

original

TP-00428

TP-00428

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-00428
Classification No. Final	Edition No. ... 1
Field Edited Map	
LOCALITY	
State ... Florida	
General Locality ... Dade County	
Locality ... Cape Florida to Soldier Key	
1971 TO 1975	
REGISTRY IN ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY

- ☒ ORIGINAL
☐ RESURVEY
☐ REVISED

SURVEY TP. 00428

MAP EDITION NO. (1)

MAP CLASS Final

JOB PH. 7113

PHOTOGRAMMETRIC OFFICE

Rockville, Maryland

OFFICER-IN-CHARGE

Commander James Collins

LAST PRECEDING MAP EDITION

TYPE OF SURVEY

- ☐ ORIGINAL
☐ RESURVEY
☐ REVISED

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 field 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 Instruc-
tions 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

Transverse Mercator

4. GRID(S)

STATE

Florida

ZONE

East

5. SCALE

STATE

ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	V. McNeel	6/73
	LANDMARKS AND AIDS BY	Inapplicable	
2. CONTROL AND BRIDGE POINTS METHOD: Coradi	PLOTTED BY	E. Allen	6/73
	CHECKED BY	N.A.	
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: SCALE:	PLANIMETRY BY	N.A.	
	CHECKED BY		
	CONTOURS BY	Inapplicable	
	CHECKED BY		
4. MANUSCRIPT DELINEATION METHOD: Graphic SCALE:	PLANIMETRY BY	P. Gibson	4/75
	CHECKED BY	C. Lewis	5/75
	CONTOURS BY	Inapplicable	
	CHECKED BY		
	HYDRO SUPPORT DATA BY	N.A.	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	J. Battley	10/75
	CHECKED BY	J. McClure	10/75
6. APPLICATION OF FIELD EDIT DATA	BY	J. Dempsey	10/75
	CHECKED BY	J. Dempsey	10/75
7. COMPILATION SECTION REVIEW	BY	C. Lewis	12/75
8. FINAL REVIEW	BY	D. Brant	12/75
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	D. Brant	1/76
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R. Cator	11/76

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

COMPILATION SOURCES

TP-00428

1. COMPILATION PHOTOGRAPHY.

CAMERA(S) Wild RC-8 K&L Cameras 6" focal length		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE ☐ PREDICTED TIDES ☐ REFERENCE STATION RECORDS ☒ TIDE CONTROLLED PHOTOGRAPHY		(C) COLOR (P) PANCHROMATIC (I) INFRARED B&W		ZONE Eastern MERIDIAN 75th & 60th ☒ STANDARD ☒ DAYLIGHT	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
73L2879R-2883R 74C(C)2901-2903	3/18/73 12/2/74	0922 1158	1:20,000 1:40,000	The stage of tide is inapplicable for the color photography.	
71L9076R-9079R 72K6275R-6281R	8/16/71 2/14/72	1040 1046	1:20,000 1:20,000	See the following page for tidal information.	
REMARKS					

2. SOURCE OF MEAN HIGH-WATER LINE:

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

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

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

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

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

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-00425	No contemporary survey	TP-00431	TP-00427
REMARKS Final junctions were made in the Coastal Mapping Section.			

TP-00 428
TIDE INFORMATION

3

PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)	STAGE OF TIDE	MEAN RANGE
71L9076R-9049R 72K6275R-6281R	Ragged Keys Ragged Keys	+0.13 MLW -0.02MHW	1.64

TP-00428

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	5/75
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY R.R. Wagner	5/75
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY R.R. Wagner	5/75
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY R.R. Wagner	5/75
	LOCATED (Field Methods) BY R.R. Wagner	5/75
	IDENTIFIED BY R.R. Wagner	5/75
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY BY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY R.R. Wagner	5/75
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 (1971)	73L2883R	DCBE 28 (USE)

3. PHOTO NUMBERS (Clarification of details)

73L2879R, 2882R, 2883R
71L9076R, 9079R

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

Landmarks and non-floating aids were located by sextant fixes, photo identification and recovery of triangulation stations.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
73L2883R	Biscayne Channel Lt. 8		

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

7. SUPPLEMENTAL MAPS AND PLANS

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

Sketchbook submitted with TP-00430

*The Field Report is bound with this Descriptive Report.

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

TP-00428

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 were 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.

