TP-00446

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-00446
Classification No. Final Edition No
LOCALITY
State Florida
General Locality Monroe County
Locality Angle Fish Key to
Worlds Beyond
1972 TO 19 75
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. 00446
TO THE STATE AND ATMOSPHERIC ROMAN.	K ORIGINAL	MAP EDITION NO. (1)
	_	
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS Final
	REVISED	јов Рн - <u>7119</u>
PHOTOGRAMMETRIC OFFICE	LAST PRECEED	ING MAP EDITION
Periodilla W. J. 1	TYPE OF SURVEY	JOB PH-
Rockville, Maryland	D ORIGINAL	MAP CLASS
OFFICER-IN-CHARGE	RESURVEY	SURVEY DATES:
Cdr. James Collins	RÉVISED (19TO 19
I. INSTRUCTIONS DATED	<u></u>	
1. OFFICE	2.	FIELD
General Instructions-OFFICE-NOS Cooperative	Aerial photogra	
Coastal Boundary Mapping, Job PH-7000	Supplement 1, 1,	· · · · ·
December 9, 1975	Supplement II,	
Supplement 1, November 4, 1974	Supplement III,	
Supplement III, October 24, 1974 NOTE: Office and field edit instructions(197		7000 General Instruc-
incorporate applicable prior operational	Mapping) 1973	ua Coastai Zone
instructions.	mabbind) 19/3	_
II. DATUMS		
1. HORIZONTAL: XX 1927 NORTH AMERICAN	OTHER (Specify)	
THE ROLL OF THE AMERICAN		
XX MEAN HIGH-WATER	OTHER (Specify)	
2. VERTICAL: XX MEAN LOW-WATER	•	
MEAN SEA LEVEL		·
3. MAP PROJECTION	4,	GRID(S)
	STATE	ZONE
Transverse Mercator	Florida	East
5. SCALE	STATE	ZONE
1:10,000		
OPERATIONS 1. AEROTRIANGULATION BY	V. McNeal	6/74
METHOD: Analytic LANDMARKS AND AIDS BY	Inapplicable	5/ /4
2. CONTROL AND BRIDGE POINTS PLOTTED BY	R. Robertson	1/75
METHOD: Calcom CHECKED BY	Inapplicable	
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	Inapplicable	
COMPILATION CHECKED BY		
INSTRUMENT: CONTOURS BY	Inapplicable	
SCALE: CHECKED BY	G G-11 -1	A /8-
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY	S. Solbeck J. Battley	4/75 4/75
CONTOURS BY	Inapplicable	7/13
метнор: Graphic снескер ву		
HYDRO SUPPORT DATA BY	Inapplicable	
SCALE: 1:10,000 CHECKED BY		
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	J. Battley	4/75
6. APPLICATION OF FIELD EDIT DATA	J. McClure	11/75
CHECKED BY	C. Lewis	12/75
7. COMPILATION SECTION REVIEW BY	J. Battley D. Brant	1/76 3/76
8. FINAL REVIEW BY	erant	
Q DATA FORWARDED TO BUOTOGRAMMETRIC BRANCH	D. Branc	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	D. Brant	7/76

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

TP-00446

COMPILATION SOURCES

CAMERA(S) L(6") & K (6") RC-8			PHOTOGRAPHY EGEND	TIME RE	FERENCE
TIDE STAGE REFERENCE PREDICTED TIDES REFERENCE STATION RECOINTY XXTIDE CONTROLLED PHOTOG		(C) COLOR (P) PANCH (I) INFRAE	ROMATIC	Eastern MERIDIAN 75th	₩XSTANDARD □ DAYLIGHT
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE	OF TIDE
73L(C) 2905-2911	3/18/73	0945	1:20,000	The stage o	f tide is
73L(C) 2955-2958R	3/18/73	1040	1:40,000	inapplicabl color photo	e for the
72K6313R-6315R	2/14/72	1250	1:30,000	Piloto	arap
72K6548R-6550R	2/20/72	1125	1:30,000		
72K6430R-6434R	2/15/72	1004	1:20,000		rm 76-36B(1)
72K6348R-6353R	2/14/72	1346	1:20,000	for stage of	f tide data.

