

11890

Diag. Cht. No. 903.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey SHORELINE (Photogrammetric)

Field No. Ph-6403 Office No. T-11890

LOCALITY

State Puerto Rico

General locality San Juan to Loiza Aldea

Locality Punta Las Marias

19 64-66

CHIEF OF PARTY

J. Bull, Atlantic Marine Center

LIBRARY & ARCHIVES

DATE Sept. 8, 1967

USCOMM-DC 5087

11890

DESCRIPTIVE REPORT - DATA RECORD

T - 11890

PROJECT NO. (II):
JOB PH-6403

FIELD OFFICE (III):
Atlantic Marine Center

CHIEF OF PARTY:
J. Bull, Director, Atlantic Marine Center

PHOTOGRAMMETRIC OFFICE (III):
Atlantic Marine Center

OFFICER-IN-CHARGE:
J. Bull, Director, Atlantic Marine Center

INSTRUCTIONS DATED (II) (III):
September 22, 1964
November 17, 1964

METHOD OF COMPILATION (III):
Kelsh

MANUSCRIPT SCALE (III):
1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:6,000 pantographed to 1:10,000

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): MHW
~~MEXICOCENTRE~~ 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):
PUERTO RICO INTERNATIONAL AIRPORT ARP, 1962 ✓

LAT.: 18°26'48".047(1,477.2m) ✓

LONG.: 66°00'07".352(215.7m) ✓

ADJUSTED
 UNADJUSTED

PLANE COORDINATES (IV):
= 222,888.15 ft. ✓ x = 649,475.31 ft. ✓

STATE: Puerto Rico ✓

ZONE: 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.

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (III): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Date of photographs February 17, 1964 Air Photo Compilation Date of Photography February 17, 1964		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE November 1964
PROJECTION AND GRIDS CHECKED BY (IV): P. Hawkins		DATE November 1964
CONTROL PLOTTED BY (III): K. Boyle		DATE November 1964
CONTROL CHECKED BY (III): H. Cordell		DATE November 1964
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): G. M. Ball		DATE December 1964
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY B. Wilson	DATE September 1965
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): B. Wilson		DATE October 1965
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): R. J. Pate		DATE December 1965
REMARKS: Field Edit R. S. Tibbetts April 1966		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

W camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
64-W-3199	Feb.17, 1964	1515	1:30,000	0.2 above MLW
3200	"	"	"	"
3201	"	"	"	"

TIDE (III) Predicted

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: SAN JUAN, PUERTO RICO		1.1	1.4
COORDINATE STATION:			
SUBORDINATE STATION:			

Atlantic Marine Center
WASHINGTON OFFICE REVIEW BY (IV):

M.M. SLAVNEY

DATE:

FEB. 1967

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

IDENTIFIED:

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:

T-11890

COMPILATION RECORD

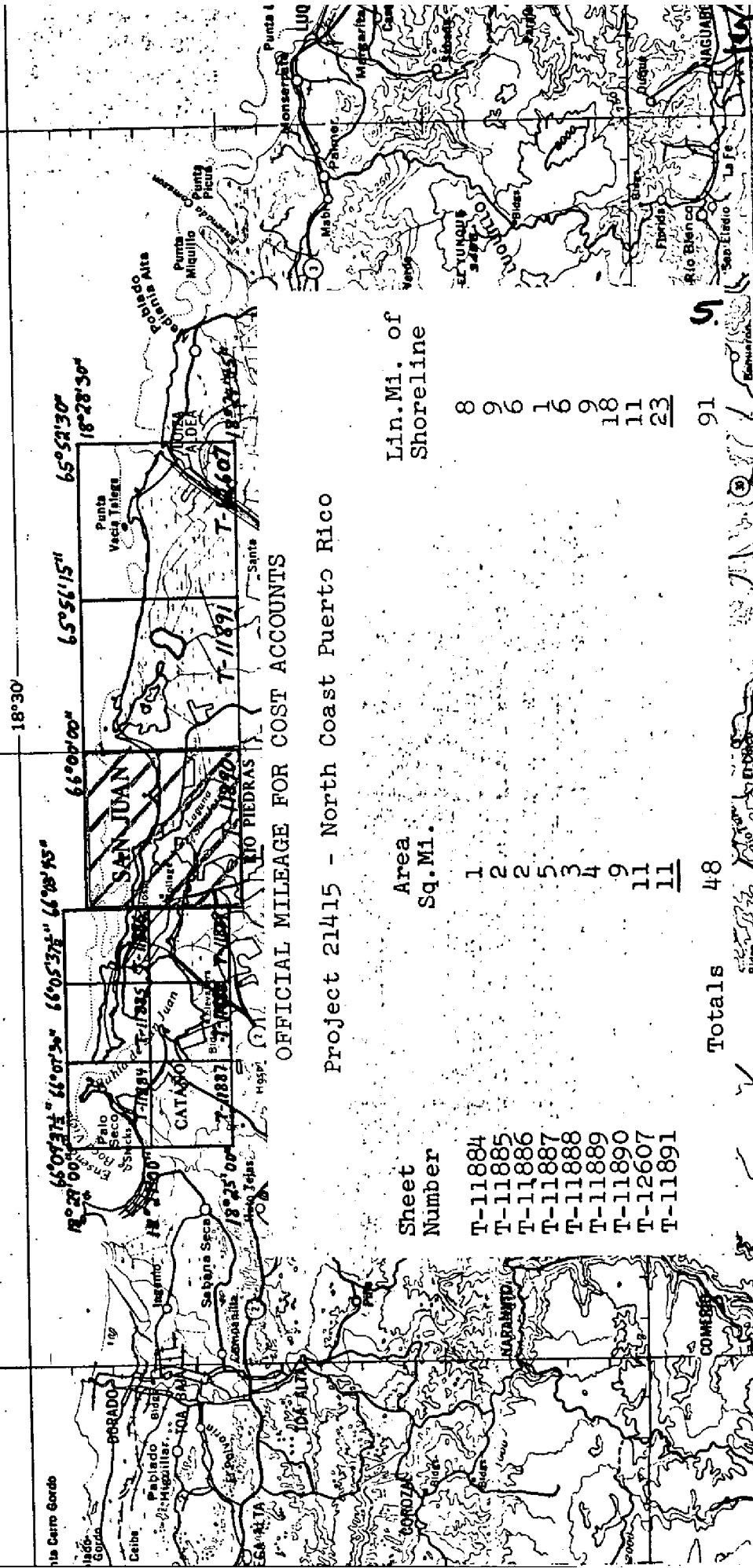
COMPLETION DATE

REMARKS

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore detail for hydro	Jan. 1966	
Field Edit applied Manuscript complete	June 1966	

T I C O C L A

PROJECT 21415
SHORELINE MAPPING
PUERTO RICO
SAN JUAN TO LOIZA ALDEA
1:5,000 & 1:10,000 SCALES



OFFICIAL MILEAGE FOR COST ACCOUNTS

Project 21415 - North Coast Puerto Rico

Lin. Mi. of Shoreline

Area Sq. Mi.

Sheet Number	Area Sq. Mi.	Lin. Mi. of Shoreline
T-11884	1	8
T-11885	2	9
T-11886	2	6
T-11887	5	7
T-11888	3	6
T-11889	4	9
T-11890	9	18
T-12607	11	11
T-11891	11	23
Totals	48	91

91

48

Totals

6.

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-11890

Shoreline manuscript T-11890 is one of three 1:10,000 scale maps in Ph-6403 (San Juan to Loiza Aldea, Puerto Rico, which also contains six 1:5000 scale maps. The sketch on page 5 of this report shows the position of this manuscript in the project.