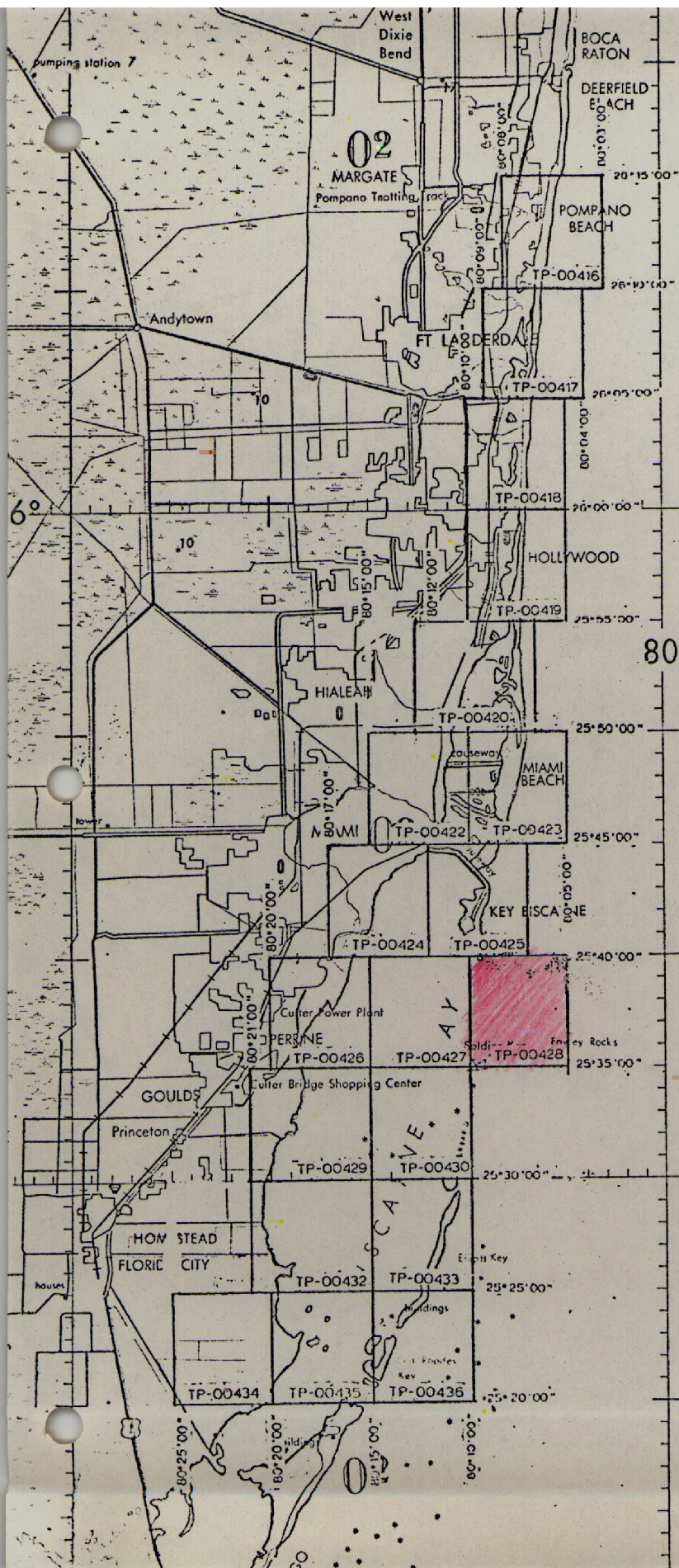
2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 11/17/75
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

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 ☐ 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.	Sq. Miles
TP-00416	3
TP-00417	3
TP-00418	3
TP-00419	8
TP-00420	10
TP-00422	4
TP-00423	6
TP-00424	4
TP-00425	6
TP-00426	4
TP-00427	1
TP-00428	1
TP-00429	4
TP-00430	1
TP-00432	4
TP-00433	3
TP-00434	1
TP-00435	5
TP-00436	5

Total 76

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

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

Coastal Zone Map TP-00428 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.

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

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

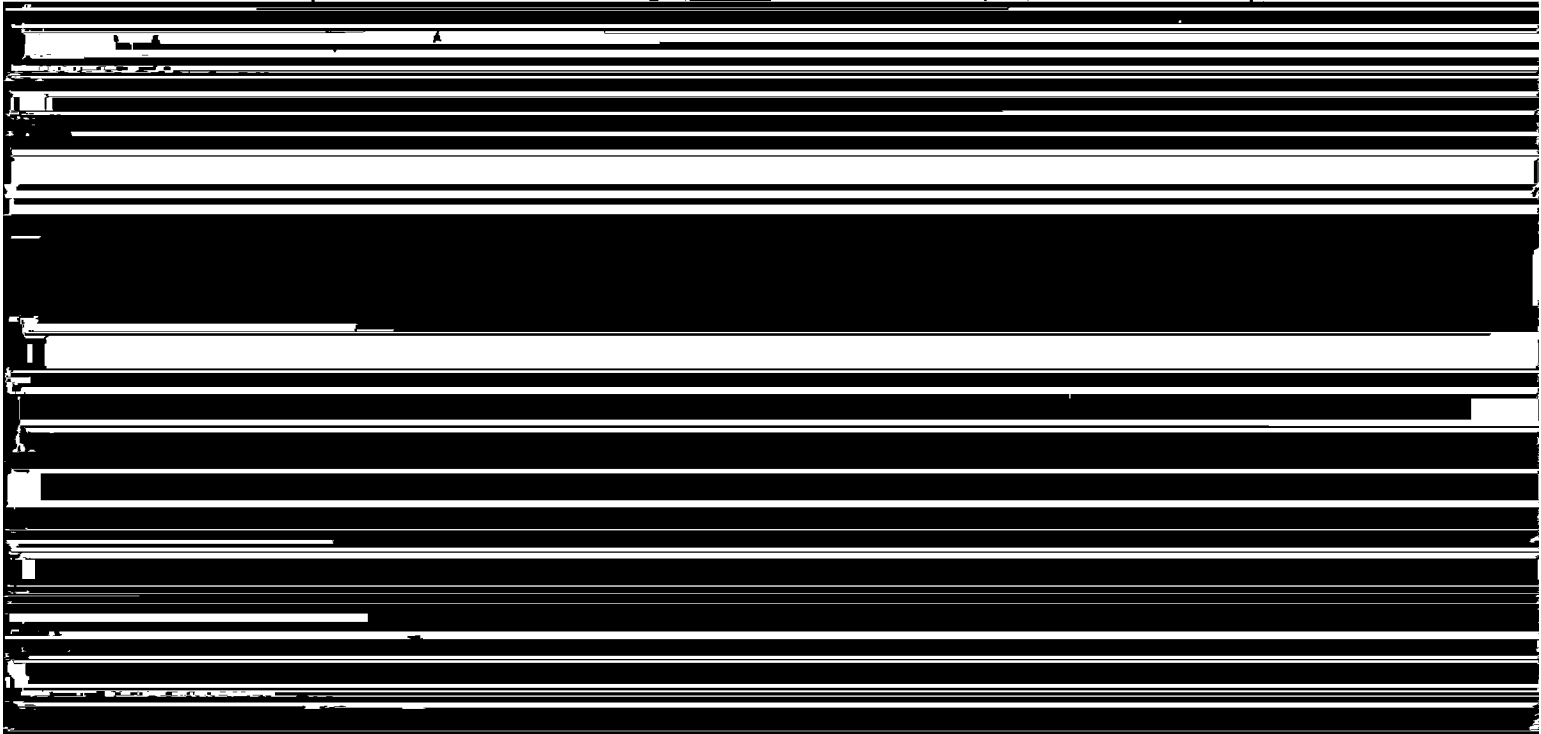
CAPE FLORIDA OLD TOWER FINIAL 1883 was marked by a single white triangle. No room was available for wing panels.

