				J.P. Battley		11/72	
SCALE: HYDRO SUPPORT DATA BY				Inapplicable			
CHECKED BY							
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				J.P. Battley			
6. APPLICATION OF FIELD EDIT DATA BY				S. Solbeck		1/74	
CHECKED BY				J.P. Battley		1/75	
7. COMPILATION SECTION REVIEW BY				J.P. Battley		1/75	
8. FINAL REVIEW BY				D. Brant			
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY							
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				D. Brant			
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				R. CATOR		2/77	

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

COMPILATION SOURCES

TP-00416

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8 E&K 6" focal length		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED B&W		ZONE East	☒ STANDARD
☐ PREDICTED TIDES ☐ REFERENCE STATION RECORDS ☒ TIDE CONTROLLED PHOTOGRAPHY				MERIDIAN 75th & 60th	☒ DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
*71E(C)9123-9126 71E(C)9525	8/17/71 3/8/71	1548 1210	1:30,000 1:30,000	The stage of tide is inapplicable for the color photography.	
71K5633R-5636R 71K5751R-5754R	2/24/71 3/2/71	1230 1048	1:25,000 1:25,000	Refer to the following page for tide information	

REMARKS

*Photography used for the assembly of the orthophoto mosaic.

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the MHW line is the tide-coordinated black-and-white infrared photography listed in item 1. The rectified color photography was used as an aid for interpreting culture features and compiling the limits of shoal and shallow areas for Nautical Charts.

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

The map was field edited in 1973.

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

The source of the MLW line is the tide-coordinated black-and-white infrared photography listed under item 1.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED
Inapplicable					

5. FINAL JUNCTIONS

NORTH	EAST No contem- porary Survey	SOUTH	WEST No contem- porary Survey
TP-00192		TP-00417	

REMARKS Final junctions were made in the Coastal Mapping Section

NOAA FORM 76-36B(1)
(7-75)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYTIDE - COORDINATED PHOTOGRAPHY
TP _ 00416

LOCATION AND PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)	STAGE OF TIDE	MEAN RANGE
ATLANTIC OCEAN			
71K5633R-5636R	Hillsboro Inlet, Atlantic O.	-0.17MLW	2.57
71K5751R-5754R	Hillsboro Inlet, Atlantic O.	-0.04MHW	
INTERIOR WATERS			
71K5633R-5636R	Hillsboro Inlet	-0.06MLW	2.53
71K5751R-5754R	Hillsboro Inlet	-0.17MHW	

REMARKS:

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

TP-00416

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION *☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE	
1. CHIEF OF FIELD PARTY	R.R. Wagner	6/73	
2. HORIZONTAL CONTROL	RECOVERED BY R.R. Wagner ESTABLISHED BY Inapplicable PRE-MARKED OR IDENTIFIED BY Inapplicable	6/73	
3. VERTICAL CONTROL	RECOVERED BY R.R. Wagner ESTABLISHED BY Inapplicable PRE-MARKED OR IDENTIFIED BY R.R. Wagner	6/73	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY R.R. Wagner LOCATED (Field Methods) BY C.V. Ullman IDENTIFIED BY Inapplicable	6/73	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION		
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY C.V. Ullman	6/73	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.		
II. SOURCE DATA			
1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Refer to field report	71E9529	POMPANO, F235,12.120(SRD)
		71E9123	V311
		71E9124	T234
		71E9125	X234,S311
		71E9126	11.72(SRD),R311,N01
			Y234,K311,RESET,1970

3. PHOTO NUMBERS (Clarification of details)

71E9123 thru 71E9126 are 71E9123

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

RECORD OF SURVEY USE

TP-00416

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No copies were furnished to Nautical Charts prior			to final	review.

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
		7/14/74	3 forms 76-40 submitted as field report.

