FORM **C&GS-504**

U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)
Field No. Office No.T-13126
LOCALITY
State Puerto Rico
General locality Southwest Coast
Locality Islacaja De Muertos
<u>1966-1</u> 972
CHIEF OF PARTY
Alfred C. Holmes, Director, AMC
LIBRARY & ARCHIVES .
DATE

USCOMM-DC 87022-P66

REFERENCE STATION (III):

Muertos Island Light House, 1899 LAT.: LONG.: XX ADJUSTED 17° 53' 42.518" 66⁰ 31' 17.599 UNADJUSTED PLANE COORDINATES (IV): STATE ZONE **x** = Puerto Rico 1

AN 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 (3-66) U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T-13126

	1-13120	
FIELD INSPECTION BY (II):		DATE:
None		
MEAN HIGH WATER LOCATION (III) (STATE DATE	AND METHOD OF LOCATION):	
Air Photo Compilation - Date	of Photography Nov. 15, 1966	56
PROJECTION AND GRIDS RULED BY (IV):		DATE
Coradomat		Sept. 22, 1970
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
Coradomat .		Sept. 22, 1970
CONTROL PLOTTED BY (III):		DATE
Aerotriangulation Points: -	Coradomat .	-Sept. 22, 1970
Triangulation Stations: -		
CONTROL CHECKED BY (III):		DATE
	Consdomat	Sept. 22, 1970
Aerotriangulation Points: - Triangulation Stations: -	COPACOMAC	Jept. 22, 1370
RADIAL PLOT OR STEREOSCOPIC CONTROL EXT	ENSION BY (III):	DATE 71 1967
I. I. Saperstein		Oct. 31, 1967 Sept. 11, 1970
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY By: R. White	DATE NOV. 20, 1970
Wild B-8	Reviewed By: A. L. Shands	Nov. 20, 1970
	CONTOURS	DATE
	Inapplicable	
MANUSCRIPT DELINEATED BY (III):		DATE
R. White		Nov. 24, 1970
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
L.F. Beugnet		Nov. 1970
REMARKS:		DATE:
	Field Edit By: - E. Pursel	May 17, 1972
	•	

DESCRIPTIVE REPORT - DATA RECORD

T-13126

MERA (KIND OR SOURCE) (III):

Wild RC-8 "L"

	PHO	TOGRAPHS (III)		
NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66L(c)8363 thru 8366 66L(I)8643 thru 8646		10:19 10:40	1:15,000 1:15,000	0.8 above MLW 0.8 above MLW

