T-12162 Thru T-12165 T-11711 Thru F11713

L12162 No. 7-12165 7-1171 No. 7-11713

AAON	FORM	74.	71

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

DESCRIPTIVE REPORT

Type of SurveySharelineT-12162 thru T- Job No. PH-5909	1-713
LOCALITY	
State Puerto Rico	
General Locality Culebra Island	
Locality	• • • • • • •
••••••••••••••••••••••••	
1964 TO 19 66	
REGISTRY IN ARCHIVES	
DATE	• • • • • • • •

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-776

NOAA FORM 76-36A (3-72) NATIO	U. S. DEPARTMENT OF COM	MERCE	TYPE OF SURVEY	SURVEY	TP	
			ORIGINAL	MAPEDIT	•	
DESCRIPTIVE	REPORT - DATA RECORD		RESURVER	MAP CLAS	s	
DESCRIPTIVE REPORT - DATA RECORD			REVISED	ЈОВ	РН- 5909	
PHOTOGRAMMETRIC OFFIC	E		 	EEDING MAP EDI		
Rockville, Mai	rvland		TYPE OF SURVEY		PH	
OFFICER-IN-CHARGE			ORIGINAL		ss	
			RESURVEY	SURVEY [
James Collins			L KETTISES	1 '310'	· · · · · · · · · · · · · · · · · · ·	
I. INSTRUCTIONS DATED	1		1	2, FIELD		
August 24, 1966	I. OFFICE		September 2,		· · · · · · · · · · · · · · · · · · ·	
November 10, 1975						
				-		
II. DATUMS						
			OTHER (Specify)	· · · · · · · · · · · · · · · · · · ·		
1. HORIZONTAL:	1927 NORTH AMERICAN		Puerto Rican	·		
	MEAN HIGH-WATER		OTHER (Specify)			
2. VERTICAL:	MEAN LOW-WATER MEAN LOWER LOW-WAT	ER				
	MEAN SEA LEVEL					
3. MAP PROJECTION				4. GRID(S)		
Polycomic			Puerto Rico	ZONE		
5. SCALE T-12162-65			STATE	ZONE	-	
T-11711-713, 1:10,(<u>i </u>	<u></u>		
	OPERATIONS	···-	NAME	<u> </u>	DATE	
1. AEROTRIANGULATION		ВҮ	I.I. Saperstein	<u> </u>	10-66	
METHOD:	LANDMARKS AND A	AIDS BY	N.A			
2. CONTROL AND BRIDGE		TED BY	D. Barton		10/66	
METHOD:	CHEC	KED BY	R.A.Youngblood	D. Varrach La	10/66	
3. STEREOSCOPIC INSTRUI			J.B.Phillips & J.P. Battley	R. Toungbloo	1/67,2/67	
COMPILATION Instrument:		URS BY	N.A.	<u> </u>	1707,2707	
SCALE:		KED BY				
4. MANUSCRIPT DELINEAT	-		J.Phillips & R.	Youngb Lood	12/66,2/67	
	CHEC	KED BY	J. Battley		11 11	
метнор: В-8	CONTO	URS BY	N.A		<u> </u>	
B-8		KED BY	Doto dio			
scale: 1:5000, 1:	HYDRO SUPPORT D.	ATA BY KED BY	Data discarded			
5. OFFICE INSPECTION PR	IOR TO FIELD EDIT	BY	J.P. Battley		2/67	
ВУ						
6. APPLICATION OF FIELD	CHECK	KED BY				
7. COMPILATION SECTION	REVIEW	ВУ	J.P. Battley			
8. FINAL REVIEW		BY	F. Wright		12/75	
9. DATA FORWARDED TO F	PHOTOGRAMMETRIC BRANCH	BY	E Weight		12/75	
11. MAP REGISTERED - COA		BY	F. Wright		12/75	
			· · · · · · · · · · · · · · · · · · ·		1-0//6	

