

12155

12155

12155

Form 504	
U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE
Field No.	Office No. T-12155
LOCALITY	
State	PUERTO RICO
General locality	EAST COAST
Locality	PUNTA CASCAJO TO PUNTA ALGODONES
1955 1958-1965	
CHIEF OF PARTY M. L. Olivier, Photo Party 708 V. Ralph Sobieralski, Tampa District Office	
LIBRARY & ARCHIVES	
DATE	1 JUL 1966

DESCRIPTIVE REPORT - DATA RECORD

50.

T - 12155

PROJECT NO. (II): Ph-6106 (21042)		
FIELD OFFICE (III): Puerto Rico	CHIEF OF PARTY M. L. Olivier	
PHOTOGRAMMETRIC OFFICE (III): Tampa, Florida	OFFICER-IN-CHARGE V. Ralph Sobieralski	
INSTRUCTIONS DATED (II) (III): Field & Office - Aug. 30, 1961 Amendment: " " - Jan. 15, 1962 * <i>* Interior planimetry restricted to those features useful to photo hydro support scd</i>		
METHOD OF COMPILATION (III): Kelsh plotter		
MANUSCRIPT SCALE (III): 1:5,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:3,000	
DATE RECEIVED IN WASHINGTON OFFICE (IV): APRIL 13, 1968	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):	
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III): Puerto Rico	VERTICAL DATUM (III): MHW MEAN LOW WATER 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): SOUTH 1941		
LAT: 18° 12' 12.776" (392.8m.)	LONG.: 65° 39' 03.720" (109.3m.)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): y = 135,007.53 Ft. x = 771,503.24 Ft.	STATE Puerto Rico	ZONE Lambert
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): M. L. Olivier		DATE: Dec. 1961 Date taken from CSI card
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air Photo Compilation Date of Photography Oct. 19, 1961 <i>Mar. 5, 1965</i>		
PROJECTION AND GRIDS RULED BY (IV): A. Riley		DATE Jan. 1962
PROJECTION AND GRIDS CHECKED BY (IV): I. Y. Fitzgerald		DATE Jan. 1962
CONTROL PLOTTED BY (III): V. P. Cackowski		DATE Feb. 1962
CONTROL CHECKED BY (III): R. E. Smith		DATE Feb. 1962
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): Washington		DATE Jan. 1962
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY R. E. Smith	DATE Feb. 1962
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): R. E. Smith " " Reviewed by: W. H. Shearouse		DATE Mar. 1962 Mar. 1962
SCRIBING BY (III): P. W. Leikhim " Reviewed by: R. R. Wagner		DATE May 1963 May 1963
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): W. H. Shearouse		DATE May 1963
REMARKS: FIELD EDIT BY G. F. WIRTH, SEPT. 1962		

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DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild "W" and "S"

