

T-12162 Thru T-12165
T-11711 Thru T-11713

T-12162 Thru T-12165

T-11711 Thru T-11713

NOAA FORM 76-35	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY*	
DESCRIPTIVE REPORT	
Type of Survey ... Shoreline	T-12162 thru T-12165
Job No. PH-5909	Map No. T-11711-713
Classification No. III	Edition No. 1
LOCALITY	
State ... Puerto Rico	
General Locality Culebra Island	
Locality	
1964 TO 1966	
REGISTRY IN ARCHIVES	
DATE	

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.	
DESCRIPTIVE REPORT - DATA RECORD		TYPE OF SURVEY ☒ ORIGINAL ☐ RESURVEY ☐ REVISED	
PHOTOGRAMMETRIC OFFICE Rockville, Maryland		SURVEY TP. * MAP EDITION NO. (1) MAP CLASS III JOB PH. 5909	
OFFICER-IN-CHARGE James Collins		LAST PRECEDING MAP EDITION TYPE OF SURVEY ☐ ORIGINAL ☐ RESURVEY ☐ REVISED JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
August 24, 1966 November 10, 1975		September 2, 1965	
II. DATUMS			
1. HORIZONTAL: ☐ 1927 NORTH AMERICAN		OTHER (Specify) Puerto Rican	
2. VERTICAL: ☒ MEAN HIGH-WATER ☐ MEAN LOW-WATER ☐ MEAN LOWER LOW-WATER ☐ MEAN SEA LEVEL		OTHER (Specify)	
3. MAP PROJECTION Polyconic		4. GRID(S) STATE Puerto Rico ZONE I	
5. SCALE T-12162-65, 1:5,000 T-11711-713, 1:10,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: _____ BY _____ LANDMARKS AND AIDS BY _____		I.I. Saperstein	10-66
2. CONTROL AND BRIDGE POINTS METHOD: _____ PLOTTED BY _____ CHECKED BY _____		D. Barton R.A. Youngblood	10/66 10/66
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: _____ SCALE: _____		J.B. Phillips & R. Youngblood J.P. Battley N.A.	12/66, 2/67 1/67, 2/67
4. MANUSCRIPT DELINEATION METHOD: B-8 SCALE: 1:5000, 1:10,000 HYDRO SUPPORT DATA BY _____ CHECKED BY _____		J. Phillips & R. Youngblood J. Battley N.A. Data discarded	12/66, 2/67 " "
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY _____		J.P. Battley	2/67
6. APPLICATION OF FIELD EDIT DATA CHECKED BY _____		None	
7. COMPILATION SECTION REVIEW BY _____		J.P. Battley	
8. FINAL REVIEW BY _____		F. Wright	12/75
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY _____			
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY _____		F. Wright	12/75
11. MAP REGISTERED - COASTAL SURVEY SECTION BY _____		R. CADOR	3/76

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

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) S&W		TYPES OF PHOTOGRAPHY LEGEND (C) COLOR (P) PANCHROMATIC (I) INFRARED		TIME REFERENCE	
TIDE STAGE REFERENCE ☒ PREDICTED TIDES ☐ REFERENCE STATION RECORDS ☐ TIDE CONTROLLED PHOTOGRAPHY				ZONE	☐ STANDARD
				MERIDIAN	☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
66S2407-2410(C)	3/7/66	11:46	1:40,000	.06 above MLW
2340-2343(C)	2/26/66	11:09	1:40,000	"
2346-2348(C)	2/26/66	11:15	1:40,000	"
64W3597-3600(P)	2/23/64	11:17	1:15,000	0.2 above MLW
3623-3624(P)	"	11:32	"	"
3575-3580(P)	"	11:05	"	"
3586-3588(P)	"	11:08	"	"
3611-3613	"	11:25	"	"

REMARKS

2. SOURCE OF MEAN HIGH-WATER LINE:

Office interpretation of the above listed photography.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

