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-00450
Classification No. Final Edition No1
Field Edited Map
LOCALITY
State Florida
General Locality Monroe County
Locality Boggy Key to
Key Largo Beach
19 72 TO 1975
REGISTRY IN ARCHIVES
DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-762-901

NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	TYPE OF SURVEY	SURVEY TP. 00450
(3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	[<u>_</u>
	XX ORIGINAL	MAP EDITION NO. (1)
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS Final
	REVISED	JOB Рн. 7119
PHOTOGRAMMETRIC OFFICE	LAST PRECEED	ING MAP EDITION
	TYPE OF SURVEY	JOB PH-
Rockville, Maryland	ORIGINAL,	MAP CLASS
OFFICER-IN-CHARGE	RESURVEY	SURVEY DATES:
Commander James Collins	REVISED	19TO 19
I. INSTRUCTIONS DATED	<u></u>	* * * **
I. OFFICE		FIELD
General Instructions-OFFICE-NOS Cooperative	Aerial Photography	
Coastal Boundary Mapping, Job PH-7000	Supplement 1, 1/28	· •
December 9, 1975	Supplement II, 3/2	
Supplement 1, November 4, 1974	Supplement III, 8/	10/72 00 General Instruct-
Supplement III, October 24, 1974	I .	Coastal Zone Mapping
NOTE: Office & field edit instructions (1975) incorporate applicable prior operational	1973	oustar zone nappring
instructions	1 13/3	
II. DATUMS		
III DATOMS	OTHER (Specify)	· · · · · ·
1. HORIZONTAL: X 1927 NORTH AMERICAN		
TXMEAN HIGH-WATER	OTHER (Specify)	
2. VERTICAL:	Mean water level	
MEAN LOWER LOW-WATER	Refer 76-36 B(1):	Remarks
MEAN SEA LEVEL 3. MAP PROJECTION		
9. MAL ELIAGRATION	STATE	GRID(S)
Transverse Mercator	Florida	East
5. SCALE	STATE	ZONE
1:10,000		
III. HISTORY OF OFFICE OPERATIONS		
OPERATIONS	NAME	DATE
I. AEROTRIANGULATION BY METHOD: Analytic Landmarks and aids by	V. McNeel Inapplicable	6/74
		6 (7)
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradamat CHECKED BY	D. Phillips	6/74
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	Inapplicable	
COMPILATION CHECKED BY		
INSTRUMENT: CONTOURS BY	Inapplicable	
SCALE: CHECKED BY		
4. MANUSCRIPT DELINEATION PLANIMETRY BY	S. Solbeck	4/75
CHECKED BY CONTOURS BY	J. Battley, Jr. Inapplicable	5/75
METHOD: Graphic CHECKED BY	inappiicable	
HYDRO SIPPORT DATA BY	Inapplicable	
scale: 1:10,000 CHECKED BY	-mappingunia	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	J. Battley	6/75
6. APPLICATION OF FIELD EDIT DATA	J. McClure	9/75
CHECKED BY	J. Battley, Jr.	9/75
7. COMPILATION SECTION REVIEW BY	J. Battley	9/75
8. FINAL REVIEW BY	D. Brant	9/75
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 NOAA FORM 75-35A SUPERSEDES FORM C&G3 181 SERIES	PITI CATOR	9/76

