

Original ✓

TP-00430

TP-00430

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey ... Coastal Zone Map	
Job No. PH-7113	Map No. TP-00430
Classification No. Final	Edition No. 1
Field Edited Map	
LOCALITY	
State Florida	
General Locality Dade County	
Locality ... Ragged Keys	
.....	
<hr/> 19 72 TO 1975 <hr/>	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>00430</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB PH- <u>7113</u>
PHOTOGRAMMETRIC OFFICE Rockville, Maryland		LAST PRECEEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
OFFICER-IN-CHARGE Cdr. James Collins		JOB PH- _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE General Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000, 12/9/75 Supplement I, 11/4/74 Supplement III, 10/24/74 Note: Office and filed edit instructions (1975) incorporate applicable prior operational instructions.		2. FIELD 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: <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)	
5. SCALE 1:10,000		STATE Florida	ZONE East
III. HISTORY OF OFFICE OPERATIONS		STATE ZONE	
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic BY LANDMARKS AND AIDS BY		McNeel-Kelly Inapplicable	10/73, 2/75
2. CONTROL AND BRIDGE POINTS METHOD: PLOTTED BY CHECKED BY		D. Phillips Inapplicable	8/71
3. STEREOSCOPIC INSTRUMENT COMPILATION PLANIMETRY BY INSTRUMENT: CHECKED BY SCALE: CONTOURS BY CHECKED BY		Inapplicable Inapplicable Inapplicable	Inapplicable
4. MANUSCRIPT DELINEATION METHOD: Graphic PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY SCALE: 1:10,000 HYDRO SUPPORT DATA BY CHECKED BY		J. Battley, S. Solbeck P. Dempsey Inapplicable Inapplicable	4/75 4/75
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		J. Battley	7/72
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY		J. McClure P. Dempsey	10/75 12/75
7. COMPILATION SECTION REVIEW BY		P. Dempsey	12/75
8. FINAL REVIEW BY		D. Brant	2/76
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		D. Brant	3/76
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY		R. CATDR	7/76
11. MAP REGISTERED - COASTAL SURVEY SECTION BY		R. CATDR	7/76

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

TP-00430

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) RC-8 C,L., & K 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) COLOR (P) PANCHROMATIC (I) INFRARED B&W		ZONE Eastern MERIDIAN 75th <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
73L(C)2873-2879R	3/18/73	0923	1:20,000	The stage of tide is inapplicable for the color photography.	
74C(C)2897-2899	12/2/74	1158	1:40,000		
72K6402R-6406R	2/14/72	1459	1:20,000	See following page for tidal reference data.	
72K6271R-6274R	2/14/72	1045	1:20,000		
*NASA photography 370 and 383	2/18/71	not available	1:60,000		

REMARKS

*Photography used for compiling limits of shoal areas around Featherbed Banks.

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the MHWL is the tide-coordinated black-and-white infrared photography listed in item 1 above. The rectified color photography listed was used as an aid for interpreting cultural 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.

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 above, except for the MLWL located by the field editor.

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-00427	TP-00431	TP-00433	TP-00429

REMARKS

Final junctions were made in the Coastal Mapping Section.

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

TP-00430

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION *1971☒ FIELD EDIT OPERATION 1975

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

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Refer to field report	73L2875R	Ragged Key Tidal BM1

3. PHOTO NUMBERS (Clarification of details)

72K6402,6406; 73L 2874R,2875R; 74C2898

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

One landmark was verified. Non-floating aids were located by triangulation and sextant fix.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

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

7. SUPPLEMENTAL MAPS AND PLANS

None

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

Sketchbook, Form 76-52, Horizontal Direction

*The Field Report is bound with this Descriptive Report.

NOAA FORM 76-36C
(3-72)

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

TP-00430

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No copies of this map have been submitted to the Marine Chart Division prior to final review.				

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
		11/17/75	Three forms 76-40 were submitted as final report.

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 11/17/75
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 - _____ (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	

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

Coastal Zone Map TP-00430 is one of nine (9), 1:10,000 scale (shoreline type) maps in Job PH-7113. These maps will not be published. Interior detail is limited to a narrow zone of planimetry usually back from the shoreline to and including the first road. Other maps in Job PH-7113 will be published with an orthophoto interior.