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

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

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

All targets were taken up after photography except the two in the water. All were found in good condition.

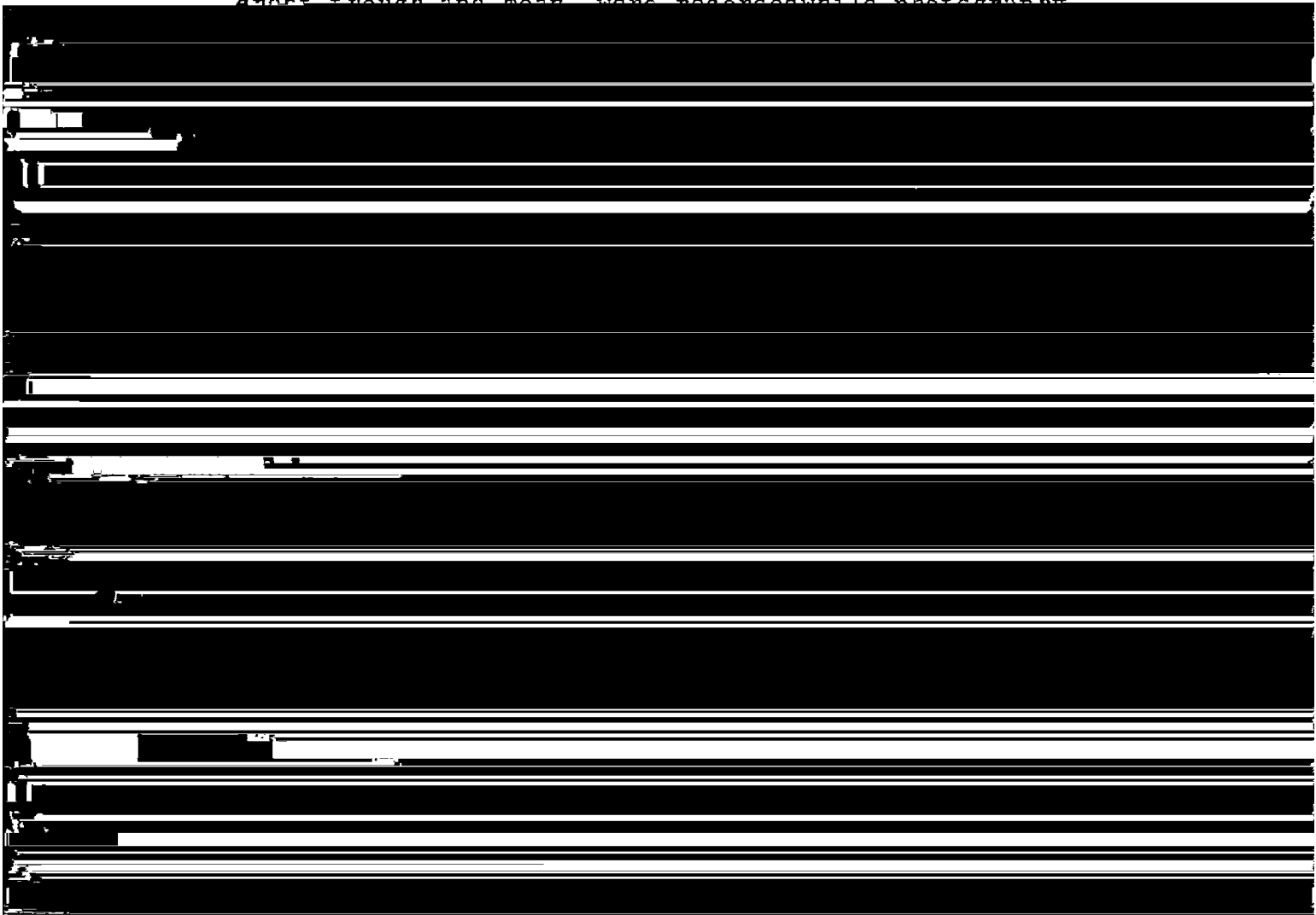


stations were manned.

- (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



(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.

--(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 (between BAYVIEW and NORTH MIAMI) was

3. FORESHORE PROFILES

Ten planetable beach profiles were run within the limits of Job PH-7113. They cover a linear distance of approximately 40 miles. The northerly one is at triangulation station PCMPANO and the southernmost one is near the Cape Florida lighthouse on Key Biscayne. Mr. Phil Walbolt ran 7 of the 10 during the period of photography, basing tide stage on a nearby tide gage. The other 3 were similarly accomplished two or three days after photography, with information as to tide level being obtained from the Weather Service's remote recorder in Miami Beach via telephone, in 2 instances.