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the MHWL was the black and white tide-coordinated infrared photography listed in item 1. The rectified color photography was used for the interpretation of culture shoreline.

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

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

The source of the MLWL was the black and white tide-coordinated infrared photography listed in item 1. Refer to paragraph 36 of the Compilation Report.

Inapplicable	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED
5. FINAL JUNCTION	IS				
NORTH TP-00435	EAST No	Survey	SOUTH TP-00449		WEST TP-00445

Final junctions were made in the Coastal Mapping Section.

NOAA FORM 76-36B(1) (7-75)

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

TIDE - COORDINATED PHOTOGRAPHY

TP-00446

TP -

TP-00446	TP_	A	
LOCATION AND PHOTOGRAPHY	TIDE STATIONS (In operation at time of photography)	STAGE OF TIDE	MEAN RANGE
ATLANTIC SHORELINE			At Tide Station
72K6348-6353	Ocean Reef	+ 0.03MLW=	2.33'
72K6430-6434	Ocean Reef	0.00 MHW	
INTERIOR WATERS			
72K6313-6315	Wednesday Point Card Sound	+ 0.12 MHW + 0.25 MHW	0.74' 0.52'
72K6430-6434	Wednesday Point Basin Hills	+ 0.10 MHW - 0.15 MHW	0.74' 0.43'
72K6348-6353	Basin Hills	+ 0.71 MLW + 0.28 MHW - 0.06 MHW	0.43'
72K6548-6550	Wednesday Point Card Sound	+ 0.08 MLW + 0.03 MLW	0.74' 0.52'
REMARKS:			
instructions for some	tolerance is greater than ±0.30' of the photography used in compi The horizontal positions of th	ling portions o	
verified by field edit		Portions	

REMARKS:

	HISTORY OF FIELD	OPERATIONS	· · · · · · · · · · · · · · · · · · ·	·
I. XX FIELD INSP	ECTION OPERATION Feb. 1972 XX FIEL	D EDIT OPERATION	July 1975	
	OPERATION	<u></u>	NAME	DATE
1. CHIEF OF FIEL	D PARTY	R.R. Wagner	l	
	RECOVERED BY	R.R. Wagner		7/75_
2. HORIZONTAL	CONTROL ESTABLISHED BY	Inapplicable	3	
	PRE-MARKED OR IDENTIFIED BY	Inapplicable	2	
	RECOVERED BY	R.R. Wagner		7/75
3. VERTICAL CON	NTROL ESTABLISHED BY	Inapplicable	e	
	XXXXXXXXXXX IDENTIFIED BY	R.R. Wagner	·	7/75
	RECOVERED (Triangulation Stations) BY	Inapplicable	<u> </u>	
4. LANDMARKS AT AIDS TO NAVIG		R.R. Wagner		7/75
AIDS TO NAVIO	IDENTIFIED BY	R.R. Wagner		7/75
	TYPE OF INVESTIGATION		•	
5. GEOGRAPHIC N	BY			
1111237102710	T 31 ECIFIC NAMES ONE			
	XX NO INVESTIGATION	 		
6. PHOTO INSPEC		R.R. Wagner		7/75
7. BOUNDARIES A		Inapplicable		
II. SOURCE DATA	CONTROL IDENTIFIED	2. VERTICAL COL	NTROL IDENTIFIED	
	6717011115	PHOTO NUMBER	STATION DET	CHA TION
PHOTO NUMBER	STATION NAME		STATION DESI	GNATION
	Refer to Field Report	73L2907R	H 327	N 975
	Refer to field Report	73L2908R 73L2910R	P 275, N 275, AAD 66 (USE)	14 2/5
		73L2910R 73L2957	E 316 (SRD)	
		7302937	E 210 (2KD)	
3. PHOTO NUMBE	RS (Clarification of details)	· · · · · · · · · · · · · · · · · · ·		
	52, 6353; 72K6430, 6431			
73L2905R th	ru 2910R ND AIDS TO NAVIGATION IDENTIFIED			
]		
field edit.	nd non floating aids were either	rocated or ve	erified during]
	AC 1777 1111	T		
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT N	AME
73L2908R	Key Largo Anglers Club Pier Lt.	73L2906R	Tower (Souther:	n Be l l)
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		<u> </u>		
5. GEOGRAPHIC	IAMES: REPORT XX NONE	6. BOUNDARY AN	D LIMITS: REPORT	T KX NONE
7. SUPPLEMENTA	L MAPS AND PLANS			
8. OTHER FIELD	RECORDS (Sketch books, etc. DO NOT list data submit	ted to the Geodesy D	ivision)	}
Sketch Book	_ -			ļ
Refer to Fig	eld Report bound with this Descri	ptive Report.		[
]