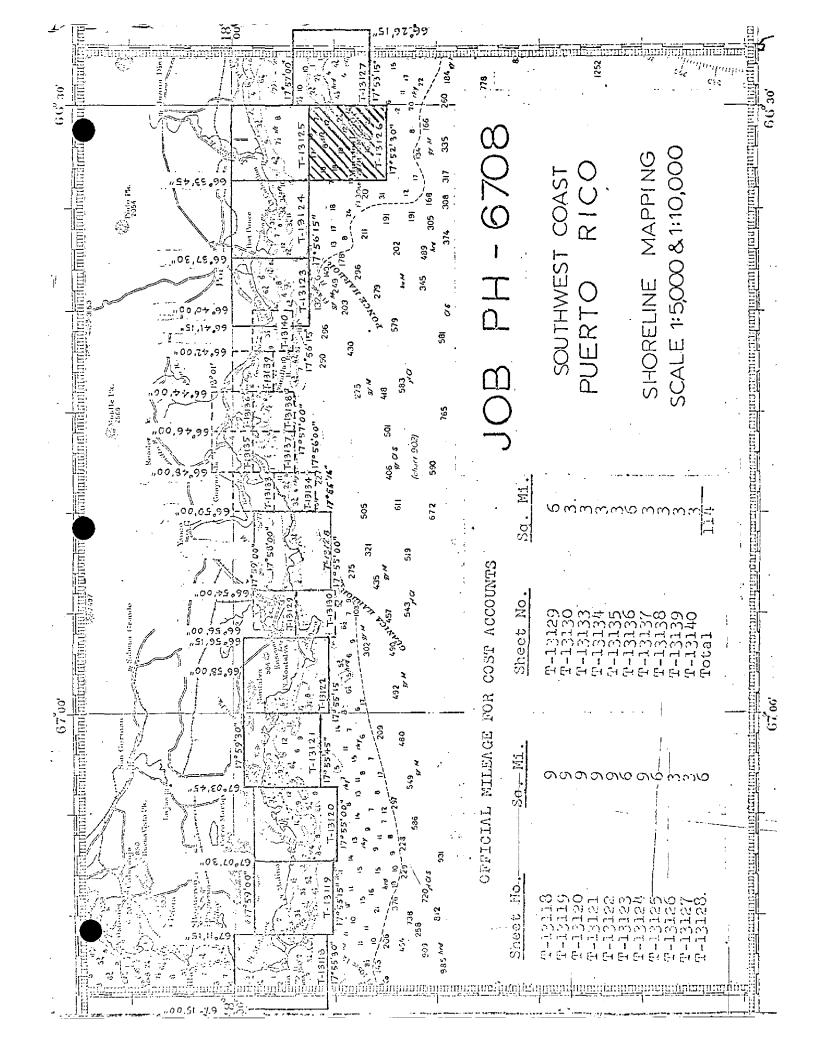
	PREDICTED TIDE (III)		 	DIURNA
		88 CO CO CO SARROS CO	RATIO OF RANGES	MEAN RANGE	RANĞE
REFERENCE STATION:	Galveston, Texas				1.4
SUBORDINATE STATION:	Playa Cortada, P.R.		0.57		0.4
SUBORDINATE STATION:					}
WASHINGTON OFFICE REVIEW	Bernard Kurs,	AMC	DATE: March,	1 973	
PROOF EDIT BY (IV):			DATE:		
NUMBER OF TRIANGULATION	STATIONS SEARCHED FOR (II):	RECOVERED:	None	D:	
NUMBER OF BM(S) SEARCHED	FOR (II): None	RECOVERED: None	IDENTIFIE None	D	
NUMBER OF RECOVERABLE PI	IOTO STATIONS ESTABLISHED (III):	None			
NUMBER OF TEMPORARY PHO	TO HYDRO STATIONS ESTABLISHED (III):	None			

REMARKS:

USCOMM-DC 46200-P70

ESSA FORM 76-36c (2-70)		T-13126 HISTORY OF FIELD		NTAL SCIENC	DEPARTMENT E SERVICES AL OAST AND GEO	MINISTR	A TIÓN
I. TI FIELD INSPEC	TION OPE	RATION X FIEL	D EDIT OPERATION	N			
		ERATION		NAME		DATE	
1. CHIEF OF FIELD	PARTY		E. Pursel,	Jr.	1	7 May	72
2. HORIZONTAL CO	NTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	N.A.				
3. VERTICAL CONT		RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	N.A. N.A. N.A.	T			
4. LANDMARKS AND AIDS TO NAVIGAT)	ECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY TYPE OF INVESTIGATION	Pursel, N.A. N.A.	UF.			
5. GEOGRAPHIC NAI INVESTIGATION	MES	COMPLETE SPECIFIC NAMES ONLY NO INVESTIGATION	None	···			<u> </u>
6. PHOTO INSPECT		CLARIFICATION OF DETAILS BY	None				
7. BOUNDARIES AND	D LIMITS	SURVEYED OR LDENTIFIED BY	N.A.		1		
1. HORIZONTAL CO None	NTROL IDE	NTIFIED	2. VERTICAL CO	NTROL IDEN	ITIFIED		
PHOTO NUMBER		STATION NAME	PHOTO NUMBER	57	TATION DESIGN	A TLON	
	ı	,					
3. PHOTO NUMBERS 66L(c)8	·	on of details) 365, 8366					
4. LANDMARKS AND None	AIDS TO N	AVIGATION IDENTIFIED					
PHOTO NUMBER	<u>-</u>	OBJECT NAME	PHOTO NUMBER		OBJECT NAM	Ę	
5. GEOGRAPHIC NA	MES:	- REPORT Μ NONE	6. BOUNDARY A	ND LIMITS:	REPORT	ГХ) иои	
7. SUPPLEMENTAL None			To Bookerit Al	Co Limita.		LAINON	
	a Submi	etch books, etc. DO NOT list data submit tted with Report ort	ted to the Geodesy I	Division)			
ESSA FORM 76-36C					Uscom	1-DC 4620	0.53=0

