NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey Shoreline PH-6904 Job No	
Classification No.	Edition No1
Field Edited Map	
LOCALIT	Υ
State Puerto Rico	***********
General LocalitySouth Coa	ast
Locality . Pueblo Oeste,	
19 ⁷⁰ TO	19 76
REGISTRY IN AF	

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

NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE	TYPE OF SURVEY	SURVEY TP. 13361		
(3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		_		
	T ORIGINAL	MAP EDITION NO. (1)		
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS FINAL		
	REVISED	JOB PH- 6904		
PHOTOGRAMMETRIC OFFICE	LAST PRECEEDING MAP EDITION			
Coastal Mapping Division				
Norfolk, Va.	TYPE OF SURVEY	JOB PH		
OFFICER-IN-CHARGE	AESURVEY	SURVEY DATES:		
	☐ REVISED	19 _ TO 19 _		
Jeffrey G. Carlen, CDR				
I. INSTRUCTIONS DATED				
1, OFFICE	2.	FIELD		
Compilation Oct. 16, 1970	April 7, 1969			
Compilation cost 10, 15, 15	Jan 23, 1970			
	Jan 31, 1972			
·	Nov 16, 1972			
<u> </u>	1			
II. DATUMS	OTHER (Specify)			
I. HORIZONTAL: [] 1927 NORTH AMERICAN	Puerto Rico			
	OTHER (Specify)			
MEAN HIGH-WATER	, , , , , , , , , , , , , , , , , , , ,			
2. VERTICAL:]			
MEAN SEA LEVEL				
3. MAP PROJECTION	4.	GRID(S)		
P. 1	STATE	ZONE		
Polyconic	Puerto Rico	1		
5. SCALE	STATE	ZONE		
1:5.000		<u> </u>		
	1			
OPERATIONS 1. AEROTRIANGULATION BY	R. Kelly	Sep 1970		
METHOD: Analytic LANDMARKS AND AIDS BY	- Ki KC119			
2. CONTROL AND BRIDGE POINTS PLOTTED BY	P. Dempsey	Oct 1970		
METHOD: Coradomat CHECKED BY	P. Dempsey	Oct 1970		
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY	B. L. Barge	Feb 1971		
COMPILATION CHECKED BY	A. L. Shands	Feb 1971		
INSTRUMENT: Wild B-8 & Graphically contours by	<u>NA</u>			
SCALE: 1:7,500 CHECKED BY	NA D	A 1071		
4. MANUSCRIPT DELINEATION PLANIMETRY BY	B. L. Barge	Aug 1971 Mar 1972		
CHECKED BY CONTOURS BY	R. Pate	Mar 19/2		
METHOD: Smooth drafted CHECKED BY	NA			
1:5.000 HYDRO SUPPORT DATA BY	B. L. Barge	Aug 1971		
SCALE: CHECKED BY	R. Pate	Mar 1972		
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	R. Pate	Mar 1972		
6. APPLICATION OF FIELD EDIT DATA	C. Blood	Sep 1976		
CHECKED BY	A. L. Shands	Sep 1976		
7. COMPILATION SECTION REVIEW BY	A. L. Shands	Sep 1976		
8. FINAL REVIEW BY	A. L. Shands	Nov 1977		
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	A. L. Shands	Dec 1977		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	J. B. Phillips	Jan 1978		



NOAA FORM 76-36 A

NOAA FORM 76-36B (3-72)						ATIONAL OCE				OF COMMERCE
T-13361 NATIONAL OCEAN SURVEY COMPILATION SOURCES										
			COM	PILATIO	ON SQU	RCES				
1. COMPILATION PH	OTOGRAPHY	,				· · · · · · · · · · · · · · · · · · ·				
CAMERA(S)		· · · · · · · · · · · · · · · · · · ·		TYP	S OF PI	HOTOGRAPHY		TIME	REFERE	
	11d RC 8	"E"			LEG	END		I IMIC	REFERE	- NCE
TIDE STAGE REFER				(¢) cc	LOR		ZONE	lantic		Xstandare
REFERENCE STA		ns.		(P) PA	NCHRON	MATIC	MERIO:		<u> </u>	STANDAR
TIDE CONTROLL				(1) 1N	FRARED		60			DAYLIGHT
NUMBER AND	TYPE		DATE	TIM	E	SCALE		ŞTA	GE OF T	IDE
70 E(C) 6/2/	6426	2/7	/70	12.4	27	1.15.000		0 (.	1	147.11
70 E(C) 6424	1 - 6426	3/7	//0	12:0	37	1:15,000	0.9	9 ft.	above	MLW
							İ			
						ļ				
EMARKS										
2. SOURCE OF MEAN HIGH-WATER LINE:										
The MHWL was compiled from the above listed photographs.										
										······································
3. SOURCE OF MEA	N LOW-WATE	R OR MEA	N LOWER LO	W-WATER	LINE:					
None con	enilod									
None con	whiten.									
			.,		****					
4. CONTEMPORARY	HYDROGRA	PHIC SURV	EYS (List of	nly those	surveys t	hat are sources	for photogran	nmetric s	urvey inf	ormation.)
SURVEY NUMBER	DATE(S)		SURVEY COP	YUSED	SURV	EY NUMBER	DATE(S)		SURVEY	COPY USED
	1									
	<u> </u>		-		1					
5. FINAL JUNCTION NORTH	IS	FAST .	m 1001-		SOUT			WEST		.
No survey		T-133	5913368,	000)	1	ırvey		1	-1336	2
REMARKS		L								