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 7/14/753. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

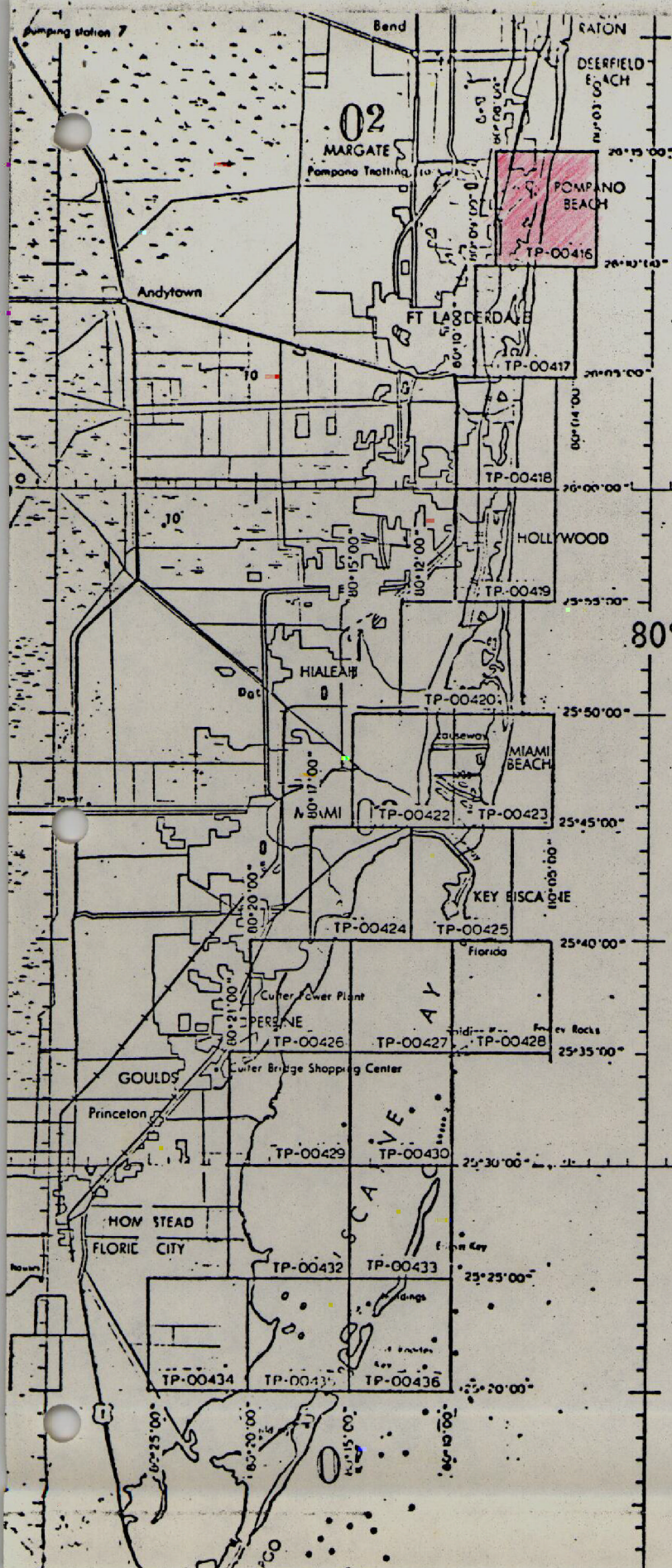
III. FEDERAL RECORDS CENTER DATA

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

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

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

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	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 - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	



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

MILEAGE FOR COST ACCOUNTS

Sheet No.	Sa. 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-00416 thru TP-00418

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

A layout of the maps (revised since the aerotriangulation operation) will show the location of the individual maps.

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 by aerial photography taken in 1971 on 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.

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 will be registered in the NOS Archives:

Published Map

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 orthophoto mosaic.
4. The Descriptive Report.

Shoreline Map

1. A stable base copy of Coastal Zone Map.
2. A stable base copy of the Registration Copy.
3. The Descriptive Report.

All negatives are filed in the Reproduction Division.

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

FIELD REPORT

JCS 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 FORT EVERGLADES) was photographed at 1103 to 1106 hrs. with the camera end overlap setting at 80%.

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

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

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

This ends the high-water photography.

5.

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 POMPAU 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
- } Not applicable for TP-00416*

22. Method

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

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

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

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

23. Adequacy of Control

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

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

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

Irving 1971

Mangrove (USE) 1930 Sub Point A

Sands Cut RM2, 1849-1947 Sub station

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

Rubi, 1930-1948 Reset

Man, 1930

Angelfish Key RM3, 1853

Narrow Point, 1854

Long Sound 1961

Snipe Pt., 1934, substation

Knowlson, 1935, substation

Hull Key, 1852

Rock Harbor 2, 1961

Lower Sound Point, 1853 substation

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

Largo, 1962

Low 2, RM2, 1934

Planter 2, RM4

3

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

Tavernier 1935

Snake 1934 Sub. Sta.