NOAA FORM 76-36 A SUPERSEDES FORM C& GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B				NAT10		U. 9	. DEPAR	TMENT	OF COMMERCE MINISTRATION
(3-72)				NATIO	NAL OCE	ANIC AND A			CEAN SURVEY
		CC	DMPILATIO	N SOURCE	S				
1. COMPILATION PHO	TOGRAPHY		 						<u> </u>
CAMERA(S)		<u></u>	TYPE	S OF PHOTOS	RAPHY	T			
S&W			',''	LEGEND			TIME REFERENCE		
TIDE STAGE REFEREN	ICE		(c) co	0.8		ZONE		1	
X PREDICTED TIDES				NCHROMATIC					STANDARD
REFERENCE STAT				RARED		MERIDI	AN		OAYLIGHT
TIDE CONTROLLE	D PHOTOGRA	——————————————————————————————————————	,,,					1	
NUMBER AND		DATE	TIME		SCALE			E OF TI	DE
66S2407-2410(C		3/7/66	11:46		40,000	.06 a	above	MLW	
2340-2343(C		2/26/66	11:09		40,000		11		
2346-2348(C	:)	2/26/66	:15	1;	40,000		11		
64W3597-3600(F	')	2/23/64	11:17	[]:	15,000	0.2 a	above	MLW	
3623-3624(F)	11	11:32	İ	íi –		11		
3575-3580(F		1111	11:05		11		11		
3586-3588(F		n	11:08	į.	17		**		
3611-3613	,	11	11:25		11		11		
2011-2012			1,,,25	ļ					
REMARKS				l					
2. SOURCE OF MEAN	HIGH WATER	I INE.			•				
		=-							
Office interpr	etation	or the above	e listed	photograp	pny.				
•									
									1
3. SOURCE OF MEAN	LOW-WATER	OR MEAN LOWER	LOW-WATER	LINE:			-		
•••••••••••••••••••••••••••••••••••••••									
None									
None				•					
			**						
A PONTENIA DE LOS CO	VDDGG : C							-	
4. CONTEMPORARY H	TUKUGRAPI	TIC SURVEYS (List	t only those st	urveys that are	sources f	or photogram	metric su	rvey info	rmation.)
SURVEY NUMBER	DATE(S)	SURVEY CO	OPY USED	SURVEY NU	MBER	DATE(S)	!	SURVEY	COPY USED
						<u> </u>			
							[
S. FINAL JUNCTIONS									
NORTH		EAST		SOUTH			WEST	-	
REMARKS Junct	ions mad	Α		l			·	 ··	
a unc i	TOTTS INDU	•							

NOAA FORM 76-366 (3-72)	c		NATIONAL OCEA	NIC AND ATMOSPH	RTMENT OF COMMERCE TERIC ADMINISTRATION TONAL OCEAN SURVEY	
		HISTORY OF FIEL	D OPERATIONS			
I. 🖄 FIELD INSP	ECTION OPE	RATION FI	ELD EDIT OPERATION	I		
	ÓF	ERATION		NAME	DATE	
1. CHIEF OF FIEL	D PARTY				_ ,	
			LCDR James		2/66	
1 HORIZONTAL C	CONTROL	RECOVERED B	7		2/66 2/66	
2. HORIZONTAL C	JUNINUL	ESTABLISHED B	27.07.27.07.		2/66	
		REÇOVERED B	4.4	115	2/00	
3. VERTICAL CON	NTROL	ESTABLISHED B				
Si venniene con		PRE-MARKED OR IDENTIFIED B				
			N			
4. LANDMARKS AT		ECOVERED (Triangulation Stations) B LOCATED (Field Methods) B	k.)			
AIDS TO NAVIG		IDENTIFIED B	1.1			
		TYPE OF INVESTIGATION	1 140/16			
5, GEOGRAPHIC N	IAMES	COMPLETE				
INVESTIGATION		SPECIFIC NAMES ONLY	Y			
		XX NO INVESTIGATION				
6. PHOTO INSPEC	TION	CLARIFICATION OF DETAILS B	v None			
7. BOUNDARIES A	ND LIMITS	SURVEYED OR IDENTIFIED B				
II. SOURCE DATA		**	1 132/15			
1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CO	NTROL IDENTIFIED	· · · · · · · · · · · · · · · · · · ·		
			None	None		
PHOTO NUMBER		STATION NAME	PHOTO NUMBER	STATION	DESIGNATION	
	Contro premai	l for these sheets was ^ked.				
3. PHOTO NUMBE	RS (Clarificat	ion of details)	1	<u></u>		
None	,, -					
4. LANDMARKS AT	ND AIDS TO N	AVIGATION IDENTIFIED	· - ·- · · ·			
None						
PHOTO NUMBER		OBJECT NAME	PHOTO NUMBER	0818	ECT NAME	
5. GEOGRAPHIC N	IAMES:	REPORT MONE	6. BOUNDARY AN	DLIMITS: TR	EPORT X NONE	
7. SUPPLEMENTA			1 - 200 AN		- 2117 EJ HORE	
		-				
None						
	RECORDS <i>(Sk</i>	etch books, etc. DO NOT list data sub	mitted to the Geodesy D	ivision)		