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

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

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

Submitted 3/25/71

William H. Shearouse
William H. Shearouse
Chief, Photo Party 60

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

21. Area Covered

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

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

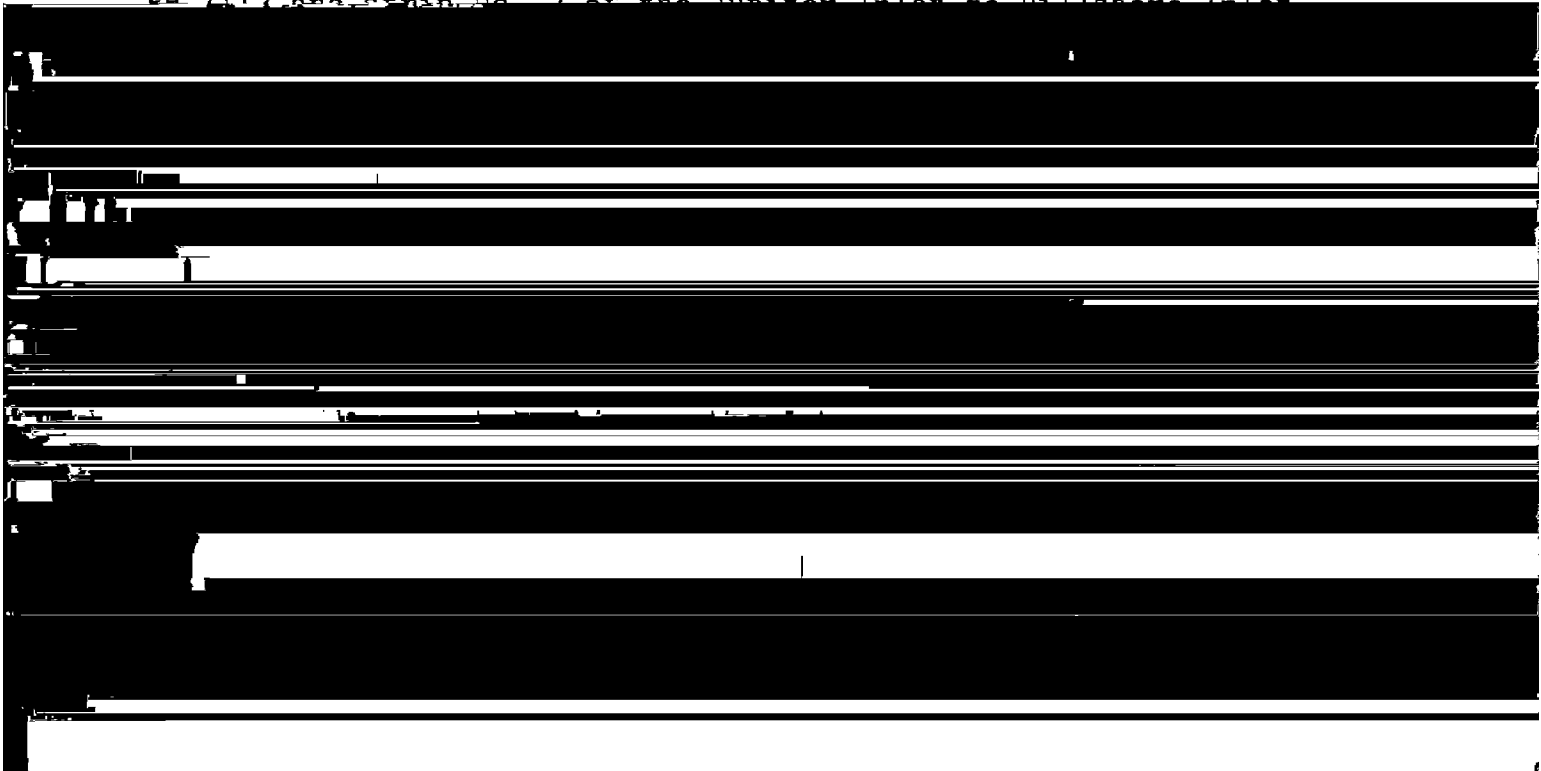
Job PH-7119 consists of twelve (12) 1:10,000 scale sheets: TP-00444 through TP-00455.

