

original

TP-00453

TP-00453

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey Coastal Boundary	
Job No. PH-7119	Map No. TP-00453
Classification No. Final	Edition No. 1
Field Edited Map	
LOCALITY	
State Florida	
General Locality Monroe County	
Locality Key Largo to Long Point	
1972 TO 1975	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.					
DESCRIPTIVE REPORT - DATA RECORD		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"> TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED </td> <td style="width: 50%;"> SURVEY TP. <u>00453</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB PH. <u>7119</u> </td> </tr> </table>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>00453</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB PH. <u>7119</u>		
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PHOTOGRAMMETRIC OFFICE Rockville, Maryland		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> LAST PRECEDING MAP EDITION </td> </tr> <tr> <td style="width: 50%;"> TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED </td> <td style="width: 50%;"> JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__ </td> </tr> </table>		LAST PRECEDING MAP EDITION		TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__
LAST PRECEDING MAP EDITION							
TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__						
OFFICER-IN-CHARGE Commander James Collins							

I. INSTRUCTIONS DATED	
1. OFFICE General Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000 December 9, 1975 Supplement I November 4, 1974 Supplement III October 24, 1974 NOTE: Office & 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 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) Mean water level Refer to NOAA Form 76-36B(1) for explanation						
3. MAP PROJECTION Traverse Mercator	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> 4. GRID(S) </td> </tr> <tr> <td style="width: 50%;"> STATE Florida </td> <td style="width: 50%;"> ZONE East </td> </tr> <tr> <td style="height: 20px;"> STATE </td> <td style="height: 20px;"> ZONE </td> </tr> </table>	4. GRID(S)		STATE Florida	ZONE East	STATE	ZONE
4. GRID(S)							
STATE Florida	ZONE East						
STATE	ZONE						
5. SCALE 1:10,000							

III. HISTORY OF OFFICE OPERATIONS		
OPERATIONS	NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY	V. McNeal	6/74
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Calcom CHECKED BY	R. Robertson	12/74
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: CONTOURS BY SCALE: CHECKED BY	Inapplicable Inapplicable	
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Graphic CONTOURS BY CHECKED BY SCALE: HYDRO SUPPORT DATA BY CHECKED BY	S. Solbeck Inapplicable Inapplicable	7/75
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	J. Battley	8/75
6. APPLICATION OF FIELD EDIT DATA BY CHECKED BY	J. McClure C. Lewis	10/75 11/75
7. COMPILATION SECTION REVIEW BY	J. Battley	1/76
8. FINAL REVIEW BY	D. Brant	6/76
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	D. Brant	8/76
11. MAP REGISTERED - COASTAL SURVEY SECTION BY	R. K. CATOK	9/76

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

COMPILATION SOURCES

TP-00453

1. COMPILATION PHOTOGRAPHY

CAMERA(S) L&K RC8 6" Focal Length	TYPES OF PHOTOGRAPHY LEGEND (C) COLOR IR (P) PANCHROMATIC (I) INFRARED B&W	TIME REFERENCE	
TIDE STAGE REFERENCE <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		ZONE Eastern	<input checked="" type="checkbox"/> STANDARD
		MERIDIAN 75th	<input type="checkbox"/> DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
73L(C)2791R-2792R	3/5/73	1318	1:40,000	The stage of tide is inapplicable for the color photography.
72K6375R-6377R	2/14/72	1410	1:30,000	Refer to NOAA Form 76-36B(1) for stage of tide data.
72K6506R-6507R	2/16/72	1105	1:30,000	

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE: The source of the MHW line (Atlantic Ocean) and the MWL (blackwater Sound) is the tide-coordinated, black-and-white infrared photography, listed in item 1. The rectified color photography was used as an aid for interpreting cultural features and compiling the limits of shallow and shoal areas.

Where the shoreline is obscured by vegetation such as mangrove, the apparent shoreline symbol was used.

Refer to Field Edit Report and Remarks: Application of field edit for canal and piers constructed after photography.

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-00450	No Contemporary	Survey	TP-00452

REMARKS

Final junctions will be 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 SURVEY

TIDE - COORDINATED PHOTOGRAPHY

TP -00453

LOCATION AND PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)	STAGE OF TIDE	MEAN RANGE
			At Tide Station
72K6375R-6377R	Tavernier Hawk Channel	+0.13MLW	2.13
72K6506R-6507R	Tavernier Hawk Channel	+0.10MHW	
<u>FLORIDA BAY</u>			
72K6375R-6377R	Tavernier Florida Bay	+0.16MWL	- -
72K6506R-6507R	Tavernier Florida Bay	+0.20MWL	- -

REMARKS: The periodic tide on TP-00453 (Blackwater Sound) was masked by non-tidal forces and the mean range was substantially less than two-tenths of a foot. In this situation the mean high/low water datums converge, and for mapping purposes, the mean high and low water lines are indistinguishable. As a consequence, special treatment was given to the portrayal of the shoreline on this map; the mean water level line was mapped in lieu of the mean high water line and shown by a distinctive symbol.

