

# 12168

Diag. Cht. No. 904.

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. Ph-5909 Office No. T-12168

### LOCALITY

State Puerto Rico

General locality Isla De Vieques

Locality Ensenada Honda

19 59-66

### CHIEF OF PARTY

J. Bull, Director, Atlantic Marine  
Center

### LIBRARY & ARCHIVES

DATE April 1968

USCOMM-DC 37022-P66

# 12168

## DESCRIPTIVE REPORT - DATA RECORD

T - 12168

PROJECT NO. (II):

PH-5909

FIELD OFFICE (III):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center

OFFICER-IN-CHARGE

J. Bull, Director

INSTRUCTIONS DATED (II) (III):

November 12, 1965

METHOD OF COMPILATION (III):

Wild B-8

MANUSCRIPT SCALE (III):

1:20,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:6,000 pantagraphed to 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):

Puerto Rico

VERTICAL DATUM (III):

~~MEAN LOW WATER~~ EXCEPT AS FOLLOWS: MHW

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):

EAST END, 1900 ✓

LAT.:

18° 08' 11".263(346.3m)

LONG.:

65° 16' 21".014(617.7m)

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y = 111,345.15 ft.

X = 903,027.74 ft.

Puerto Rico

Zone 1

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

T-12168

FIELD INSPECTION BY (II):		DATE:
None		
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):		
Air Photo Compilation		
Date of Photography April 20, 1959 and February 21, 1964		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		November 1965
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. S. Kornspan		November 1965
CONTROL PLOTTED BY (III):		DATE
B. H. Barnes		January 1966
CONTROL CHECKED BY (III):		DATE
A. C. Rauck		January 1966
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
Robert B. Kelly (WSC)		No Date
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
	L. O. Neterer	January 1966
	CONTOURS	DATE
	Inapplicable	
MANUSCRIPT DELINEATED BY (III):		DATE
LT. D. L. Des Jardins		January 1966
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
L. L. Graves		January 1966
REMARKS:		
Field Edit: D. R. Rich, LTjg, USESSA		April 1966

FORM C&GS-181c  
(3-66)U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEYDESCRIPTIVE REPORT - DATA RECORD  
T-12168

CAMERA (KIND OR SOURCE) (III):

"S" and "W" Cameras

## PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64-W-3489	Feb. 21, 64	10:04	1:30,000	0.1 <i>above MLW</i>
64-W-3490	"	10:04	1:30,000	0.1
64-W-3491	"	10:04	1:30,000	0.1
64-W-3492	"	10:05	1:30,000	0.1
59-S-3972	Apr. 20, 59	09:03	1:30,000	0.2
59-S-3973	"	09:03	1:30,000	0.2
59-S-3974	"	09:04	1:30,000	0.2
59-S-3975	"	09:04	1:30,000	0.2
59-S-3976	"	09:04	1:30,000	0.2

*Predicted* TIDE (III)

		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION:				
Galveston, Texas San Juan, Puerto Rico				
SUBORDINATE STATION:				
Bahia de Mulas, Isla de Vieques		.73	.8	1.0
SUBORDINATE STATION:				Diurnal
Puerto Ferro, Isla De Vieques		.60	.6	0.8
Atlantic Marine Center REVIEW BY (IV):		DATE:		
M. M. SLAVNEY		JAN. 1967		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III):	RECOVERED: 5	IDENTIFIED: 5		
NUMBER OF BM(S) SEARCHED FOR (III):	RECOVERED: - -	IDENTIFIED - -		
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):		None		
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):		None		

REMARKS:



## COMPILATION RECORD

## COMPLETION DATE

## REMARKS

ALONGSHORE AREA FOR HYDRO	February 1966	Superseded
Field Edit Applied Manuscript Complete	July 1966	<i>Superseded</i>
<i>Shoreline revised during final review</i>	<i>Dec 1966</i>	



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12168

Shoreline manuscript T-12168 is one of three 1:20,000 scale manuscripts of the Vieques Island part of Ph-5909, which also contains 8 maps of Culebra Island and adjoining islands. The sketch on page 5 of this report shows the position of this manuscript in this part of the project.

This is a stereo-instrument project in advance of hydrographic surveys of the area. Two strips of 1:30,000 scale panchromatic photographs the southern one taken in 1959 with "S" camera, and the northern flight taken in 1964 with the "W" camera. 1962 color photographs at 1:10,000 scale provided added information along the shoreline.

The stereo-bridge was run and adjusted to field identified control in the Washington Office. Compilation was done with the Kelsh Plotter. Ratio prints, at 1:20,000 scale were processed, and provided for photo-hydro support.

Field work preceding compilation consisted of control identification only. The manuscript was field edited in conjunction with photo-hydro support.