NOAA FORM 76-36B

NOAA FORM 76-36C (3-72)	T-13361 HISTORY OF FIELD	NATIONAL OCEANIC		ENT OF COMMI C Administra Al Océan sui	
I. XX FIELD INSPECTION OPE	RATION FIEL	D EDIT OPERATION			
ОР	ERATION	NAM	E	DATE	
1. CHIEF OF FIELD PARTY		J. Wilson			
	RECOVERED BY	None			
2. HORIZONTAL CONTROL	ESTABLISHED BY	None			
· ·	PRE-MARKED OR IDENTIFIED BY	None			
	RECOVERED BY	NA			
3. VERTICAL CONTROL	ESTABLISHED BY	NA			
	PRE-MARKED OR IDENTIFIED BY	NA			
R	ECOVERED (Triangulation Stations) BY	None			
4. LANDMARKS AND	LOCATED (Field Methods) BY	None			
AIDS TO NAVIGATION	IDENTIFIED BY	None			
	TYPE OF INVESTIGATION				
5. GEOGRAPHIC NAMES	COMPLETE BY				
INVESTIGATION	SPECIFIC NAMES ONLY				
	NO INVESTIGATION	N.			
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	None			
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA		1	
II. SOURCE DATA		la visation sauto	A. IBEUTICIES		
None		NA NA	OL IDENTIFIED		
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DES	IGNATION	
3. PHOTO NUMBERS (Clarificat	ion of details)				
None					
4. LANDMARKS AND AIDS TO M	AVIGATION IDENTIFIED	<u> </u>			
None					
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT	NAME	
5. GEOGRAPHIC NAMES:	REPORT NONE .	6. BOUNDARY AND L	IMITS: REPOI	RT [X] NON	
7. SUPPLEMENTAL MAPS AND					
None					
8. OTHER FIELD RECORDS (Sk	etch books, etc. DO NOT list data submit	tied to the Geodesy Divisi	lon)		
None		•			

DAA FORM 76–36C -72)	T-13361 History of Field	NATIONAL OCEANIC	AND ATMOSPHERIC	ENT OF COMMER C ADMINISTRATI AL OCEAN SURV			
I FIELD INSPECTION OPERATION FIELD EDIT OPERATION							
OP.	ERATION	NAMI	 E	DATE			
CHIEF OF FIELD PARTY		** ** 11		1076			
		W. Hull None		Jun 1976			
HORIZONTAL CONTROL	RECOVERED BY	None		 			
HORIZONIAL CONTROL	PRE-MARKED OR IDENTIFIED BY	None					
	RECOVERED BY	NA NA		 			
VERTICAL CONTROL	ESTABLISHED BY	NA					
	PRE-MARKED OR IDENTIFIED BY	NA		 			
R	ECOVERED (Triangulation Stations) BY	None					
LANDMARKS AND	LOCATED (Field Methods) BY	None					
AIDS TO NAVIGATION	IDENTIFIED BY	None					
	TYPE OF INVESTIGATION			}			
GEOGRAPHIC NAMES	COMPLETE BY						
INVESTIGATION	SPECIFIC NAMES ONLY						
	XX NO INVESTIGATION			 			
PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	W. Hull		1976			
BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	NA		<u> </u>			
. SOURCE DATA . HORIZONTAL CONTROL IDE	NTIFIER	2. VERTICAL CONTRO	DI IDENTIFIED				
	NIFIED	1	OL IDENTIFIED				
None		NA T					
PHOTO NUMBERS (Clarificet 70E(C)	6425						
None							
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	TOBLEOT	NAME			
. GEOGRAPHIC NAMES:	REPORT NONE	6. BOUNDARY AND LI	MITS: REPO	RT NONE			
SUPPLEMENTAL MAPS AND							
One se	et of engineers plans						
OTHER FIELD RECORDS (Sk	etch books, etc. DO NOT list data submit	ted to the Geodesy Divisi	ion)				
	Edit Ozalid Edit Report	,					

