

12167

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-12167

LOCALITY

State Puerto Rico

General locality Isla De Vieques

Locality Puerto Real to ^{Punta} Puerto Conejo

1959-66

CHIEF OF PARTY

J.Bull, Atlantic Marine Center

LIBRARY & ARCHIVES

DATE April 1968

USCOMM-DC 37022-P66

12167

DESCRIPTIVE REPORT - DATA RECORD

T - 12167

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 and Kelsh

MANUSCRIPT SCALE (III):

1:20,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:6000 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 SEA LEVEL EXCEPT AS FOLLOWS:

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):

Port Ferro Lighthouse 2 (USGS) 1938 - 41 ✓

LAT.:

18° 05' 53.479" (1644.1m) ✓

LONG.:

65° 25' 26.392" (776.0m) ✓

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

Y = 97,136.36 ✓

X = 850,507.84 ✓

STATE

PUERTO RICO

ZONE 1

PUERTO RICO

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-12167

FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air photo compilation Date of ^{photos.} compilations April 20, 1959 and February 21, 1964		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE Nov. 18, 1965
PROJECTION AND GRIDS CHECKED BY (IV): R. S. Kornspan		DATE Nov. 18, 1965
CONTROL PLOTTED BY (III): B. Barnes		DATE January 1966
CONTROL CHECKED BY (III): A. Rauck		DATE January 1966
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): Robert B. Kelly (WSC)		DATE No date
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY J. Place and L. Neterer	DATE January 1966
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): J. Place		DATE January 1966
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): L. L. Graves		DATE February 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 SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T-12167

CAMERA (KIND OR SOURCE) (III):

"S" and "W" Cameras

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
59-S-3967	Apr. 20, 1959	09:05	1:30,000	0.1 <i>Above MLW</i>
59-S-3968	"	09:05	1:30,000	0.1 "
59-S-3969	"	09:05	1:30,000	0.1 "
59-S-3970	"	09:05	1:30,000	0.1 "
59-S-3971	"	09:06	1:30,000	0.1 "
64-W-3493	Feb. 21, 1964	10:06	1:30,000	0.2 "
64-W-3494	"	10:06	1:30,000	0.2 "
64-W-3495	"	10:06	1:30,000	0.2 "
64-W-3496	"	10:07	1:30,000	0.2 "
64-W-3497	"	10:07	1:30,000	0.2 "
64-W-3498	"	10:08	1:30,000	0.2 "

TIDE (III) Predicted

		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:	Puerto Ferro, Isla De Vieques	.60	.6	Diurnal 0.8
Atlantic Marine Center WASHINGTON FIELD REVIEW BY (IV): <i>M.M. SLAVNEY</i>		DATE: <i>Jan. 1967</i>		
PROOF EDIT BY (IV):		DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):	RECOVERED: 6	IDENTIFIED: 6		
NUMBER OF BM(S) SEARCHED FOR (II): None	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

Along Shore Area for Hydro	February 1966	Superseded
Field Edit Applied Manuscript Complete	June 1966	<i>Superseded</i>
<i>Some additions & revisions during final review</i>	<i>JAN. 1967</i>	