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

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

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

The field operations consisted of the following:

1. Premarking of horizontal control for aerotriangulation.
2. Establishment of tidal datums.
3. Field Edit.

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

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

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

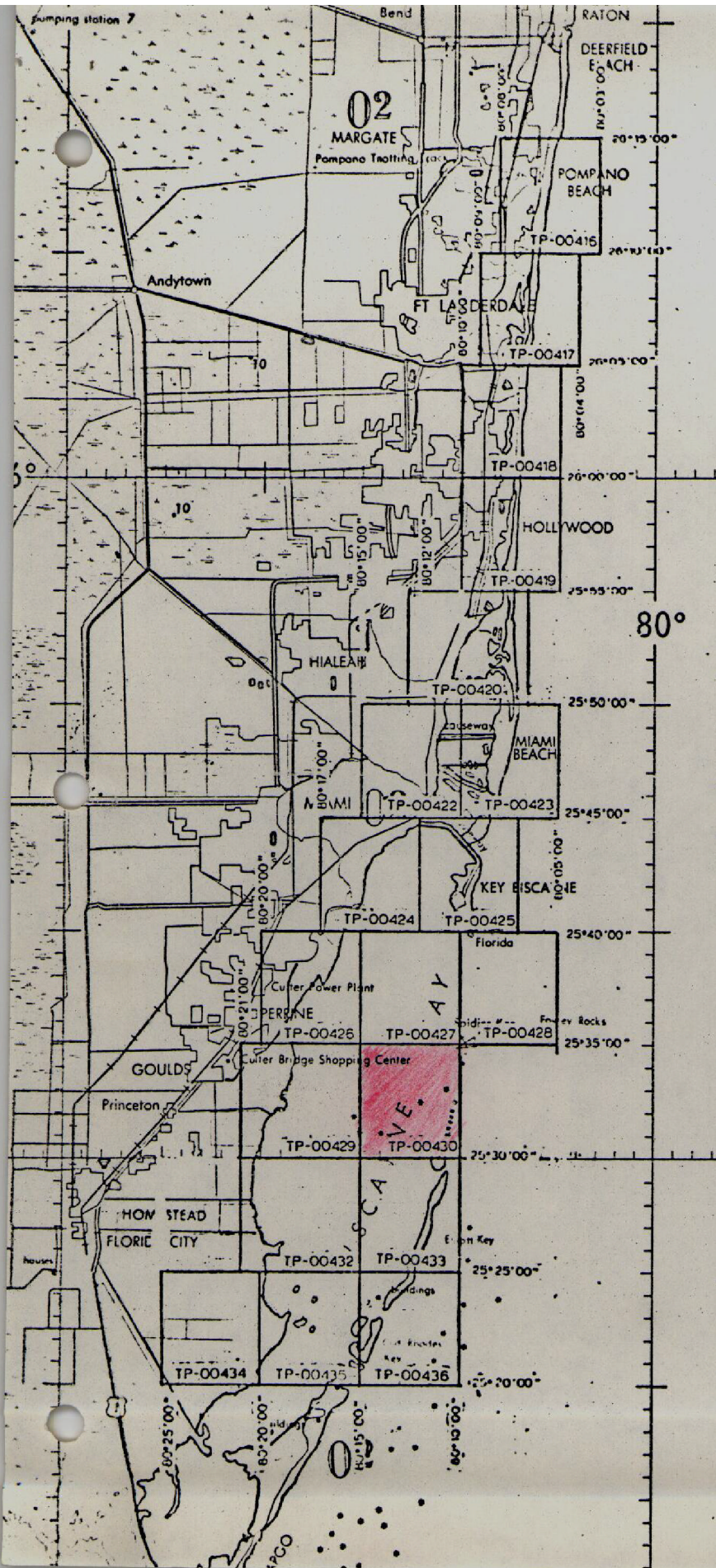
shallow lines used by the Marine Chart Division but not required on the Coastal Zone Maps. This copy of the map is labeled "Registration Copy" in the title block.

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.



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

MILEAGE FOR COST ACCOUNTS

Sheet No.	Sq. Miles
TP-00416	3
TP-00417	3
TP-00418	3
TP-00419	8
TP-00420	10
TP-00422	4
TP-00423	6
TP-00424	4
TP-00425	6
TP-00426	4
TP-00427	1
TP-00428	1
TP-00429	4
TP-00430	1
TP-00432	4
TP-00433	3
TP-00434	1
TP-00435	5
TP-00436	5

Total 76

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

FIELD REPORT

JOBS PH-7010 and PH-7113

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

1. HORIZONTAL CONTROL

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

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

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

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

2.