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NOAA FOR (3-72)	RM 76-36D	٠.	N/	ATIONAL OCEANIC	U. S. DEPARTMEN	T OF COMMERCE
		RECO	RD OF SURVE	Y IISE		4
TP-0044	16	NLCO		1 032		
I. MANUSC	RIPT COPIES				<u>. </u>	
		MPILATION STAGE	T			PT FORWARDED
	DATA COMPILED	DATE	RE	MARKS	MARINE CHARTS	HYDRO SUPPORT
						·
COPY OF	CLASS I MANUSCRI	TT TO MARINE	CHART DIVI	SION 3/16/76		
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					9/9/76	
		 				
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II I ANDM	ARKS AND AIDS TO NAVIG	ATION	<u> </u>		1	<u> </u>
	ORTS TO MARINE CHART D		DATA BRANCH			
NUMBER	CHART LETTER	DATE		DEM	ARKS	
NUMBER	NUMBER ASSIGNED	FORWARDED				
		1/27/76	Two (2) di	gitized forms	: 76_40 were	submitted
	,	11/21/10	100 (2) 41	grerzea rorms	70-40 WEIE	Submitteed
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	REPORT TO MARINE CHAR REPORT TO AERONAUTICA					
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· 🗆	BRIDGING PHOTOGRAPHS	DUPLICATE	BRIDGING REPO	RT; COMPUTE	R READOUTS.	
	CONTROL STATION IDENT		_			
3. 🖳	ACCOUNT FOR EXCEPTIO		port) AS LISTED I	IN SECTION II, NOAA	70-36C.	
					-	
4. 🗀	DATA TO FEDERAL RECO	RDS CENTER. DAT	E FORWARDED:			
IV. SURVE	Y EDITIONS (This section					
SECOND	SURVEY NUMBER	(2) PH	R		TYPE OF SURVEY	BURVEY
EDITION	DATE OF PHOTOGRAP		ELD EDIT	<u> </u>	MAP CLASS	-
_2,.,01				□.n. □.m.	□+v. □v.	FINAL
	SURVEY NUMBER	ЈОВ МИМВЕ	R		TYPE OF SURVEY	
THIRD	тр	_ (3) PH		⊔re	VISED > RES	URVEY
EDITION	DATE OF PHOTOGRAP	HY DATE OF FI	ELO EDIT	l — — —	MAP CLASS	П

FOURTH

EDITION

SURVEY NUMBER

DATE OF PHOTOGRAPHY

TP - _

JOB NUMBER

DATE OF FIELD EDIT

PH -

_ (4)

MAP CLASS

□ III. □IV. □v.