NOAA FORM 76-36B (3-72)			NATIONAL OCEA	NIC AND ATMOSPHER	
				NAT10	NAL OCEAN SURVEY
TP-00450	C	OMPILATION S	OURCE?		
1. COMPILATION PHOTOGR	APHY		· · ·		
CAMERA(S) Wild RC-8		TYPES O	F PHOTOGRAPHY	TIME BI	EFERENCE
K&L 6" focal leng	yth		LEGEND	<u>.</u>	
TIDE STAGE REFERENCE		(C) COLOR	IR	ZONE	
PREDICTED TIDES REFERENCE STATION RI	ECORDS	(P) PANCH		Eastern	X)STANDARD
TIDE CONTROLLED PHO		(I) INFRAI	RED B&W	75th	DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE		OF TIDE
73-L(C) 2789-2791 (R)		1417	1:40,000	The stage of	
73-L (C) 2962-2964 (R)	1 ' '	1045	1:40,000	inapplicable photography	e for color
72K6508R-6510R	2/16/72	1105	1:30,000		
72K6322R-6325R	2/14/72	1250	1:30,000	Refer to NO	AA Form 76-361
72K6373R-6374R	2/14/72	1411	1:30,000	100	
				,	
REMARKS					
2. SOURCE OF MEAN HIGH-					
The source of the M coordinated infrare	HWL along the At d photography li	clantic Ocea isted under	an is the bla item 1.	ck-and-white,	tide-
The source of the M black-and-white, ti (Refer to Remarks F	.de-coordinated i	nfrared pho	otography lis	ted under item	n 1.
The map was field e	dited in 1975.				
3. SOURCE OF MEAN LOW-V	VATER OR MEAN LOWER	LOW-WATER LINI			
The source of the M tide-coordinated in	LWL shown on the frared photograp	: Atlantic (hy listed (Ocean is the under item 1.	black-and-whit	ce,
					<u> </u>
4. CONTEMPORARY HYDRO					
SURVEY NUMBER DATE	SURVEY C	OPY USED SU	RVEY NUMBER	DATE(S) SU	RVEY COPY USED
napplicable					
5. FINAL JUNCTIONS				T	
NORTH	EAST	50	UTH	WEST N	o Contem-

TP-00453

west No Contem-

porary survey

TP-00447

REMARKS

TP-00451

Final junctions were made in the Coastal Mapping Section.

NOAA FORM 76-36B(1)

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

TIDE - COORDINATED PHOTOGRAPHY

TP _ 00450

	TP _ 00450		
LOCATION AND PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)	STAGE OF TIDE	MEAN RANGE
ATLANTIC OCEAN			
72K6508-6510	Tavernier, Hawk Channel	+0.10мнพ	2.13'
72K6373-6374	n n	+0.13MLW	
LITTLE BUTTONWOOD SOUND & FLORIDA BAY			
72ĸ6322	Tavernier, Florida Bay	+0.18MWL	
72K6508-6509	. 11 11 11	+0.20MWL	
TARPON BASIN			
72K6373	11 11 11	+0.16MWL	
72K6510	11 17 11	+0.20MWL	
FLORIDA BAY			
72K6323-6325	11 11 11		
,			
	·		
		,	

REMARKS: The periodic tide for the interior waters on this map were masked by non-tidal forces and the mean range was less than two-tenth of a foot. Where this occures, the mean high/low water datums converge and for mapping purposes the lines are in distinguishable. The mean water level line was mapped in lieu of the mean high water line and is shown by a distinctive symbol except for man made features such as bulkheads which are shown by a solid line or where vegetation such as mangrove obscures the shoreline and then the apparent shoreline symbol was used.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
73L2789R	Tarpon Basin Daybn 42	73L2790R	Tower
73L2789R	Grouper Cr. Daybn 52	73L2789R	Radio Tower
5. GEOGRAPHIC	NAMES: REPORT WONE	6. BOUNDARY AN	DLIMITS: TREPORT V NONE

7. SUPPLEMENTAL MAPS AND PLANS

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

* The field report is bound in this Descriptive Report.