None

4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST

REMARKS Junctions made

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	LCDR James Randall	2/66
2. HORIZONTAL CONTROL	RECOVERED BY R.S. Tibbetts	2/66
	ESTABLISHED BY Lt. J. Lium	2/66
	PRE-MARKED OR IDENTIFIED BY R.S. Tibbetts	2/66
3. VERTICAL CONTROL	RECOVERED BY None	
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY None	
	LOCATED (Field Methods) BY None	
	IDENTIFIED BY None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION ☐ COMPLETE ☐ SPECIFIC NAMES ONLY ☒ NO INVESTIGATION	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY None	
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CONTROL IDENTIFIED	
		None	
PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Control for these sheets was premarked.		
3. PHOTO NUMBERS (Clarification of details)			
None			
4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED			
None			
PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE		6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE	
7. SUPPLEMENTAL MAPS AND PLANS			
None			
8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)			

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Interior shoreline & offshore ledges	12/66 - 2/67			2/67
Hydro support data has been destroyed.				

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
			None submitted

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: _____
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ^{lost} ☐ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☐ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.
ACCOUNT FOR EXCEPTIONS:
4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY ☐ REVISED ☐ RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL	

5

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 *[Signature]*
Chief, Coastal Mapping Division

SUBJECT: Instructions-OFFICE, Job Completion-Job PH-5909,
Culebra, Vieques, and Adjoining Islands,
Puerto Rico

1. 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.

T-11711
1:10,000

T-11712
1:10,000

T-11713
1:10,000

66 S 2407

T-12162
1:5,000

64 W 3600

64 W 3624

3623

64 W 3575

66 S 2410

ISLA DE CULEBRA

66 S 2340

3588

3613

64 W 3586

3614

64 W 3580

66 S 2343

3612

64 W 3612

66 S 2348

66 S 2346

Cayo Norte

Isla Culebrita

64 W 3597

1:5,000
T-12163

1:5,000
T-12164

PROJECT LAYOUT

PH-5909

CULEBRA ISLAND, P.R.

Photo centers shown are the
radio cronapaque prints prepared
for hydro support.

(manuscript
discarded)

1:10,000

Cancelled

Oct 1966

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 IBM 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. Tie 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

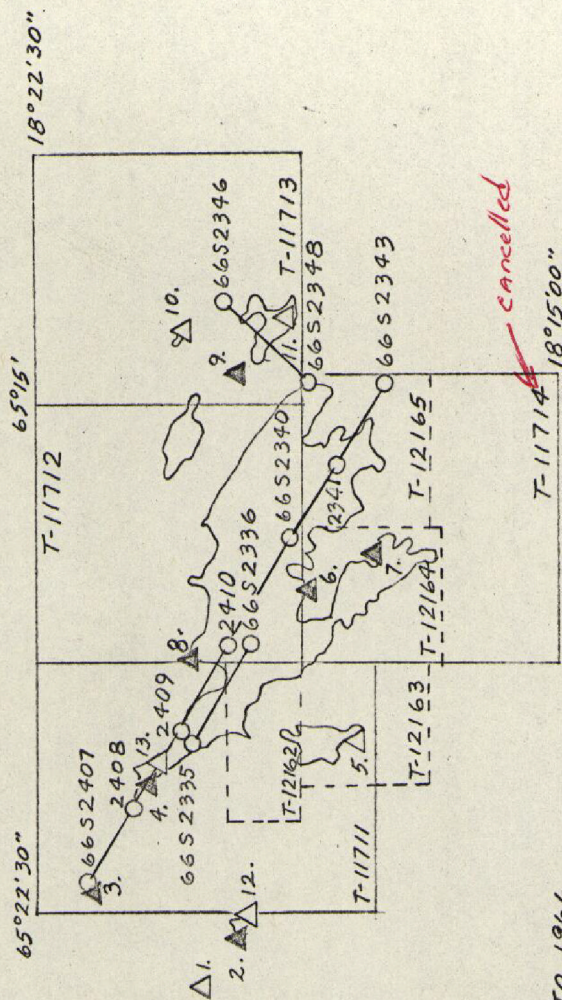
Approved & Forwarded:

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)	1st 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)	1st model
	(+4.74 -2.46)	2nd model cloudy

*control used in final adjustment



1. S.P. LOBITO, 1966
2. S.P. CRUZ, 1966
3. FUNGY BOWL PHOTO PANEL, 1966
4. S.P. ULT, 1966
5. THE 2, 1966 (Not used in bridge, clouds)
6. DEBORAH 2, 1966
7. MARK, 1966
8. SURF 2, 1966
9. DAVY CAY 4, 1966
10. S.P. PALADA CAY, 1925 (Not used in bridge)
11. CULEBRITA ISLAND LT. 1900
12. S.P. LOBO, 1966
13. S.P. EAKIN, 1966

Aerotriangulation Sketch CULEBRA ISLAND, P.R.