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12167

Shoreline manuscript T-12167 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. 12167 PROJECT NO. PH. 5909 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION		N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)	FORWARD	(BACK)	FORWARD	(BACK)	FORWARD	(BACK)
COMPANA (USGS) 1938 - 41	G.P. pg.176	P.R.	18° 09' 23.229"	714.1	(1130.45)	✓					
			65° 23' 41.838"	1229.7	(533.82)	✓					
PORT MULAS NO. 3 (USGS) 1938 - 41	G.P. pg.178	"	18° 08' 23.526"	723.3	(1121.3)	✓					
			65° 29' 06.311"	185.5	(1578.7)	✓					
PEREZ (USGS) 1938 - 41	G.P. pg.177	"	18° 06' 20.989"	645.3	(1199.3)	✓					
			65° 29' 55.543"	1633.0	(131.04)	✓					
POINT NEGRO(USGS) 1938 - 41	G.P. pg.177	"	18° 05' 21.497"	660.9	(1183.7)	✓					
			65° 27' 15.740"	462.8	(1301.4)	✓					
PORT MULAS LIGHT- HOUSE(POINT MULAS) 1900	G.P. pg.38	"	18° 09' 23.137"	711.3	(1133.3)	✓					
			65° 26' 38.992"	1146.1	(617.47)	✓					
LIGHTHOUSE NO.2 (USGS)Port Ferro 1938 - 41	G.P. pg.176	"	18° 05' 53.479"	1644.10	(200.5)	✓					
			65° 25' 26.392"	775.98	(988.15)	✓					
CABALLO BLANCO MIDDLE 1901	G.P. pg.49	"	18° 10' 25.736"	791.2	(1053.4)	✓					
			65° 28' 04.462"	131.1	(1632.2)	✓					
DESTINO (USGS) 1938 - 41	G.P. pg.176	"	18° 07' 49.308"	1515.9	(328.7)	✓					
			65° 26' 29.267"	860.3	(903.5)	✓					
SONADORA (USGS) 1938 - 41	G.P. pg.177	"	18° 08' 22.743"	699.2	(1145.4)	✓					
			65° 25' 44.708"	1314.2	(449.6)	✓					
PORT MULAS NO.1 (USGS) 1938 - 41	G.P. pg.179	"	18° 07' 29.034"	892.6	(952.0)	✓					
			65° 29' 22.680"	666.7	(1097.2)	✓					
LE BRUN, STACK 1900	G.P. pg.53	"	18° 07' 49.087"	1509.1	(335.5)	✓					
			65° 29' 57.333"	1685.4	(78.4)	✓					
		"	18° 09' 21.760"	669.0	(1175.6)	✓					
			65° 26' 00.626"	18.4	(1745.1)	✓					

MAP T. 12167.....

PROJECT NO. PH-5909

SCALE OF MAP:

1:20,000

SCALE FACTOR

[illegible]

1 FT. = .3048006 METER

COMPUTED BY:

DATE _____

CHECKED BY:

DATE _____

M-2388.12

9

10

COMPILATION REPORT
T-12167

Aerotriangulation report is submitted with T-12166.

31. DELINEATION

The Kelsh and Wild B-8 plotters were used.

There was no field inspection.

Color photography was used for a comparison of alongshore areas and as an aid to delineate rocks and other offshore features. Reefs in the northwest section of the sheet were compiled graphically from color photography as there was no photo coverage with panchromatic photography of this area.

32. CONTROL

See Aerotriangulation Report submitted with T-12166.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

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

36. OFFSHORE DETAILS

See items 31 and 49.

37. LANDMARKS AND AIDS

3 Aids to Navigation have been submitted on Form 567.
1 Landmark has been submitted on Form 567.

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Satisfactory junctions were made with T-12166 to the west and T-12168 to the east. The Caribbean Sea is to the south and Pasaje De Vieques is to the north.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

A comparison was made with USGS 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 940, Pasaje De Vieques and Radas Roads, scale 1:25,000 and Chart 904, Virgin Passage and Sonda De Vieques, scale 1:100,000.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

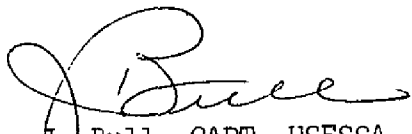
None

ITEMS TO BE CARRIED FORWARD

None.