NOAA FORM 76-36D (3-72) U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

RECORD OF SURVEY USE								
I. MANUSC	RIPT COPIES							
	COMPILATION STAGES				DATE MANUSCR	ATE MANUSCRIPT FORWARDED		
	DATA COMPILED	DATE	RE	MARKS	MARINE CHARTS	HYDRO SUPPORT		
	r shoreline & re ledges	12/66 - 2/67			:	2/67		
Hyd	ro support data ha	s been dest	royed.					
			<u> </u>	<u> </u>				
		`		•				
	:	·						
II. LANDM	ARKS AND AIDS TO NAVIGA	TION						
1. REP	ORTS TO MARINE CHART D	VISION, NAUTICAL	DATA BRANCH					
NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED			REMARKS			
			N	lone submi-	tted			
						· 		
	•			·				
	-							
			<u>_</u>					
	REPORT TO MARINE CHART REPORT TO AERONAUTICA							
III. FEDERAL RECORDS CENTER DATA								
î. 📩 2. 🔀	/o≤+ BRIDGING PHOTOGRAPHS; CONTROL STATION IDENTI SOURCE DATA (except for G ACCOUNT FOR EXCEPTION	FICATION CARDS;	FORM NO	567 SUBMITTE	ED BY FIELD PARTIES.			
· 4. □	DATA TO FEDERAL RECOR		re forwarded:			_		
	EY EDITIONS (This section s			edition is regis	tered)			
	SURVEY NUMBER	JOB NUMBE			TYPE OF SURVEY	1		
SECOND	TP -	(2) PH		_		SURVEY		
EDITION	DATE OF PHOTOGRAPH		IELD EDIT	□n. □	MAPCLASS]HI. □IV. □V.	FINAL .		
	SURVEY NUMBER	JOB NUMBE	iR		TYPE OF SURVEY			
THIRD	TP	(3) PH			REVISED RES	SURVEY		
EDITION	DATE OF PHOTOGRAPH	TY DATE OF F	IELD EDIT		MAP CLASS]iii. □iv. □v.	FINAL		
	SURVEY NUMBER	ЈОВ ИЏМВЕ	R		TYPE OF SURVEY			
FOURTH	TP	_ (4) PH			REVISED RES	ÜRVĖY		
EDITION	DATE OF PHOTOGRAPH	Y DATE OF F	IELD EDIT		MAP CLASS	Пе		

Summary to Accompany Descriptive Report T-12162 thru 12165 and T-11711 thru 11713

T-12162 thru 12165 at 1:5,000 scale, and T-11711 thru T-11713 at 1:10,000 scale comprises the northern portion of Project PH-5909 and covers Culebra Island and the off-lying islands, Puerto Rico. The purpose of this project was to provide photo-hydro support. Refer to the project diagram for the location of each sheet in the project.

The only field work preceding compilation was the premarking and identification of control necessary for bridging. See Photogrammetric Plot Report for details.

Compilation was accomplished from December 1966 thru February 1967 using the B-8 plotter. Stable base copies and ratio prints were furnished for hydro support and field edit. Neither hydro or field edit was accomplished.