This is a stereo-instrument project in advance of hydrographic surveys of the area. 1:30,000 scale panchromatic photographs and 1:10,000 scale color photographs were taken with the "W" camera for the 1:10,000 scale maps. 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 1:10,000 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 3 minutes, 45 seconds in latitude, and 3 minutes 45 seconds in longitude. The smooth manuscript was on cronaflex for registry and record after final review.

FIELD INSPECTION REPORT

There was no Field Inspection prior to compilation.

MAP T-11890 PROJECT NO. 21415 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
				FORWARD	(BACK)		FORWARD	(BACK)	
SAGREDO CORAZON, SPIRE (USGS), 1934	G.P. 132	Puerto Rico	18° 26' 40.310	1239.3	(605.3) ✓				
			66° 03' 33.401	980.1	(780.5) ✓				
CUMBRE, FLAG (USGS), 1939	G.P. 150	"	18° 25' 54.430	1673.4	✓				
			66° 02' 24.080	706.7	✓				
AIRPORT BEACON, PUERTO RICO INTERNATIONAL AIRPORT, SAN JUAN, 1962	G.P. 183	"	18° 26' 28.130	864.8	✓				
			66° 00' 19.328	567.2	✓				
Puerto Rico INTERNATIONAL AIRPORT CONTROL TOWER, G.P. 183 FLAGPOLE, 1962	"	"	18° 26' 28.035	861.9	✓				
			66° 00' 19.326	567.1	✓				
PUERTO RICO INTERNATIONAL AIRPORT AP STA A, 1962	G.P. 183	"	18° 26' 28.449	874.6	✓				
			66° 00' 55.700	1634.5	✓				
PUERTO RICO INTERNATIONAL AIRPORT ARP, 1962	G.P. 183	"	18° 26' 48.047	1477.2	✓				
			66° 00' 07.352	215.7	✓				
ROIG, 1964	Photo-stay Bridge	"	y= 224,858.84	✓					
			x= 635,993.57	✓					

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Supplement to
Photogrammetric Plot Report
Project 21415
Puerto Rico
December 1964

21. Area Covered

This report covers an area of the northern coast of Puerto Rico, east of $66^{\circ} 03' 45''$, from Punta Las Marias to Punta Uvero.

22. Methods

Analytic aerotriangulation methods were used; to obtain instrument values ($x-y-z^B$) for two field reidentified and one office identified control stations. The attached sketch shows both field and office identified control used in the adjustment of this final portion of strip #1. Closures to control have been tabulated, as have the junctions to control used previously to adjust strip #1, west of $66^{\circ} 03' 45''$.

23. Adequacy of Control

Horizontal control as reidentified and required is adequate. The three sheets (T-11890, T-11891 and T-12607) can now be compiled to meet National Standards of Map Accuracy.

24. Supplemental Data

None

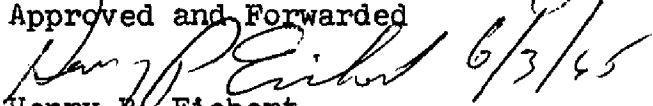
25. Photography

As stated in the prior report photography is adequate in all aspects.

Respectfully submitted:


George M. Ball

Approved and Forwarded

 6/3/65
Henry P. Eichert
Acting Chief, Aerotriangulation Section

Puerto Rico Strip #1

UVERO, 1964

SS #2 {+0.6 -0.7}
SS #3 {-8.5 +2.1}

TELEGAS RM #1, 1964
(+2.2 +2.5)

CANGREJO, 1964

SS #1 {+12.7 +5.0} Questionable Pt.
SS #3 {-2.3 --1.2}
SS #4 {+3.0 +6.7}

AIRPORT BEACON, INTL. AIRPORT, 1962 (office identified)
(-3.2 -4.5)