•				
	T-1312	6		
	COMPILATION RECORD	COMPLETION DATE	REMARKS	_
	Alongshore Area For Hydro.	Nov. 1970	Superseded	
	Complete Pending Field Edit			
	Field Edit Applied	July 1972	Superseded	
·	Final Review	March 1973		
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SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT

T-13126

Shoreline survey T-13126 is one of twenty-one similar surveys in Project PH-6708. The project is located on the south shore of Puerto Rico and extends from Cabo Rojo to Cayo Berberia. This manuscript covers Isla Morrillito and Isla Caja de Muertos.

There was no field work preceding the incomplete manuscript.

Compilation was by B-8 plotter using November, 1966 photography. A copy of the incomplete manuscript along with ozalids and specially prepared photographs were furnished for the preparation of the boat sheet; location of the photo-hydro signals and field edit use.

This manuscript was a stabilene sheet, three minutes, forty-five seconds in latitude and three minutes, forty-five seconds in longitude at 1:10,000 scale. After field edit was applied and checked, the manuscript was scribed, reproduced, and stuck-up. The final review was at AMC in March, 1973. One cronaflex and negative of the final reviewed survey are being forwarded for record and registry.

FIELD INSPECTION REPORT PH-6708 T-13126

There was no field inspection prior to compilation.

PHOTOGRAMMETRIC PLOT REPORT Job PH-6708 Puerto Rico

October 31, 1967

21. Area Covered

This report covers the southwest part of Puerto Rico, consisting of eight (8) 1:10,000 scale T-sheets, T-13118 thru T-13125, and thirteen (13) 1:5,000 scale T-sheets, T-13128 thru T-13140. Photography covering sheets T-13126 and T-13127 was not bridged at this time due to lack of control.

22. Method

Analytic aerotriangulation methods were used to bridge Strip 1, 1:60,000 scale color diapositives, using premarked and office identified control. Numerous tie points were located to control the compilation photography. Strips 3, 5, 5A, 6, 7 and 8 were bridged by analytic methods. Strips 2 and 4 were bridged by stereoplanigraph in order to facilitate the work.

The attached sketch of the strips bridged shows the placement of triangulation used in the final strip adjustment. Closures to control are shown for each strip on the IBM readout, along with all bridge points on Puerto Rico plane coordinates.

23. Adequacy of Control

Horizontal control is adequate to control Strip 1. All other strips were bridged using tie points and horizontal control and is adequate.

The premarked paneling at station PAGEN was removed prior to photography and the subpoint could not be identified. It was decided, therefore, to end Strip 1 with photo 66-M-625 and Strip 6 with photo 66-L-8433. However, it is believed that sheet T-13125 can be adequately compiled.

Station GUANICA L.H. 1900 does not have a valid position. Geodesy did not tie to this station during the 1966 work, and no adjustment was made to the new Puerto Rico datum. (Station has been reported destroyed.) The positions shown on Form 725d computed by Geodesy is arbitrary. Therefore, GUANICA L.H. Subpoint 1 and subpoint 2 are unreliable and were not held in the bridge.

It is to be noted that all horizontal control used on this job and the final pass point positions are on the new Puerto Rico Datum. A Xerox copy of triangulation station positions issued by Geodesy is submitted to the Compilation office with this job. Previously published GP's and plane coordinates should not be used for plotting.

