T-11202, 11204, 11205

T-11202, T-11204, T-11205

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE

Field No. ..... Office No. T-11202, 11204, T-11205

LOCALITY

State FLORIDA

General locality FLORIDA KEYS

Locality Archer Key to Marquesas Keys

19

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE

USCOMM-DC 5087

FORM C&GS-181a
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T-11202, 11204 & T-11205

PROJECT NO. (II):	
FIELD OFFICE (II):	CHIEF OF PARTY
PHOTOGRAMMETRIC OFFICE (III): Washington D. C.	OFFICER-IN-CHARGE CAPT. WAUGH
INSTRUCTIONS DATED (II) (III): Ltr. No 73/rrj 9 jun/60 and Ltr. 73/rrj dtd/ 24 Jun/60	
METHOD OF COMPILATION (III): Graphic and Stereo	
MANUSCRIPT SCALE (III): 1:20,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:20,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE: / DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III):	VERTICAL DATUM (III): MEAN SEA LEVEL EXCEPT AS FOLLOWS: *Elevations shown as (25) refer to mean high water* *Elevations shown as (5) refer to sounding datum i.e., mean low water or mean lower low water*
REFERENCE STATION (III):	
LAT.: / LONG.:	☐ ADJUSTED ☐ UNADJUSTED
PLANE COORDINATES (IV): Y = X =	STATE / ZONE

ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE.
WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

FORM C&GS-181b
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):	DATE: FEB 27 1963
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Florida Keys, October 1962, Stereoscopic Method MHW	
PROJECTION AND GRIDS RULED BY (IV): R.A. Creel	DATE 11-29-60
PROJECTION AND GRIDS CHECKED BY (IV): J.D. Clark	DATE 11-30-60
CONTROL PLOTTED BY (III): Rose Ann Carter Jacqueline B. Phillps	DATE
CONTROL CHECKED BY (III): Jacqueline B. Phillps Rose Ann Carter	DATE
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): Stereo Planigraph Bridge Robert E. Feuchsel	DATE
STEREOSCOPIC INSTRUMENT COMPILATION (III): Wright & Lucas — PLANIMETRY: None	DATE
CONTOURS: None	DATE
MANUSCRIPT DELINEATED BY (III): Frank Wright & Henri Lucas	DATE
SCRIBING BY (III):	DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):	DATE
REMARKS:	

USCOMM-DC 16276B-P61

FORM C&GS-181c
(12-61)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
9692 to 9697	28 Feb 60	0950 + 0954	1:20,000	.85 ft. above MLW
9701 to 02 & 9706 to 07	28 Feb 60	0955		
9812 to 9815	28 Feb 60			
9901 to 03	28 Feb 60	1650 - 1653		-0.5
001+0010 & 014 to 020	6 Mar 60	0950 - 1000		1.0
068 to 073	8 Mar 60	0845 - 0848		.37
Infra-red (list)				00.1 above MLW

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Key West Fla.	.13	1.2	1.5
SUBORDINATE STATION: Northwest Channel	.12	2.5	3.1
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):		DATE:
PROOF EDIT BY (IV):		DATE:
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	RECOVERED:	IDENTIFIED:
NUMBER OF BM(S) SEARCHED FOR (II):	RECOVERED:	IDENTIFIED
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):		
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):		

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 in office 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.

Strip 12E: 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. △ ECLAT, 1960 and △ 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. The 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 ratioed 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 stereoplotter 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 item 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

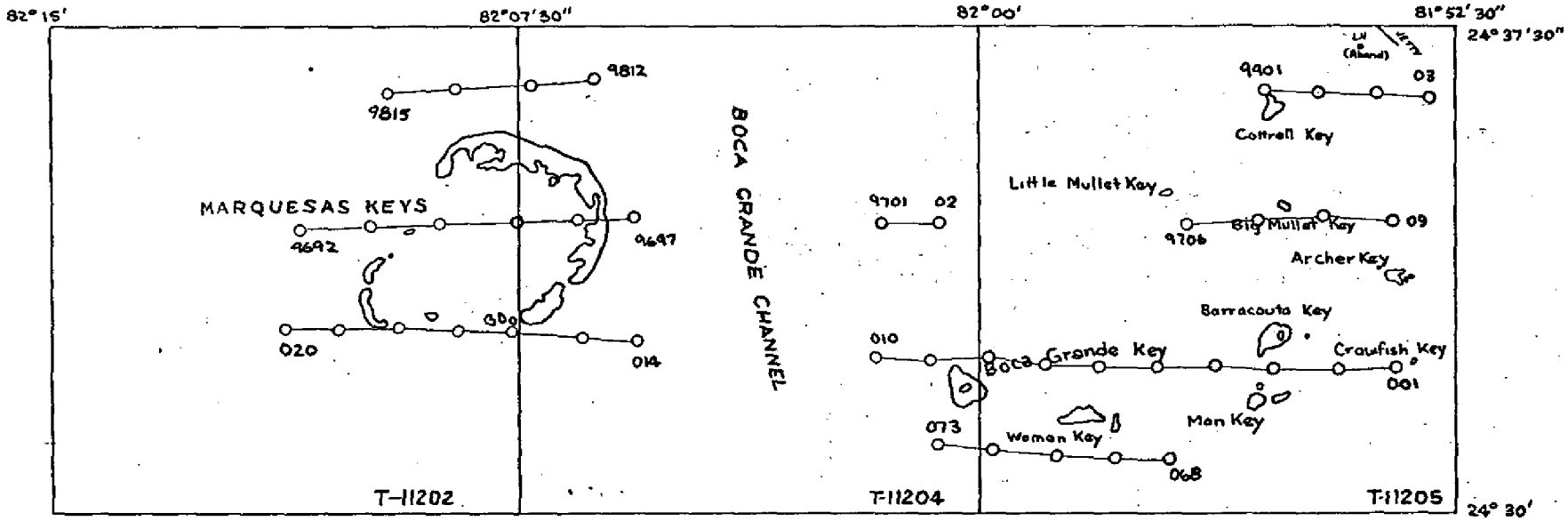
Henri Lucas

Approved by:

Jeter P. Battley Jr.

J. P. Battley, Jr.

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



○ Photographs (Ratio prints)