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

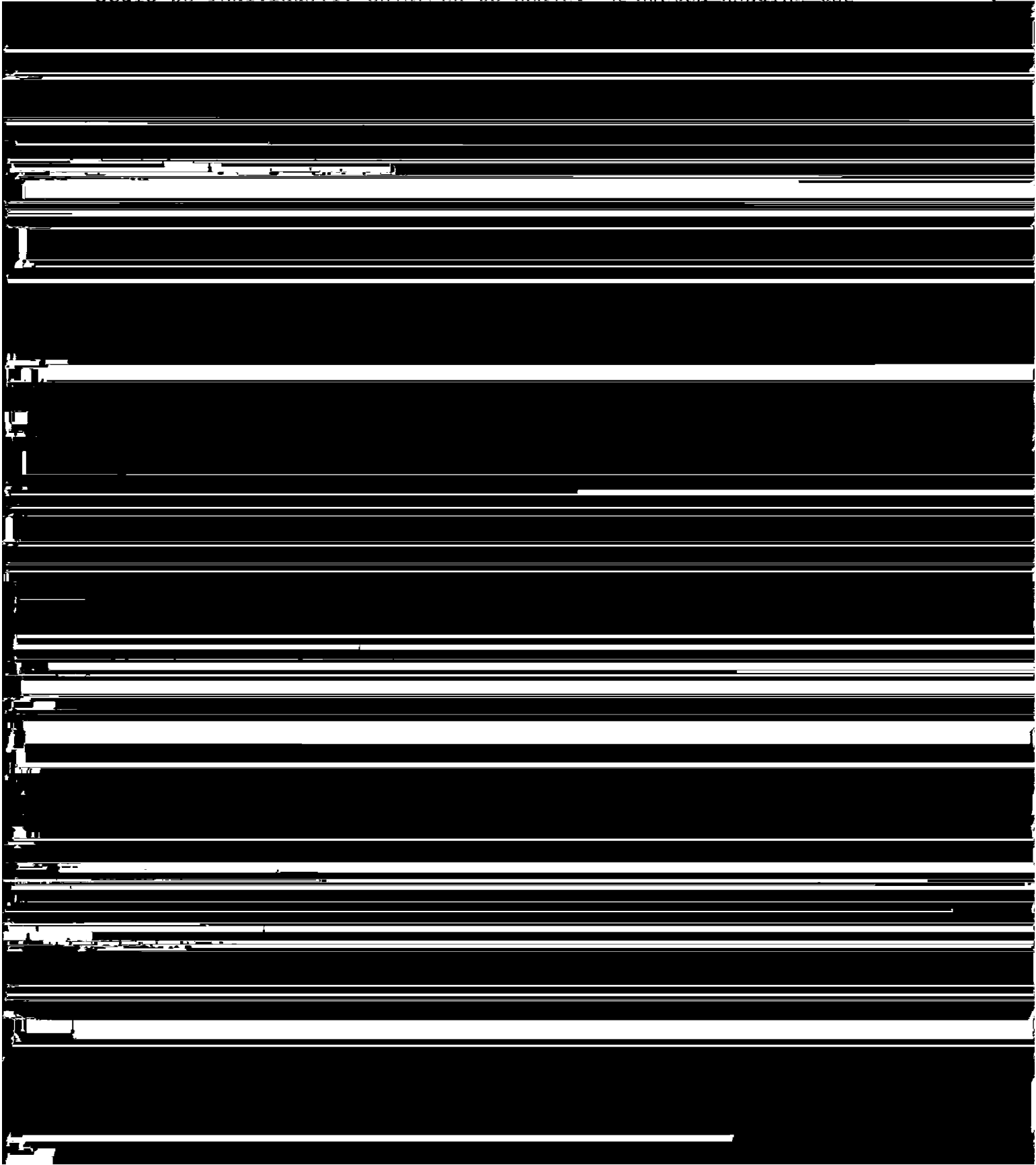
- (1) Port Everglades, Florida
- (2) Miami to Mangrove Point, Florida
- (3) Hollywood to Miami Beach, Florida

22. Method

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



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



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

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

CONTROL STATIONS

			<u>residuals</u>	
1.	(027100)	Turtle 1929	-0.706	-0.115
2.	(023102)	Pompano, 1928, subpoint B	1.488	-0.229
3.	(029100)	South Jetty, 1938	-1.134	0.176
4.	(034101)	Halland, 1928	0.317	-0.007
5.	(567101)	Causeway, 1934	0.027	-0.012
6.	(562101)	Point View, 1934	0.000	-0.181
7.	(207100)	Base, 1934	0.112	0.142
8.	(204100)	Key Biscayne North Base, 1849	-0.158	0.033
9.	(201101)	Cape Florida Old Tower Finial, subpoint A	-0.156	0.002
10.	(538102)	Pan American, 1935, Target 2	0.000	0.000
11.	(534101)	Naco 1934, subpoint A	0.000	0.000
12.	(544801)	Tie point from strip #5 used as control for strip #6	-0.157	0.025
13.	(591100)	Black Point 3	0.351	-0.066
14.	(595101)	Turkey Point No. 2, 1930, RM No. 2	-0.229	0.073
15.	(940100)			
	(602100)	Narrow Point 1854	-1.808	1.267
16.	(944100)	Man 1930.	0.222	-0.009
17.	(960100)	Long Sound, 1961	-0.168	-0.075
18.	(936101)	Snipe Point, 1934, sub- station	-0.215	-0.201
19.	(878101)	Irving, 1971, substation	0.687	-0.080
20.	(875102)	Mangrove (USE), 1930, subpoint B	-0.826	0.125
21.	(872101)	Sands Cut RM 2, 1849-1947 substation	0.296	-0.049
22.	(901100)	Rubi, 1930-1947, reset	-0.192	-0.134
23.	(905101)	Angelfish Key RM 3, 1853	-0.303	-0.242
24.	(914101)	Knowlson, 1935 substation	0.153	-0.155
25.	(919100)	Hull Key, 1852	-0.053	0.103
26.	(922100)	Rock Harbor 2, 1961	0.364	-0.284
27.	(022101)	Lower Sound Point, 1853 substation **		
28.	(923101)	Sub Station Key Largo Cable Visions Inc., Taller Mast, 1961 **		
29.	(924100)	Largo, 1962	-0.210	0.103