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

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

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

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

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

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

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

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

2. TIDE COORDINATED PHOTOGRAPHY

As directed by telephone, the following nine tide

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 6 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 1.6 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 CREEK, 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 POMPAHO and the southernmost one is near the Cape Florida lighthouse on Key Biscayne. Mr. Phil Walbolt ran 7 of the 10 during the period of photography, basing tide stage on a nearby tide gage. The other 3 were similarly accomplished two or three days after photography, with information as to tide level being obtained from the Weather Service's remote recorder in Miami Beach via telephone, in 2 instances.

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

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

In addition to sketches at some of the occupied points, 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 revision.

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:

- Rub1, 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

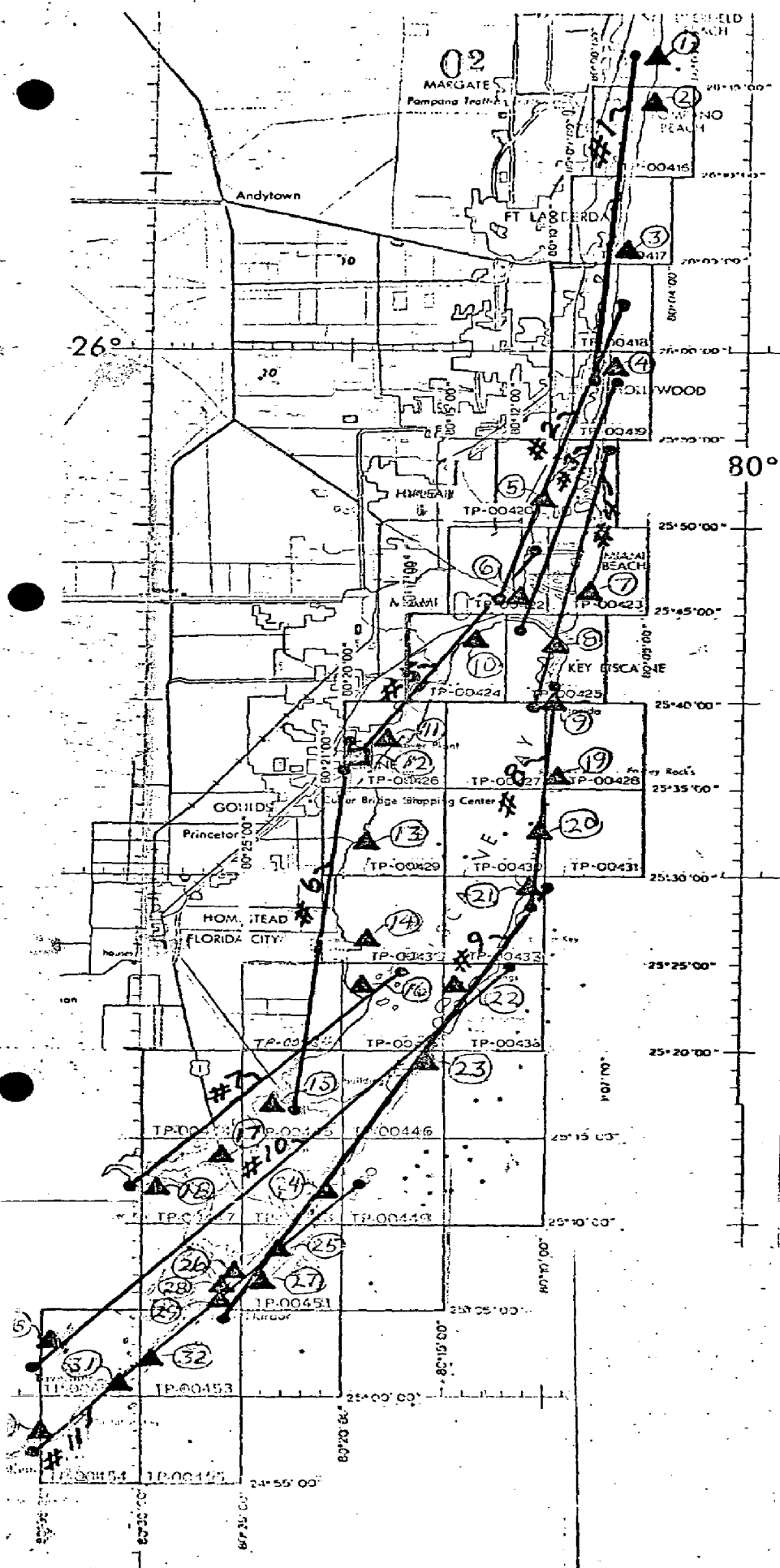
Approved and forwarded:

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

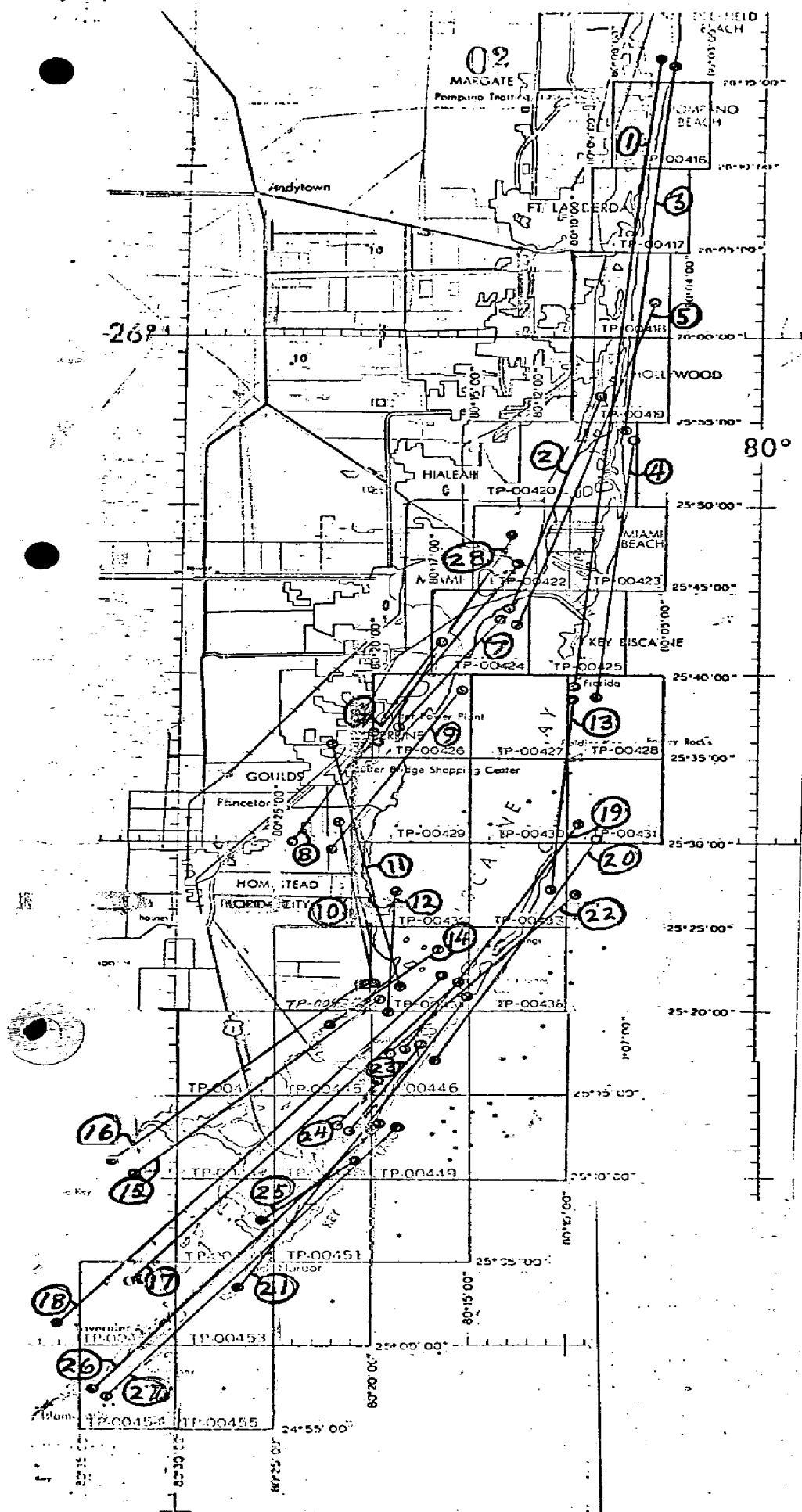
30.	(967101)	Low 2, RM 2, 1934	0.042	0.215
31.	(692100)	Tavernier, 1935	0.308	-1.325
32.	(793101)	Planter 2, RM 4	-1.476	1.087
33.	(695101)	Snake, 1934, subpoint	0.128	0.174