ROIG, 1964

SS #1 {+3.7 +3.8} 1st run {0.9 +0.3}
SS #2 {-2.2 +2.5} {6.7 -0.6}

SHERATON, 1964

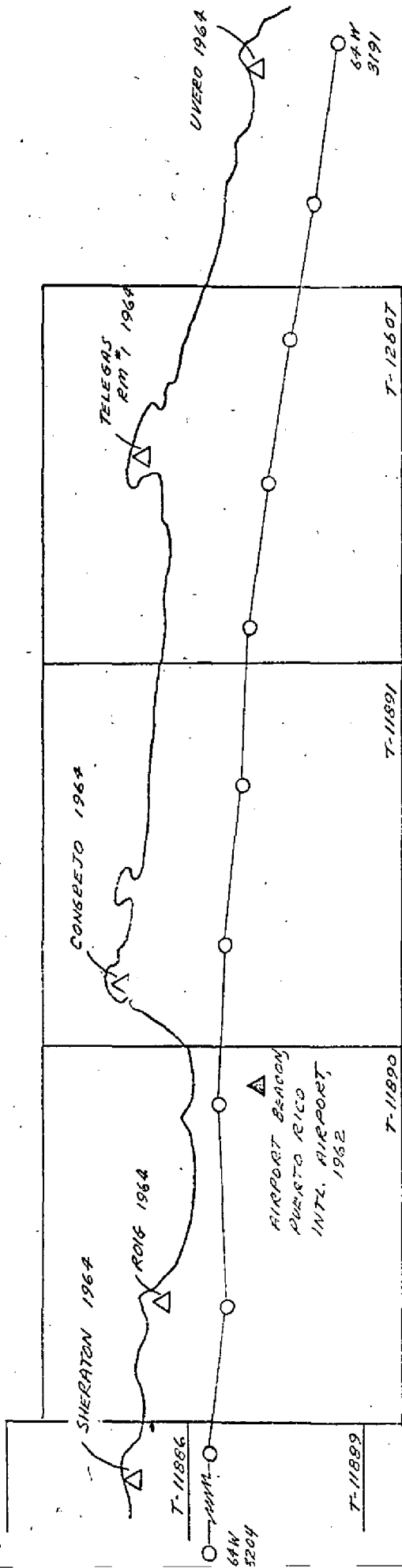
SS #1 {+5.3 -1.0} 1st Run { -0.3 +4.0}
SS #2 {+1.8 +3.1} {-3.3 -0.1}

POWER HOUSE STACK, 1939 (office identified)
(-2.5 -5.4) 1st run {4.4 -3.7}

PIER, PAA, 1961

(SS #1 {-1.4 -3.9} {-3.5 -0.9}
SS #2 {-2.1 -2.3} {4.2 +0.0}

PUERTO RICO SKETCH



TRIANGULATION

△ FIELD IDENTIFIED

○ OFFICE IDENTIFIED

○ 1:30,000 SCALE

COMPILATION REPORT
T-11890

The Photogrammetric Plot Report is submitted with this report.

31. DELINEATION

Compilation was done by the Kelsh plotter. Color photography was used as an aid in delineation of rocks and other offshore features. Photography was satisfactory.

There was no field inspection.

32. CONTROL

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

There was no shoreline inspection.

Foul areas, breakers, and coral, were delineated from office interpretation of the photographs.

No low water line was shown.

36. OFFSHORE DETAILS

See Item 49.

37. LANDMARKS AND AIDS

These are to be ascertained during the hydrographic survey.

38. CONTROL FOR FUTURE SURVEY

None.

39. JUNCTIONS

Junctions are in agreement with T-11891 to the east and T-11899 (1:5,000 scale) to the west. The Atlantic Ocean is to the north. There is no contemporary survey to the south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle SAN JUAN, P. R., scale 1:20,000 dated 1957.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart No. 903, scale 1:100,000, 6th edition, March 16, 1964.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.