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

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

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

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

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

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

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

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

24. Supplemental Data

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

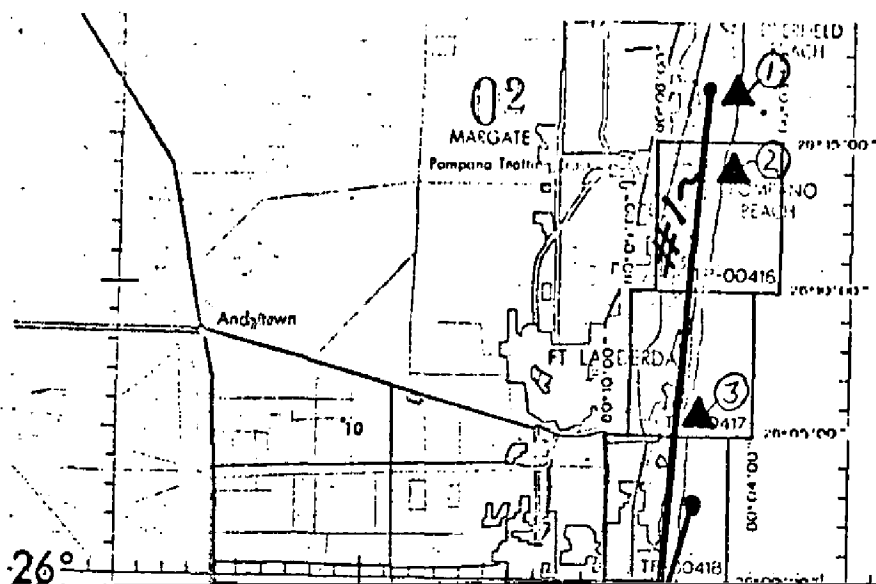
25. Photography

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

1:20,000 scale

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





JOB PH-7113
AND
JOB PH-7119

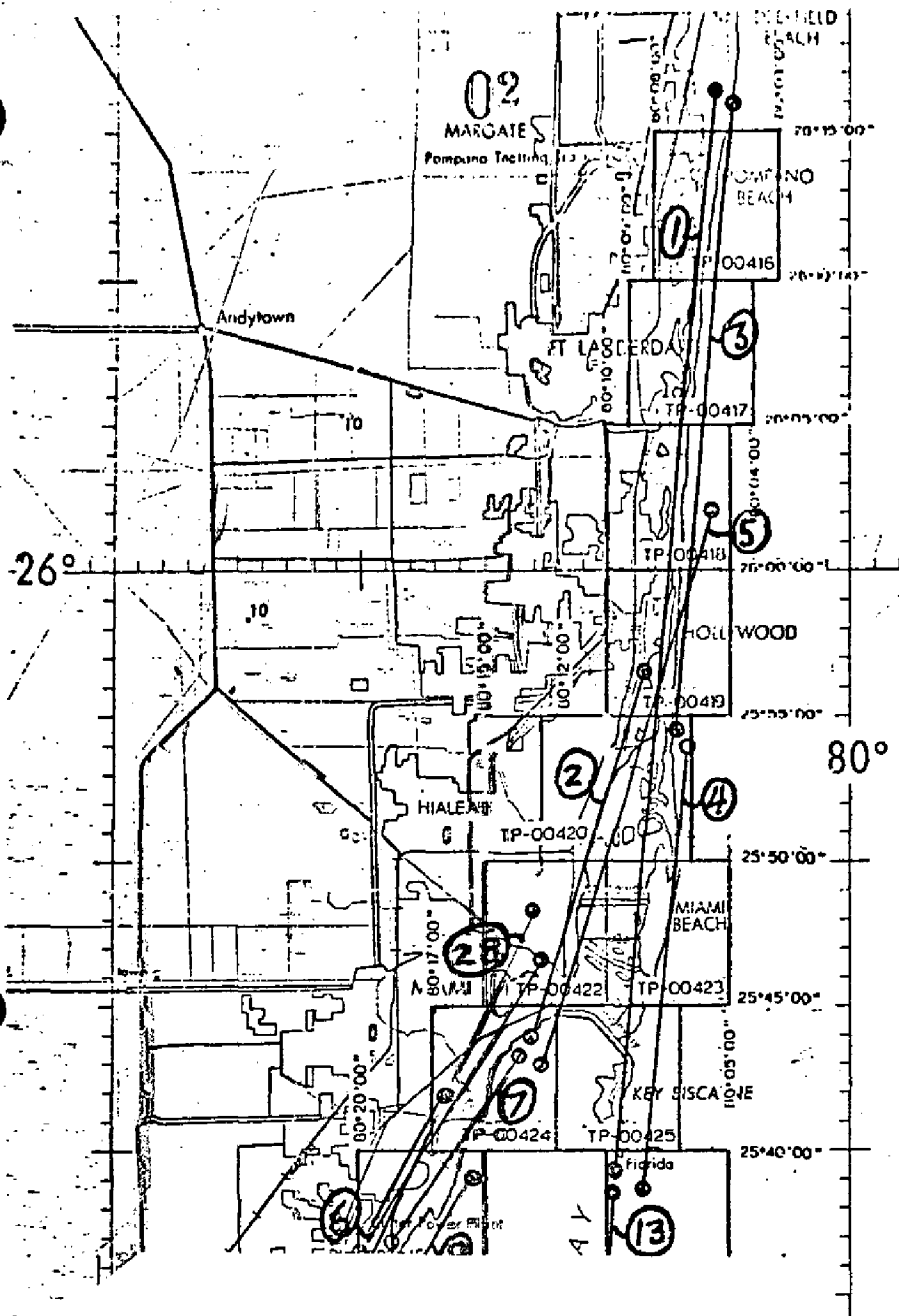
HILLSBORO INLET
· TO
PLANTATION KEY,
FLORIDA

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		

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

** means not used in adjustments



JOB PH-7113
AND
JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

INFRA-RED CONTACT
PRINTS RATIOED FOR
COMPILATION

INFRA-RED CONTACT PRINTS

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

FLORIDA— NOAA Coastal Boundary Mapping Program

Horizontal Control

Map TP— 00416

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
POMPANO, 1928	Book 422, P.7, 35 G.P.-Fla. Vol. 1, P. 185, P.C. Fla. E Zone, P.48
POMPANO BEACH WATER TANK, 1934	Station Destroyed
BURK 2, 1934	Book 422, P. 10, 34, 25, 31, G.P.-Fla. Vol. 1, P. 164, P.C. Fla. E Zone, P.23

Vertical Control--Geodetic

Map TP--00416

Page 1 of 1

Geodetic Bench Mark	Elevations (feet)	Condensed Description
	NGVD 1929	
