T-11199 THE 11202

7-11199 7-11202 7-11202

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey Planimetri	.C					
Job No. PH-6003	. Map No*					
Classification No.*	Edition No					
· 						
LOCALI	LOCALITY					
StateFlorida	•••••					
General Locality Key West, Florida						
Locality . Key West to Dry Tortugas						
•						
1960 TO	19					
REGISTRY IN ARCHIVES						
BATE						
DATE	••••••					

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

* T-11199 - Incomplete (Class III)
T-11200 - Incomplete (Class III)
T-11201 - Incomplete (Class III)

T-11201 - Incomplete (Class III)

T-11202 - Incomplete (Class III)

SUMMARY PH-6003 KEY WEST TO DRY TORTUGAS FLORIDA KEYS, FLORIDA

This project covers the areas from Key West, Florida to Rebecca Shoal Lighthouse and Dry Tortugas. There are twelve maps covering this project. Three are at 1:20,000 scale (T-11202, T-11204, and T-11205). The remaining maps are at 1:10,000 scale (T-11199, T-11200, T-11201, T-11206, T-11207, T-11249, T-11250, T-11251, and T-11252).

The instructions, Field and Office, are dated June 24, 1960.

This project was compiled to provide a base for photo hydro support and for nautical charting. Also, underwater contouring of the shallow and shoal areas was undertaken.

Photography was taken in March 1960. 1:20,000 scale color photography was used for bridging and compilation. Infrared low water photography taken with the "L" camera was used for shoreline interpretation. Panchromatic photography taken with the "S" camera was used for field location of hydrographic signals.

Everything pertinent to the compilation of these maps is lost. Copies of the original maps are reproduced and will be registered without a final review. Maps T-11207, T-11249, T-11250, and T-11251 at 1:10,000 scale are advance maps, and were partially applied to chart 584 on March 12, 1968. This is the only portion of this project used by charts. T-11252 was not compiled. There is no shoreline within the boat sheet limits.

Manuscripts T-11206, T-11249, and T-11251 are superseded by job CM-7201, 1:10,000 scale shoreline mapping project.

A stable base positive and negative for each map are submitted for registration and filing in the Bureau Archives. This summary will be filed in lieu of the missing Descriptive Reports.

Submitted by:

, **J. B.** Philĺips

Re. 1977

Approved and Forwarded:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

Three Identical reports are submitted under separate cover.
(1) T-11199 thru T-11202, (2) T-11204 thru T-11207
(3) T-11249 Thru T-11252

PROJECT ~H-6003

1:20,000 1:10,000 and Scales Mapping Planimetric

KEY WEST TO DRY TORTUGAS

FLORIDA KEYS, FLORIDA

11250 11261 24 81°48'45" 61.52,30" 1205 11204 82,07,30 11202 615 82.48 \$5 82°45′ 82,5230"

Official Mileage For Cost Accounts

11252 24.26.15

81.53

	Area Lin, Mi. Sheet Are 50.2 5 11205 5 11207 5 11249 11250 11250 11250 11250 11250 11250 11250 11250 11250 11250	TOTAL 1.30 Area Sq. M1.
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FORM 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY				
DESCRIPTIVE REPORT				
Type of Survey SHORELINE T-11202, 11204 Field No. Office No. 11205				
LOCALITY				
State FLORIDA				
General locality FLORIDA KEYS				
Locality Archer Key to Marquesas Keys				
19				
CHIEF OF PARTY				
LIBRARY & ARCHIVES				
DATE USCOMM-DC 5087				

DESCRIPTIVE REPORT - DATA RECORD

T-11202, 11204 & T-11205

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PROJECT NO. (II):						
FIELD OFFICE (II):			CHIEF OF PARTY	,		
PHOTOGRAMMETRIC OFFICE (III):			OFFICER-IN-CHA	RGE		
Washington D. C.	•	-	CAPT. WAUGH			
INSTRUCTIONS DATED (II) (III):			I	· · · · · · · · · · · · · · · · · · ·		
Ltr. No 73/rrj 9	Jun/60 and Li	tr. 73/1	rrj dtd/ 24	Jun£60		
METHOD OF COMPILATION (III):	:	··				
Graphic and Ster	·eo					
MANUSCRIPT SCALE (III):		STEREOSCO	COPIC PLOTTING INSTRUMENT SCALE (III):			
1:20,000		1:20	20,000			
DATE RECEIVED IN WASHINGTON OFFICE	(IV):	DATE REPO	DRTED TO NAUTICA	L CHART BR	NCH ((V):	
APPLIED TO CHART NO.		DATE:		DATE REGIS	TERED (IV):	
GEOGRAPHIC DATUM (III):			VERTICAL DATUM (III):			
			MEAN SEA LEVEL EXCEPT AS FOLLOWS:			
			Elevations shown as (25) refer to mean high water			
			Elevations shown	_		
	•		i.e., mean low wet	er or mean lowe	r low water	
REFERENCE STATION (III):		· · · · · · · · · · · · · · · · · · ·				
LAT.:	ONG.:		ADJUSTED		<u>-</u>	
PLANE COORDINATES (IV):			STATE		ZONE	
y = x =						
ROMAN NUMERALS INDICATE WHETHER T OR (IV) WASHINGTON OFFICE. WHEN ENTERING NAMES OF PERSONNEL						