NOAA	FORM	76-36D
(3-72)		

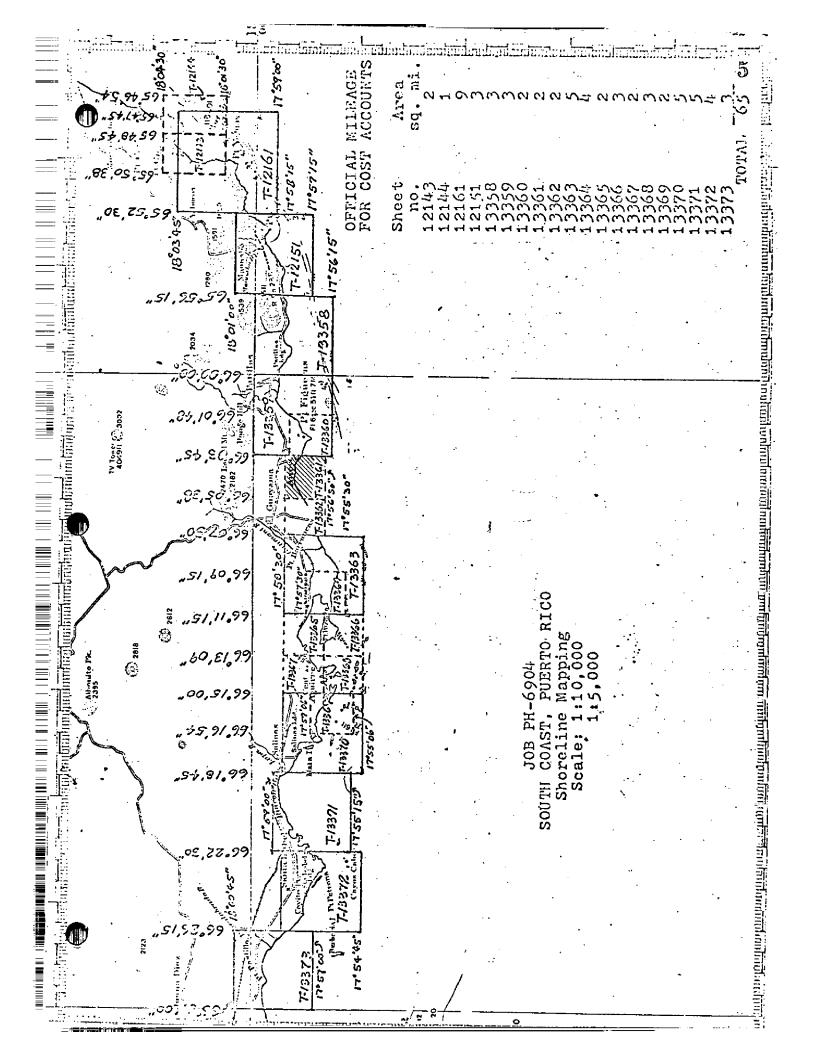
U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

T-13361

RECORD OF SURVEY USE

RECORD OF SURVEY USE								
I. MANUSC	RIPT COPIES							
}	co	MPILA	TION STAGES	<u> </u>			DATE MANUSC	RIPT FORWARDED
	DATA COMPILED	ļ	DATE	REI	MARKS		MARINE CHART	5 HYDRO SUPPORT
Compil	ation complete	1		!				10/30/72
pending	g field edit	Aug	1971	Class III	manuscri	pt		$\frac{1}{12}$ $\frac{1}{2}$ $\frac{75}{275}$
		1			 			-
	dit applied.	1		1				Ţ
·Compila	tion complete	Sept	1976	Class I ma	nuscript		9/22/76	
		1						,
Final R	levi ew	Nov	1977	Final			12/30/77	1
		1		1 11101			<u> </u>	 -
		1						
								1
II. LANDH	ARKS AND AIDS TO NAVIGA	TION	None					
	ORTS TO MARINE CHART D		I, NAUTICAL	DATA BRANCH				
NUMBER	CHART LETTER	1	DATE			REM	ARKS	
NUMBER ASSIGNED FORWARDED								
		 						