POMPANO	9.875	C&GS disk stamped POMPANO 1932 9.793; set on top of SE concrete wing wall of SW 1st Avenue bridge over Pompano Canal.
F 235	20.381	C&GS disk stamped F 235 1965; 53.5 ft. W of and across side track from W rail of N-bound track, 93.5 ft. N of centerline of NW 16th St. 1.5 ft. S of cable line pole.
V 311	10.308	C&GS disk stamped V 311 1970; 23 ft. W of A1A centerline, 18 ft. S of approx. centerline of NE 7th Place, 2.5 ft. NW of power line pole, 2.3 ft. SE of stop sign.
12.120 (SRD)	12.149	FSRD disk stamped 12.120; set on top of S end of W concrete abutment of ICW bridge, 19.3 ft. S of SR 814 centerline.
2 11.72 (SRD)	11.745	FSRD disk stamped 2 11.72; set on top of W banister of bridge, 5.2 ft. W of W curb of Hwy., 7.7 ft. S of N end of banister.
T 234	16.680	C&GS disk stamped T-234 1965; set vertically in W face at NW corner of concrete foundation for main hangar and office bldg. of airport.
X 234	6.184	C&GS disk stamped X 234 1965; 167 ft. E of Dixie Hwy., centerline, 38 ft. W of W rail of S-bound track, 37.5 ft. NW of milepost 334, 2 ft. N of metal witness post.
Y 234	7.707	C&GS disk stamped Y 234 1965; set vertically in W side and near SW corner of concrete loading platform of Sears & Roebuck Co. Service Bldg. 34.2 ft. E of and across side track from E rail of N-bound track.
K 311 RESET 1970	11.606	C&GS disk stamped K 311 RESET 1970; set in top of SE corner of seawall, near Villa Caprice Apts., 26.5 ft. N of extended centerline of Palm Ave., 1.3 ft. NW of SE corner of seawall.
R 311	10.466	C&GS disk stamped R 311 1970; 32 ft. W of A1A centerline, 20 ft. S of Washington Ave. centerline, 1.5 ft. E of power line pole.