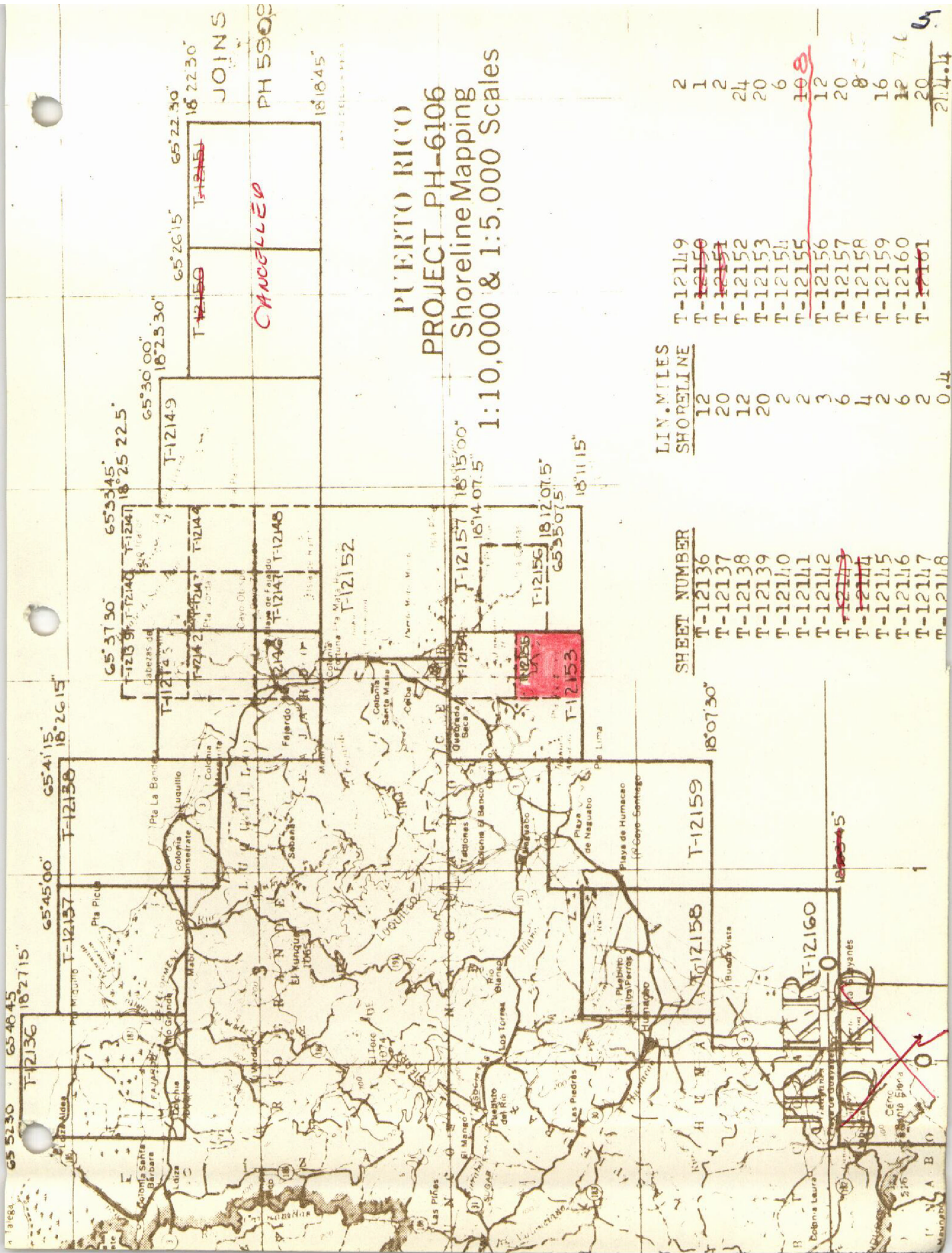
PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE *
58-S-2585 thru 2589	1958	-	1:10,000	(COLOR PHOTOS)
61-W-1559 thru 1561	10-19-61	1434	1:15,000	* DIAPPOSITIVES
61-W-1760 thru 1762	10-20-61	-	1:10,000	(COLOR PHOTOS)
65-L 1331 & 1336 & 1337	3/5/65	1521	1:15,000	" (Centers off T-12155)

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: *Chart No. 922 states 0.7 ft. range of tide			
SUBORDINATE STATION:			
SUBORDINATE STATION:			
WASHINGTON OFFICE REVIEW BY (IV): Atlantic Marine Center M. M. SLAVNEY	DATE: Sept, 1967		
PROOF EDIT BY (IV):	DATE:		
NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 4	RECOVERED: 1	IDENTIFIED: 0	
NUMBER OF BM(S) SEARCHED FOR (II): 0	RECOVERED: 0	IDENTIFIED: 0	
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):	None		
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):	None		

REMARKS:



PUERTO RICO
PROJECT PH-6106
 Shoreline Mapping
 1:10,000 & 1:5,000 Scales

JOINS
PH 5906

CANCELLED

SHEET NUMBER	LIN. MILES
T-12136	12
T-12137	20
T-12138	12
T-12139	20
T-12140	2
T-12141	2
T-12142	3
T-12143	6
T-12144	4
T-12145	2
T-12146	6
T-12147	2
T-12148	0.4

SHORELINE	LIN. MILES
T-12149	2
T-12150	1
T-12151	2
T-12152	24
T-12153	20
T-12154	6
T-12155	10.8
T-12156	12
T-12157	20
T-12158	8
T-12159	16
T-12160	12
T-12161	20
TOTAL	214.4

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6.

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12155

Shoreline manuscript T-12155 is one of eight 1:5,000 scale maps in PH-6106 (21042) Puerto Rico, which also contains sixteen 1:10,000 scale maps. The sketch on page 5 of this report shows the position of this manuscript in the project. It is noted that 1:5,000 scale maps T-12143 and T-12144, and 1:10,000 scale maps T-12150, T-12151, and T-12161 of this project are ~~in a postponed status until some future date.~~ *cancelled. m.m.s.*

This is a stereo-instrument project in advance of hydrographic surveys of the area. Field inspection was done on 1:10,000 ratio prints from 1:30,000 panchromatic photographs made with the "S" camera April 18, 1959. Compilation was done with 1:15,000 photographs made with the "W" camera on Oct. 19, 1961. Color prints at 1:10,000 taken with the "W" camera on Oct. 20, 1961 were furnished for reference. 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 1:5,000 scale were processed and provided for photo-hydro support.