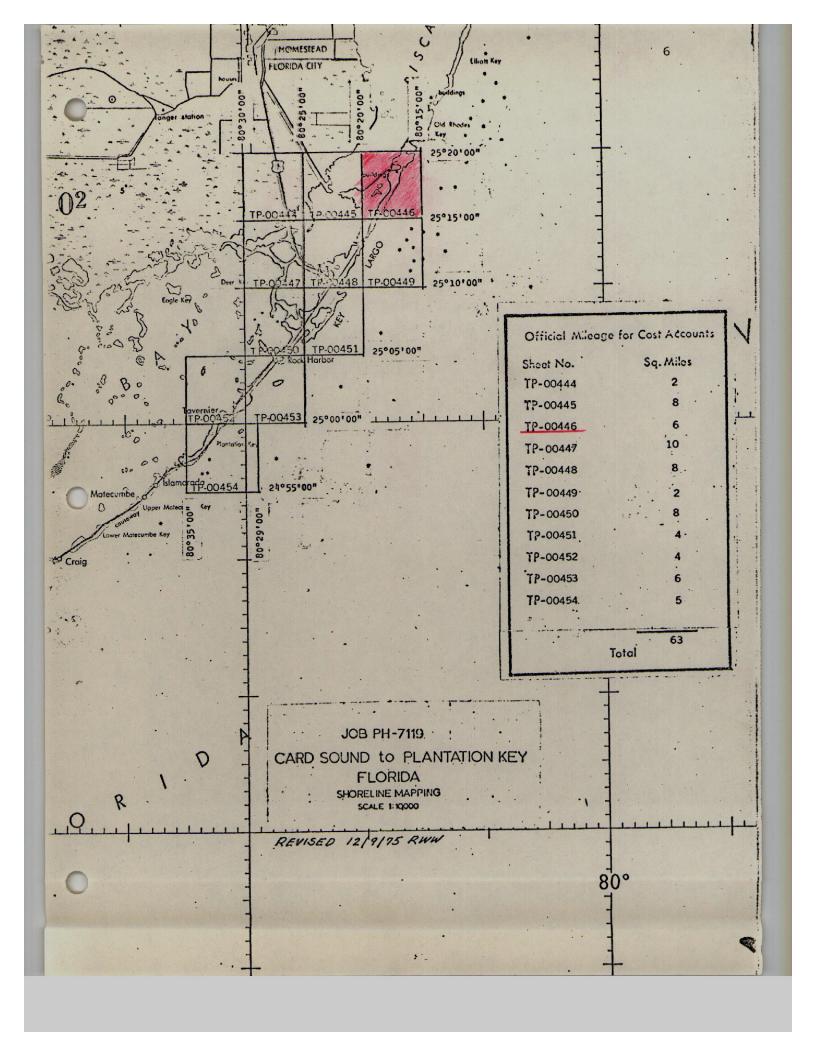
RESURVEY

FINAL

TYPE OF SURVEY

REVISED

□ n.



SUMMARY for TP-00444 thru TP-00454

Coastal Zone Map TP-00446 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:

- I. 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. PREHARKING 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 Pranch. 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 NHW and ± 0.1 ft. for NHW were observed. Wet staff readings - crest, mean, and troughwere recorded while photography was in progress. Eastern Standard Time was used.

Line 30-4. Flown for HHW on March 2, 1971 at 1319-1325 when both MIAWI BISCAYME BAY 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 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. MTW North half was flown at 1430-1435 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) LHW Flown at 939-947 on August 11 when the TAVERNIER HAWK CHARNEL staff read 4.00 to 4.12, HLW 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 \$35-842 on August 9 when the CARD Sound staff read 3.6 and the EANATEE CREEK staff read 3.75. Line was unacceptable because of clouds in the middle segment and rossible smoke in the porthorn third. This and the FLW photography were not accomplished due to clouds and seasonal high water.

4. ADDITIONAL PHOTOGRAPHY

Tide coordinated photography was taken on a small shoul about ore

mile NHE of the Molasses Reef light. The shoal was photographed at about 0900 on August 10 when the TAVERNIER HAWK CHAMMEL 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.