HISTORY OF FIELD OPERATIONS TP-00453

I. ☒ FIELD INSPECTION OPERATION Feb. 1972
Mar. ☒ FIELD EDIT OPERATION Aug. 1975

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	R. R. Wagner	
2. HORIZONTAL CONTROL	RECOVERED BY R. R. Wagner	8/75
	ESTABLISHED BY Inapplicable	
	PRE-MARKED OR IDENTIFIED BY Inapplicable	
3. VERTICAL CONTROL	RECOVERED BY R. R. Wagner	8/75
	ESTABLISHED BY Inapplicable	
	PRE-MARKED OR IDENTIFIED BY R. R. Wagner	8/75
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY Inapplicable	
	LOCATED (Field Methods) BY R. R. Wagner	8/75
	IDENTIFIED BY R. R. Wagner	8/75
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <input checked="" type="checkbox"/> NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY R. R. Wagner	8/75
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY Inapplicable	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Refer to field reports	73L2791R	X 275, Z 275

3. PHOTO NUMBERS (Clarification of details)
72K6377, 6504; 73L2791R, 2792R; 72K6379

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
73L2791R	Harborage Yacht Club Ent. Lt.		

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

7. SUPPLEMENTAL MAPS AND PLANS

One photo print Monroe County, Fla. Page 51 by REDI

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

4 Pages of sextant cuts

Refer to Field Reports bound with this Descriptive Report.

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

TP-00453

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
NO MAP COPIES WERE FURNISHED TO NAUTICAL CHARTS PRIOR TO FINAL REVIEW.				
			9/9/76	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
		11/20/75	Two (2) digitized NOAA Forms 76-40 submitted as final report

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 11/20/753. ☐ 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 <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-00444 thru TP-00454

Coastal Zone Map TP- 00453 is one of eleven (11), 1:10,000 scale (shoreline type) maps in Job PH-7119. These maps will not be published. Interior detail is limited to a narrow zone of planimetry usually back to and including the first road.

A layout of Job PH-7119 (revised since the aerotriangulation operation) will show the location of the individual maps. A copy of this layout is included in this Descriptive Report.

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

The area is covered by aerial photography taken in 1972 and 1973 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 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

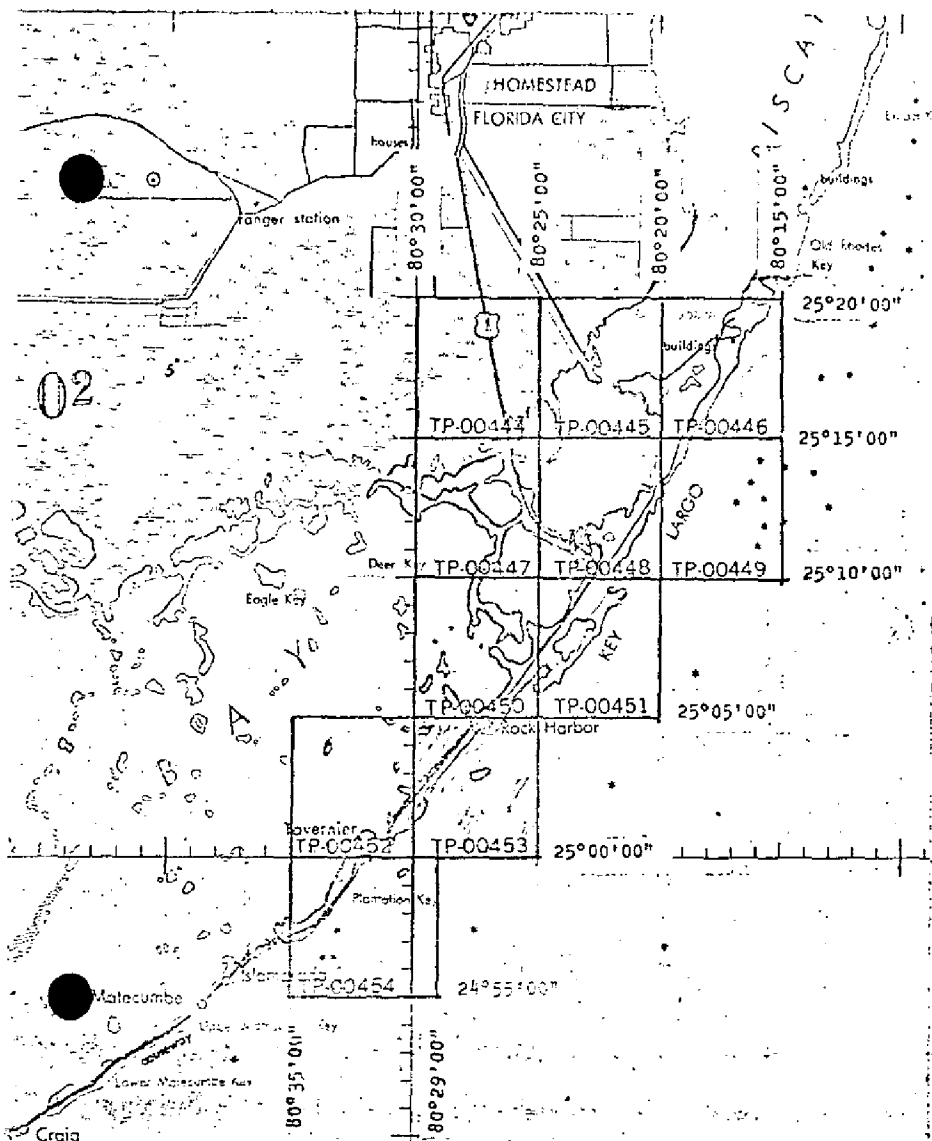
shallow lines used by the Marine Chart Division but not required on the Coastal Zone Maps. This copy of the map is labeled "Registration Copy" in the title block.