See Instructions-OFFICE-, dated November 10, 1975, page 6 of this report for completion requirements.



U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration Rockville, Md. 20852 - National Ocean Survey

NOV 10 1975

C3421

TO:

Chief, Photogrammetric Branch

FROM:

James Collins

Chief, Coastal Mapping Division

SUBJECT:

Instructions-OFFICE, Job Completion-Job PH-5909,

Culebra, Vieques, and Adjoining Islands,

Puerto Rico

Background

The 3 job maps covering Vieques Island were field edited, reviewed, and registered. The remaining 7 maps in the project, covering Culebra and adjacent islands, are in the Class III stage of completion. These maps were compiled from photographs taken in 1964 and 1965.

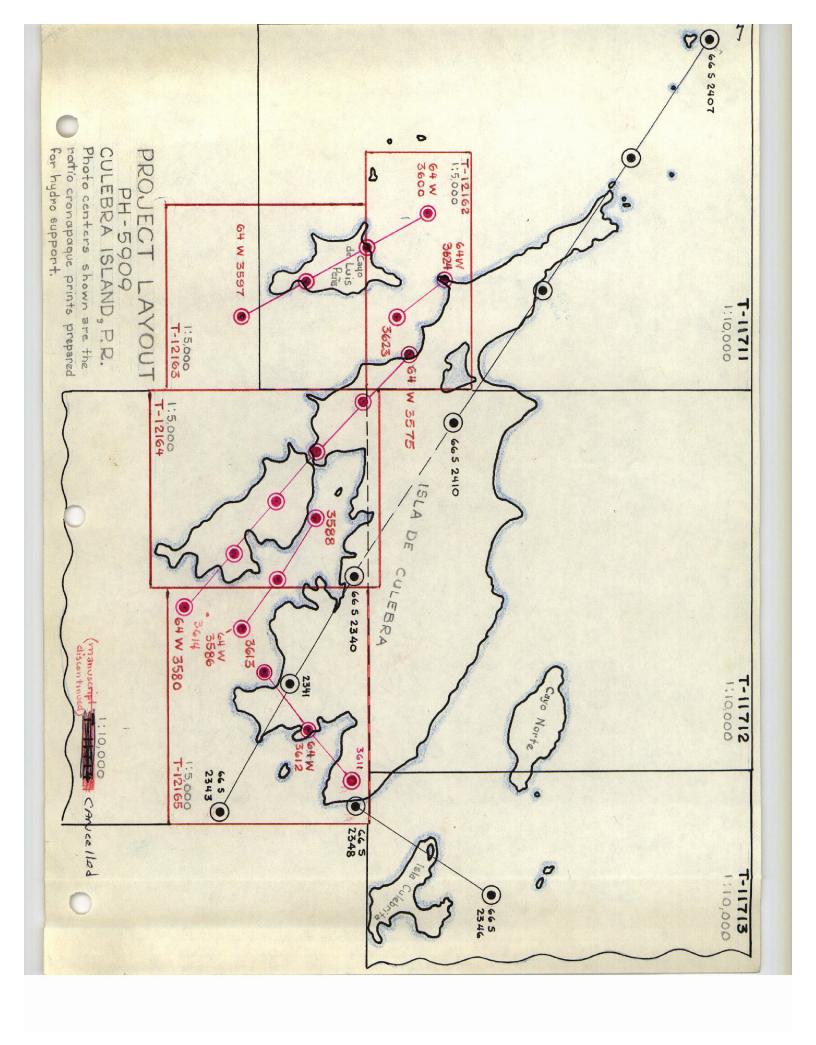
Inshore hydrography requiring photo-hydro support data will not be done prior to 1981.

2. Job Completion Requirements and Procedures

.01 The 7 Class III maps shall be final reviewed, registered, and other job completion operations performed in accordance with standard procedures.

.02 Field edit operations for these first editions of the Class III maps are cancelled. Any future work involving these maps, in either revision with new photography or new basis mapping, will be done under a new project. Any maps produced at the same scale and having common coverage will be second editions.