NOAA FOR (3-72)	M 76-36D		N/	ATIONAL OCEANIC	U. S. DEPARTMEI AND ATMOSPHERIC	NT OF COMMERCE
(5.72)		RECO	RD OF SURVE	Y IISF		
TP-0045	0					
. MANUSC	RIPT COPIES				T - <u>2</u>	
		OMPILATION STAGE	T		†	PT FORWARDED
	DATA COMPILED /	DATE	RE	MARKS	MARINE CHARTS	HYDRO SUPPOR
There w	ere no copies of	TP-00450 sul	pmitted to M	arine Charts	prior to	
final r	eview.		-		9/9/76	
			,			
	(·		
II. I ANDRA	ARKS AND AIDS TO NAVIG	ATION	1	· · · · · · · · · · · · · · · · · · ·		
	ORTS TO MARINE CHART		L DATA BRANCH	····		
NUMBER	CHART LETTER Number assigned	DATE FORWARDED		RE	MARKS	
	· ·	11/25/75	Four (4) d	igitized NOA	A Forms 76-40	are
	· ·	1	submitted	as final rep	ort.	
2. XX i	REPORT TO MARINE CHAR	T DIVISION, COAST	PILOT BRANCH.	DATE FORWARDED	: <u>11/25/75</u> DATE FORWARDED:	
III. FEDER	AL RECORDS CENTER DA	AT.				
2. 📆	BRIDGING PHOTOGRAPHS CONTROL STATION IDENT SOURCE DATA (except for	IFICATION CARDS	FORM NO	5 567 SUBMITTED E	BY FIELD PARTIES.	
·	ACCOUNT FOR EXCEPTION					
	Y EDITIONS (This section			o edition is registere	d)	-
	SURVEY NUMBER	JOB NUMBI	ER .		TYPE OF SURVEY	
SECOND EDITION	DATE OF PHOTOGRAF	(2) PH PHY DATE OF F	RELD EDIT	<u> </u>	MAP CLASS	SURVEY .
	SURVEY NUMBER	JOB NUMBI	ER.	n. ⊔m	TYPE OF SURVEY	FINAL
THIRD	TP -	_ (3) PH		RE	_	SURVEY
EDITION	DATE OF PHOTOGRAP	_ ,	TELD EDIT		MAP CLASS	•

DATE OF FIELD EDIT

JOB NUMBER

PH-_

_ (4)

SURVEY NUMBER

DATE OF PHOTOGRAPHY

TP - __

FOURTH

EDITION

REVISED RESURVEY

MAP CLASS

FINAL

FINAL

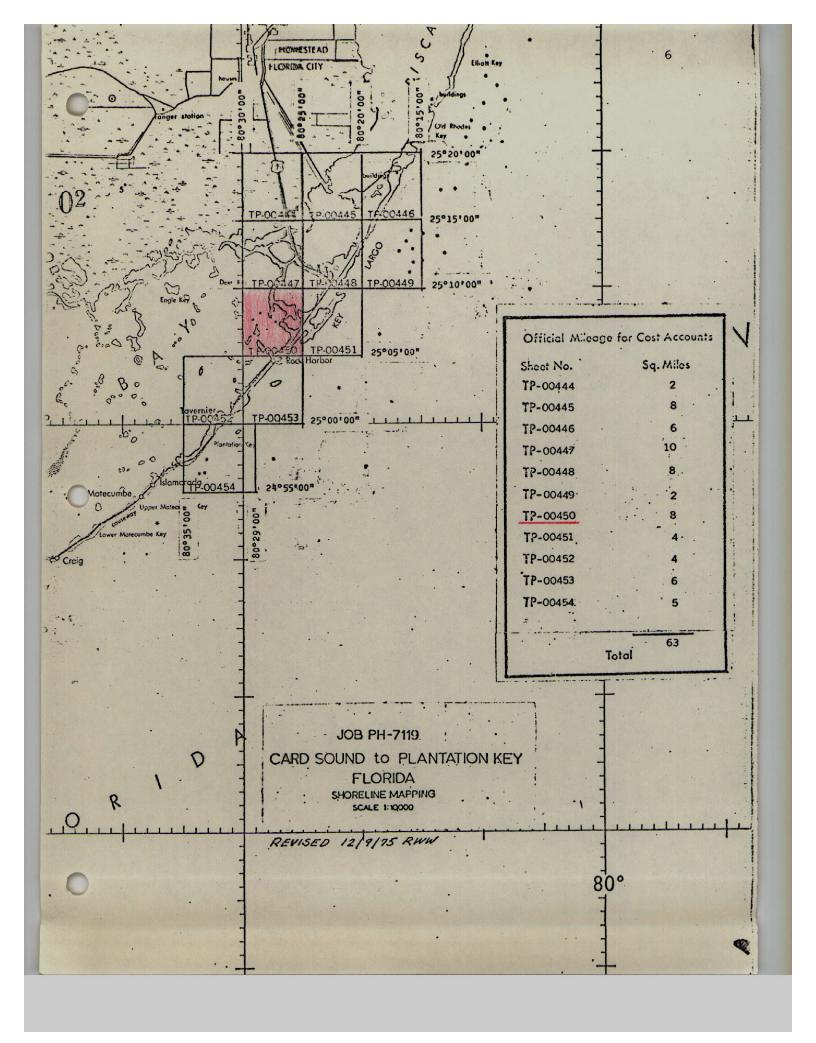
□jii. □iv. □v.