Geodetic Bench Mark	Elevations (feet)	Condensed Description
	NGVD 1929	
S 311	9.695	C&GS disk stamped S 311 1970; 28 ft. E of A1A centerline, 2.5 ft. S of power line. 2.3 ft. N of metal witness post.

Compilation Report
TP-00416
January 1974

31. Delineation

The tidal datum lines were delineated from the black-and-white tide-coordinated infrared photography by graphic methods. This photography was controlled by map points determined by aerotriangulation and planimetric features compiled from the orthophoto mosaic.

The land area on this map is shown by an orthophoto mosaic. The orthophoto mosaic was assembled from the rectified prints of the color infrared photography. The orthophoto mosaic was controlled by points determined by aerotriangulation.

32. Horizontal Control

See Photogrammetric Plot Report.

33. Supplemental Data - None

34. Contours and Drainage

Contours are not applicable. Drainage is depicted by the orthophoto mosaic.

35. Shoreline and Alongshore Details

The MHW and MLW lines were delineated from photo interpretation of the tide-coordinated infrared photography.

Completeness and accuracy of the tidal datum lines will be verified during the field edit operation.

36. Offshore Details

No unusual problems were encountered.

37. Landmarks and Aids

The images of charted objects visible on the photography were located during compilation and will be verified by field edit. Objects not visible on the photography will be located by the field editor.

38. Control for Future Surveys - None

39. Junctions

Refer to form 76-36B (page 2 of this Descriptive Report).

40. Horizontal Accuracy

Coastal Zone Map TP-00416 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

Comparison was made with the following USGS quadrangles:

Pompano Beach, Fla., 1:24,000 scale, dated 1962,
photorevised, 1969.

Fort Lauderdale, Fla., 1:24,000 scale, dated 1962,
photorevised 1969.

No significant differences were noted.

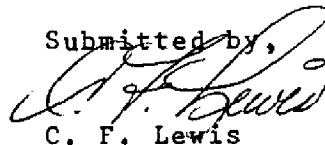
47. Comparison with Nautical Charts

11467(formerly 847-SC) 13th edition, dated Sept. 1974,
1:40,000 scale

11466(formerly 1248) 16th edition, dated Aug. 1974,
1:80,000 scale

No significant differences were noted.

Submitted by,



C. F. Lewis

Approved and forwarded:

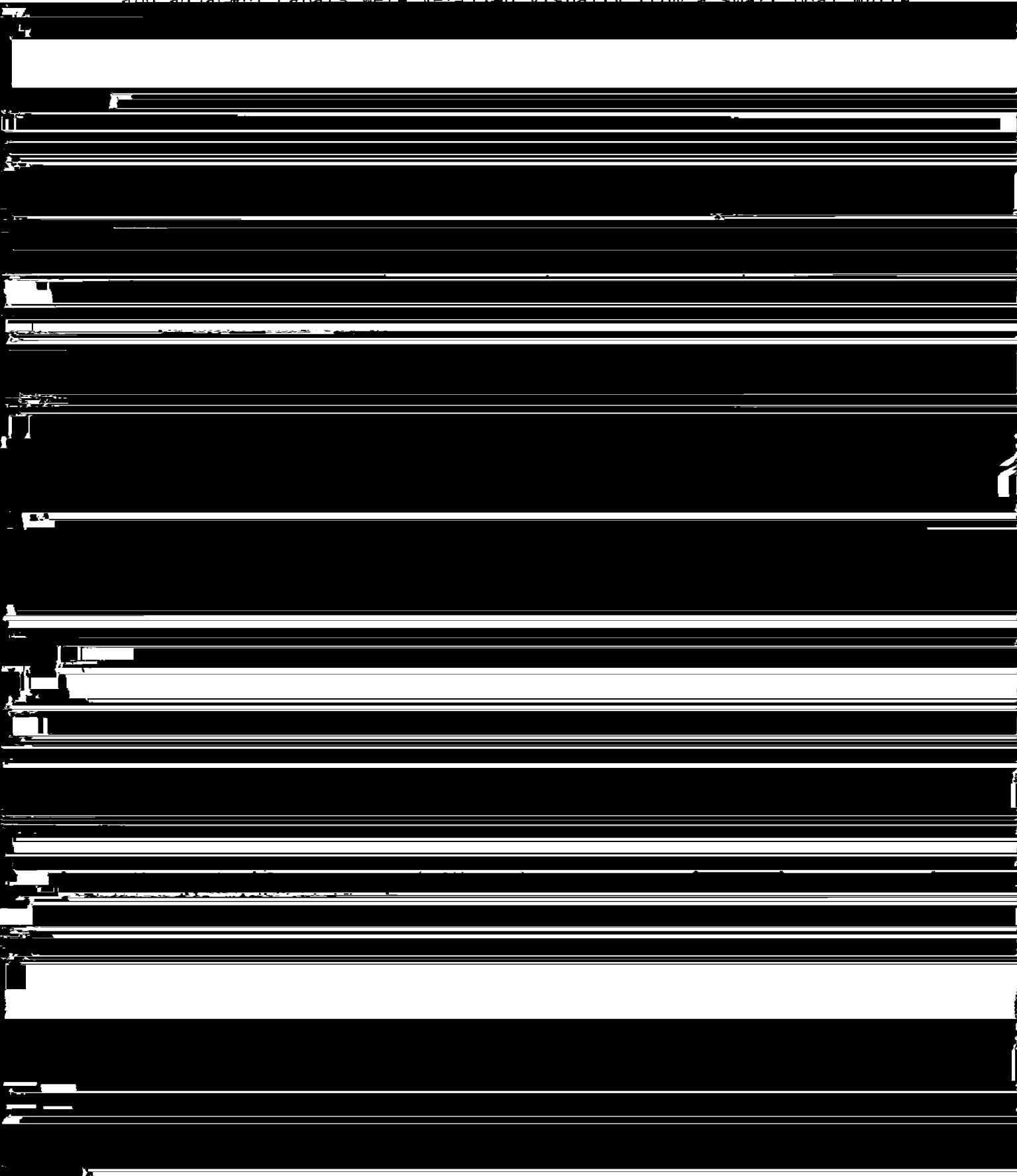


J. P. Battley, Jr.

Chief, Coastal Mapping Section

51. METHODS

The shoreline of the Atlantic Ocean was verified visually by walking along the shoreline. The shoreline of the Intracoastal Waterway and adjacent canals were verified visually from a small boat while