The compilation manuscript was a vinylite sheet 7 minutes, 30 seconds in latitude, and 7 minutes 30 seconds in longitude. The smooth manuscript is on cronaflex for registry and record after final review.

FIELD INSPECTION REPORT

There was no field inspection prior to compilation.

MAP T..... 12168..... PROJECT NO. PH-5909..... SCALE OF MAP 1:20,000..... SCALE FACTOR.....

PROJECT NO. PH-5909

SCALE OF MAP 1:20,000

SCALE FACTOR

[illegible]

ET = 3049006 METER

COMPUTED BY: D.L. DesJardins

DATE 2/4/66

CHECKED BY:..... Barnes.....

DATE 2-3-66

M-2388-12

COMPILATION REPORT  
T-12168

Aerotriangulation Report is submitted with T-12166.

31. DELINEATION

The Wild B-8 instrument was used.

There was no field inspection.

Photography was satisfactory.

32. CONTROL

See Aerotriangulation Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

There was no shoreline inspection. Shoreline and alongshore details were compiled by office interpretation of the photography. No low water line was shown.

36. OFFSHORE DETAILS

See Item 49.

37. LANDMARKS AND AIDS

One Aid to Navigation has been submitted on Form 567.  
There are no Landmarks.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

A satisfactory junction was made with T-12167 to the west. The Caribbean Sea is to the south and Sonda De Vieques to the north.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with U.S.G.S. Quadrangles, ISLAND OF VIEQUES, PUERTO RICO; scale 1:50,000 and Topographic Map of the Island of Vieques, Puerto Rico; scale 1:30,000.

47. COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Chart 904, VIRGIN PASSAGE and SONDA DE VIEQUES, scale 1:100,000.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.



L. L. Graves  
Cartographic Technician

Approved and Forwarded:



J. Bull, CAPT, USESSA  
Director, Atlantic Marine Center



48. GEOGRAPHIC NAME LIST

BAHIA FANDUCA

BAHIA ICACOS

BAHIA JALOVA

BAHIA PLAYA BLANCA

BAHIA SALINA DEL SUR

BAHIA SALINAS - Not on Geographic Name Quad (A.M.S.), on Washington Office  
Name List, on Geol. Survey Quad. of island, and on  
Chart 904. *USED*

BAHIA YOYE

\*\* CANO HONDO

CARIBBEAN SEA

CAYO JALOVA

CAYO JALOVITA

\*\*\* CERRO FARALLON

\*\*\* CERRO INDIO

\*\*\* CERRO MATIAS JALOBRE

ENSENADA HONDA

ISLA DE VIEQUES

ISLA YALLIS

LAGUNA ALGODONES

LAGUNA ANONES

LAGUNA MATIAS

LAGUNA MONTE LARGO

LAGUNA YANUEL

LAGUNA PUERTO DIABLO

PENASCO FOSIL

\* PUERTO DIABLO



68 12  
PUERTO NEGRO

PUNTA BRIGADIER

PUNTA CARENERO

PUNTO<sup>A</sup> CONEJO

PUNTA ESTE

PUNTA GATO

PUNTA GOLETA

PUNTA ICACOS

PUNTA JALOVA

PUNTA MATIAS

PUNTA SALINAS

ROCA ALCATRAZ

ROCA CUCARACHA

SONDA DE VIEQUES

\* ON GEOGRAPHIC NAME SHEET BUT NOT ON GEOGRAPHIC NAME LIST, *USED*

\*\* ON GEOGRAPHIC NAME LIST TAKEN FROM CHART 904, *not on Geographic*

\*\*\* *Feature (Hill or Mountain) not delineated, name not used.* Name Quad. *USED*



GEOGRAPHIC NAMES

FINAL NAMES LIST

PH-5909  
T-12168

Bahia Fanduca

Bahia Icacos

Bahia Jalova

Bahia Playa Blanca

Bahia Salina del Sur

Bahia Salinas - Not on Geographic Name Quad.(A.M.S.);  
on Washington Office Name List, on  
Bahia Yoye Geol. Survey Quad., on Chart 904

Cano Hondo — (On Chart 904, not on Geographic Name  
\*\* Caribbean Sea Quad.), USED  
Cayo Jalova

Cayo Jalovita

\*\*\* Cerro Farallon

\*\*\* Cerro Indio

\* Cerro Matias Jalobre

\* Cerro Palomas

Ensenada Honda

Isla De Vieques

Isla Yallis

Laguna Algodones

Laguna Andnes

Laguna Matias

Laguna Monte Largo

Laguna Puerto Diablo

\* \* Laguna Yanuel Puerto Diablo



**\*\* Puerto Diablo**

Puerto Negro  
Punta Brigadier  
**\*\* Punta Canejo**  
Punta Carenero  
Punta Este  
Punta Gato  
Punta Goleta  
Punta Icacos  
Punta Jalova  
Punta Matias  
Punta Salinas  
Roca Alcatraz  
Roca Cucaracha  
Sonda De Vieques

Approved by:

*A. J. Wraight*

A. J. Wraight  
Chief Geographer

Prepared by:

*Frank Pickett*

Frank Pickett  
Cartographic Technician

\*Feature (Hill or Mountain) not delineated, name not used.