USCOMM-DC 16276B-P81

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):		DATE:	
		FEB 2 7 %500	
MEAN HIGH WATER LOCATION (III) (STATE DATE		0.54	
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Florida Keys. October	1962, Stereoscopic Method MH	i	
PROJECTION AND GRIDS RULED BY (IV):		DATE	
R.A. Creel		11-29-60	
PROJECTION AND GRIDS CHECKED BY (IV):		DATE	
J.D. Clark		11-30-60	
CONTROL PLOTTED BY (III):		DATE	
Rose Ann Carter		·	
Jacqueline B. Phillps:		\	
	·····		
CONTROL CHECKED BY (III):		DATE	
Jacqueline B. Phillps Rose Ann Carter			
	3,500%, 0000	,	
RADIAL PLOT OR STEREOSCOPIC CONTROL EXT	ension by (III): Stereo Planigraph	DATE	
Robert E. Feuchsel	Bridge		
STEREOSCOPIC INSTRUMENT COMPILATION (III)	PLANIMETRY	DATE	
	None		
Wright & Lucas	CONTOURS	DATE	
	Your		
MANUSCRIPT DELINEATED BY (III):	None	DATE	
Buowh Madahé & Hound 1			
Frank Wright & Henri scribing by (III):	Jugas	DATE	
	'		
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE	
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REMARKS:			
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DESCRIPTIVE REPORT - DATA RECORD CAMERA (KIND OR SOURCE) (III): PHOTOGRAPHS (III) NUMBER STAGE OF TIDE DATE TIME SCALE 28 Feb 60 0950 + 0954 1:20,000 .85 ft. abbve MLW 9692 to 9697 9701 to 02 & 9706 28 Feb 60 0955 to 07 28 Feb 60 9812 to 9815 9901 to 03 28 Feb 60 1650 - 1653 -0.5 001+0010 & 014 to 1.0 6 Mar 60 0950 - 1000 020 068 to 073 8 Mar 60 0845 - 0848.37 00.1 above MLW Infra-red (list) TIDE (III) RATIO OF MEAN SPRING RANGES RANGE RANGE REFERENCE STATION: Key West Fla. 1.5 UBORDINATE STATION: 12 Northwest Channel SUBORDINATE STATION: DATE: WASHINGTON OFFICE REVIEW BY (IV): DATE: PROOF EDIT BY (IV): RECOVERED: IDENTIFIED: NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): RECOVERED: IDENTIFIED NUMBER OF BM(S) SEARCHED FOR (II): NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (SII): REMARKS:

PHOTOGRAMMETRIC PLOT REPORT PROJECT PH-6003

21. Area Covered

T-11202, T-11204 through T-11207, T-11250 through T-11252.

22. Method

Three stereoplanigraph bridges were run in order to establish pass points for use in Kelsh compilation, and for hydro-support purposes. All three bridges were adjusted by IBM methods.

Because of a scarcity of land area in the models, relative orientation was an uncertain process, and firm elevation settings could not be made. Hence, the entire aerotriangulation procedure must be regarded as lacking the high standard of reliability that is normally attainable.

A summary of the adjustment procedure:

Strip 1: This bridge is based on Station SOUMUD, 1934 - SUB. STA. 2; Station BAY KEY, 1934 - SUB. STA.; and Station CALDA CHANNEL LT. NO. 1, 1960. On the initial adjustment SOUMUD, 1934 - SUB. STA. 1 missed its true position by a few hundred feet. It. was then determined that the field man had mis-identified both sub stations of station SOUMUD, placing them in a cove adjacent to the one in which they actually were located. The sub. stations were reidentified and a new adjustment was performed referencing to Sub. Station 2, the better identification. Sub. Station 1 was missed approximately 40 ft. (65 mm at 1:20,000) in this adjustment but another feature which closely matched the sketch would have held satisfactorily.

Strip12E:Originally adjusted to four stations:
Station ROCK PT. 3, 1934 - SUB. STA.;
Station KEY WEST NAVAL RADIO MAST, MIDDLE
1917; Station WESTCRAW, 1934 - SUB. STA.

Strip 12E cont.