The following items will be registered in the NOS Archives:

1. A stable base copy of the Registration Copy.
2. The Descriptive Report.

The negative of the Registration Copy is 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.



Official Mileage for Cost Accounts	
Sheet No.	Sq. Miles
TP-00444	2
TP-00445	8
TP-00446	6
TP-00447	10
TP-00448	8
TP-00449	2
TP-00450	8
TP-00451	4
TP-00452	4
TP-00453	6
TP-00454	5
Total	
63	

JOB PH-7119
 CARD SOUND to PLANTATION KEY
 FLORIDA
 SHORELINE MAPPING
 SCALE 1:10000

REVISED 12/9/75 RWH

80°

FIELD REPORT

JOB PH-7119

This report is on work done in accordance with Instructions-field-Job PH-7119; Horizontal Control for Aerotriangulation and Field Support for Aerial Photography; Coastal Boundary Mapping, Card Sound to Plantation Key, Florida. The field work was done during the period 20 July - 7 September 1971.

1. PREMARKING OF CONTROL

One control station, IRVING 1971, was established on Soldier Key. Eighteen stations were paneled for 1:30,000 scale photography. The deviations from the job diagram and target specifications were recommended in the field by Mr. Saperstein, Photogrammetrist and authorized by the Chief, Surveys Planning Branch. The locations of the paneled stations are shown on the chart section accompanying this report.

2. BRIDGING PHOTOGRAPHY

Flight lines are shown on the accompanying chart. Bridging photography was accomplished on March 8, 1971 for lines 30-4, 30-5, and 30-6 under Job PH-7113. Line 30-6 was redesignated 30-1 for Job PH-7119. Line 20-1 was photographed on Aug. 4 and all other lines on Aug. 11 - the only suitable day in the period 4-26 August. This photography was unacceptable and will be rescheduled for February 1972.

3. TIDE-COORDINATED PHOTOGRAPHY

Locations of the tide staffs are shown on the accompanying chart. Lines 30-4 and 30-5 carried over from Job PH-7113 were completed. Lines 20-2 and 30-3 (Outside) were also completed. Clouds throughout the period prevented completing all lines and the job except for 30-4 and 30-5 will be rescheduled for February 1972. The times are summarized below in case the pictures will be used to supplement the future February work.

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

Line 30-4. Flown for MHW on March 2, 1971 at 1319-1325 when both MIAMI BISCAYNE RAY and CUTLER were in range. The north end

was flown for MLW at 1325-1335 on August 6 when the MIAMI DISCAYNE PAV staff read 2.3 and 2.2. The south end was flown for MLW at 1425-1435 on August 6 when the CUTLER staff read 2.75 and 2.69.

Line 30-5. MHW North half flown at 805-815 on August 7 when CUTLER staff read 4.5 to 4.7. South half flown at 1220-1235 on August 7 when the TURKEY POINT staff read 3.15 to 3.05. MLW North half was flown at 1420-1435 on 6 August when the CUTLER staff read 2.73 to 2.69. South half flown at 850-855 on August 11 when the TURKEY POINT staff read 1.65. This was flown at a reduced altitude of 14,000 feet to get under some clouds. A triplicate was flown at 855-900 to get outlying islands which might not have been covered at the reduced altitude.

Line 20-2. MHW The northern two-thirds were flown at 802-815 on August 9 when the OCEAN REEF staff read 4.58 to 4.70. The remainder was flown at 830-840 on August 10 when the staff read 4.25 to 4.35. MLW Due to clouds this was flown in three parts. The NE end to the Ocean Reef Club was flown at 1328-1342 on August 7 when the staff read 2.25 to 2.11, the NE end was flown at 1530 on August 6 when the staff read 2.2, and the south part flown at 955-1001 on 16 August when the staff read 2.30.

Line 30-3 (Outside) MHW Flown at 939-947 on August 11 when the TAVERNIER HAWK CHANNEL staff read 4.00 to 4.12, MLW Flown at 1315-1322 on August 4 when the staff read 2.1.

Line 30-3 (Inside) No photography. Clouds and seasonal high tides during the rest of the period prevented it.

Line 20-1. MHW No photography. MLW Line was flown at 927-945 on August 16 when the RAGGED KEYS staff read 1.8 to 1.75.