**\*\* ON THE GEO. NAME AM.S. QUAD., USED**

T-12168

49. NOTES FOR THE HYDROGRAPHER

Features believed to be of landmark value have been shown, however their navigational value should be verified.

Rocks, shoals and other offshore features have been shown from office interpretation and should be verified.

Due to the time and date difference in photography, many shoreline points which appear on the 1964 photographs do not appear on the 1959 photos and vice-versa.

C&GS FORM 1002  
(11-13-61)U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## PHOTOGRAMMETRIC OFFICE REVIEW

XX103XX T-12168

1. PROJECTION AND GRIDS LLG		2. TITLE LLG		3. MANUSCRIPT NUMBERS LLG		4. MANUSCRIPT SIZE LLG	
CONTROL STATIONS							
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY LLG				6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX		7. PHOTO HYDRO STATIONS XX	
8. BENCH MARKS XX		9. PLOTTING OF SEXTANT FIXES XX		10. PHOTOGRAMMETRIC PLOT REPORT Bridge (WSC)		11. DETAIL POINTS Kelsh	
ALONGSHORE AREAS (Nautical Chart Data)							
12. SHORELINE LLG		13. LOW-WATER LINE XX		14. ROCKS, SHOALS, ETC. LLG		15. BRIDGES XX	
16. AIDS TO NAVIGATION LLG		17. LANDMARKS XX		18. OTHER ALONGSHORE PHYSICAL FEATURES LLG		19. OTHER ALONGSHORE CULTURAL FEATURES LLG	
PHYSICAL FEATURES							
20. WATER FEATURES LLG				21. NATURAL GROUND COVER LLG		22. PLANETABLE CONTOURS XX	
23. STEREOSCOPIC INSTRUMENT CONTOURS XX		24. CONTOURS IN GENERAL XX		25. SPOT ELEVATIONS XX		26. OTHER PHYSICAL FEATURES LLG	
CULTURAL FEATURES							
27. ROADS LLG		28. BUILDINGS XX		29. RAILROADS XX		30. OTHER CULTURAL FEATURES LLG	
BOUNDARIES							
31. BOUNDARY LINES XX				32. PUBLIC LAND LINES XX			
MISCELLANEOUS							
33. GEOGRAPHIC NAMES LLG				34. JUNCTIONS LLG		35. LEGIBILITY OF THE MANUSCRIPT LLG	
36. DISCREPANCY OVERLAY XX		37. DESCRIPTIVE REPORT LLG		38. FIELD INSPECTION PHOTOGRAPHS XX		39. FORMS LLG	
40. REVIEWER LLG				SUPERVISOR, REVIEW SECTION OR UNIT ACR			
41. REMARKS (See attached sheet)							
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT							
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.							
COMPILER LLG				SUPERVISOR ACR			
43. REMARKS							



## NONFLOATING AIDS OR LANDMARKS FOR CHARTS

~~TO BE CHARTED~~  
~~TO BE REVISED~~  
~~TO BE DELETED~~

**STRIKE OUT TWO**

October 12, 1966

I recommend that the following objects which have ~~(been sent)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(based from)~~ the charts indicated.

The positions given have been checked after listing by

L. L. Graves

J. Bull, Director, Atlantic Marine Center

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

## FIELD EDIT REPORT

T-12168

The field edit report is included with the Descriptive Report for T-12166.

REVIEW REPORT T-12168

SHORELINE  
January 1967

61. GENERAL STATEMENT

See summary accompanying Descriptive Report (page 6)

A Comparison Print (ozalid) showing the differences referred to in Items 62, 64 and 65 is enclosed with the original \* of this Report. The flight lines of the color photographs are shown on the Comparison Print in brown.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Reg. No. 2636; 1:10,000; 1903 Puerto Rican Datum  
" " 2871; 1:20,000; 1907 " " "

The Comparison Print shows areas of this map covered by these Registered Surveys. FILED IN TUBE WITH MAP

(a) There are differences of up to 80 meters, at Punta Goleta, latitude  $18^{\circ}09'.5$ , longitude  $65^{\circ}21'.4$ .

(b) The major differences with Reg. No. 2871 are:

The size and shape of Isla Yallis, at latitude  $18^{\circ}09'.0$ , longitude  $65^{\circ}18'.55$ .