TYPE OF SURVEY

□ III. □IV. □v.

□11.

□ II.



SUMMARY for TP-00444 thru TP-00454

Coastal Zone Map TP-00450 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.
- Establishment of tidal datums.
- 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.

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 COMPROL

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. Telerances of ± 0.3 ft. for MHW and ± 0.1 ft. for MLW were observed. Wet staff readings - crest, mean, and thoughwere recorded while photography was in progress. Eastern Stardard Time was used.

Line 30-4. Flown for MMW on March 2, 1971 at 1319-1325 when both MIAMI BISCAYME PAY and CUTLER were in range. The north and

was flown for MLW at 1325-1335 on August 6 when the MIAMI BISCAYNE BAY 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 flowr at 805-815 on August 7 when CUMIER 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. MW North half was flown at 1430-1435 on 6 August when the CUMIER 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 striplicate 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) LHW 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 reat 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 SOURD 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 FEW photography were not accomplished due to clouds and seasonal high water.

4. ADDITIONAL PHOTOGRAPHY

Tide coordinated photography was taken on a small shoul about one

mile MNE of the Molasses Reef light. The shoal was photographed at about 0900 on August 10 when the TAVERNIER HAWK CHARMED staff was in MHW 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 MIANI 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 L. Veselenak John C. Veselenak

Chief, Photo Party 65

FIELD REPORT

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 smulsion.

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 MANATES CREEK and BARNES SCUND 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. Bastern Standard Time was used.

Line 20-1. MMW Completed at 1050 on February 14 when the RACCED 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 Pebruary when the OCEAN REST 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 .945-1000 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 SCUND 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 (NAMCPOVE 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 ARSENICKER 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

Chief, Photo Party 65

John C. Veselenak

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. The points were located in this area and the 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 72b(C)8698R:

Tavernier 1935 Snake 1934 Sub. Sta.

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

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

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

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

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

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

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

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

24. Supplemental Data

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

25. Photography

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

1:20,000 scale

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

1:30,000 scale

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

:1:40,000 scale

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

The quality and definition of the photography was adequate.

Respectfully submitted,

Victor McNeel

Approved and forwarded:

John D. Perrow, Jr.