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

** means not used in adjustments

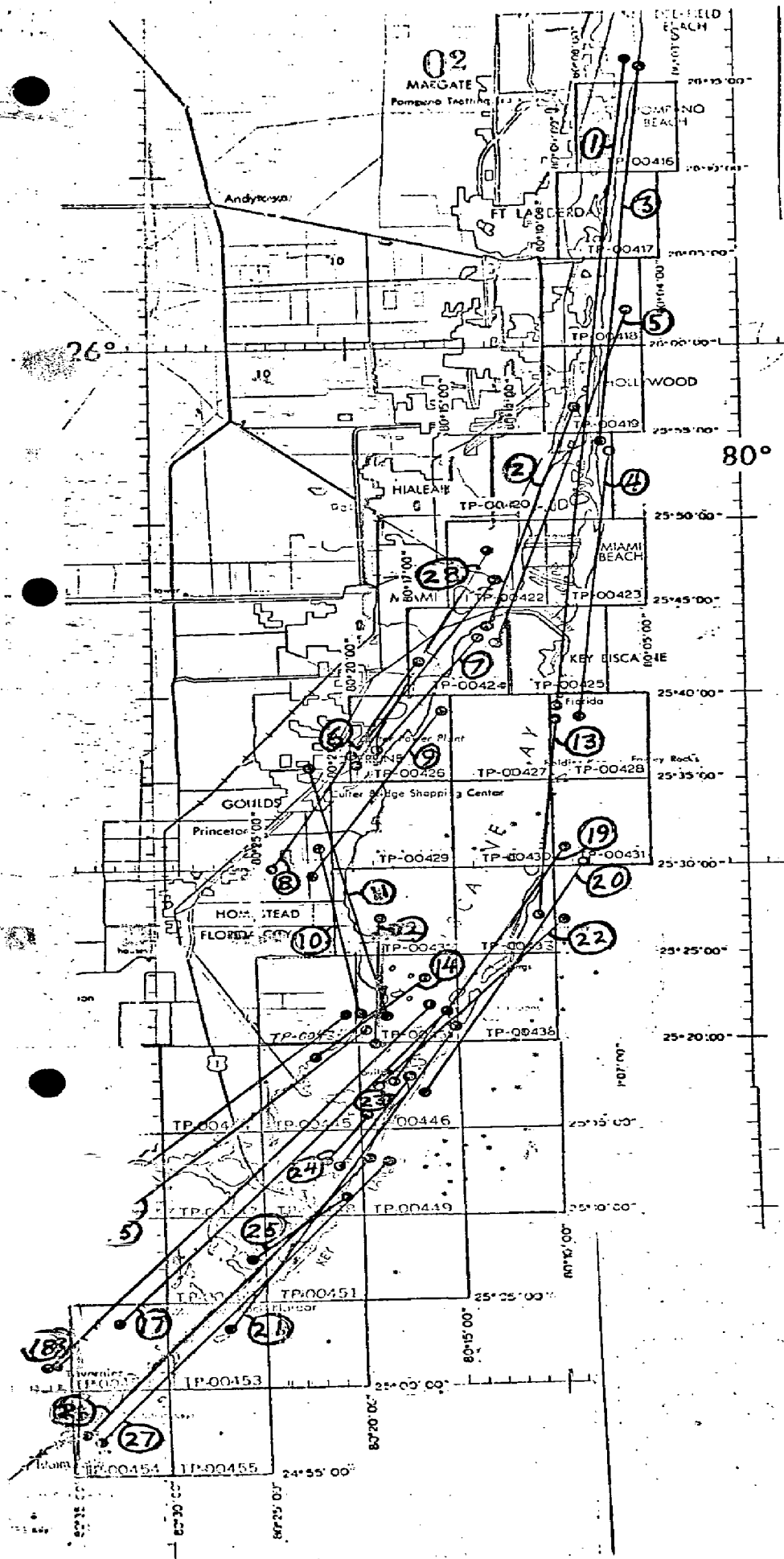
INFRA-RED CONTACT PRINTS

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

JOB PH-7113
AND
JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

INFRA-RED CONTACT
PRINTS RATIOED FOR
COMPILATION



Photogrammetric Plot Report
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

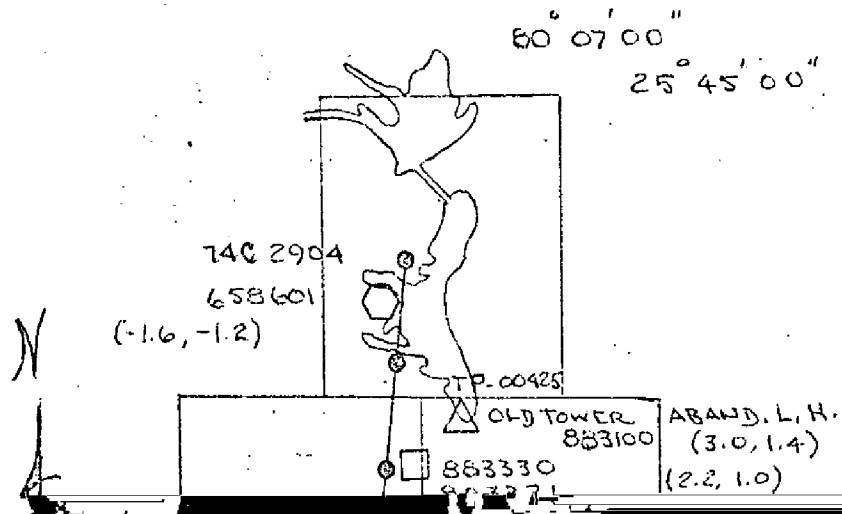
Approved and Forwarded:

John D. Ferrow Jr.
John D. Ferrow, Jr.