		1						
		1					· ·	
		├						
		┼						
2.	REPORT TO MARINE CHAR	T DIVIS	ION, COAST	PILOT BRANCH.	DATE FORW	ARDED	·	
	REPORT TO AERONAUTICA		RT DIVISION	, AERONAUTICAL	DATA SECT	ION. D	ATE FORWARDE	o:
III. FEDERAL RECORDS CENTER DATA								
1. 😿 BRIDGING PHOTOGRAPHS; 😾 DUPLICATE BRIDGING REPORT; 😿 COMPUTER READOUTS.								
	CONTROL STATION IDENT							s .
	SOURCE DATA (except for C							
¥ 1	ACCOUNT FOR EXCEPTION	N5:						
4.	DATA TO FEDERAL RECO	RDS CE	NTER, DAT	E FORWARDED:				
IV. SURV	EY EDITIONS (This section : ISURVEY NUMBER	shall be	JOB NUMBE		edition is reg) TYPE OF SURVE	
SECOND	TD.	(2)	PH					T ESURVEY
EDITION	D.1.7- D. 0.10.7		DATE OF FI	ELD EDIT			MAP CLASS	
		.]			□ π.	□ու	□ıv. □v	. 🗌 FINAL
	SURVEY NUMBER		JOB NUMBE	R	_ 	_	TYPE OF SURVE	1
THIRD	TP -	_ (3)	PH			∐ RE		E\$URVEY
EDITION	DATE OF PHOTOGRAP	нү	DATE OF FL	ELD EDIT	□ 11.	□ш.	MAP CLASS	Π
	SURVEY NUMBER		JOB NUMBE	- 8	<u> </u>		UIV. □V	
	TP	(A)	PH	· · ·		□ RE		T EŞÜRVEY
FOURTH	DATE OF PHOTOGRAP		DATE OF FI	ELD EDIT			MAP CLASS	
EDITION	1					$\Box \dots$		□ -

NOAA FORM 76-36D



SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORTS

T-12143, T-12144, T-12151, T-12161 and T-13358 thru T-13362

The maps included in this summary cover the eastern portion of project PH-6904. They are all standard shoreline maps which severed to provide shoreline in support of hydrographic operations and nautical chart construction. These maps cover the south coast of Puerto Rico from Punta Icacos westward to Punta Barrancas.

Photographs of the area were flown in March, 1970. Glare covers most of the water area. The black and white ratio photographs made from color contact prints are dark and the resolution is not good. Delineation of offshore and alongshore area details was made difficult by these factors.

No clearification of details was made prior to compilation. Precompilation field work was limited to the recovery and identification of horizontal control necessary for bridging.

Compilation was done at the Atlantic Marine Center by instrument and graphic methods. The Wild B-8 stereoplotter was used.

These maps were field edited in March and April, 1976. The edit items were applied to the maps at the Atlantic Marine Center in August and September, 1976.

Final review was preformed at the Atlantic Marine Center in October and November, 1977. The original base manuscripts were forwarded to the Washington Science Center for reproduction and final registration.

FIELD INSPECTION

T-13361

There was no field inspection prior to office compilation.

ΣΣ.

Aerotriangulation Report PH-6904 South Coast of Puerto Rico September 1970

21. Area Covered

This report covers the Southern Coast of Puerto Rico, consisting of (9) 1:10,000 scale T-sheets, 12151, 12161, 13358, 13359, 13363, 13370 thru 13373 and (11) 1:5,000 scale T-sheets, 12143, 12144, 13360 thru 13362 and 13364 thru 13369.

22. Method

Two strips 1:40,000 and one strip of 1:5,000 scale color photography were bridged by analytical methods to provide horizontal control points for compilation and shoreline points for ordering 1:10,000 and 1:5,000 scale ratio prints. The attached sketch of the strips bridged shows the placement of horizontal control points used in the strip adjustments. A list of closures to control is part of this report. Positions of all compilation points and control stations have been plotted on the manuscripts by the Coradi.

23. Adequacy of Control

The horizontal control used is on the new adjustment of the Puerto Rico datum. All control was adequate and held well within the accuracy required by National Standards of Map Accuracy at 1:10,000 and 1:5,000 scales. Tie points were used to augment datum tie between strips 1, 2 and 3.

24. Supplemental Data

U. S. Geological Survey quadrangles were used to provide elevations for vertical adjustment of bridges.

25. Photography

RC-8 E color photography was adequate as to coverage overlap and definition.