** means not used in adjustments

JOB PH-7113
AND
JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

INFRA-RED CONTACT
PRINTS RATIOED FOR
COMPILATION



INFRA-RED CONTACT PRINTS

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

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

21. Area Covered

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

22. Method

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

23. Adequacy of Control

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

24. Supplemental Data

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

25. Photography

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

Submitted by,

Robert B. Kelly
Robert B. Kelly

Approved and Forwarded:

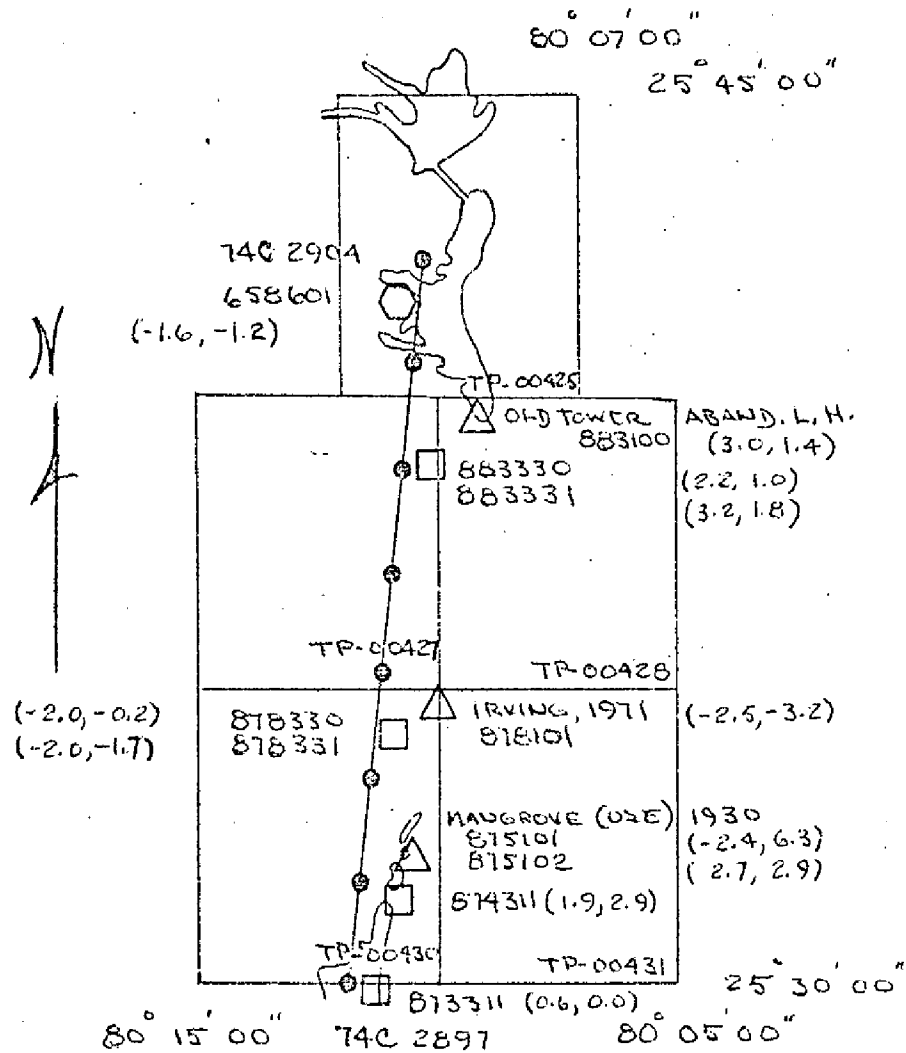
John D. Perrow Jr.
John D. Perrow, Jr.