Field work preceding compilation consisted of control identification and field inspection was provided for compilation. The manuscript was field edited during 1962 in conjunction with photo-hydro support.

Revision of Ensenada Honda and contiguous areas was done during final review using 1965 photographs, because extensive shoreline changes were made after the 1962 field edit. Please see Item 61 of Final Review Report, page 16.

The compilation manuscript was a vinylite sheet 1 minute, 52.5 seconds in latitude, and 1 minute, 52.5 seconds in longitude. The smooth manuscript was on cronaflex for registry and record after final review.

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FIELD INSPECTION REPORT - 7 -

2. AREAL FIELD INSPECTION

T-12139, T-12142, T-12145, T-12146, and T-12152 through T-12157,

These shoreline sheets, are located on the eastern coast of Puerto Rico. The area is undeveloped except for the village of Fajardo and the Roosevelt Roads Naval Reservation.

Field inspection was performed on photographs 59-S-3940 through 59-S-3949 and 59-S-3915 through 59-S-3923. Some difficulty of interpretation of the apparent MHWL was encountered around mangrove areas.

Three housing areas within the naval station were not field inspected. It is believed that the 1961 photographs will cover these spots. Also a small marina in Ensenada Honda was left for the 1961 photographs. A new marina, under construction, on the south side of Cayo Obispo (a small island just east of Playa de Fajardo) was left for field edit.

3. HORIZONTAL CONTROL

All Coast and Geodetic Survey control stations except four within the project limits were searched for. HOUSE, 1901; KID, 1941; MONTE, 1941; and NORTH, 1941 were not searched for because no descriptions were furnished. Only those stations as specified on the project diagram were photo-identified. One U. S. Geological Survey control station (CENTRAL FAJARDO, NORTH STACK, 1941) was recovered and photo-identified.

There were many triangulation stations that could not be recovered especially around the naval base. It is believed that much of this control was destroyed during construction of the base.

4. VERTICAL CONTROL

All tidal bench marks in the area were searched for. The one at Playa de Fajardo was recovered but the two in Ensenada Honda could not be found.

5. CONTOURS AND DRAINAGE

Contours were not a part of the work requirements for this project.

The drainage patterns can be distinguished on the photographs.

6. WOODLAND COVER

Woodland cover has been classified in accordance with the requirements for topographic maps. Wooded areas are adequately covered by the field inspection photographs.

Swamp areas were designated as mangrove. There is considerable mangrove throughout the area.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line was inspected from a small boat and by walking along the shoreline.

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The shoreline in places was visited at low water. The mean low water line is shown on the photographs in green ink.

The foreshore is steep in some places and somewhat flat in other places.

Docks, piers, wharves, etc. are adequately covered on the field inspection photographs.

One submerged cable was identified on the photographs.

8. OFFSHORE FEATURES

Some offshore rocks were visited and their heights above MHW were noted. Coral is distinguishable on the photographs.

9. LANDMARKS AND AIDS

Landmarks and aids to navigation located by photogrammetric methods are shown on the contact prints. One landmark, a tower on Pineros Island, was identified on the field inspection photographs.

All landmarks and aids to be charted or deleted are adequately covered on Form 567.

10. BOUNDARIES, MONUMENTS, AND LINES

Boundaries were excluded by the project instructions.

11. OTHER CONTROL

Existing objects suitable for photo hydro control were identified on the field inspection photographs. These are shown on the photographs by three digit numbers. Many of the landmarks and aids can be used for photo hydro control.

12. OTHER INTERIOR FEATURES

All buildings and roads have been classified in accordance with project instructions dated 30 August 1961.

13. GEOGRAPHIC NAMES

An investigation of geographic names was not required by the project instructions. It was noticed that the geographic names on the existing charts and quads of this area agree with one another and with the general opinion of the local people.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Contact photographs were forwarded to the Washington office by Letter of Transmittal No. PH-6106-3 dated 20 November 1961.

Submitted
5 December 1961

Michael L. Olivier
Michael L. Olivier
Chief, Photo-Party 70

8.

PHOTOGRAMMETRIC PLOT REPORT
PUERTO RICO, EAST COAST
PROJECT PH-6106
March, 1962

21. Area Covered:

T-12136 through T-12139; T-12141 through ^{T-12146;} T-12148; T-12152
through T-12161.