Submitted by

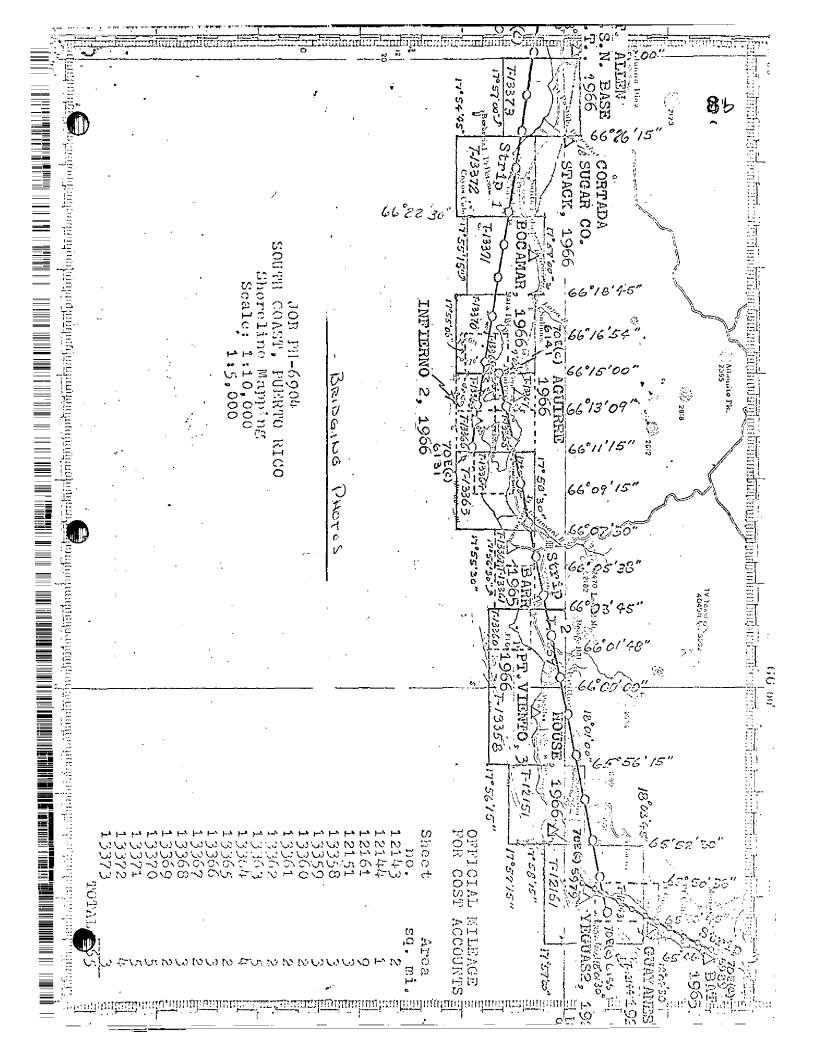
Robert B. Kelly

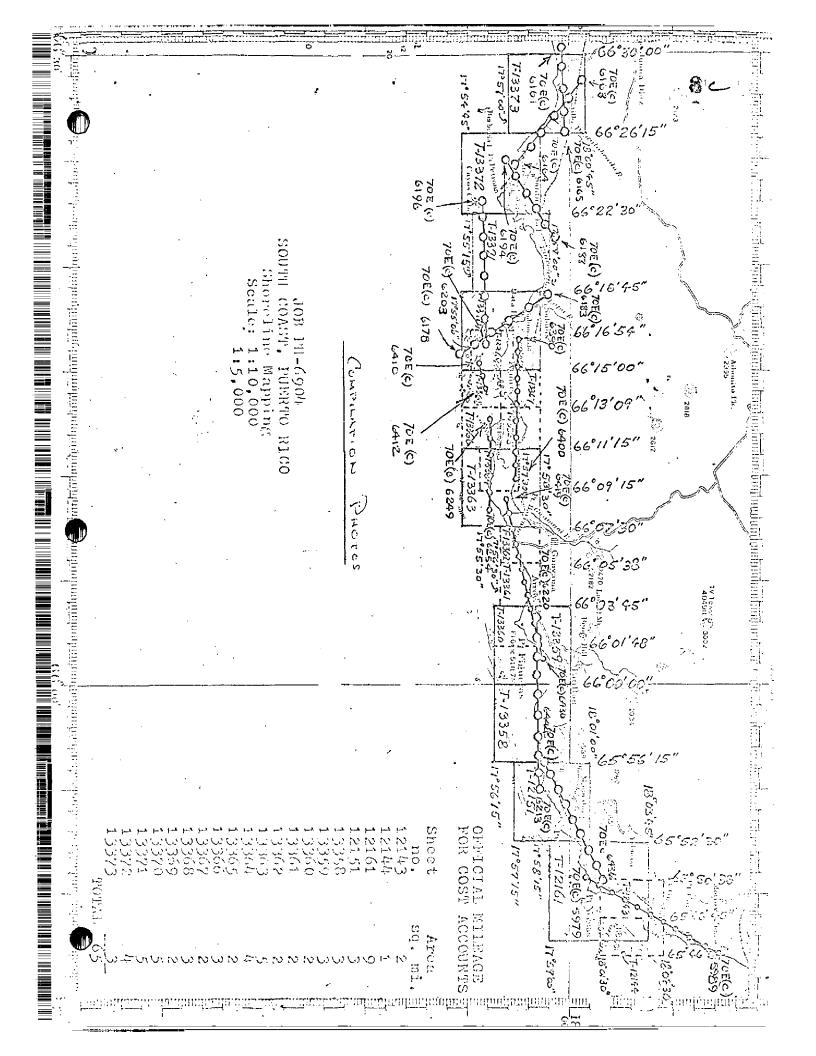
Approved and forwarded,

Henry P./Eichert

Chief, Aerotriangulation

Section





(MIOI.

Described to Control Shown

() CLOSURES OF BRIDGE TO CONTROL SHOWN

IN PARENTHESIS

CONTROL USED AS CHECK.

StRIP 1

Δ	FT. ALLEN U.S. D. BASE W.T. (0.0,0.0)
Δ	" Sub, Sta. A (-0.4,0.0)
∇	CORTADA SUGAR Co. STACK: 1966 (+0.8,40.1)
\triangle	SBSTA.A (+1.2,+1.2)
Δ	BOCAMAR, 1966 SUB. STA. A. (0.0,0.0)
∇	INFIERNC 2, 1966 (0.0,00)

STRIP 2

Δ	1 NEIER NO 3, 1966	(-0.6, +0.3)
Δ	AGUIRRE, 1966	(-1.3,40.6)
∇	BARR, 1965	(-0.6,-1.0)
Δ	Pr VIENTO 3, 1966	(-1.2, -0.8)
∇	HOUSE, 1966 SUB St. A	(+1,1,+0,4)
Δ	YEGUAS Z, 1965	(+1.1, -0.6)
Δ	YEGUAS 2, 1965 SUBSTA.A	(+0.5, -0.2)

St210 3

Δ YRGUAS 2,1965 (0.0,0.0)
Δ YRGUAS 2,1965 SUB. STA.A (0.0,0.0)
Δ GUAYANES 2, 1923 (0.0,0.0)
Δ BAT, 1965 (0.0,0.0)

	9
ŀ	

	_ _ _ _ _ _				=	
0						
RM 76-41		DESCRIPTIV	CRIPTIVE REPORT CONTROL RECORD	NATION	, DEPARTMENT OF COMMINISTR	ERCE
	JOB NO.	7069, Hd	GEODETIC DATUM Priorto Pico	ORIGINATING A	STIVITY Coastal Mapping	gu
1-13391	Г	1000	COORDINATES IN SEET		TLOIK, VA.	