Line 30-1. MHW The middle third was flown at 1020-1025 on August 4 when the CARD SOUND staff read 3.7 and the MANATEE CREEK staff read 3.5. The remainder was flown at 1110-1115 the same day when the CARD SOUND staff read 3.6 and the MANATEE CREEK staff read 3.5. MLW No photography.

Line 30-2. Line was flown at 835-842 on August 9 when the CARD Sound staff read 3.6 and the MANATEE CREEK staff read 3.75. Line was unacceptable because of clouds in the middle segment and possible smoke in the northern third. This and the MLW photography were not accomplished due to clouds and seasonal high water.

4. ADDITIONAL PHOTOGRAPHY

Tide coordinated photography was taken on a small shoal about one

mile NNE of the Molasses Reef light. The shoal was photographed at about 0900 on August 10 when the TAVERNIER HAWK CHANNEL staff was in MNW range. It was flown at 1206 on August 16 when the staff read 2.31. This shoal was also photographed in color and false color, but the times were not obtained from the photographer.

5. FORESHORE PROFILES

Four planetable beach profiles were run within the limits of the job by Mr. Dale Fuller during the photography period. A brief report accompanies the profile sheet.

6. FIELD RECORDS

All CSI cards, recovery notes, profiles and the original field records for IRVING 1971 were forwarded to C3413 on 1 March 1972. Form 277, Tides Volumes for the MIAMI BISCAYNE BAY, TURKEY POINT, and CUTLER Tide staffs were also forwarded on 1 March. The 277's for the other staffs will be forwarded with the report for the February 1972 photography.

Submitted 29 February 1972

John C. Veselenak
John C. Veselenak
Chief, Photo Party 65

FIELD REPORT

JOB PH-7119

This report is on work done in accordance with Instructions-Field-Job PH-7119; Horizontal Control for Aerotriangulation and Field Support for Aerial Photography; Coastal Boundary Mapping, Card Sound to Plantation Key, Florida, dated January 31, 1972. The field work was done during the period 7-23 February 1972.

1. PREMARKING OF CONTROL

Four stations were paneled for 1:30,000 scale photography. The locations are shown on the chart section accompanying this report.

2. AEROTRIANGULATION PHOTOGRAPHY

Flight lines are shown on the chart. Color photography was accomplished on February 19, 1972 between the approximate times of 1045 and 1230 hours. The skies were exceptionally clear for this area and the ground winds was from the north-west at 20-25 knots all morning. These lines were also flown on February 14, but the photography was unacceptable because of a bad film emulsion.

3. TIDE-COORDINATED PHOTOGRAPHY

Locations of the tide staffs are shown on the chart. The job was completed; photography taken on the 12, 14, 15, 16, and 20, of February. Lines 20-2 and 30-3 were also photographed and portions of the other lines were also partially photographed during August 1971.

Recordings entered in the tide volumes, Form 277, were at 5 minute intervals during photography and at 15 minute intervals near photography. An exception to this is the readings for the MANATEE CREEK and BARNES SOUND staff where the tide varies only a few hundredths of a foot per day. Tolerances of ± 0.30 foot for MHW, ± 0.20 foot for MWL, and ± 0.10 foot for MLW were observed. Wet staff readings - crest, mean, and trough - were recorded while photography was in progress. Eastern Standard Time was used.

Line 20-1. MHW Completed at 1050 on February 14 when the RAGGED KEYS staff read 3.38-3.26. MLW Completed at 1500 on February 14 when the staff read 1.80.

Line 20-2. MHW. Flown at 1035-1052 on 16 February when the OCEAN REEF staff read 4.75-4.61. This line was also flown at 1006 on February 15, but the pilot recommended it be rescheduled. MLW. Flown at 1338-1350 on February 14 when the staff read 2.31-2.32.

Line 30-1. This line is controlled by three staffs, the MANATEE CREEK staff has a MWL datum and the EAST ARSENICKER and CARD SOUND staffs have mean high and mean low datums. MHW. The line was flown at 1120-1142 on 14 February. At this time the EAST ARSENICKER staff read 3.95-3.86 and the MANATEE CREEK staff read 3.54-3.57(MWL). The line was flown again at 1445 on 14 February when the CARD SOUND staff read 3.8 and the MANATEE CREEK staff read 3.60. MLW. Was flown at 0945-1000 on 20 February when the CARD SOUND staff read 3.2 and the EAST ARSENICKER staff read 2.78-2.81.

Line 30-2. MHW. It was completed at 1250 on February 14 when the TAVERNIER, FLA. BAY staff read 3.05 (MWL Range), the BARNES SOUND staff read 3.92, the MANATEE CREEK staff read between 3.6 and 3.5, the CARD SOUND staff read 4.0 and the EAST ARSENICKER staff read 3.65. MLW. Completed at 0945 on February 20 when the CARD SOUND staff read 3.20 and the EAST Arsenicker staff read 2.77-2.78.

The BARNES SOUND staff read 0.31 foot higher than its 3.61 Mean Water Level. Since the shoreline in this area is overhung with mangrove this section of the line was not rescheduled.