Chief, Aerotriangulation Section

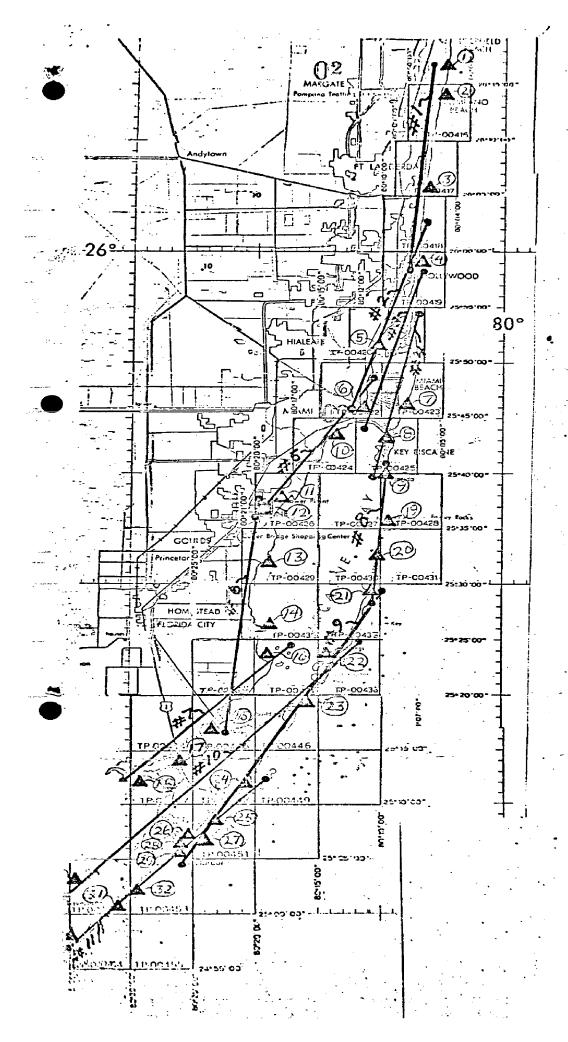
CONTROL STATIONS

		. '		100
		و مد	<u>residuals</u>	
1.	(027100)	Turtle 1929	-0.706ft	-0.115 C †
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,		_ • -: •
	(=0,1=00)	1849	-0.158	0.033
9.	(201101)	Cape Florida Old Tower	0.430	0.000
٠, ٠	(=-,==-,	Finial, subpoint A	-0.156	0.002
10.	(538102)	Pan American, 1935,	0,230	0.002
- V.	(330102)	Target 2	0.000	0.000
11.	(534101)	Naco 1934, subpoint A	0.000	0.000
12.	(544801)	Tie point from strip #5	0.000	0,000
	(344002)	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,	0,551	0.000
14.	(333101)	RM No. 2	-0.229	0.073
15.	(940100)	NH NO. 2	0.227	0.0/5
1).	(602100)	Narrow Point 1854	-1.808	1.267
16.	(944100)	Man 1930.	0.222	-0.009
17.	(960100)	Long Sound, 1961	-0.168	-0.005
	(936101)	Snipe Point, 1934, sub-	-0.100	-0.075
18.	(320101)	station	-0.215	-0.201
19.	(878101)		0.687	-0.080
-	(875101)	Irving, 1971, substation	0.007	-0.000
20.	(0/ 31 02)		-0.826	0.125
21	(0721.01.)	subpoint B Sands Cut RM 2, 1849-1947	-0.020	0,125
21.	(872101)		0.296	_0 0/49
22	(901100)	Rubi, 1930-1947, reset		
	•	Angelfish Key RM 3, 1853	-0.303	-0.242
24	(905101)	Knowlson, 1935 substation		
24.	(914101)	Hull Key, 1852	-0.053	0.103
			0.364	
		Rock Harbor 2, 1961	0.304	-0,204
41.	(OZZIUI)	Lower Sound Point, 1853		٠
aò	(022101)	substation **		
28.	-	Sub Station Key Largo Cable		
		Visions Inc., Taller Mast,		
20	(02/3.00)	1961 **	_h 210	0 102
۷۶.	(744100)	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