Chief, Aerotriangulation Section

BISCAYNE BAY
ADDENDUM TO PH-7113

FEBRUARY, 1975



Horizontal Control

Map TP- 00428

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
CAPE FLORIDA OLD TOWER FINIAL, 1883	Book 423, p. 8, 19, 21, 25; GP, Fla. Vol. 1 p. 189; PC FLA. E. Zone P. 50
FOWEY ROCKS LIGHTHOUSE 1883	Book 424, p. 2, 28, 34; GP, Fla. Vol. 1 P 402; PC Fla. E. Zone P. 103
SOLDIER KEY 3, 1929- 1972, (DCPW)	Book 424, p. 2, 28, 37, 39; GP, Fla. Vol. 1 P. 380; PC Fla. E. Zone P. 97
FLASHING RED LIGHT 1930	Book 424, p. 2, 28; GP, Fla. Vol. 1 P. 387; PC Fla. E. Zone P. 100

Geodetic Bench Mark	Elevations (feet)	Condensed Description
	SLD 1929	
DCBE		USE disk stamped DCBE 28 1967 JACKSONVILLE DIST; set in seawall 122 ft. S of Lighthouse, in front (East) of a small brick building.

TP-00428
Compilation Report
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.

The MHWL and MLWL were compiled using ratioed tide-coordinated black-and-white infrared photography. The color contact prints were used as an aid in interpreting the shoreline on Soldier Key.

Interior features were compiled from rectified black-and-white prints of the color photography.

32. Control

The control is adequate (see Photogrammetric Plot Report).

33. Supplemental Data - None

34. Contours and Drainage

Contours are inapplicable. Drainage was compiled from the rectified black-and-white prints of the color photography.

35. Shoreline and Alongshore Features

The photography was adequate for the interpretation of the shoreline and alongshore features.

36. Offshore Details

Shoal areas and the Biscayne Channel were delineated from the color photography.

37. Landmarks and Aids

Two aids were located during aerotriangulation. Four landmark towers (radio) were delineated from the rectified black-and-white photography. Field edit is needed to verify these positions.

38. Control for Future Surveys - None.

39. Junctions - Refer to form 76-36B

40. Horizontal and Vertical Accuracy

This map complies with the accuracy requirements for the Florida Coastal Zone Mapping Program, PH-7000.

41. thru 45. Inapplicable

46. Comparison with Existing Maps

A comparison was made with the following USGS Quads:

Key Biscayne, Florida, 1962, photorevised 1969, 1:24,000
Soldier Key, Florida, 1956, 1:24,000

No significant differences were noted.

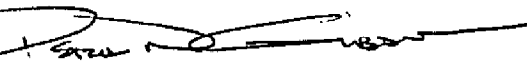
47. Comparison with Nautical Charts

A comparison was made with the following Nautical Charts:

848, 1:40,000, 14th edition, April 1973
1248, 1:80,000, 11th edition, July 1970
11451, 1:80,000, 12th edition, September 1974

Some differences were noted in the outlines of shallow areas and the extensiveness of low water.

Respectfully submitted,



Peter N. Gibson
Carto (Photo)

Approved and forwarded:



J. 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-00428, JOB PH 7113

51. METHODS

The shoreline was inspected from a small boat while cruising just off shore. Notes regarding apparent and fast shoreline, pier, groins and other shoreline features were made on the rectified photographs.

Four triangulation stations were recovered.

One vertical control station was identified.

One landmark is recommended for charting.

There are no tide gages on this manuscript.

The low water tide coordinated prints do not portray the MLW correctly. On May 21, 1975 the MLW was checked with the tide being .15 ft. above MLW based on Ragged Key tide gage, which is .02 ft. above the tide coordinated prints. The only MLW found was inked in violet on 71L9076R and 71L9079R. Some of the areas that appears to bear on the low water prints were traversed across by a small skiff at .15 ft. above MLW based on Ragged Key tide gage.

Six aids were located by sextant cuts. One aid was identified on 73L2883R and two aids were recovered as triangulation stations. Soldier Key Daybeacon 2 and Fowey Rocks Daybeacons 3 were computed with the data being submitted with TP-00430.

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

52. ADEQUACY OF COMPILATION

Adequate after application of field edit.

53. MAP ACCURACY

No test required.

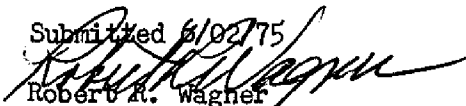
54. RECOMMENDATION

None.

55. EXAMINATION OF PROOF COPY

Not required.

Submitted 6/02/75


Robert A. Wagner
Chief, Photo Party 60

Remarks: Application of Field Edit TP-00428

The mean low water line was revised in accordance with the field editor's recommendations. (Refer to Field Edit Report.)

Review Report
Coastal Zone Map TP-00428
October 1976

61. General

The map manuscript for Coastal Zone Map TP-00428 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

There were no planetable beach profiles available at the time of compilation or review for this map.

62. Cartographic Comparison

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

Key Biscayne, Florida, 1962, photorevised 1969
Soldier Key, Florida, 1956

No significant changes were noted.

Comparison was made with chart 11465 (formerly C&GS 848), 17th edition dated March 6, 1976. The following changes between the map and the chart were noted:

1. Submerged pile and wreck northeast of Fowey Rock Light House.
2. Day beacon 4 northwest of Cape Florida Shoal Light 2 was marked by a buoy at time of field edit.
3. Obstruction at approximate latitude of 25°36.7' and longitude 80°09.9' was not found.

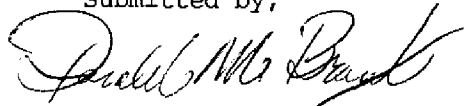
Copies of the field editor's notes are attached to the Chart Maintenance Print.