R. E. Smith
Cartographer

Approved and forwarded:



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

48. GEOGRAPHIC NAME LIST

ATLANTIC OCEAN *

ISLA PIEDRA

ISLA VERDE^E

LLORENS TORRES

LAGUNA LOS COROZOS

OCEAN PARK

PTA EL MEDIO

PTA EL MARIAS

PUERTO RICO INTERNATIONAL AIRPORT *

SAN JUAN

SANTA TERSITA

VILLA MAR

* Not on name list of A. J. Wraight

GEOGRAPHIC NAMES
Ph 21415 Puerto Rico

Atlantic Ocean

T-11890 (shoreline)

* Buena Vista	** Municipio de Carolina
* Cangrejo Arriba	** Municipio de San Juan
* Cano de Martin Pena	* Obrero
* Cantera	Ocean Park
* Hato Rey Central	* Oriente
* Huyke	Pta El Medio
* Isla Guachinanga	Pta Las Marias
Isla Piedra	* Quebrada Juan Mendez
Isla Verda ²	* Quebrada San Anton
* Laguna San Jose	San Juan
* Las Casas	* San Jose
Llorens Torres	Santa Teresita
* Los Angeles	* Santurce
* Martin Pina	* Valencia
* Monte Flores	Villa Mar
Laguna Los Corozos	* Sabana Abajo

A. J. Wraight
A. J. Wraight
Geographic Names

* OUTSIDE DELINEATION LIMITS.
** FEATURE NOT DELINEATED, NAME NOT USED.

T-11890

49. NOTES FOR THE HYDROGRAPHER

Refer to project instructions dated Sept. 22, 1964. See paragraph No. 6.02 regarding landmarks and aids. See items noted on discrepancy print.

PHOTOGRAMMETRIC OFFICE REVIEW

Tx10363 T-11890

1. PROJECTION AND GRIDS RJP		2. TITLE RJP		3. MANUSCRIPT NUMBERS RJP		4. MANUSCRIPT SIZE RJP	
CONTROL STATIONS							
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP			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 RJP		13. LOW-WATER LINE XX		14. ROCKS, SHOALS, ETC. RJP		15. BRIDGES XX	
16. AIDS TO NAVIGATION XX		17. LANDMARKS XX		18. OTHER ALONGSHORE PHYSICAL FEATURES RJP		19. OTHER ALONGSHORE CULTURAL FEATURES RJP	
PHYSICAL FEATURES							
20. WATER FEATURES RJP			21. NATURAL GROUND COVER RJP			22. PLANETABLE CONTOURS XX	
23. STEREOSCOPIC INSTRUMENT CONTOURS XX		24. CONTOURS IN GENERAL XX		25. SPOT ELEVATIONS XX		26. OTHER PHYSICAL FEATURES RJP	
CULTURAL FEATURES							
27. ROADS RJP		28. BUILDINGS RJP		29. RAILROADS XX		30. OTHER CULTURAL FEATURES RJP	
BOUNDARIES							
31. BOUNDARY LINES XX				32. PUBLIC LAND LINES XX			
MISCELLANEOUS							
33. GEOGRAPHIC NAMES RJP			34. JUNCTIONS RJP			35. LEGIBILITY OF THE MANUSCRIPT RJP	
36. DISCREPANCY OVERLAY XX		37. DESCRIPTIVE REPORT RES		38. FIELD INSPECTION PHOTOGRAPHS XX		39. FORMS RJP	
40. REVIEWER RJP <i>R.J. Pate</i>				SUPERVISOR, REVIEW SECTION OR UNIT ACR <i>Albert C. Rauch, Jr.</i>			
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 <i>Lowell O. Neter Jr.</i> LON				SUPERVISOR ACR <i>Albert C. Rauch, Jr.</i>			
43. REMARKS							

TIDE COMPUTATION

PROJECT NO. Ph-214 S T. 11890

Time and date of exposure 1515 Feb. 17, 1964 Reference station San Juan, Puerto Rico