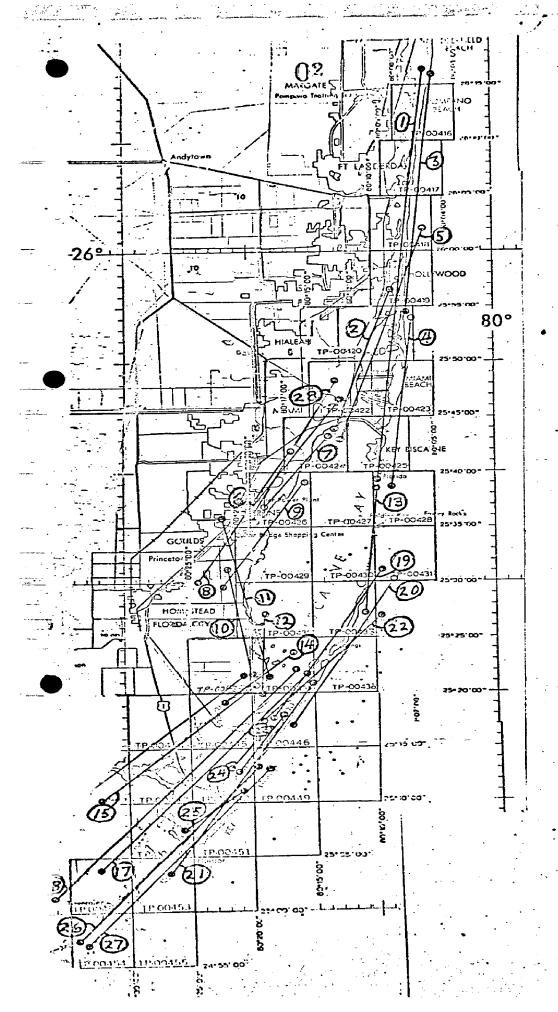
JOB PH-7113 AND JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

CONTROL STATIONS USED IN THE ADJUSTMENTS

INFRA-RED CONTACT PRINTS

- 71K 5632R 5660R MLW
- 71K 5662R 5672R MLW -
- 71K 5750R 5766R MHW
- 71K 5795R 5806R MHW
- 71K 5815R 5829R MHW 5.
- 71L 8501R 8509R MLW
- 7. 71L 8512R - 8520R MLW
- 71L 8571R 8580R MHW 8.
- . 9, 71L 8523R - 8530R MLW
- 71L 8783R 8791R MHW 10.
- 71L 8584R 8593R MHW 11.
- 71L 8532R 8537R MLW 12.
- 13. 71L 9067R - 9080R MLW
- 14. 71L 8337R - 8341R MHW
- 15. 72K 6287R - 6298R MHW
- 72K 6572R 6584R MLW 16.
- 72K 6546R 6563R MLW 17.
- 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
- 72K 6344R 6350R MLW 23.
- 72K 6253R 6255R MLW 24.
- 25. 72K 642 OR - 642 3R MHW
- 26. 72K 6501R - 6515R MHW
- 72K 6368R 6382R MLW 27.
- 71K 5847R 5856R MHW 28.



JOB: PH-7113 AND JOB PH-7119

HILLSBORO INLET
TO
PLANTATION KEY,
FLORIDA

INFRA-RED CONTACT PRINTS RATIOED FOR COMPILATION

FLORIDA – NOAA Coastal Boundary Mapping Program

Horizontal Control

 $\textbf{Map TP-}_{00450}$

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
LARGO 1962	Fla. Vol 2 P. 610
KEY LARGO CABLE VISIONS INC 1961 (TALLER MAST)	Fla. Vol 2 P. 345
TARPON 1934	Book 424, P. 21, 32; R.C. P. 89; G.P. P. 359
ROCK HARBOR 2 1961	Fla. Vol 2 P. 323
y √	
	·

Compilation Report TP-00450 May 1975

31. Delineation

The tidal datum lines and offshore features on this map were compiled from office interpreted black-and-white, tide-coordinated infrared photography. This photography was controlled by common planimetric features compiled from the rectified prints and map points determined by aerotriangulation.

The-rectified color photography was used as an aid for interpreting culture features and compiling shallow and shoal areas for Nautical Charts.

Interior features compiled were limited to the first main road behind the MHWL or 800 to 1000' behind the MHWL. Roads leading the the MHWL in these areas, if considered public roads, were also compiled.