63. thru 65. Inapplicable

66. Adequacy of Results and Future Surveys

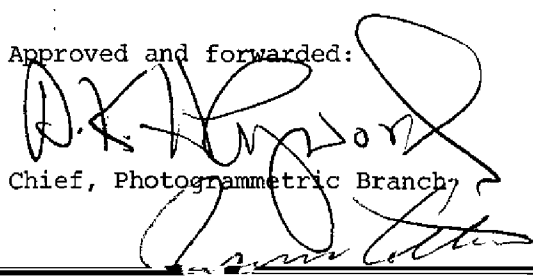
Coastal Zone Map TP-00429 complies with the instructions for NOS Cooperative Boundary Mapping, Job PH-7000, and the National Standards of Map Accuracy.

Submitted by,



Donald M. Brant

Approved and forwarded:



Chief, Photogrammetric Branch

October 12, 1976

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-7113 (Biscayne Bay, Florida)

TP-00428

Atlantic Ocean

Biscayne Channel

Biscayne Flats

Cape Florida

Fowey Rocks

Key Biscayne

Soldier Key

Approved by:



Chas. E. Harrington
Staff Geographer

RESPONSIBLE PERSONNEL		ORIGINATOR
TYPE OF ACTION	NAME	
OBJECTS INSPECTED FROM SEAWARD		☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	R. Wagner	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	P. Dempsey	OFFICE ACTIVITY REPRESENTATIVE ☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE
INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION' (Consult Photogrammetric Instructions No. 64,)		
OFFICE I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75	FIELD (Cont'd) B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982	
FIELD I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection 5 - Field Identified 6 - Theodolite 7 - Planetable 8 - Sextant A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-1 8-12-75	II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75 III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date. EXAMPLE: V-Vis. 8-12-75 **PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.	
*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.		

RESPONSIBLE PERSONNEL		ORIGINATOR	
NAME		☐ PHOTO FIELD PARTY ☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ OTHER (Specify)	
VERIFIED	R. Wagner	FIELD ACTIVITY REPRESENTATIVE	
CONTROL REVIEW	P. Dempsey	OFFICE ACTIVITY REPRESENTATIVE	
		☐ REVIEWER ☐ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE	

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'
 (Consult Photogrammetric Instructions No. 64.)

FIELD (Cont'd)

ED AND LOCATED OBJECTS
 and date (including month,
 of the photograph used to
 locate the object.

16042
 75

B. Photogrammetric field positions** require
 entry of method of location or verification,
 date of field work and number of the photo-
 graph used to locate or identify the object.
 EXAMPLE: P-8-V
 8-12-75
 74L(C)2982

TERMINED OR VERIFIED
 able data by symbols as follows:

P - Photogrammetric

Vis - Visually

5 - Field Identified

6 - Theodolite

7 - Planetable

8 - Sextant

ns* require entry of method of
 date of field work.

P-6-L
 12-75

determined by field obser-
 vely upon ground survey methods.

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a tri-
 angulation station is recovered, enter 'Triang.
 Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
 8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
 8-12-75

**PHOTOGAMMETRIC FIELD POSITIONS are dependent
 entirely, or in part, upon control established
 by photogrammetric methods.

NOAA FORM 76-40 (8-74) Replaces C&GS Form 567.										U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION										NONFLOATING AIDS OR LANDMARKS FOR CHARTS										ORIGINATING ACTIVITY																																																																																																			
☒ TO BE CHARTED ☐ TO BE REVISED ☐ TO BE DELETED										REPORTING UNIT (Field Party, Ship or Office) Rockville, MD										STATE FLORIDA										LOCALITY CAPE FLORIDA to SOLDIER KEY										DATE 4-4-75										☐ HYDROGRAPHIC PARTY ☐ GEODETIC PARTY ☐ PHOTO FIELD PARTY ☒ COMPILATION ACTIVITY ☐ FINAL REVIEWER ☐ QUALITY CONTROL & REVIEW GRP. ☐ COAST PILOT BRANCH (See reverse for responsible personnel)																																																																															
OPR PROJECT NO.										JOB NUMBER PH-7113										SURVEY NUMBER TP-00428										DATUM N.A. 1927										METHOD AND DATE OF LOCATION (See instructions on reverse side)										CHARTS AFFECTED																																																																															
CHARTING NAME										DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses.)										LATITUDE ° / ' " D.M. Meters										LONGITUDE ° / ' " D.P. Meters										OFFICE										FIELD																																																																															
RADIO TOWER										WRIZ RADIO TOWER, westernmost										25 39										3 33										80 09										38.88										3/8/73										V-VIS										84P=SC																																																	
RADIO TOWER										WRIZ Radio Tower										25 39										102.47										80 09										1084.47										73L2882R										5/15/75										1248																																																	
RADIO TOWER										WRIZ Radio Tower										25 39										2.15										80 09										37.78										"										"										"																																																	
RADIO TOWER										WRIZ Radio Tower Easternmost										25 38										28.93										80 09										1053.79										"										"										"																																																	
LIGHT HO.										CAPE FLORIDA OLD TOWER final 1883 Ht=107(111)										25 39										58.24										80 09										623.0										Triang. Rec 4/24/75										"																																																											
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ORIGINATOR

PHIC PARTY

PARTY

(by)

Y REPRESENTATIVE

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CONTROL AND REVIEW GROUP

ATIVE

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HOTOGRAPH

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established

National Archives Data
TP-00428

1 Discrepancy print (paper copy)
1 Field edit sheet (stable base copy)
3 NOAA Forms 76-40 (Nonfloating Aids or Landmarks)
1 NOAA Form 76-36C (History of Field Operations)
1 Sketch book for TP-00427 and TP-00428

Photography:

73-L(C) 2879R, 2882R, 2883R

71-L(C) 9076R and 9079R (Not available)