L. L. Graves
Cartographic Tech.

Approved and Forwarded:


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

48. GEOGRAPHIC NAME LIST

*** ARRECIFE CORONA

*** ARRECIFE MOSQUITO

BAHIA CORCHO ✓

BAHIA DE LA CHIVA ✓

BAHIA DE MULAS ✓

BAHIA TAPON ✓

BAJO COMANDANTE ✓

** BAJO MERAIL ✓

*** CABALLO BLANCO

CABELLOS COLORADOS ✓

* CARIBBEAN SEA ✓

CAYO CHIVA ✓

CAYO DE TIERRA ✓

CAYO REAL ✓

* CERRO BONE)

CERRO CARACAS)

* CERRO COMACHO)

CERRO PLAYVELA)

Hills or Mountains

Feature not delineated - name not used

** ENSENADA CLAQUE ✓

ENSENADA SUN BAY ✓

ESPERANZA ✓

ISABEL SEGUNDA ✓

ISLA CHIVA ✓

ISLA DE VIEQUES ✓

LAGUNA YANUEL ✓

- PLAYA GRANDE ✓
PUERTO FERRO ✓
PUERTO MOSQUITO ✓
PUERTO REAL ✓
PUNTA CAMPANILLA ✓
PUNTA CONEJO ✓
PUNTA MARTINEAU ✓
PUNTA MULAS ✓
PUNTA NEGRA ✓
QUEBRADA COFI ✓
* QUEBRADA COFRESI ✓
QUEBRADA HUECA ✓
QUEBRADA LA MINA ✓
QUEBRADA LA PERLA ✓
QUEBRADA MARUNGUEY ✓
QUEBRADA URBANO ✓
* ~~Santa Maria~~ ✓
* SONDA DE VIEQUES ✓
- * NOT ON GEOGRAPHIC NAME LIST BUT ON GEOGRAPHIC
NAME SHEET
- ** ON GEOGRAPHIC NAME LIST BUT NOT ON GEOGRAPHIC
NAME SHEET ON ~~CHART~~ QUAD. (On Chart 940)

*** Beyond limits of Photographic coverage

GEOGRAPHIC NAMES

FINAL NAMES LIST

PH-5909
T-12167

*Arrecife Corona

*Arrecife Mosquito

Bahia Corcho

Bahia de la Chiva

Bahia de Mulas

Bahia Tapon

On Chart 940, not on -----
Geographic Name Quad. (Feature
is a reef and is delineated at
18°09.1' 65°29.45') and name
is used)

Bajo Comandante

Bajo Merail

Barriada Monte Santo

Caballo Blanco

Cabellos Colorados

Not found on -----
Geographic Name Quad. CARIBBEAN SEA (on Geographic Name Sheet)
Cayo Chiva

Cayo de Tierra

Cayo Real

** Cerro Caracas

** Cerro Martinea

** Cerro Playuela

** Cerro Sonadora

** Colonia Lujan (Pol. Subd.)

** Colonia Puerto Real (Pol. Subd.)

** Destino (Village)

On Chart 940 not in ----- Ensenada Claque
Geographic Name Quad.,
name is used.

Ensenada Sun Bay

Esperanza

Isabel Segunda

Isla Chiva

Isla de Vieques

Laguna Yanuel

** Moscou (Village)

Playa Grande

** Proyecto Barracon (Pol. Subd.)

Puerto Ferro

Puerto Mosquito

Puerto Real

Punta Cabellos Colorados (On Chart 904, not on
Geographic Name Quad.,
point is not prominent, so
name was not used.)

Punta Campanilla

Punta Conejo

Punta Martineau

Punta Mulas

Punta Negra

Quebrada Cofi

Quebrada Cofresi (On Geographic Name Quad) name used.

Quebrada Hueca

Quebrada La Mina

Quebrada La Perla

Quebrada Marunguey

** Quebrada Pilon (Outside delineation limits.)

Quebrada Urbano

Santa Maria

Sonda De Vieques (On Geographic Name Sheet and nautical chart)

Approved by:

A. J. Wraight

A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Frank Pickett
Cartographic Technician

* Beyond limits of photographic coverage

** Feature not delineated

T-1216~~7~~

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.