24. Supplemental Data

Vertical control needed for the adjustment was taken from USGS quadrangles.

25. Photography

The definition and quality of the RC-9 "M" and RC-8 "L" color photography was fair and good respectively. Smoke covers parts of some photographs on Strips 3 and 5A, but should not hinder compilation of the shoreline.

Although sheets T-13137 thru T-13140 are covered by 1:15,000 scale photographs, these photographs were not bridged, nor can they be used for compilation on the plotter because of water areas. Strip 3, therefore, should be used to compile the above sheets.

Ratio prints have been ordered for the 1:30,000 and 1:15,000 scale photographs to compilation scale, on black and white base.

Several points were transferred to ratio print 66-L-8394 in order that a reef on T-13140 may be compiled graphically.

Respectfully submitted

I. I. Sapersteyn

Approved and Forwarded

Henry P. Eichert, Chief

Aerotriangulation Section

STRIP F13120 T-13121 64 下13124 T-13125 7-13126 66M625 1-13127

B. PONCE, PADIO STATION WELD MAST, 1966 4. VAQUERO, 1900 3. ENSENADA, SOUTH P.R. SUGAR CO 6. GUAYANILLA, UNION CARBIDE CO. W.T. 1966 II. BAHIA DE GUANICA RANGE FRONT 10. PONCE, DON Q RUM CO. STACK, 1966 5. TURN 2, 1966 7. REY, 1966 GUANICA MUNIC. CENT. GUANICA WEST GEAST STACK 5,1966 PONCE BAY FRONT & REAR RANGE LTS. 1966 N. 1. 1966 1.1.1900

AEROTRIANGULATION

RUERTO RICO Southwest Coast

PH-6708 Oct. 1967

1EGEND

01:15,000 Photos 1:30,000 Photos 1:60,000 Photos

KEAR CTS- 1966



DESCRIPTIVE REPORT CONTROL RECORD

MAP T. 13126 PROJECT NO.	No. PH-6708	SCA	SCALE OF MAP_1:10,000SCALE	SCALE FACTORNone	
STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. =, 3048006 meter) FORWARD (BACK)	DATUM PROJECTION LINE 48006 meter) (BACK)
Muertos Island Lighthouse, 1899	Geodesy Pad 27224	Puerto Rico	17 <mark>0</mark> 531 42,51822" 66 311 17,59918"	1307.1	(537.5)
Janet, 1970		=	19,198. 34 ft. 466,809.17 ft.	4,198.34 ft. 1,809.17 ft.	(801.66)
Rea, 1970		t.	25,907.13 ft. 472,189.34 ft.	907.13 ft. 2,189.34 ft.	(4,092.87)
Note: The positions of Janet, 1970 and Rea, were determined by three point fix fogrammetric Mapping purposes only and ked by topographic station disks	1970 and Rea, 1 e point fix for oses only and ar	1970 or Phot6 - are mar-			
מינולס אהולס ה לת החינ	• 04015				
COMPUTED BY K. K. White Jr.	DATE NOV: 24, 19	1988	CHECKED BY F. P.M.	DATE NOV. 24, 1970 NOV. 21, 1968	// 08

COMPILATION REPORT

T-13126

31. DELINEATION

Delineation was by Wild B-8 methods using the color photography taken November 15, 1966. This was supplemented by infrared photography.

The photography was good. There was no field inspection prior to compilation.

32. CONTROL

See Supplemental Photogrammetric Plot Report dated Sept. 11, 1970.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable. There was no drainage to compile.

35. SHORELINE AND ALONGSHORE DETAILS

All detail was compiled from office interpretation of the photographs. Because of the small variation between high and low tide, no low water line was compiled.

36. OFFSHORE DETAILS

None

37. LANDMARKS AND AIDS

Appropriate copies of form 567 for one aid to navigation have been submitted to the Washington Office.