Line 30-3 (ATLANTIC SIDE). MHW. Completed at 1107 on February 16 when the TAVERNIER, HAWK CHANNEL staff read 4.62-4.43. MLW. Completed at 1412 on February 14 when the staff read 2.30-2.28.

Line 30-3 (Florida Bay Side). MWL. The north side was completed on February 12 at 1150 hrs. when the BARNES SOUND staff read 3.78 and the TAVERNIER, FLA. BAY staff read 2.72. The south end was in range at 1412 on February 14 when 30-3(ATLANTIC SIDE) MLW was flown. The south half was also in range at 1107 on February 16 when 30-3 MHW was flown although the staff was not manned at that time.

4. ADDITIONAL PHOTOGRAPHY

Special photography over Florida's test area was flown between 1005 and 1240 on 20 February with various films. The staff at the EAST ARSENICKER gage was observed and its value recorded at 5 minute intervals during this period. The staff at the

mouth of the northern cut (MANGROVE POINT) was observed and its value recorded at 5 minute intervals from 1135 to 1300 hours. The latter staff values are listed in the EAST ARSEWICKER Form 277.

5. FORESHORE PROFILES

Four planetable beach profiles were run within the limits of the job during the photography period of August 1971. The few small beaches found for the profiles were of coral, and since erosion is not considered a problem, these profiles were not rerun.

6. MONITORING OF TEMPORARY TIDE STAFFS IN THE JOB AREA

On February 15 verbal instructions were received from the Chief, Tidal Datum Planes: Temporary staffs were to be put in at 11 selected locations and observed every 12, 15, or 30 minutes through one high and one low water. All 11 need not be observed simultaneously and the actual location could be varied slightly. Four were observed on the 16th., two on the 17th., 1 on the 20th., and four on the 21st. The chart accompanying this report shows the exact location of each staff.

7. FIELD RECORDS

All CSI cards, Form 277's and a copy of the records from the 11 tide staffs were sent to C3413 on 13 March 1972. The original field records for the 11 staffs were forwarded to C3311 on 23 February 1972. Profiles and recovery notes were sent to C3413 on 1 March 1972 with the report for work done on this job in August 1971.

Submitted 14 March 1972

John C. Veselenak
John C. Veselenak
Chief, Photo Party 65

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

21. Area Covered

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

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

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

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

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

22. Method

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

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

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

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

23. Adequacy of Control

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

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

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

Irving 1971

Mangrove (USE) 1930 Sub Point A

Sands Cut RM2, 1849-1947 Sub station

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

Rubi, 1930-1948 Reset

Man, 1930

Angelfish Key RM3, 1853

Narrow Point, 1854

Long Sound 1961

Snipe Pt., 1934, substation

Knowlson, 1935, substation

Hull Key, 1852

Rock Harbor 2, 1961

Lower Sound Point, 1853 substation

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

Largo, 1962

Low 2, RM2, 1934

Planter 2, RM4

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

Tavernier 1935

Snake 1934 Sub. Sta.

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

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

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

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

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

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

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

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

24. Supplemental Data

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

25. Photography

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

1:20,000 scale

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

1:30,000 scale

Strip No. 1 71E(C)9120-9135
Strip No. 2 71E(C)9562-9574
Strip No. 3 71E(C)9576-9586
Strip No. 5 71E(C)9536-9545
Strip No. 6 71E(C)9588-9602

1:40,000 scale

Strip No. 7 73L(C)2935-2945R.
Strip No. 10 73L(C)2952-2968R
Strip No. 11 73L(C)2785-2797R

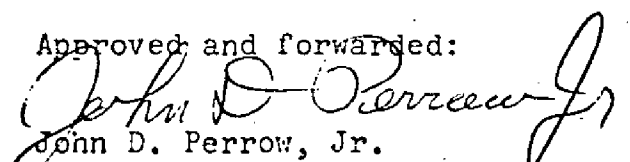
The quality and definition of the photography was adequate.

Respectfully submitted,



Victor McNeel

Approved and forwarded:



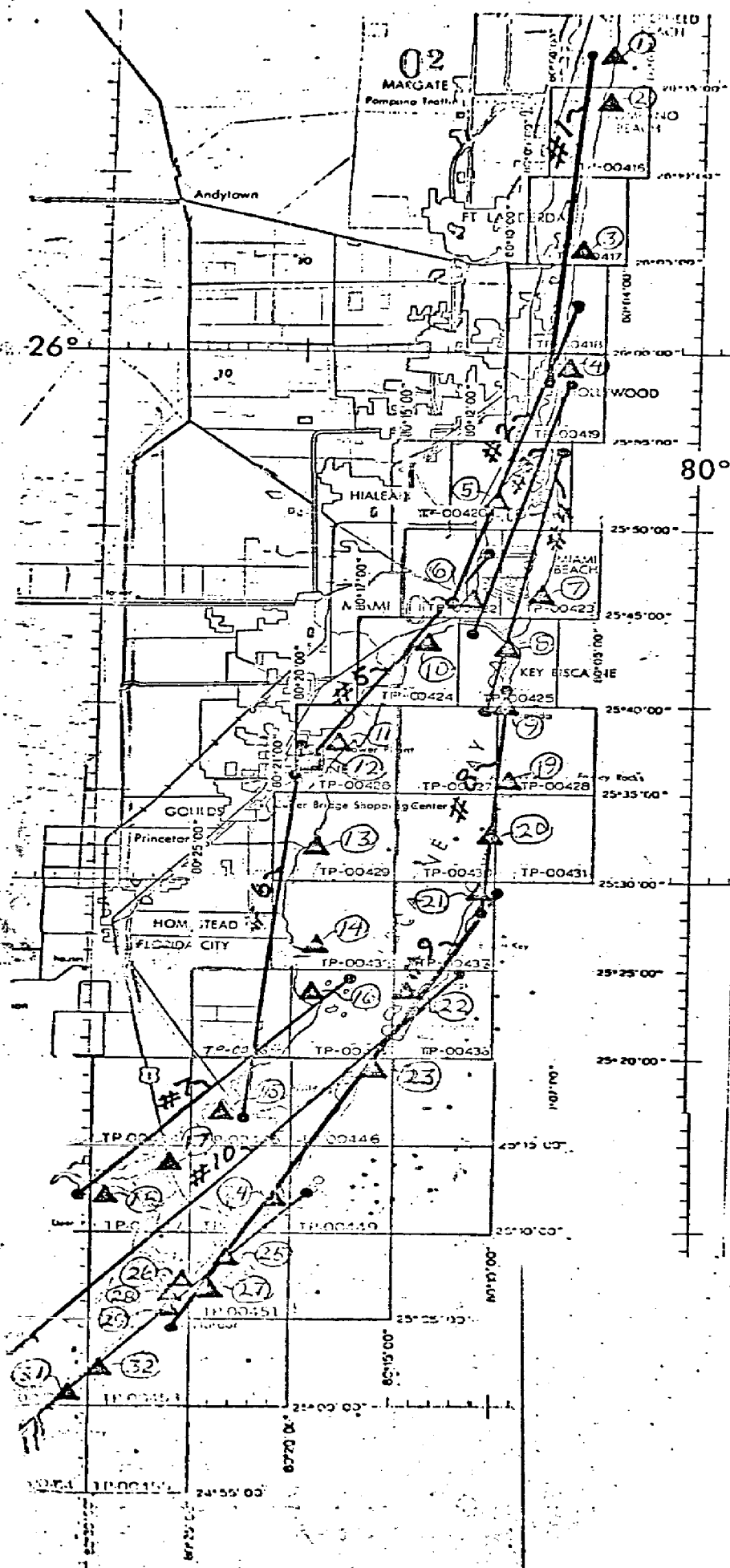
John D. Perrow, Jr.
Chief, Aerotriangulation Section