STATION NAME	SOURCE OF INFORMATION	AEROTRI- ANGULATION POINT	STATE	φ LATITUDE	REMARKS	
			X=			
NONE			<i>U</i> **	۲	-	
			**	Φ.		
			de.	γ	 - - -	
			χ=	ф		
			λe.	γ	; ;	
			-χ	ф		
			d=	Y	.	,
			χε	ф		
			εĥ	γ		-
			<i>×≈</i>	φ		
	İ		ήs.	γ		
			χε	φ		
			y=	γ	i	
			χ=	ф		
			y=	γ γ		
-			χε	φ		_
			y=	γ		
			<i>x</i> ≈	φ		
;			<i>R</i> =	х .		
COMPUTED BY		DATE	COMPUTATION CHECKED BY		DATE	
LISTED BY		DATE	LISTING CHECKED BY		DATE	
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY		DATE	
		SUPERSEDES NO	SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.	H IS OBSOLETE.] 9



T-13361

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter. Due to sun glare the limits of reef areas was shown as approximate.

32. CONTROL:

See the attached Aerotriangulation Plot Report, dated Sept., 1970.

33. SUPPLEMENTAL DATA: .

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. Drainage was delineated by the Wild B-8 stereoplotter.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and alongshore details were delineated by the Wild B-8 stereoplotter from office interpretation of the photographs.