Mean range 1.1

1.3

Date of field inspection _____ Subordinate station _____ Ratio of ranges _____

	Time		Height feet	Height x Ratio of ranges	Time	
	h.	m.			h.	m.
High tide	11	37	1.0	1.0		
Low tide	18	01	-0.4	-0.4		
Duration of rise or fall	6.24			1.4		

	h. m.		Height feet	Height x Ratio of ranges	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet	Feature bares Stage of tide above MLW Feature above MLW	feet	Photo. No.
	Time High or L. T. Required time Interval	18							
Time H. T. or L. T. Required time Interval									
Time H. T. or L. T. Required time Interval									
Time H. T. or L. T. Required time Interval									
Time H. T. or L. T. Required time Interval									
Time H. T. or L. T. Required time Interval									

Computed by A. Santillan Checked by J. A. Bayle

18' 01
11 37
6 34

TIDE COMPUTATION

3311 = 1633 h. m.
Feb. 17, 1954

PROJECT NO. Ph. 21415 T. 11890

Spring 1.3
Mean range 1.1

Reference station San Juan, Puerto Rico

Date of field inspection None Subordinate station _____ Ratio of ranges _____

High tide	Time		Height	Height x Ratio of ranges	Time	
	h.	m.			h.	m.
11 37	11	37	1.0	1.0		
Low tide	18 01		-0.4	-0.4		
Duration of rise or fall	06 34			1.4		

(Out with sheet - check when returned)

Time H. T. or L. T.	h. m.	Height or L. T.	Height x Ratio of ranges	Time H. T. or L. T.	h. m.	Photo. No.
Required time	18 01	Tabular correction	1.0	Feature bares		640 3312 (0)
Interval	16 33	Stage of tide above MLW	-0.4	Stage of tide above MLW		3313 "
	01 28	Ht. H. T. or L. T.		Feature above MLW		3314 "
		Tabular correction		Feature bares		3315 "
		Stage of tide above MLW		Stage of tide above MLW		3316 "
		Ht. H. T. or L. T.		Feature above MLW		3317 "
		Tabular correction		Feature bares		3318 "
		Stage of tide above MLW		Stage of tide above MLW		
		Ht. H. T. or L. T.		Feature bares		
		Tabular correction		Stage of tide above MLW		
		Stage of tide above MLW		Feature above MLW		
		Ht. H. T. or L. T.		Feature bares		
		Tabular correction		Stage of tide above MLW		
		Stage of tide above MLW		Feature above MLW		
		Ht. H. T. or L. T.		Feature bares		
		Tabular correction		Stage of tide above MLW		
		Stage of tide above MLW		Feature above MLW		

Computed by A. Santillana Checked by A. S. Boyd

FIELD EDIT REPORT

PROJECT Ph 6403

SAN JUAN, PUERTO RICO

- - - - -

51. The field edit on this project was accomplished from shore. No off-shore inspections by boat were made, however buildings were checked from the Ship WHITING during the trips from Vieques to San Juan. For the most part the shore line is paralleled by a road and inspection was accomplished via the road and a rented automobile.

All questions were answered as completely as possible on the discrepancy prints. In several cases the field editor was asked to verify coral limits. A light plane was rented in San Juan in an effort to comply with this request with the conclusion that only verification of the images could be made; the actual limits must wait on the hydrographic survey.

An attempt was made to photo identify Caballo Channel Front and Rear Range. When these aids could not be located by photogrammetric methods, the Commanding Officer of the WHITING determined that since they are private aids and in a poor state of repair (very close together and both were leaning) the location on previous photography in 1965 was likely adequate and if not could be located by the hydrographer. All notes on the photographs and discrepancy prints have been made in purple ink and properly cross referenced.

52. Adequacy of Compilation.

These maps are adequate for the transfer of shoreline and location of signals on hydrographic survey sheets.

53. Map accuracy.

No horizontal or vertical accuracy tests were made. The maps appear to be accurate so far as could be determined by a visual inspection.

54. Recommendations.

None.

55. Examination of Proof Copy.

No local contacts were made to examine proof copy of these maps.