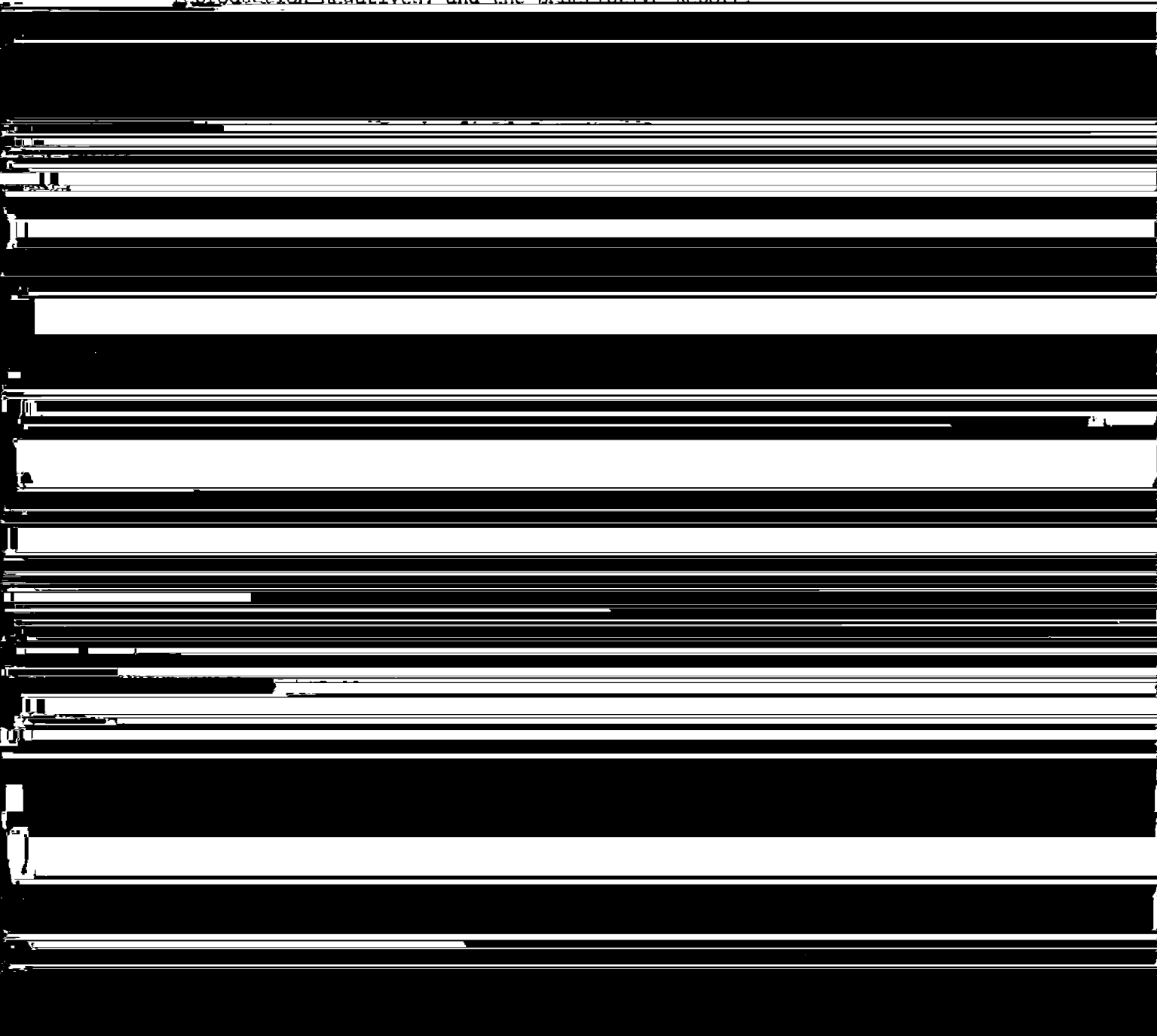


Review Report
Coastal Zone Map TP-00416
October 1975

61. General

The map manuscript for Coastal Zone Map TP-00416 was inspected in its Class III stage prior to field edit. This inspection comprised of an examination of the Class III Manuscript, photography, discrepancy print, and Descriptive Report (partial).

The review for Coastal Zone Map TP-00416 consisted of an examination of the Class I manuscript, the field edit and its application, the reproduction negatives, and the Descriptive Report.

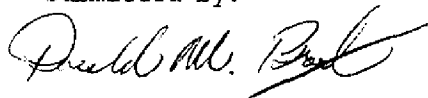


63. thru 65. Inapplicable

66. Adequacy of Results and Future Surveys

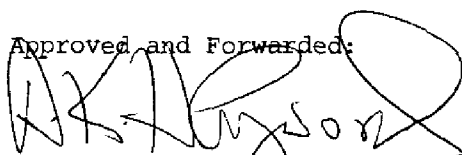
Coastal Zone Map TP-00416 complies with the instructions for NOS Cooperative Boundary Mapping, Job PH-7000, and the National Standards of Map Accuracy.

Submitted by:

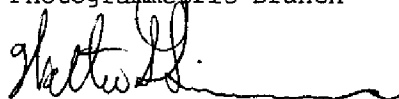


Donald M. Brant

Approved and Forwarded:



Chief, Photogrammetric Branch



Chief, Coastal Mapping Division

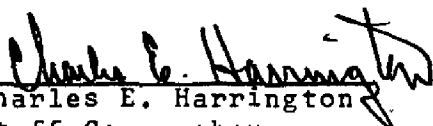
March 1975

GEOGRAPHIC NAMES
FINAL NAME SHEETS
PH-7010(Florida)

TP-00416

Atlantic Ocean	High Ridge Estates
Coral Heights	Imperial Point
Coral Hills	Lake Cayuga
Coral Ridge Isles	Lake Santa Barbara
Coral Woods	Lake Seneca
Country Club Isles	Lauderdale-by-the-Sea
Cypress Creek Canal	Lettuce Lake
Cypress Harbor	Oakland Park
Cypress Isles Estates	Pompano Beach
Cypress Lake	Pompano Isles
East Coral Lake	Santa Barbara Shores
Florida East Coast R.R.	Sea Ranch Lakes
Fort Lauderdale	Silver Shores
Garden Isles	Terra Mar
Harbor Village	