Chief, Aerotriangulation Section

BISCAYNE BAY

ADDENDUM TO PH-7113

FEBRUARY, 1975



Horizontal Control

Map TP- 00430

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
SANDS POINT (USE) 1930	Book 424, P. 3,28,37; GP Fla. P. 388 Vol. 1; PC Fla. E. Zone P. 101
MANGROVE (USE) 1930	Book 424 P. 2,28,29, G.P. Fla., P. 380 Vol. 1; P.C. Fla. E. Zone, P. 97

Compilation Report
TP-00430
April 1975

31. Delineation

All features were delineated by graphic compilation. Control for the graphic compilation consisted of map points, determined in aerotriangulation, and planimetric features compiled from the rectified prints of the color infrared photography.

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

Manmade features and alongshore features were compiled from rectified black-and-white prints from the color photography.

Interior details were compiled from the rectified color infrared photography.

Due to the importance of proper interpretation and symbolization of features, a field edit is required.

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 the color infrared photography.

35. Shoreline and Alongshore Details

Photography was adequate.

36. Offshore Detail

No unusual problems were encountered.

37. Landmarks and Aids

One charted landmark was located during compilation and will be verified during field edit. Non-floating aids will be located by field edit.

38. Control for Future Surveys - None

39. Junctions

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

40. Horizontal Accuracy

This 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 Soldier Key, Florida, 1:24,000, 1956

47. Comparison with Existing Nautical Charts

848, 14th edition, April 7, 1973

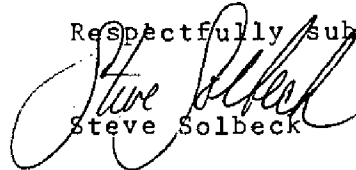
1249, 12th edition, April 28, 1973

11451, 12th edition, September 7, 1974

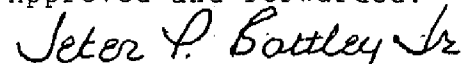
Some minor differences were noted and delineated or deleted from the map.

All the published charts show the Ragged Keys as natural shoreline. This is no longer true due to the development of these islands. There are considerable seawalls and docking areas.

Respectfully submitted,


Steve Solbeck

Approved and forwarded:



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

Addendum
to
Compilation Report

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

Field Edit Report
Map TP-00430
Job PH-7113

51. Methods

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

Landmark, TOWER was verified by using it as an azimuth station in the location of piles and a daybeacon.

Two triangulation stations were recovered.

Fourteen aids were located by triangulation and sextant. The location of aids on TP-00427, TP-00428, and wrecks on TP-00429 are submitted with this report.

There are a large number of rocks that appear on the charts covering this manuscript. The area was inspected and none were found. The bottom was visible in most areas. Mr. Beneez, a 20-year resident of the area was questioned on the rocks and he didn't know any. There is some coral that bears at MLW and they were shown on the discrepancy print.

Two tide gages fall within this manuscript. Ragged Key Inside Gage was identified along with Tidal BM on photograph 73L2875R. Sands Key Tide Gage was not in place at the time of field edit. SANDS POINT (USE) 1930 is a tidal BM.

The low water tide-coordinated prints do not portray the MLW correctly. The MLW in Biscayne Bay was inspected at MLW on May 22 and June 11 using Ragged Key Inside Gage BM and Sands Key Gage BM. Notes regarding the MLW will be found on the discrepancy print. On June 12 the MLW was inspected at MLW using Elliott Key Outside Gage. Notes regarding the MLW will be found on the discrepancy prints and the LW tide-coordinated photographs.

The HW tide-coordinated photographs appears good. A small change is recommended on photograph 73L2875R. for the second island from the north along Ragged Key.

52. Adequacy of Compilation

Adequate after application of field edit.

53. Map Accuracy

No test required.


54. Recommendation

None

55. Examination of Proof Copy

Not required.

Submitted 6/13/75


Robert R. Wagner
Chief, Photo Party 60

Remarks: Application of Field Edit TP-00430

The shoal areas located in the southwest portion of this map and the junction with TP-00429 were compiled from the NASA photography listed on form 76-36B. A wreck located on TP-00429 and the non-floating aids (Featherbed Bank) on this map were used to control the photography. The positions of the wreck and non-floating aids were determined by field methods during field edit.

Interior details were compiled after the field edit operation and are from office interpretation of the color infrared photography.