PHOTOGRAMMETRIC OFFICE REVIEW
T-10363

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 XX
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 LLG	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 LLG	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 LLG	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 ADVISED
TO BE DELIVERED

STRIKE OUT TWO

October 20, 1966

Atlantic Marine Center

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

The positions given have been checked after listing by

L. L. Grave

~~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 provided for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TANNATZ, SICHOS AND METERS

NONTECHNICAL AIDS OR LANDMARKS FOR CHARTS

STRIKE OUT TWO

October 12, 1966

Atlantic Marine Center

I recommend that the following objects which have (~~have not~~) been inspected from seaward to determine their value as landmarks be charted on (~~deleted 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 *non/losing 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 for individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

USCOMM-DC 16294-P01

FIELD EDIT REPORT

T-12167

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

18.

REVIEW REPORT T-12167
SHORELINE
January 1967

61. GENERAL STATEMENT

See summary accompanying Descriptive Report (page 6)

*
See below A Comparison Print (ozalid) showing the differences noted in Items 62, 64 and 65 is enclosed with the original of this report. The flight lines of the color photography are shown on this print in brown.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Registry No.	2587;	1:10,000;	1902;	Puerto Rican Datum
"	"	2635;	1:10,000;	1903; " " "
"	"	2636;	1:10,000;	1903; " " "
"	"	2804;	1:20,000;	1906; " " "
"	"	2871;	1:20,000;	1907; " " "

The Comparison Print shows the areas of this map covered by the Registered Surveys.

(a) Surveys 2635 and 2636, the north coast of Isla De Vieques from Punta Mulas to the east limits of this map, have the shoreline about 100 meters north of its position on this map. The old surveys have two triangulation stations used on T-12167 in the same position, which seems to preclude datum discrepancies. It is noted that Chart 904 has this shoreline in agreement with T-12167 but uses the position of the foul limits from 2635 and 2636.

(b) Surveys 2587, 2804 and 2871 show minor shoreline differences. The largest being the delineation of Isla Chiva (Lat. $18^{\circ}06'.6$, long. $65^{\circ}23'$) on 2871; and the mangrove areas of Bahia Tapon (lat. $18^{\circ}06'.8$, long $65^{\circ}24'.5$) and Puerto Ferro (lat. $18^{\circ}06'.8$, long. $65^{\circ}25'.6$)

(c) Surveys 2635, 2636 and 2871 show numerous foul areas not noted by the field editor, they are not on the Comparison Print because they coincide with many of the sunken rocks from Charts 904 and 940; see Item 65, paragraph (a) and (d).

(d) Survey 2871 shows two rocks awash at latitude $18^{\circ}05'.4$, longitude $65^{\circ}26'.7$; these are probably the same rocks

* filed in tube with map

compiled just to the north on this manuscript. The field editor noted the one rock awash and no mention is made of any further offshore. The discrepancies in the mangrove shoreline in Puerto Ferro at longitude $66^{\circ}25'.5$, on the south coast, are not surprising.

Color photographs used were 62-S-619 thru 626, 62-S-647 thru 666, and 62-S-9989 thru 0000.

T-12167 supersedes these registered surveys for nautical chart construction. Please note the hydrographic data in in paragraphs (c) and (d).

63. COMPARISON WITH MAPS OF OTHER AGENCIES

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

Agreement is quite good. There are differences in the shoreline of the north coast west of Isabel Segunda of 35 meters; and on the south coast in the mangrove coastline of Bahia Tarpon of 70 meters.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

NOTE: REFER TO
ADDENDUM ON
PAGE 22

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

(a) This hydrographic survey is for the north coast of the island; there is no contemporary survey for the south coast.

(b) The boat sheet shoreline was from T-12167 Advance Compilation. Rocks on the boat sheet coincide with those on the compilation.

(c) It is noted that the Boat Sheet showed few soundings inside the 6 ft. area and, therefore, no check was provided for much of the reef delineation on T-12167.

(d) A "rock awash" on T-12167 at latitude $18^{\circ}09'.75$, longitude $66^{\circ}22'.93$, is not on the boat sheet; it was corroborated by the field edit.