2; and Station PASS, 1911 - SUB. STA 2. On this adjustment Station PASS, 1911 -SUB. STA. 1 missed its true position by about 150 ft. (2.5 mm at 1:20,000). A critical examination of the field data disclosed that a faulty starting azimuth resulted in an erroneous field-positioning of the sub. stations for Station PASS, 1911. Due to the absence of an alternate station for use as the westernmost adjustment point in lieu of Station PASS, the plane coordinate positions of three photo-identifiable points were scaled from map manuscript T-8489 at 1:20,000 scale. The machine coordinate readings for these points were observed, and appended to the bridging notes. A final IBM adjustment was performed, using all three of the map-scaled points in lieu of Station PASS sub. stations. The three easternmost adjustment points were the same as on the initial run. This solution resulted in a lessened, though still excessive, bow error. A ECLAT, 1960 and A COTTRELL KEY 2, 1934, and their respective substitute stations, all of which had been designated at the time of bridging as being points of extremely poor image quality, all missed their true ground positions by large amounts. three map-scaled points missed their scaled positions by 22 ft., 34 ft., and 36 ft. (.3 mm, .5 mm, and .6 mm, respectively at 1:20,000 scale). This does not seem excessive as they were not well defined map points.

For reasons cited above, the resulting accuracy of this bridge is probably less than standard. However, it should suffice for hydro support at 1:20,000 scale.

Strip 12W: Owing to the almost total absence of any land area or visible underwater features in the Boca Grande channel, photos 60 S 425-429 were run as a separate entity rather than as an integral part of the main strip 12, and were designated as strip 12 W.

Strip 12W cont.

Adjustment was referenced to four stations namely Station SAW, 1911 - SUB. STA. 2; Station SOUTH, 1911 - SUB. STA. 2; Station PLAT, 1960 - SUB. STA. 1; and Station DEEP, 1960. All control held well.

23.

23. Adequacy of Control

Refer to the side heading 22 above. The control identification complied with project instructions. Except as discussed above for Strip 12E, control was adequate for a usual type of photogrammetric problem. Here the resulting accuracy is probably less than usual.

24. Supplemental Data

Topographic Survey T-8489 (1:20,000; 1943) was used as stated in side heading 22.

25. Photography

The photography used in bridging did not retain the high degree of tonal gradation and resolution that was present in the original color photography. This and the lack of well-defined land features made relative orientation difficult and uncertain. Coverage was adequate.

Sketch and List of Control: Attached.

Submitted by:

Robert E. Feuchsel

Approved:

Everett H. Ramey, Chief Aerotriangulation Section

NOTES TO THE COMPILER

Holes were drilled in the emulsion on the plates with the Wild PUG Point Transfer Device. In many instances, a lack of congruity between corresponding drill holes can be noticed. This is traceable to the above-mentioned side heading 22, scarcity of land area, which results in an insufficiency of texture and tonal differentiation, hence making the determination of depth difficult if not impossible. This causes the point-transfer process to be unreliable. In all cases, the point number assigned to a drill hole is derived from the photo number on the plate on which the drill hole appears. The locations of the drill-hole points have been circled on the contact prints.

COMPILATION REPORT T-11202, 11204 & T-11205 PH-6003 Florida Keys Scale 1:20,000 Oct. 1962

The purpose of this project is to furnish base shoreline manuscripts and raticed panchromatic photographs to the field for photo-hydro support.

The bridging was accomplished with 1:40,000 scale color photography. As photo-hydro support was to be achieved with panchromatic photography, common pass points with the bridging photography was a necessity.

Orienting the drilled bridge plates on the Wild B-8 sterecplotter and scaling to the plotted bridge points on the manuscript base, pass points common to the panchromatic photos were positioned on to the manuscript from the instrument.

The contact panchromatic prints were ratioed to these points and the ratio prints were resected on to the manuscript for photo-hydro support.

31. Delineation

The delineation was accomplished by graphic methods utilizing ratioed panchromatic photos. These photographs were printed on cronapaque and the centers and pass points were identified on these prints.

Ratioed infra-red photography flown at low water was used for the delineation of the low-water line.

32. Control

See Photogrammetric Plot Report

33. Supplemental Data

See Item 47

34. Contours and Drainage

Inapplicable

35. Shoreline and Alongshore Details

Delineation was from office interpretation of the photography, utilizing tide data.

36. Offshore Details

No unusual problems were encountered in detailing the MLWL and shallow areas existing on these manuscripts,

37. Landmarks and Aids

Inapplicable

38. Junctions

Satisfactory junctions were made with adjoining sheets (see enclosed layout sketch)

40. Horizontal and vertical accuracy

See Photogrammetric Plot Report

41-45. (Inapplicable)

46. Comparison with existing maps

See 1tem 47

47. Comparison with existing charts

Comparison was made with Nautical charts 1351 and 1352. Chart No. 1351 was revised 8-17-59, scale 1:80,000 and Chart No. 1352 was revised 5-2-60, scale 1:80,000. These charts were of reference value in verifying office interpretation of shoal and shallow areas prominent in the area.

Submitted by:

Henri Lucas

Approved by:

Jeter P. Battley Jr.

F11204 82"07'50" T-11202 MARQUESAS KEYS 48 070

FLORIDA KEYS - PROJECT PH-6003 Scale 1:20,000

o Photographs (Ratio prints)