Respectfully submitted:

Robert S. Tibbetts

RST/jrb

Approved and Forwarded:

James P. Randall
James P. Randall, LCDR, USESSA
Commanding USC&GS Ship WHITING

18

REVIEW REPORT T-11890
SHORELINE
February 1967

61. GENERAL STATEMENT

See summary accompanying Descriptive Report (page 6).

A Comparison Print (ozalid) showing the differences noted in Items 62 and 63 is enclosed with the original of this report. The flight lines of the color photographs are shown in brown.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

Registered Survey No. 4205; 1:20,000; 1921

The Comparison Print shows these differences:

1. Rocks awash, in the vicinity of latitude $18^{\circ}27.5'$ from longitude $66^{\circ}02.55'$ to longitude $66^{\circ}03.05'$ on this map were tentatively identified and positioned during compilation from the B & W and the color photographs. They were corroborated by the Field Editor upon request. These rocks do not appear on Survey 4205 or the previous plane-table survey of the area. Reg. No. 2581, 1:20,000, 1902, or Chart 903.
2. Shoreline changes, receding and advancing, of up to 70 meters have occurred.
3. Changes in the size and shape of Isla Piedra, latitude $18^{\circ}28.05'$ longitude $66^{\circ}02.75'$; and Isla Verde, latitude $18^{\circ}27.03'$ longitude $66^{\circ}01.04'$.
4. Survey 4205 shows a danger area, reef and sunken rocks near Pta El Medio, around Isla Verde. It is believed that the limits of this area may be more accurately defined on T-11890 than on Survey 4205. B & W photographs 64-W-3197, 3199 and 3200 and color photographs 64-W-3312 thru 3314 were used, which show the lagoon between the shoreline and the area labelled "Foul with rocks", just east and north of Pta El Medio.

- 5. The danger areas, sunken rocks, reefs, and rocks awash shown on Survey 4205, excepting those noted in paragraph 3, could not be seen on the B & W photographs as anything but breakers. Color photographs 64-W-3260 thru 3267 cover these areas but give only occasional views of the bottom and these photographs could not be fixed.
- 6. Rocks at latitude 18°28.22' longitude 66°03.36' on this map are just south of what is probably the same rock on Survey 4205.

T-11890 supersedes registered survey 4205 for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

San Juan, P. R., U.S.G.S., quad; 1:20,000; 1939-1940 revised 1957.

The planimetry of the quadrangle and this survey are in fair agreement. The hydrographic details, including danger areas, reefs, sunken rocks and rocks awash are from Chart 903, which appears to be from Reg. Survey 4205, see Item 62.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

None.

65. COMPARISON WITH NAUTICAL CHARTS

Chart 903; 1:100,000; 6th Edition, March 16, 1964.

Registered Survey 4205 (see Item 62) is apparently the source for the danger areas, reefs, sunken rocks, rocks awash and other offshore details on the chart. The same differences listed in Item 62 between Survey 4205 and T-11890 also exist between Chart 903 and T-11890.

The chart shoreline differs by as much as 80 meters which is not a surprise, considering the 10X enlargement of the chart to T-11890 scale.

No Form 567 was submitted by the field party for the aero beacon at Puerto Rico International Airport.

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
J. Bull, RADM
Director, Atlantic Marine Center

M. M. Slavney
M. M. Slavney

Approved by:

Charles Shuman
Chief, Cartographic Branch
Photogrammetric SGB

J. Ralph Sobieralski
Chief, Photogrammetry Division
02-30-67
08

Acting Wallace A. Bruster
Chief, Chart Division

Chief, Operations Division

NOTES TO VERIFIER
T-11890 Project 21415 (Ph-6403)
BOAT SHEET No. No contemporary survey in Feb. 1967

See Items 62 and 65 of the Descriptive Report and the
Comparison Print.

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-11890

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.

CHART	DATE	CARTOGRAPHER	REMARKS
903	11/29/69	B. Fernandez	Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
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