(e) A "rock awash" at latitude $18^{\circ}09'.8$, longitude $66^{\circ}23'.23$, on the boat sheet was from the Advance Manuscript of T-12167. The field editor noted it "no rock here", therefore, it is not shown on the final manuscript.

65. COMPARISON WITH NAUTICAL CHARTS

Chart 940; 1:25,000; 3rd Edition July 25, 1966, corrected to Notice to Mariners No. 40 of October 1, 1966.

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

The Comparison Print shows the areas in which the two charts were used. Chart 940 eastern limits are at $65^{\circ}26'20''$; from which line chart 904 was used. Chart 904, at much smaller scale, covers the entire island.

(a) The shoreline of Chart 940 is in good agreement with T-12167. The sunken rocks on the chart were not verified by the field editor or the hydro party, and may have been carried over from the old registered surveys. Please see paragraph (c) of Item 62 of this report. Many of the sunken rocks fall within area delineated as "reefs" from the color photographs.

(b) Esperanza Wharf Light, 1964 (privately maintained) latitude $18^{\circ}05'.7$, longitude $65^{\circ}28'.3$ is about 20 meters north of its position on Chart 940.

(c) Chart 904 is the only coverage east of $62^{\circ}26'20''$. Its scale, 1:100,000, requires a 5X enlargement for comparison with T-12167; consequently, apparent shifts of 100 meters along the south coast are not as serious as they appear.

(d) The comparison print shows numerous submerged rocks from Chart 904 that were not visible on the photographs and were not noted by the field edit. Many of these fall within the reefs delineated from the color photographs.

(e) The name "Punta Cabellos Colorados" on Chart 904 was not shown on the Geographic Name List. Which point the name refers to is doubtful, and the area is named Cabellos Colorados.

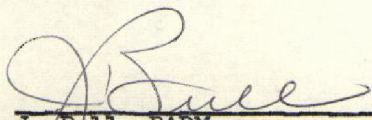
(f) Chart 904 shows two "rocks awash" at latitude $18^{\circ}05'.4$ longitude $65^{\circ}26'.7$; these are discussed in Item 62, paragraph (d).

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

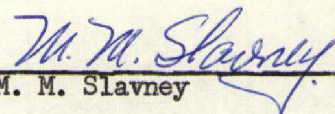
No accuracy test were run in the field. The map meets the National Standards of Map Accuracy and Bureau requirements.

Approved by:

Reviewed by:

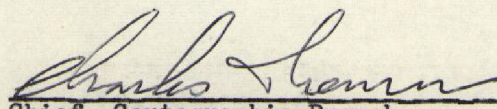


J. Ball, RADM
Director, Atlantic Marine Center

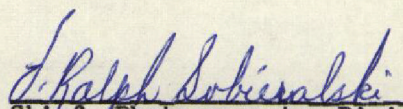


M. M. Slavney

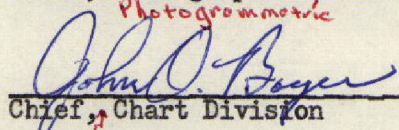
Approved by:



Chief, Cartographic Branch
SGD
Photogrammetric



Chief, Photogrammetry Division
12-07-67



Chief, Chart Division
Marine

Chief, Operations Division

NOTES TO VERIFIER
T-12167 Project 21023(Ph-5909)
BOAT SHEET No. WH-20-1-66A

Note Items 62, 64 and 65 of the Descriptive Report for T-12167; and the Comparison Print for discrepancies between T-12167 and Boat Sheet WH-20-1-66A, the registered surveys, and nautical charts 904 and 940.

64. Addendum

Reefs were compiled from office interpreted color photography. The symbols represent the offshore limit 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 in applying an approximate ~~MLW~~ ^{Reef} Line to the hydrographic survey for use on nautical charts.

A. H. Blankenship
8/25/67