36. OFFSHORE DETAILS:

See Item #31.

37. LANDMARKS AND AIDS:

None.

None.

39. JUNCTIONS:

See the attached form 76-36B, item 5 of the Descriptive Report concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS Quadrangle Guayama, Puerto Rico, scale 1:20,000, dated 1960.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 925, scale 1:20,000, 3rd edition, dated June 30, 1969.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

B. L. Barge Cartographic Tech. Oct. 26, 1971

Approved:

Albert C. Rauck, Jr.

Chief, Coastal Mapping Section

October 11, 1977

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6904 (South Coast, Puerto Rico)

T-13361

Arroyo

Branderi

Mar Pueblo

Pueblo Oeste

Puerto Arroyo

Quebrada Branderi

Quebrada Corazón

Quebrada Salada

Approved by:

Charles E. Harrington Staff Geographer - C51x2

	NOAA FORM 75-74			V.	S.DEPARTMENT OF COMMERCE
	. 17-731	РНО	TOGRAMMET	RIC OFFICE REVIEW	NATIONAL ODEAN SURVEY
			TP	- 13361	12
), PROJECTION AND GRIDS	2 TITLE		3. MANUSCRIPT NUMBERS	4. MANUSCRIPT SIZE
•	RJP	RJP	-	RJP	RJP
	CONTROL STATIONS				
	.5. HORIZONTAL CONTROL ST/	ATIONS OF	6. RECOVERAB OF LESS TH. (Topographic	LE HORIZONTAL STATIONS AN THIRD-ORDER ACCURACY stations)	7. PHOTO HYDRO STATIONS
	RJP			NA	NA
	8, BENCH MARKS	9. PLOTTING OF FIXES	F SEXTANT	10. PHOTOGRAMMETRIC PLOT REPORT	11. DETAIL POINTS
<u> </u>	e NA	RJP		RJP	RJP
	ALONGSHORE AREAS (Neutice)				
	12. SHORELINE	13. LOW-WATER	RLINE	14. ROCKS, SHOALS, ETC.	15. BRIDGES
	RJP	RJP		RJP	RJP
	16, AIDS TO HAVIGATION	17. LANDMARK	ts	18. OTHER ALONGSHORE PHYSICAL FEATURES	19. OTHER ALONGSHORE CULTURAL FEATURES
	RJP	RJP		RJP	RJP
=	PHYSICAL FEATURES	· - 			
	20. WATER FEATURES		1	GROUND COVER	22. PLANEYABLE CONTOURS
	RJP		<u> </u>	NA	NA .
=	23, STEREOSCOPIC INSTRUMENT CONTOURS	24. CONTOURS	IN GENERAL	25. SPOT ELEVATIONS	24 OTHER PHYSICAL FEATURES
	NA ·	NA NA		NA	RJP
	CULTURAL FEATURES 27. ROADS	1 28. BUILDINGS		29. RAILROADS	30. OTHER CULTURAL
			•		FEATURES
	RJP	RJP		NA NA	RJP .
	BOUNDARIES	<u> </u>			
	31. BOUNDARY LINES			32. PUBLIC LAND LINES NA	
	MISCELLANEOUS				· · · · · · · · · · · · · · · · · · ·
<u> </u>	33. GEOGRAPHIC NAMES		34. JUNCTION		35. LEGIBILITY OF THE MANUSCRIPT
<u>.</u>	RJP			RJP	RJP
= .	36. DISCREPANCY OVERLAY	37. DESCRIPTI	VE REPORT	38. FIELD INSPECTION PHOTOGRAPHS	39. FORMS
	RJP	RJP		NA	RJP
\equiv .	40. REVIEWER	1		SUPERVISOR, REVIEW SECTION	
	R. J. Pate	h. FOR 3/23/72		A. C. Rauck, J	
= , ,	41. REMARKS (See attached she	et)	· · · · · · · · · · · · · · · · · · ·		
_	FIELD COMPLETION ADDITION	NS AND CORREC	TIONS TO THE M	ANUSCRIPT	
	42. Additions and corrections script is now complete ex	s fumished by the cept as noted un	ne field complet der item 43.	ion survey have been applied	to the manuscript. The manu-
	C. Blood C Blood	<i>-</i> 9/76		SUPERVISOR G. C. Rano	42
	į.		27/76	A. C. Rauck, J	
-	43. REMARKS				
		,-			
=			·		

FIELD EDIT REPORT
PROJECT PH-6904
SOUTH COAST, PUERTO RICO
T-13362, T-13361, T-13360
T-13359, T-13358, T-12151
T-12161, T-12143, T-12144

This report is submitted for five 1:5,000 scale maps and four 1:10,000 scale maps. The Field Edit was accomplished during the spring season of 1976 by the NOAA SHIP MT MITCHELL MSS-22 personnel.