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

There is no contemporary survey to the West or South. There are no land areas to effect a junction to the North with T-13125 or to the East with T-13127.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S. Quadrangle PLAYA DE PONCE, PR, scale 1:20,000 dated 1962.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with CHART 926 PUNTA PETRONA to ISLA CAJA de MUERTOS, scale 1:20,000 2nd Edition dated May 3, 1965.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:

Richard R. White

Cartographic Technician

Bernard Lurs

Nov. 24, 1970

Approved:

Alfred C. Holmes RADM, NOAA

Director, AMC

December 11, 1972

GEOGRAPHIC NAMES

FINAL NAME SHEETS

Ph-6708 (Puerto Rico)

TP-13126

Cerro Morrillo

Isla Caja de Muertos

Isla Morrillito

Mar Caribe

Approved:

A. Joseph Wraight Chief Geographer Prepared by:

Charles E. Harrington

Cartographer

49- NOTES FOR THE HYDROGRAPHER

Two recoverable topographic stations fall within the limits of this manuscript. They are:

JANET,1970 and REA, 1970.

FORM C&GS-1002			U	S. DEPARTMENT OF COMMERCE
(9-66)	DNU	TOCHAMMET	RIC OFFICE REVIEW	ESSA COAST AND GEODETIC SURVEY
	Pho		13126	
		1.	13126	
1. PROJECTION AND GRIDS	2 TITLE	-	3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
İ				
LFB	LFE	3	LFB	LFB
CONTROL STATIONS				
5. HORIZONTAL CONTROL STA THIRD-ORDER OR HIGHER A	TIONS OF	6. RECOVERA	BLE HORIZONTAL STATIONS AN THIRD-ORDER ACCURACY	7. PHOTO HYDRO STATIONS
	CCURACY	(Topographic	LFB	XX
LFB				
8, BENCH MARKS	9. PLOTTING C	OF SEXTANT	10. PHOTOGRAMMETRIC	11. DETAIL POINTS
LFB			LFB	LFB
пер				
ALONGSHORE AREAS (Nautteat				
12. SHORELINE	13. LOW-WATER	RLINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
LFB	LFE	3	LFB	LFB
16. AIDS TO NAVIGATION	17. LANDMARK	:S	18. OTHER ALONGSHORE	19. OTHER ALONGSHORE
1		-	PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
LFB	LFE	3	LFB	LFB
PHYSICAL FEATURES				<u> </u>
20. WATER FEATURES		21. NATURAL	GROUND COVER	22. PLANETABLE CONTOURS
LFB		1	XX	XX
23. STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS	IN GENERAL	25. SPOT ELEVATIONS	26. OTHER PHYSICAL FEATURES
XX	хх		XX	
CULTURAL FEATURES				
27. ROADS LFB	28. BUILDINGS LFE		29. RAILROADS	30. OTHER CULTURAL FEATXUXES
пер		,	, AA	1
	<u>!</u>			<u> </u>
BOUNDARIES 31. BOUNDARY LINES			32, PUBLIC LAND LINES	
XX			XX	
MISCELLANEOUS	 			
33. GEOGRAPHIC NAMES		34. JUNCTION	<u> </u>	35. LEGIBILITY OF THE
				MANUSCRIPT
LFB			LFB	LFB
36. DISCREPANCY OVERLAY	37. DESCRIPTI	VE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
T 777	ļ	1		LFB
LFB	LFE)	RRW	
40. REVIEWER			SUPERVISOR, REVIEW BECTIC	N OR UNIT
Leo F. Beugn	et		A.C. Rauck, Jr.	C. Pauck Jr
			111.00	
41. REMARKS (See attached shee		TIONS TO 2007	AMBREDIOT	
FIELD COMPLETION ADDITION				
42. Additions and corrections script is now complete exc	ept as noted un	der item 43.	ion survey have been applied t	
COMPILER A. L. Shands	· · · · · · · · · · · · · · · · · · ·	/24/72	SUPERVISOR A	1 Donato
Reviewed By: R.R. 1		/25/72	A.C. Rauck, Jr.	C. Rauck, Jr.
		23/12	1	
43. REMARKS				
Field Edit Applied	From: Fi	ield Edit		
•	Fi	ield Photo	s 66 -L-(c)-8364 thi	ru 836 6
7				
				·