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

CONTROL STATIONS
USED IN THE
ADJUSTMENTS

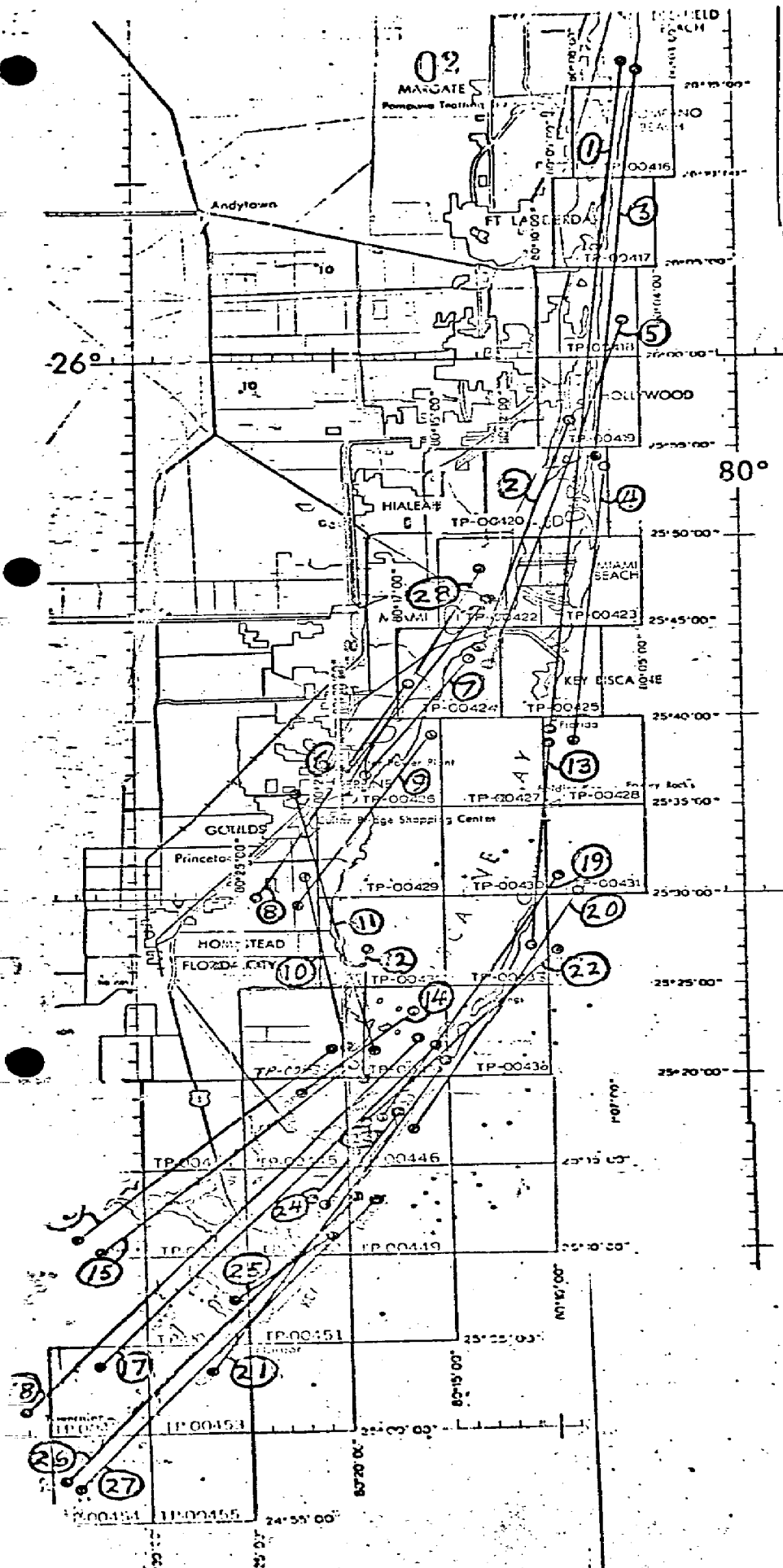
INFRA-RED CONTACT PRINTS

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



Compilation Report
TP-00453
June 1975

31. Delineation

The tidal datum lines on this map were compiled by graphic methods using tide-coordinated, black-and-white infrared photography.

Control for the graphic compilation consisted of map points and planimetric features (common to the tide-coordinated, black-and-white infrared photography) compiled from the orthophoto mosaic.

The color bridging photography was used as an aid in interpreting culture areas.

Interior details were compiled graphically from the rectified prints of the color infrared photography.

32. Control

Horizontal control was adequate. (See Photogrammetric Plot Report.)

33. Supplemental Data - None

34. Contours and Drainage

Contours are inapplicable. Drainage was compiled from the rectified prints of the color infrared photography.

35. Shoreline and Alongshore Features

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

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 to Navigation

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

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

41. thru 45. Inapplicable.

46. Comparison with Existing Maps

Rock Harbor, Florida, 1947, 1:24,000, photorevised 1969.

47. Comparison with Nautical Charts

Comparison was made with the following nautical charts:

11463, 7th Edition, 1:40,000, dated August 3, 1974
11451, 12th Edition, 1:40,000, dated September 7, 1974
1249, 12th Edition, 1:80,000, dated April 28, 1973

No significant differences were noted.

Respectfully submitted,

Stephen H. Solbeck

Stephen H. Solbeck

Approved and Forwarded:

Jeter P. Battley Jr.

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

FIELD EDIT REPORT, MAP TP-00453, Job PH 7119

51. METHODS

The shoreline was inspected from a small boat while cruising just off shore. Notes regarding fast and apparent shoreline, piers and other along shore features, will be found on the rectified photographs and discrepancy.

No triangulation stations were recovered.

~~Two~~ vertical control stations were recovered.

There are no landmarks.

All known aids were located or verified.

Three tide gages were identified. Point Charles Gage A with Tidal Bench Mark 1 and Point Charles Gage B with Tidal Bench Mark 3A were identified on 73L2791R, Point Charles Gage C and Point Charles Gage D have the same Tidal Bench Marks. Tidal Bench Mark 2 was identified with gages C and D on 73L2791R.

One photo print, page 51 Monroe County, Florida bf RADI, is submitted for a new canal and piers. The scale will need to be changed to fit the manuscript. There is sufficient detail to locate the photo on the rectified photographs.

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

52. ADEQUACY OF COMPILATION

Adequate after application of field edit.

53. MAP ACCURACY

No test required.

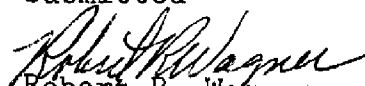
54. RECOMMENDATION

None.

55. EXAMINATION OF PROOF COPY

Not required.

Submitted


Robert R. Wagner
Chief, Photo Party 60

REMARKS: Application of Field Edit for TP-00453.

The photo print of March 1975, page 51 Monroe County, Florida (Real Estate Data, Inc.) referred to in the Field Edit Report was used to compile the canal and piers constructed after the 1973 photography. The new canal and piers are located on the westshore of Key Largo at latitude 25°03.75'. This photo print will be filed along with the other field data for TP-00453 in the National Archives.