52 ADEQUACY OF COMPILATION

The compilation is generally good. After the application of field edit data and data from engineering drawings of Arroyo and Yabucoa, the compilation will be adequate for charting.

53 MAP ACCURACY

Map compilation as to horizontal position is good. A modified field test was conducted on several points. Horizontal control was field identified, transferred to the manuscript, position scaled and compared to the computed coordinates and generally the agreement was less than one meter.

54 RECOMMENDATIONS

None

55 GEOGRAPHIC NAMES

No discrepancies were noted except those that were questioned on the field sheet. Names of persons interviewed about names in question are shown on T-13362, Photo 70E6421, 70E6218, T-13358, and T-12151.

56 SHORELINE AND ALONGSHORE FEATURES

The entire shoreline was checked by either walking, truck or small boat. All rock heights were estimated by going alongside or near in a small boat. On some near shore rocks, heights were estimated by walking the shoreline. Field Edit was conducted on days when sea conditions were moderate to calm. During launch hydro, the officer in charge, referenced many alongshore features, but in general the sea conditions were rough and the hydro launch did not get as near to the objects as the small boat used by the field editors.

All field edit data is indicated on the Field Edit Ozalid and photographs and are cross referenced.

There is a small marina under construction in Arroyo. Engineering drawings are furnished with this report. At Punta Figuras shoreline that is subject to frequent change was located by sextant angle and tape measurements; the field data and shoreline change is shown on manuscript T-13360.

On the eastern limit of T-12151, a small section of shoreline is in error and should be corrected as indicated on Photo 70E6440.

On T-12143, Yabucoa harbor area, construction is still underway. The main harbor is completed with construction underway on the southeast side. Engineering drawing of the harbor and new construction are enclosed with this report. Nautical Chart 25661 7th Edition May 24/75 already reflects the main harbor. Tie-points were located throughout the harbor to assist in tieing in with the engineering drawings. The shoreline immediately north of the riprap breakwater, as indicated on T-12143, is subject to daily change due to sand borrowing operations both landward and seaward of the mean high water line. The mouth of the stream is plugged on occasion with sand and debris, but continues to break through near the mouth as compiled. I recommend that the shoreline be charted as shown on photos and as compiled with note of frequent change.

57 LANDMARKS AND AIDS

ŧ

Form 76-40 was submitted for all nautical landmarks and fixed aids to navigation in the descriptive reports for the hydrographic surveys. Copies of those forms are attached to this report.

58 GENERAL STATEMENT

All field edit notes have been made in violet ink on the field edit ozalids and ratio photographs.

It is recommended that photography of opportunity be obtained of the Yabucoa Harbor area and of the Palmas Del Mar harbor area, just north of Yabucoa. A special report was submitted on Palmas Del Mar to Director, Atlantic Marine Center with copy to CAM5.

Submitted 18 June 1976

Wesley . Hull Captain, NOAA

Commanding Officer

NOAA Ship Mt Mitchell MSS-22

REVIEW REPORT

T-13361

SHORELINE

November 23, 1977

61. GENERAL STATEMENT:

See Summary, page 6 of this Descriptive Report.

Photographic glare of the water area prevented the delineation of Arrecife Corona. Arrecife Algarrobo was only partially delineated for the same reason. Both of these features were adequately developed by the hydrographer.

The marina at Arroyo was constructed since photography. It was delineated using engineering drawings supplied by the field editor.

- 62. <u>COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS</u>:
 Not applicable.
- 63. COMPARISON WITH MAPS OF OTHER AGENCIES:
 Not applicable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with final verified smooth sheet H-9597 (MI-10-2-76). The rock, concrete block and obstruction shown along the shoreline on the smoothsheet are not visible on the photographs. Also, there is no evidence on the photographs of the existence of the coral ledge awash shown west of the marina at Arroyo. The object labeled "pier" just east of the enterance to Quebrada Salada on the smoothsheet was identified as a sewer outfall by the field editor.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 25689, 1:20,000 scale, 5th edition, dated May 7, 1977. There are no significant differences.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the project instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Submitted by:

a. L. Shonds

A. L. Shands Final Reviewer

Approved for forwarding:

Joseph W. Vonasek

Chief, Photogrammetric Branch AMC

Approvad:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Div.