FIELD EDIT REPORT

JOB PH 6708

/ SOUTHWEST COAST PUERTO RICO

T-13126

52. ADEQUACY OF COMPILATION

Compilation was adequate for this sheet. References have been made to photographs 66L(c) 8364 for addition of two rocks. Hypsometry is given on field east ozalid. Shoreline changes are delineated on photographs 69L(c)8365 and 8366. Delineation of a submerged ledge was shown on photo 8365.

54. RECCOMMENDATIONS

None.

56. LANDMARKS AND AIDS TO NAVIGATION

One aid to navigation falls within the limits of this sheet and has been recorded on a Form 76-40 which accompanies the data with this report.

No landmarks fall within the limits of this sheet.

57. ROCKS AND RAEFS

Five rocks compiled on this sheet are to be deleted as they present no hazard to navigation due to proximity of shoreline and depth of water. Two rocks are to be added to the sheet and are delineated on photograph 66L(c)8364.

Deletions and hypsometry are shown on the field edit ozalid. The soral reefs on this sleet have been delineated on health sheet MI-10-2-72.

(cont)

58. ADDITIONAL INFORMATION

The names of two topographic stations, JANET, 1970 and REA, 1970, were compiled in the wrong places. Corrections have been made on the field edit ozalid.

Recovery notes accompany the data with this report for the above mentioned topo stations and intersection station MUERTOS ISLAND LIGHTHOUSE, 1899.

Distances to the M.H.W.L. were given from three third-order traverse stations and topographic station REA, 1970. The positions of the traverse stations shown on the field edit ozalid are approximate with the grid coordinates furnished.

Respectfully submitted,

E. Pursel, Jr.

Bernard Kursfor

Cartographic Technician

REVIEW REPORT

SHORELINE

T-13126

61. GENERAL STATEMENT

See summary which is page 6 of the Descriptive Report.

62. COMPARISON WITH REGISTERED SURVEYS

A comparison was made with registered survey No. 2416, dated 1899 at 1:20,000. There are a few changes in the shoreline, none are significant although they are noted on the discrepancy print in blue.

Registered survey No. 2416 is superseded by T-13126 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A comparison was made with USGS Quadrangle Playa de Ponce, PR, 1962 at 1:20,000 scale. Natural changes account for all differences noted on the Discrepancy print in brown.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of the boat sheet for survey H-9625, 1:10,000 scale dated 1972. Shoreline was in good general agreement since the "Incomplete" Manuscript for T-13126 was the source. There were some differences in ledge, submerged ledge and submerged coral limits. These are noted on the discrepancy print in purple.

65. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart 926 dated Feb. 5, 1972 at 1:20,000 scale. The differences are not too significant and are attributed to natural causes. These differences are noted on the discrepancy print in red.

comparison

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey meets with project instructions and the National Standards of Map Accuracy.

Reviewed by:

Bernard Kurs Bernard Kurs Cartographer

Approved for forwarding:

Melvin J, Umbach, CDR, NOAA Chief, Coastal Mapping Division, AMC

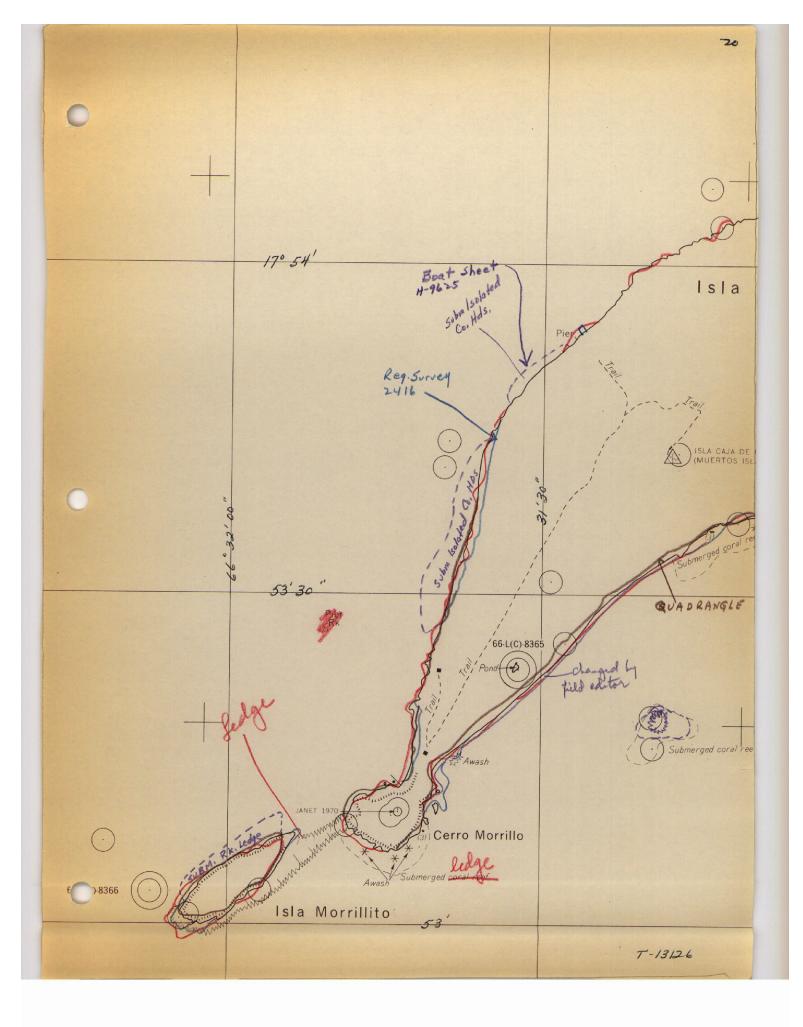
Approved:

Alfred C. Holmes, RADM, NOAA

Director, Atlantic Marine Center

Approved:

Chief, Photogrammetry Branch, Chief, Coastal Mapping Division



NOAA FORM 76-40	76-40	U.S. DEPARTMENT O	NT OF COM	IMERCE_NA	TIONAL OC	EANIC AND	F COMMERCE - NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	OMINISTRATION	ORIGINATING ACTIVITY	TIVITY
PRESCRIBED PHOTOGRAMM	(2-77) PRESCRIBED BY PHOTOGRAMMETRY INSTRUCTION NO. 64.		OATING	AIDS OF	R LAND	ARKS FO	NONFLOATING AIDS OR LANDMARKS FOR CHARTS		FIELD INSPECTION	NOIL
X TOB	TO BE CHARTED	ORIGINATING LOCATION	NOIL				DATE	8	COMPILATION	
° 1∏	TO BE DELETED	Atlantic Marine	ine Cer	Center, N	Norfolk, VA	, VA	May	, 15, 1972		FINAL REVIEW
The followin	jects have (have not)	been inspected from seaward to defermine their value as landmarks	eaward to c	letermine ti	heir value c	is landmark:			Sec	consible personnel)
JOB NUMBER PH- 6708	708	SURVEY NUMBER T - 13126	DATUM	DAT W. A. 1927	,		METHOD	METHOD AND DATE OF LOCATION	LOCATION	
STATERUERTO	rto Rico	TP-		POSITION	NOI⊤		(See instruc	(See instructions on reverse of this form)	of this form)	
CNITOTHO			LATITUDE	TUDE	LONGITUDE	TUDE				CHARTS
NAME	DESCRIPTION	NOIL	, ,	// D.M.METERS	•	D.P.METERS	FIELD	COMPILATION	FIELD EDIT	AFFECTED
Light	Isla Caja De Muertos Light (Muretos Island Lighthouse, 1899)		17 53	2.518 307.1	66 31	17.599 518.0				
									,	
		:								
·										
					, ,					