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 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 northwest 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 NANATEE 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. 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 OCHAN 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 SCUND 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 PARNES 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 ARSENICKER Form 277.

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 cansidered 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. Veselensk

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. The 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 Flane Coordinate System using the Coradomat Plotter or the Calcomo 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 3

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 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, P-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

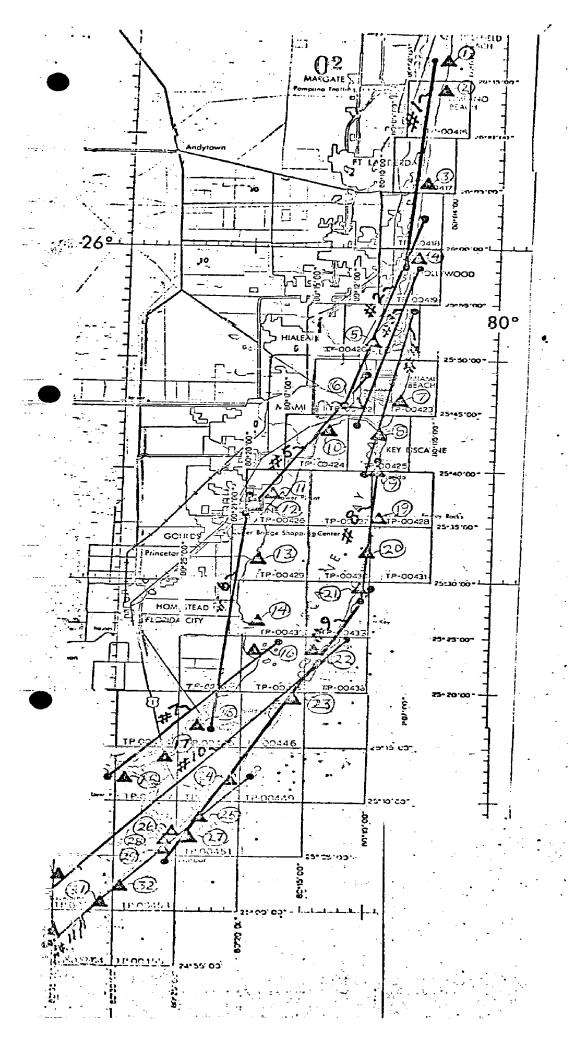
		<u>.</u>	•	
			<u>residuals</u>	
1.	(027100)	Turtle 1929	-0.706	-0.115
2.	(023102)	Pompano, 1928, subpoint B	1.488	-0.229
3.	(029100)	South Jetty, 1938	-1.134	0.176
4.	(034101)	Halland, 1928	0.317	-0.007
5.	(567101)	Causeway 1934	0.027	-0.012
6.	(562101)	Point View, 1934	0.000	-0.181
7.	(207100)	Base: 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.	(591 100)	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-		
10	(070101)	station	-0.215	-0.201
19.	(878101)	Irving, 1971, substation	0.687	-0.080
20.	(875102)		2 55 4	0.100
21	(0701.01.)	subpoint B	-0. 826	0.125
21.	(872101)	Sands Cut RM 2, 1849-1947	0.296	0.070
22	(901100)	substation	0.296	0.124
	(905101)	Rubi, 1930-1947, reset		
24	(91/101)	Angelfish Key RM 3, 1853 Knowlson, 1935 substation	0.303	-0.155
25	(91 91 00)	Hull Key, 1852	-0.053	0.103
		Rock Harbor 2, 1961	0.364	
		Lower Sound Point, 1853	0,304	-0,204
-,.	(022101)	substation **		
28	(923101)	Sub Station Key Largo Cable		
	()=54627	Visions Inc., Taller Mast,		
		1961 **		
29.	(924100)	Largo, 1962	-0,210	0.103
	\ · /	~~~ 6~) *··~	~.~~ <i>~</i>	4.200