REVIEW REPORT
TP-00453
August 1976

61. General

The map manuscript for Coastal Zone Map TP-00453 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 for compilation or final review.

62. Cartographic Comparison

Comparison was made with the following USGS quadrangle maps; 1:24,000 scale:

Rock Harbor, Florida, 1947 Photorevised 1969

No significant changes were noted.

Comparison was made with the following nautical charts; 1:40,000 scale:

11463 (formerly C&GS 850) 7th Edition, dated August 3, 1974

Chart 11463 shows the following obstructions that are not shown on TP-00453:

Wreck (bottom visible) latitude 25°0.5', longitude 80°29'
Pile (bottom visible) latitude 25°0.1', longitude 80°29'
Boiler (bottom not visible) latitude 25°0.1', longitude 80°29'

850
not
checked

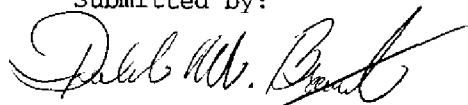
These areas were inspected by the field editor and the obstructions were not found.

63. thru 65. Inapplicable.

66. Adequacy of Results and Future Surveys

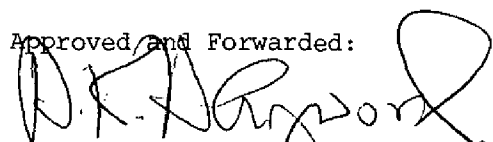
Coastal Zone Map TP-00453 complies with the Instructions for NOS Cooperative Boundary Mapping, Job PH-7000, and the National Standards of Map Accuracy.

Submitted by:

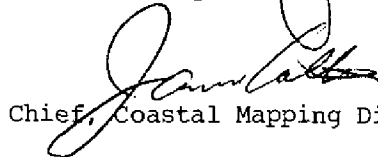


Donald M. Brant

Approved and Forwarded:



Chief, Photogrammetric Branch



Chief, Coastal Mapping Division

27 Jan. 1975

GEOGRAPHIC NAMES

PH-7119 (Card Sound to Plantation Key, Florida)

TP-00453

Atlantic Ocean

Dove Creek

Dove Key

Everglades National Park

Florida Bay

~~Hawk Channel~~

John Pennekamp Coral Reef State Park

Key Largo

Key Largo Beach

Long Point

Point Charles

Rock Harbor

Rock Harbor (locality)

Rodriguez Key

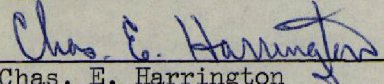
Seaside

Sunset Point

Triangles

Winken Blinken and Nod

Approved by:


Chas. E. Harrington
Staff Geographer-C51x2

0918175

F 2
ACTIVITY
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CHARTS
AFFECTED

1249	11463	11451
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PHOTOGRAMMETRIC BRANCH
COASTAL MAPPING DIVISION
NATIONAL OCEAN SURVEY
DEPARTMENT OF COMMERCE USA75-40
LISTING

* SVY TP-00-53 * RPT UNIT LMD ROCKVILLE, MD. * PAGE 2 OF 2 *

* JOB PH-7119 * NONFLOATING AIDS FOR CHARTS * STATE FLORIDA * ORIGINATING ACTIVITY *

* PROJ R * LOCALITY KEY LARGO BEACH * DATE 11/10/75 * COMPILATION *

* DIM NA 1327 * DATE 11/10/75 *

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

* CHARTING * RECORD REASON FOR DELETION * POSITION OM * CODES * C-C * METHOD AND DATE * CHARTS *

* NAME * PUT TRIANGULATION NAMES IN () * LATITUDE DP * LONGITUDE DP * SEQ * OFFICE * FIELD * AFFECTED *

* HAWK CHANNEL * * * *

* KEY LARGO * * * *

* LIGHT * OILTO * 25 0 12.27 377.5 200 * P-V-3-8 * 1248 *

* 2 * 30 28 58.20 1632.0 10 * 08/25/75 * 11463 *

* OYBN * OILTO * 25 0 4.38 134.8 219 * P-L-3-8 * 01170 *

* 3 * 80 29 28.21 791.1 6 * 08/25/75 * 11451 *

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

* * * * *

* * * * *

* POSITIONS DETERMINED * ROBERT R. WAGNER * FIELD REPRESENTATIVE *

* AND/OR VERIFIED BY * P. DEMPSEY AND VERIFIED BY J. BATTLE * OFFICE COMPILER *

* FIELD AND OFFICE * J. FIRRONE * DIGITIZER *

* ACTIVITIES * J. TAYLOR * DATA PROCESSER *

NATIONAL ARCHIVES DATA

TP-00453

1 Discrepancy print (paper copy)
1 Field edit sheet (stable base)
1 NOAA Form 76-36C (History of Field Operations)
2 NOAA Forms 76-40 (Nonfloating Aids or Landmarks for Charts)
4 pages sextant cuts

Photographs:

73L(C)2792R
72K6377, 6504, 6506

Supplemental data:

Photo print, March 1975, page 51 Monroe County Florida (Real Estate Data, Inc.).