Approved:


Charles E. Harrington
Staff Geographer

[illegible]

RESPONSIBILITY	
TYPE OF ACTION	
1. Objects inspected from seaward	R. R. Wagner
2. Positions determined and/or verified	C. V. Ullman
	H. S. Jones
3. Forms originated by Quality Control and Review Group and final review activities	Copy checked D. Brant

INSTRUCTIONS FOR METHOD A

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon 'Field Positions' are determined by field observations based entirely upon

COLUMN TITLE

COMPILATION

Applicable to office identified and identify the object.

FIELD INSPECTION AND FIELD EDIT

1. New Position Determined--Enter the

F - Field

1. Triangulation
2. Traverse
3. Intersection
4. Resection
 - a. Theodolite
 - b. Planetable
 - c. Sextant

Immediately beneath the data described
a. For 'Field Positions' enter the data
b. For 'Photogrammetric Positions' was used in locating the object

2. Triangulation Station Recovered -

3. Position Verified -- Enter 'Verif. m

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
1. Objects inspected from seaward	R. R. Warner
2. Positions determined and/or verified	C. V. Ullman
3. Forms originated by Quality Control and Review Group and final review activities	H. S. Jones
	Copy checked after typing D. Brant
	FIELD INSPECTOR
	FIELD EDITOR
	FIELD INSPECTOR
	FIELD EDITOR
	COMPILER
	REVIEWER
	QUALITY CONTROL AND REVIEW
	GROUP REPRESENTATIVE

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon control established by photogrammetric methods. 'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE

TYPE OF ENTRIES

COMPILATION

Applicable to office identified and located objects only. Enter the number and date of the photograph used to identify the object.

FIELD INSPECTION

1. New Position Determined - Enter the applicable data by symbols as indicated below:

AND

FIELD EDIT

F - Field

1. Triangulation

2. Traverse

3. Intersection

4. Resection

a. Theodolite

b. Planetable

c. Sextant

P - Photogrammetric

1. Field identified

2. Theodolite

3. Planetable

4. Sextant

EXAMPLES:

F. 3.c

P. 2

Immediately beneath the data described above, enter the following:

a. For 'Field Positions' enter the date of location.

b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

2. Triangulation Station Recovered - Enter 'Triang. Rec. mo/day/yr.'

3. Position Verified - Enter 'Verif. mo/day/yr.'

* U.S. GOVERNMENT PRINTING OFFICE: 1971-769374/445 REG.#4

[illegible]

RESPONSIBLE PERSONNEL		TITLE
TYPE OF ACTION	NAME	
1. Objects inspected from seaward	R. R. Warner	☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified	C. V. Ullman	FIELD INSPECTOR
	H. S. Jones	FIELD EDITOR
3. Forms originated by Quality Control and Review Group and final review activities	Copy checked after typing D. Brant	COMPILER ☐ REVIEWER ☒ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon control established by photogrammetric methods. 'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE

TYPE OF ENTRIES

COMPIRATION

Applicable to office identified and located objects only. Enter the number and date of the photograph used to identify the object.

FIELD INSPECTION
AND
FIELD EDIT

1. New Position Determined—Enter the applicable data by symbols as indicated below:

- | | | |
|------------------|----------------------------|------------------|
| F — Field | P — Photogrammetric | EXAMPLES: |
| 1. Triangulation | 1. Field identified | F. 3.c |
| 2. Traverse | 2. Theodolite | |
| 3. Intersection | 3. Planetable | |
| 4. Resection | 4. Sextant | P. 2 |
| a. Theodolite | | |
| b. Planetable | | |
| c. Sextant | | |

Immediately beneath the data described above, enter the following:

- a. For 'Field Positions' enter the date of location.
- b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

- 2. Triangulation Station Recovered — Enter 'Triang. Rec. mo/day/yr.'
- 3. Position Verified — Enter 'Verif. mo/day/yr.'

TP-00416
National Archives Data

- 1 Field Edit Sheet
- 1 Discrepancy Print
- 3 Forms 76-40

Photography:

71E(C)9123 thru 9126
71K 5754R