.03 Photo-hydro support data stored in the Riverdale files shall be destroyed.



PHOTOGRAMMETRIC PLOT REPORT Job PH-5909 Culebra Island, Puerto Rico

21. Area Covered

This report covers Culebra Island, Puerto Rico, and consists of the following 1:5,000 scale T-sheets: T-12162, T-12163, T-12164, T-12165; and 1:10,000 scale T-sheets as follows: T-11711, T-11712, T-11713 and T-11714.

22. Method

Analytic aerotriangulation methods were used to bridge a single strip using "S" camera, color photography at 1:40,000 scale. The attached sketch of the strip bridged shows the placement of triangulation furnished and those that were used in the final strip adjustment. Closures to control have been tabulated. State plane coordinates (Puerto Rico) have been furnished for all bridge points on the IEM readout.

In order to facilitate compilation of 1:5,000 scale manuscripts from 1:15,000 scale photographs, a separate short bridge was run using 1:40,000 scale color photographs 66-S-2409 thru 2412. Common points were drilled on both the color and 1:15,000 scale panchromatic plates. These points will be used to scale the 1:15,000 scale models.

Passpoints used were the same on both bridges and the position error between bridges averages less than one (1) foot.

23. Adequacy of Control

All horizontal control was premarked with white panels except for substation LOBITO LONG which was identified on 1959 photography. Nevertheless, control was very adequate. CULEBRITA ISLAND LIGHT 1900 was not field identified. However, an attempt was made to office identify the station but would not hold in the bridge. Vertical control needed for the adjustment was selected on the shoreline.

25. Photography

Although photography was not free from cloud cover, it was satisfactory for bridging purposes. The points for two additional models (66-S-2335-36 and 66-S-2346-48) were furnished.

One was needed to compile an area not covered on the bridge strip.

Respectfully submitted:

I. I. Saperstein

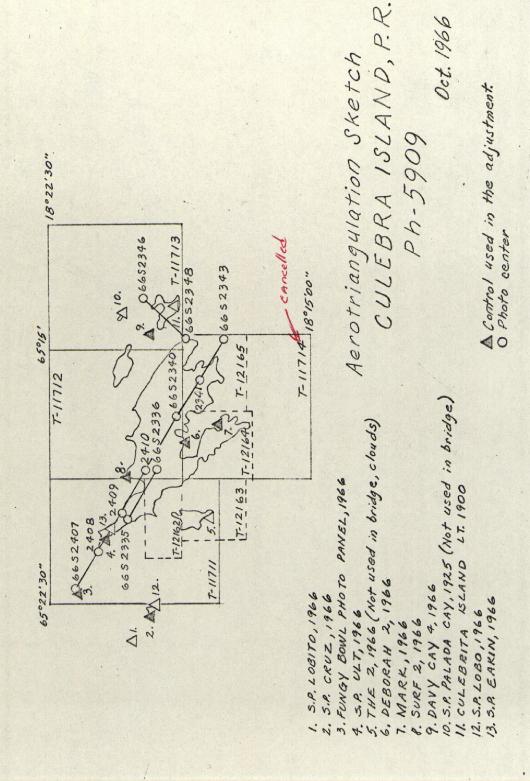
Approved & Forwarded:

Henry P. Eichert

CLOSURE TO TRIANGULATION (feet)

*FUNGY BOWL PHOTO PANEL, 1966	(+1.17	-1.20)	
S.P. LOBITO, 1966	(+0.54	+3.11)	
*S.P. CRUZ, 1966	(-2.54	#1.10)	1st model
	(-2.10	+1.51)	2nd model
S.P. LOBO, 1966	(-3.91	-0.32)	lst model
	(-3.01	+0.61)	2nd model
*S.P. ULT 2, 1966	(+0.78	-1.77)	1st model
	(+1.64	-2.32)	2nd model
S.P. EAKIN, 1966	(+0.41	-0.73)	
*SURF 2, 1966	(=1.05	-0.10)	
*DEBORAH, 1966	(-0.40	+1.04)	1st model
	(-0.16	+0.32)	2nd model
*MARK, 1966	(+0.50	+2.25)	1st model
	(+0.37	+1.40)	2nd model
	(-1.24	+0.47)	3rd model
*DAVY CAY 4, 1966	(+1.41	-1.37) :	lst model
	+4.74	-2.46) :	2nd model cloudy