32. Horizontal Control

See Photogrammetric Plot Report.

33. Supplemental Data - None.

34. Contours and Drainage

Contours are not applicable. Drainage is depicted by a stereo examination of the color contact prints and graphically compiling from the rectified photograph.

35. Shoreline and Alongshore Detail

The black-and-white, tide-coordinated infrared photography was adequate for the delineation of the tidal datum lines. The MHW and MLW lines - were mapped along the Atlantic Ocean and the MWL was mapped on the interior waters of Florida Bay.

A field edit of this map is requested for the verification of the interpretation of the photography.

36. Offshore Details

Shoal and shallow lines were delineated from the rectified prints of the color photography.

37. Landmarks and Aids

All landmarks and aids will be located or verified during 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 Mapping Program as outlined in the project instructions for Job PH-7000.

41 thru 45. Inapplicable

46. Comparison with Existing Maps

Comparison was made with the following USGS quadrangles:

Blackwater Sound, Fla. 1969, 1:24,000 scale; Rock Harbor, Fla. 1969, 1:24,000 scale.

No significant differences were found.

47. Comparison with Nautical Charts

Comparison was made with the following Nautical Charts:

849 1:40,000, 6th Edition, August 19, 1972; 850 1:40,000, 6th Edition, August 19, 1972; 11451 1:80,000, 12th Edition, October 1974; 1249 1:80,000, 10th Edition, September 1970;

No significant differences were found.

Approved and forwarded:

Jeter P. Battley Ir. J. P. Battley, Jr.

Chief, Coastal Mapping Section

FIELD EDIT REPORT MAP TP-00450, JOB PH 7119

51. METHODS

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

Three triangulation stations were recovered.

Three vertical control stations were recovered and identified.

Four landmarks are recommended for charting.

Sunset Cove tide gage and Tidal BM 5 were identified on photograph 73L279OR.

All known aids were located, verified or identified.

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

52. ADEQUACY OF COMPILATION

Adequate after application of field edit.

53. MAP ACCURACY

No test required.

54. RECOMMENDATION

None.

55. EXAMINATION OF PROOF COPY

None required

Submitted by

Robert R. Wagner Chief, Photo Party 60 7/30/75

REVIEW REPORT TP-00450

August 1976

61. General

The map manuscript for Coastal Zone Map TP-00450 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:

Blackwater Sound, Florida, 1947, Photorevised 1969 Rock Harbor, Florida, 1947 Photorevised 1969

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

11463 (formerly C&GS 849 and 850), 7th Edition, dated August 3, 1974

Copies of the field editors notes are attached to the Chart Maintenance Print for the following areas:

- 1. The MLW area shown on chart 11463 along the Atlantic shoreline at latitude 25°06' and longitude 80°35'.
- 2. The shoreline along Porjoe Key.

Refer to the Field Edit Report for explanation.

63. thru 65. Inapplicable.

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00450 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-00450

Atlantic Ocean

Shell Key

Baker Cut

Sunset Cove

Blackwater Sound

Swash Keys

Boggy Key

Tarpon Basin

Bush Point

Whaleback Key

Buttonwood Sound

Dusenbury Creek

Everglades National Park

Florida Bay

Grouper Creek

John Pennekamp Coral Reef State Park

Key Largo

Key Largo Beach

Little Buttonwood Sound

Newport

Pelican Key Point Plassant

Porjoe Key

Port Largo

Approved by:

Chas. E. Harrington Staff Geographer-C51x2

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National Archives Data TP-00450

- 1 Discrepancy print
- 1 Field editasheet (stable base copy)
- 4 NOAA Forms 76-40 (Nonfloating Aids or Landmarks) for Charts)
- 1 NOAA Form 76-36c (History of Field Operations)
- 3 Pages sextant fixes

Photography:

73-L(C) 2763R, 2764R, 2989R, and 2990R 72-K-6374R