The small islet in Bahia Salina Del Sur at latitude  $18^{\circ}08'.17$ , longitude  $65^{\circ}18'.34$ , is shown as a small peninsula on the 1907 survey.

The islet, Cayo Jalovita, at latitude  $18^{\circ}07'.1$ , longitude  $65^{\circ}21'.3$ , is now only a "rock awash".

The position of Punta Conejo, latitude  $18^{\circ}06'.62$  longitude  $65^{\circ}22.5$  is about 30 meters east of the 1907 position.

There are differences in the size and shape of the small island Roca Alcatraz, latitude  $18^{\circ}07'.5$ , longitude  $65^{\circ}18'.1$ ; and the island a half mile west of it.



(c) There are some changes in the "fast" shoreline of Isla de Vieques which are not excessive; and some understandable 100 meter changes in the mangrove shoreline bordering of Ensenada Honda on the south coast.

T-12168 supersedes the listed prior surveys for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Island of Vieques; U.S.G.S.; 1:30,000; 1943 revised 1949.

The comparison is generally good.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

NOTE: SEE  
ADDENDUM, PAGE  
19

Boat Sheet WH-20-1-66A; 1:20,000, 1966  
" " " " B: " "

The area covered by these boat sheets, and along the north coast of the island, is shown on the Comparison Print.

The Comparison Print shows some bare rocks, rocks awash, submerged rocks and ledges that are not on the boat sheet. They are on T-12168, having been noted by the field editor.

There are no contemporary hydro surveys of the south coast or of the east tip of the island.

65. COMPARISON WITH NAUTICAL CHARTS

Chart 904; 1:100,000; 11th Edition December 28, 1964.

The chart differences are shown on the Comparison Print in red:

A now non-existent island at latitude  $18^{\circ}09'.15$ , longitude  $65^{\circ}18'.35$ .

A rock awash at latitude  $18^{\circ}07'.25$ , longitude  $65^{\circ}21'.6$ ; and four near latitude  $18^{\circ}08'$ , longitude  $65^{\circ}16'.2$  were not visible on the photographs and were not noted by the field edit.

Many of the submerged rocks from chart 904 fall within the reefs shown on T-12168.



Differences in the shoreline may very well be due to the 5X enlargement needed to bring the chart to the scale of T-12168.

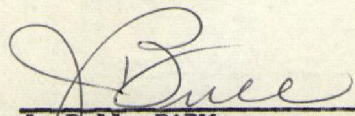
Color photographs 62-S-609 thru 620, and 62-S-666 thru 682 were used for reef, rocks, etc. delineation and, also for study during the final comparison.

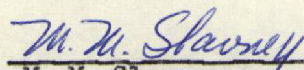
66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

No accuracy tests were run in the field. The map meets the National Standards of Map Accuracy and Bureau requirements.

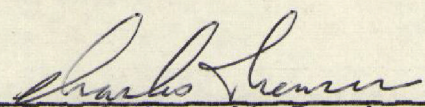
Approved by:

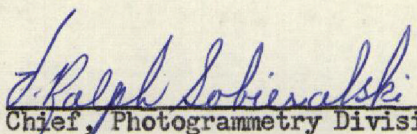
Reviewed by:

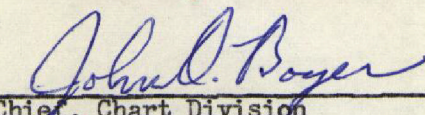
  
J. Bull, RADM  
Director, Atlantic Marine Center

  
M. M. Slavney

Approved by:

  
Chief, Cartographic Branch  
Photogrammetric

  
Chief, Photogrammetry Division  
12-07-67

  
Chief, Chart Division  
Marine

Chief, Operations Division



NOTES TO VERIFIER  
T-12168 Project 21023(Ph-5909)  
BOAT SHEET NO. WH-20-1-66 A&B

Please note Items 62, 64 and 65 of the Descriptive Report for T-12168 and the Comparison Print for discrepancies between T-12168 and the registered surveys, boat sheets, and the existing nautical chart.

#### 64. ADDENDUM

Reefs were compiled from office interpreted color photography. The symbols represent the off-shore limits of the features visible on the photography. The information was compiled to assist the hydrographer.

In some areas soundings plotted on contemporary hydrographic survey H-8880 are located inshore from the outer limits of the reefs as delineated on the subject photogrammetric survey.

As requested by the Hydrographic Data Branch, the reef symbols are retained on the photogrammetric survey as originally compiled to assist ~~the~~ in applying an approximate ~~mean low-water~~ <sup>reef</sup> line to the hydrographic survey for use on nautical charts.

S. S. Blankenship  
8/25/69

### RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-12168

## INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]