*control used in final adjustment



Compilation Report
Project PH-5909
T-11711 thru T-11713
and
T-12162 thru T-12165
February 1967

This report covers the shoreline compilation of T-11711 thru T-11713 at a scale of 1:10,000, and T-12162 thru T-12165, 1:5,000 scale. T-11714 (1:10,000) was discontinued as the land area was covered by 1:5,000 scale compilation (see project layout sketch). These manuscripts were compiled to furnish a base for photo-hydro support. The area covered includes the shoreline of Culebra Island in its entirety and surrounding islands.

31. Delineation

The manuscripts were delineated on the Wild B-8 stereoplotter. The 1:5,000 scale manuscripts were compiled from 1964, 1:15,000 scale panchromatic photography. Those 1:5,000 scale maps, where applicable, were reduced for transfer to the 1:10,000 sheets. The 1:10,000 scale manuscripts were delineated from 1966, 1:40,000 scale color photography. Points were dropped along the shoreline to facilitate hydrographic signal location. Cronapaque ratio prints of the 1964 and 1966 photography were resected to the manuscripts and prepared in the usual manner for photo-hydro support. The 4X ratio of the color photography was printed in black-and-white.

Several areas along the shoreline appeared to be overgrown with mangrove and foliage. These were shown with an apparent shoreline and labeled "swamp".

32. Control

Bridge points furnished by aerotriangulation were sufficient to adequately compile the shoreline and to locate pass points for photo-hydro support.

- 33. Supplemental Data None
- 34. Contours and Drainage Inapplicable
- 35. Shoreline and Alongshore Details

The character of the shoreline in this area consists of much foreshore coral reef. This was carefully delineated along with rocks, shallow, and shoal areas.

36. Offshore Details

Throughout the project, an approximate underwater ledge line was shown as an aid to the hydrographer.

37. Landmarks and Aids

Visible aids were located photogrammetrically and form 567 was submitted to the field editor.

- 38. Control for Future Surveys None
- 39. Junctions

A satisfactory junction was made with adjoining sheets (see project layout sketch).

40. Horizontal and Vertical Accuracy

See bridging report

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

None made.

47. Comparison with Nautical Charts

C&GS charts 913, 914, and 915.

These charts appear to have local errors in the horizontal datum.

Submitted by,

Rose A Youngblood (1B)

Rose A. Youngblood

Approved by:

Jeter P. Battley Ir

J.P. Battley, Jr.

Chief, Coastal Mapping Section

GEOGRAPHIC NAMES FINAL NAME SHEETS

PH-5909 (Culebra and Adj. Islands, Virgin Islands)

T-11711

Alcarraza

Atlantič Očean

Bahia Flamenco

Bahia Tamarindo

Bahia Tarja

Canal de Luis Peña

Canal Piedra Stevens

Cayo del Agua

Cayo de Luis Peña

Cayo Ratón

Cayo Yerba

Cerro de Luis Peña

El Ancoñ

El Mono

Isla de Culebra

La Pasa de la Alcarraza

LalPasa de Los Gemelos

Laguna de Cornelio

Laguna del Flamenco

Las Hermanas

Los Gemelos

Peninsula Flamenco

Piedra Stevens

Playa Flamenco

Punta Cruz

Punta de Molinos

Punta Noroeste

Punta Ceiadá Rociada

Punta Tamarindo

Punta Tamarindo Chico

Punta Tamarindo Grande

Approved by:

Charles E. Harrington

Staff Geographer

T-11712

Atlantic Ocean

Bahia de Marejada

Bahia de Oleaje

Canal De Cayo Norte

Cayo Matojo

Cayo Norte

Cerro Balcón

Isla De Culebra

Laguna Zoni

Monte Resaca

Playa Brava

Playa Resaca

Playa Zoni

Punta Flamenco

Punta Garay

Punta Manchita

Punta Matojó

Punta Pavimento

Punta Resaca

Punta Seria

Roca Speck

Approved by:

Charles E. Harrington

Staff Geographer

T-11713

Atlantic Ocean

Cabo del Pasaje

Canal de Culebrita

Canal Tiempo

Cayo Ballena

Cayo Botella

Cayo Norte

Cayo Sombrerito

Cayo Tiburón

Cayos Geniqui

Isla Culebrita

Isla de Culebra

Montecito Primero

Playa Larga

Punta Arenisca

Punta del Este

Punta Marc

Punta Trulla

Approved by:

Charles E. Harrington

Staff Geographer

T-12162

Bahia Tamarindo
Canal de Luis Peña
Cayo del Agua
Cayo de Luis Peña
Isla de Culebra
Laguna de Cornelio
Laguna del Flamenco
Punta Tamarindo Grande

Approved by:

Charles E. Harrington Staff Geographer

T-12163

Bahia Tarja Cayo de Luis Peña . Cerro de Luis Peña Isla de Culebra Punta Cruz Punta Tamarindo Chico

Sonda de Viques

"Vieques"

Approved by:

Charles E. Harrington Staff Geographer

T-12164

Bahia Linda '

Bahía de Sardinas

Cayo Pirata

Cayo Verde

Culebra

Ensenada de Cementerio

Ensenada del Coronel

Ensenada Dakity

Ensenada Fulladosa

Ensenada Honda

Ensenada Malena

Isla de Culebra

Laguna de Lobina

Playa de Cascajo

Playa de Sardinas

Approved by:

Charles E. Harrington

Staff Geographer

Playa Dinero

Punta Aloe

Punta Cabras

Punta Cementerio

Punta Colorada

Punta de Maguey

Punta del Soldado

Punta Melones

Punta Tampico

San / Ildefonso

Sondo de Viques "Vieques"

T-12165

Bahia de Almodóvar Bahia Mosquito Bajo de Almodóvar Cabeza de Perro Cano Quebrado Ensenada Honda Ensenada Santiago Isla de Culebra Pelá Pelaita Playa Mazanilla Puerto del Manglar Punta Almodóvar Punta Brisa Punta Carenero Punta del Viento Punta Muleros Punta Padilla Punta Vaca

Approved by:

Charles & Harrington Charles E. Harrington Staff Geographer

Review Report T-12162 thru 12165 and T-11711 thru 11713 December 1975

61. General Statement: Due to the extreme difficulty in obtaining control for this area and lack of basic shoreline data, this portion of the project that was not field edited or used for hydrography was not cancelled but will be registered as Class III maps.

The nature of the shoreline (mostly high bluffs) is such that a good MHWL could be compiled from office interpretation of photography and little or no change would be expected from a field edit. The exception to this would be the small islets and rocks shown as bare. Some of these could be awash at MHW.

The ledge line should not be used as the MLWL. The area covered by the ledge symbol includes areas that would be completely submerged at MLW. The approximate underwater ledge limits (a bottom characteristic) was drawn only as an aid to the hydrographer, to indicate possible small boat landing sites, and covers depths to 20-25 feet.

- 62. Comparison with Registered Topographic Surveys: None available.
- 63. Comparison with Maps of Other Agencies: U.S.G.S. scale 1:30,000, 1950 edition, Culebra and Adjacent Islands, Puerto Rico, no significant differences noted.
- 64. Comparison with Contemporary Hydrographic Surveys: None available.
- 65. Comparison with Nautical Charts: USC&GS Charts 913 scale 1:6,500, 914 scale 1:20,000, and 915 scale 1:10,000.

There are isolated datum differences throughout these charts. This could be the result of inadequate control on the original surveys of 1900.

66. Adequacy of Results and Future Surveys: These maps comply with the project instructions and meet the National Standards of Map Accuracy except as qualified in Item 61, General Statement.

Prepared by.

Cartographer

Approved

, Photogrammetric Branch

Coastal Mapping Division