30.	(967101)	Low 2, RM 2, 1934	0.042	0.215
31.	(692100)	Tavernier, 1935	0.3 08	-1.325
32.	(7 93 1 01)	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

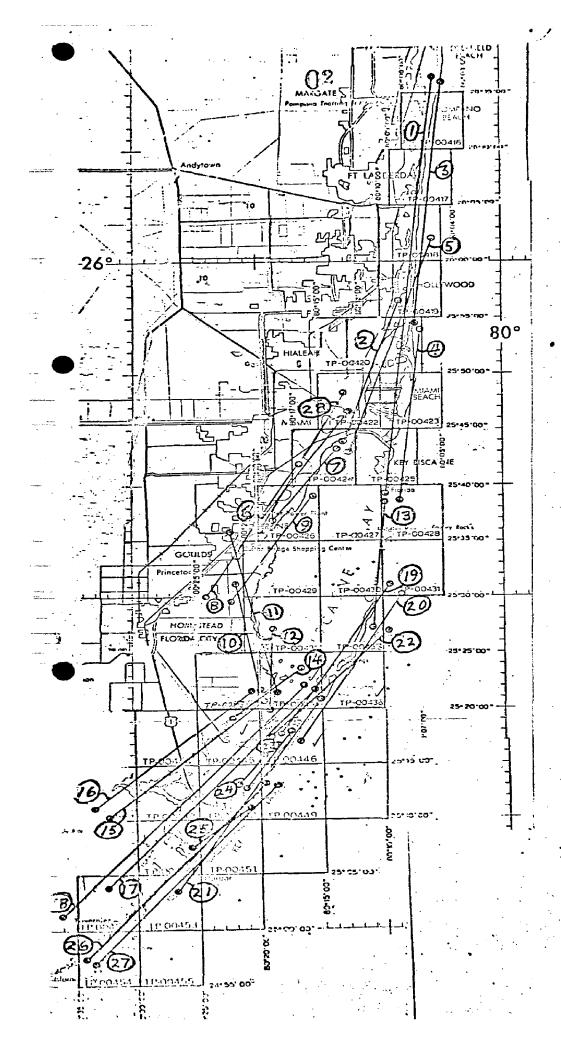
- 1. 71K 5632R 5660R MLW
- 2. 71K 5662R 5672R MLW -
- 3. 71K 5750R 5766R MHW
- 4. 71K 5795R 5806R MHW
- 5. 71K 5815R 5829R MHW
- 6. 71L 8501R 8509R MLW
- 7. 71L 8512R 8520R MLW
- 8. 71L 8571R 8580R MHW
- 9. 71L 8523R 8530R MLW
- 10. 71L 8783R 8791R MHW
- 11. 71L 8584R 8593R MHW
- 12. 71L 8532R 8537R MLW
- 13. 71L 9067R 9080R MLW
- 14. 71L 8337R 8341R MHW
- 14. 715 0007K 0041K FRIM
- 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 6420k 6423k 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

CONTROL STATIONS USED IN THE ADJUSTMENTS



JOB PH-7113 AND JOB PH-7119

HILLSBORO INLET TO PLANTATION KEY, FLORIDA

INFRA-RED CONTACT PRINTS RATIOED FOR COMPILATION

COMPILATION REPORT TP~00446 MAY 1975

31. Delineation

The tidal datum lines were compiled from office interpretation of the tide-coordinated, black and white infrared photography. This photography was controlled by common planimetric detail compiled from the color photography and map points determined by aerotriangulation.

The rectified color infrared photography was used as an aid for interpreting culture features and compiling the channel lines, shoal, shallow lines, and small scattered mangrove islets.

The rectified color photography was also used for the compilation of the interior details.

32. Control

See Photogrammetric Plot Report.

33. Supplemental Data - None.

34. Contours and Drainage

Contours are inapplicable. Drainage was compiled from a stereoscopic examination of the color printons and graphically compiling from the rectified color photography.