February 23, 1976

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7113 (Biscayne Bay, Florida)

TP-00430

Atlantic Ocean

Biscayne Bay

Biscayne National Monument

Boca Chita Key

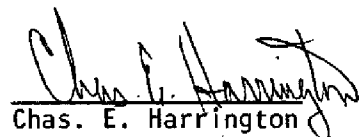
Featherbed Bank

Ragged Keys

Safety Valve

Sands Key

Approved by:

Chas. E. Harrington
Staff Geographer C51x2

Review Report
Coastal Zone Map TP-00430
May 1976

61. General

The map manuscript for Coastal Zone Map TP-00430 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

Comparison was made with the following USGS quadrangle map at a scale of 1:24,000:

Soldier Key, Florida, dated 1956

Significant changes: Rocks awash. Refer to comparison with chart for explanation.

Comparison was made with C&GS 848 (No. 11173) 15th edition, dated March 30, 1974.

Chart 848 and Soldier Key Quadrangle show rocks awash in the shoal areas. The field editor was requested to investigate these areas. The field editor reported no rocks awash in these areas. Refer to Field Edit Report.

63. thru 65. Inapplicable

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00430 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

76-40	PHOTOGRAMMETRIC BRANCH	NATIONAL OCEAN SURVEY	NOAA	VERSION
LISTING	COASTAL MAPPING DIVISION	DEPARTMENT OF COMMERCE	USA	1/20/75
* SVY	TP-00430	* RPT UNIT	CMD ROCKVILLE, MD.	* PAGE 1 OF 3
* J03	PH-7113	* NONFLOATING AIDS FOR CHARTS	* STATE FLORIDA	* ORIGINATING ACTIVITY*
* PRJ	R34210	* TO BE CHARTED	* LOCALITY RAGGED KEYS	* COMPILATION
* DTM	NA 1927	* DATE	06/20/75	
THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS				
* CHARTING*	DESCRIPTION	* POSITION	CODES*	METHOD AND DATE
* NAME	RECORD REASON FOR DELETION	* LATITUDE	DM	* OF LOCATION
	PUT TRIANGULATION NAMES IN ()	* LONGITUDE	DP	* FIELD
			SEQ	* OFFICE
				* AFFECTED*
BISCAYNE BAY-				
* LONG KEY				
* DYBN	* SAFETY VALVE BANK	* 25 34	11.42	351.4
		* 219		* 848
		* 80 11	31.67	884.0
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* DYBN	* DITTO	* 25 32	6.37	196.0
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* DYBN	* DITTO	* 25 31	56.96	1752.7
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* LIGHT	* DITTO	* 25 32	17.13	527.1
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* LIGHT	* FEATHERBED BANK	* 25 31	15.90	489.3
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POSITIONS DETERMINED				
AND/OR VERIFIED BY				
FIELD AND OFFICE				
ACTIVITIES				
ROBERT R. WAGNER				
STEVE SOLBECK AND PAT DEMPSEY (CHKR)				
FRANK MALONEY				
JIM TAYLOR				
FIELD REPRESENTATIVE				
OFFICE COMPILER				
DIGITIZER				
DATA PROCESSER				

76-40

LISTING

PHOTOGRAMMETRIC BRANCH

COASTAL MAPPING DIVISION

ATIONAL OCEAN SURVEY

DEPARTMENT OF COMMERCE USA

NOAA

VERSION

06/20/75

06/20/75

SVY

TP-00430

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RPT UNIT

CMD ROCKVILLE, MD.

*

PAGE

2 OF 7

*

JOB

PH-7113

*

NONFLOATING AIDS FOR CHARTS

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STATE

FLORIDA

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PRJ

R34210

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LOCALITY

RAGGED KEYS

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ORIGINATING ACTIVITY

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DTM

NA 1927

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DATE

06/20/75

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COMPILATION

*

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

CHARTING*

RECORD REASON FOR DELETION

*

DESCRIPTION

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POSITION

DM

C-C

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METHOD AND DATE

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NAME*

PUT TRIANGULATION NAMES IN ()

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SEQ

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OFFICE

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FIELD

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AFFECTED*

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NATIONAL ARCHIVES DATA
TP-00430

- 1 Discrepancy Print
- 1 Field Edit Sheet (stable base)
- 1 Form 76-36C (History of Field Operations)
- 1 Sketchbook (TP-00427, TP-00428, TP-00429, and TP-00430)

Photographs:

72K6402
73L2874R and 2875R
74C2899
NASA Photographs 370 and 383