Ph-5909

Oct. 1966

△ Control used in the adjustment
○ Photo center

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 - None39. 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 (JB)

Rose A. Youngblood

Approved by:

Jeter P. Battley Jr

J.P. Battley, Jr.

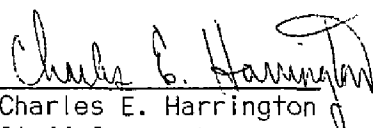
Chief, Coastal Mapping Section

GEOGRAPHIC NAMES
FINAL NAME SHEETS
PH-5909 (Culebra and Adj. Islands,
Virgin Islands)

T-11712

Atlantic Ocean
Bahía de Marejada
Bahía de Oleaje
Canal ^dDe Cayo Norte
Cayo Matojo
Cayo Norte
Cerro Balcón
Isla ^dDe 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:

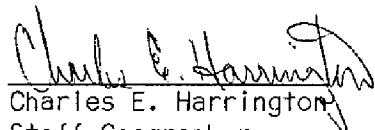

Charles E. Harrington
Staff Geographer

GEOGRAPHIC NAMES
FINAL NAME SHEETS
PH-5909 (Culebra and Adj. Islands,
Virgin Islands)

T-11713

Atlantic Ocean
Cabo del Pasaje
Canal de Culebrita
Canal Tiempo
Cayo Ballena
Cayo Botella
Cayo Norte
Cayo Sombrerito
Cayo Tiburón
Cayos Geniquí
Isla Culebrita
Isla de Culebra
Montecito Primero
Playa Larga
Punta Arenisca
Punta del Este
Punta Marc
Punta Trulla

Approved by:

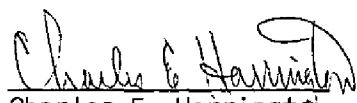

Charles E. Harrington
Staff Geographer

GEOGRAPHIC NAMES
FINAL NAME SHEETS
PH-5909 (Culebra and Adj. Islands,
Virgin Islands)

T-12162

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

Approved by:


Charles E. Harrington
Staff Geographer

GEOGRAPHIC NAMES
FINAL NAME SHEETS
PH-5909 (Culebra and Adj. Islands,
Virgin Islands)

T-12163

Bahía Tarja
Cayo de Luis Peña
Cerro de Luis Peña
Isla de Culebra
Punta Cruz
Punta Tamarindo Chico
Sonda de Viques "Vieques"

Approved by:

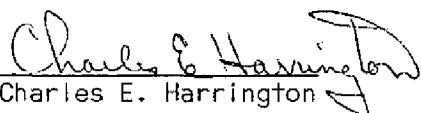
Charles E. Harrington
Charles E. Harrington
Staff Geographer

GEOGRAPHIC NAMES
FINAL NAME SHEETS
PH-5909 (Culebra and Adj. Islands,
Virgin Islands)

T-12164

Bahía Linda	Playa Dinero
Bahía de Sardinas	Punta Aloe
Cayo Pirata	Punta Cabras
Cayo Verde	Punta Cementerio
Culebra	Punta Colorada
Ensenada de Cementerio	Punta de Maguey
Ensenada del Coronel	Punta del Soldado
Ensenada Dakity	Punta Melones
Ensenada Fulladosa	Punta Tampico
Ensenada Honda	San Ildefonso
Ensenada Malena	Sondo de <u>Viques</u> — "Vieques"
Isla de Culebra	
Laguna de Lobina	
Playa de Cascajo	
Playa de Sardinas	

Approved by:


Charles E. Harrington
Staff Geographer

GEOGRAPHIC NAMES
FINAL NAME SHEETS
PH-5909 (Culebra and Adj. Islands,
Virgin Islands)

T-12165

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

Approved by:

Charles E. 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,

Frank A. Wright
Frank A. Wright
Cartographer

Approved:

Charles Lynn
Chief, Photogrammetric Branch

James L. Latta
Chief, Coastal Mapping Division