35. Shoreline and Alongshore Details

The photography was adequate for shoreline compilation with the exception of three photographs (72K 6313R thru 6315R) tide coordinated at mean high water that were of poor quality. The shoreline compiled from these photographs was interpreted from a stereoscopic comparison with the color photography.

36. Offshore Details

Two offshore islands were compiled near the north limits of the map. These islands were compiled from the black and white tide-coordinated infrared photography. The MHWL and MLWL were compiled and are subject to verification by field edit. Lines verified as compiled. We

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 and Vertical Accuracy

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

- 41. thru 45. Inapplicable.
- 46. Comparison with Existing Maps

Card Sound, Florida, 1956, 1:24,000, scale, photorevised 1969 & 1973.

47. Comparison with Nautical Charts

Comparison was made with the following Nautical Charts:

11463, 7th edition, 1:40,000 scale, dated August 3, 1974; 11451, 12 edition, 1:40,000 scale, dated September 7, 1974.

No significant differences were noted.

Respectfully subfitted

Stephen A. Solbeck

Approved and forwarded:

Jeter P. Battley, Jr. 7 Chief, Coastal Mapping Section

FIELD EDIT REPORT, MAP TP-00446, JOB PH 7119

51. METHOD

The shoreline was inspected from a small boat while cruising just eff shore. Notes regarding apparent and fast shoreline and along shore details were made on the photographs.

No triangulation stations were recovered.

Six bench marks were identified.

Two tidal bench marks were identified. Ocean Reef gage and a bench mark was identified on 73L2907R. Wednesday Point gage was not in place. Tidal bench mark was identified on 73L2908R. It is in the base of the aid.

Three landmarks are recommended for charting.

All known aids were located or verified and identified.

All field edit data 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 7/15/75

Chief, Phote Party 60

ADDENDUM 1, PH 7119 TP-00446

Punpkin Key, Card Sound Tide Gage was installed after field edit. It along with Tidal Bench Mark 3 was identified on photograph 73L2955R.

Submitted 8/20/75

Robert R. Wagner Chief, Photo Party 60

GOT ZGNOV 75 JM

Review Report TP-00446

July 1976

61. General

The map manuscript for Coastal Zone Map TP-00446 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 plane table beach profiles available at the time of compilation or review for this map.

62. Cartographic Comparison

Comparison was made with the following USGS quadrangle: Card Sound, Florida, 1956 photo revised 1969 and 1973, 1:24,000 scale.

The geographic name Steamboat Creek is misspelled (Streamboat Creek) on TP-00446. This has been noted on the standard for TP-00446.

Comparison was made with the following Nautical Chart: 11463 (formerly C&GS 849) 7th edition, dated August 3, 1974, 1:40,000 scale.

The areas of MLW shown on II463 in the vicinity of Angelfish Creek were not shown on Coastal Zone Map TP-00446. The field editor's notes about his investigation are annotated on the Chart Maintenance Print.

63. thru 65. Inapplicable.

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00446 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

GEOGRAPHIC NAMES

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

TP-00446

Angelfish Key

Snapper Point

Atlantic Ocean

Steamboat Creek

Barnes Sound

Wednesday Point

Card Sound

Worlds Beyond

Crocodile Lake

Dynamite Docks

Grayvik

Hawk Channel

High Mangrove Point

Jew Point

John Pennekamp Coral Reef State Park

Key Largo

Little Angelfish Creek

Little Dispatch Creek

Little Pumpkin Creek

Pumpkin Creek

Pumpkin Key

Approved by:

Chas. E. Harrington Staff Geographer-C51x2

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TP-00446 National Archives Data

- l Discrépancy print (paper)
- 1 Field edit sheet (stable base)
- 5 Pages sextant fixes
- 1 Form 76-36C (History of field operations)
- 2 Forms 76-40

PHOTOGRAPHY:

73-L-2905R thru 2910R

73-L-2955R and 2957R

72-K-6349 and 6352