22. Method:

Five stereoplanigraph bridges were run in order to provide pass points for Kelsh compilation of the project.

Strip #4 was adjusted on a linear basis. All other strips were adjusted on a least-squares basis on the IBM 650 computer. Satisfactory adjustments were obtained for all strips in the project.

23. Adequacy of Control:

The horizontal control provided complied with project instructions, and was adequate. The following control failed to hold in bridging:

Δ PINERITA 2, 1941-SUB.PT. 2. This station had been designated as a poor image pt. at the time of bridging, and may safely be disregarded due to the proximity of other control that held in bridging.

24. Supplemental Data:

None

25. Photography:

The photography was adequate for the needs of aerotriangulation.

Submitted by:

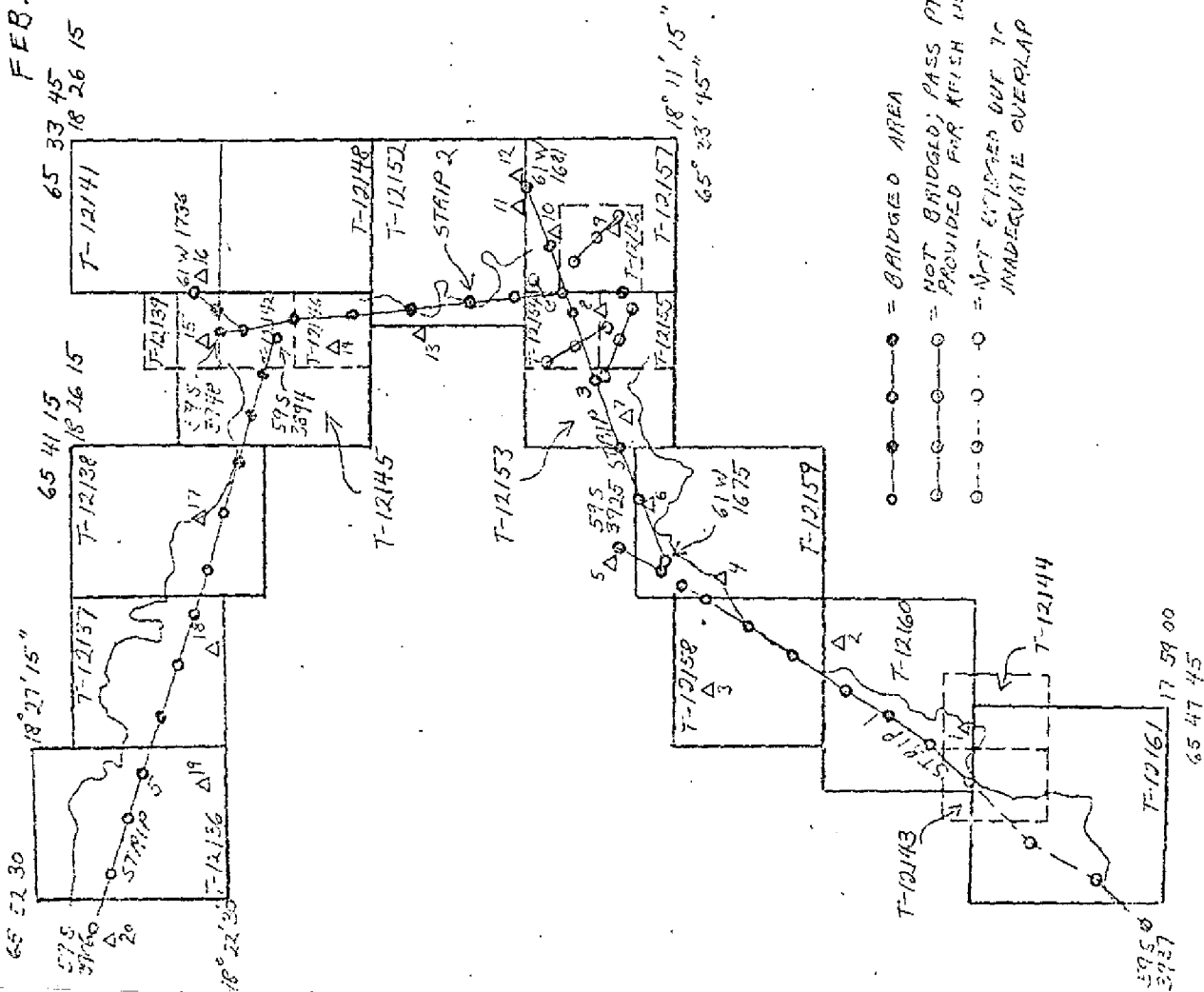
R. E. Fuechsel
R. E. Fuechsel

Approved:

E. H. Ramey
E. H. Ramey, Chief
Aerotriangulation Section

PUERTO RICO - EAST COAST PROJECT PH-6106

FEB. 1962



TRIANGULATION LIST

- | | |
|---|--|
| 1. GUAYANES 2, 1923-SUB. 1+2 | 16. CAPE SAN JUAN LIGHT-HOUSE, 1900 |
| 2. BATATA, 1901-SUB. 1+2 | 17. LUQUILLO CH. (USGS) 1934 |
| 3. PASTO VIEJO EASTERN BEAR ASSM. W.H. COM. STACK, 1941 | 18. PALMER (USGS) 1939-SUB. 1+2 |
| 4. HUMACAP PLAYA CH. (USGS) 1934 | 19. RIO GRANDE CHURCH (USGS) 1934-SUB. 1+2 |
| 5. NAGUARO CH. (USGS) 1934 | 20. SANTA INEZ, 1902-SUB. 1+2 |
| 6. COLON (USGS) 1941-SUB. 1+2 | |
| 7. LOMA 1941-SUB. 1+2 | |
| 8. HONDA 1941-SUB. 1+2 | |
| 9. CABRAS IS. LT., 1941 | |
| 10. MUNDO, 1926-SUB. 1+2 | |
| 11. PIENITA 2, 1941-SUB. 1+2 | |
| 12. CAJON DE PUERTO RT., 1923 | |
| 13. PEÑERO, 1941-SUB. 1+2 | |
| 14. CENTRAL FAJARDO NORTH STACK, 1941 | |
| 15. CAPE, 1901-SUB. 1+2 | |

~~2018.2 21982~~

Jan 29, 1962

during the bridging of strip 3, points were established to facilitate the block setting of various models ~~to~~ to compile the large-scale sheets T-12154, 12155 + 12156. These models are at scale 1:15,000, and are numbered as follows: 61 W 1559-60; 1560-61; 1566-67; 1575-76; 1576-77; 1583-~~84~~ 84; 1584-85. These models are at ~~the same scale as~~ a scale twice as large as that of the scale of the photos used in strips 2 + 3. Therefore, the models mentioned above should be used in lieu of strips 2 + 3 for the large-scale compilation.

Do not use Δ PINERITA 2, 1941-S.S. 2. This sta. had been designated as a poor image point at the time of bridging, and the number and geographic location of other control in strip 3 is such that this point may be entirely disregarded. All other control in strip 3 held very well in bridging.

Note points A, B, C, D, & E, described on back of photo 59-1921. These should be positioned first, compilation phase.

COMPILATION REPORT T-12155

PHOTOGRAMMETRIC PLOT REPORT

The stereotriangulation bridge was run in the Washington Office. No report has been received, however a "Notes on Puerto Rico - Strip 3" was received and a copy is included with this report.

31. DELINEATION

The Kelsh plotter was used in delineation. Only the shoreline and offshore details were shown. See item 35.

32. CONTROL

The stereo bridge was run from 1:30,000 scale diapositives. Control point 59320 (79403) could not be held. It appears to be misidentified. (The point on photo No. 61-W-1559 is not the same as the point on 61-W-1679 (used in the bridge); (the point has been removed from the map manuscript so as not to confuse the hydrographer). Some of the control points were rather large. They were small enough on the 1:30,000 scale photographs but on the 1:15,000 diapositives they were larger than desirable on the Kelsh plotter.

33. SUPPLEMENTAL DATA

Inapplicable.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was skimpy. With the help of the color photographs 2585-2589 and 1760-1762 and office interpretation of the photographs, it is believed that the shoreline meets the required accuracy. Shallow and mud areas were delineated from office interpretation of the photographs as was the low-water line where shown.

36. OFFSHORE DETAILS

The rocks indicated by the field inspector have been shown and their elevations checked by the Kelsh plotter. A group of rocks (approx. location Latitude 18°12'03", Longitude 65°38'51") the

COMPILATION RECORD

COMPLETION DATE

REMARKS

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore Area for Hydro	February 1962	Superseded
Alongshore Area Revised from Field Edit. Manuscript Complete	November 1962	Superseded
The Area bordering Ensenada Honda and the bay opening into it at lat. $18^{\circ} 12'.7$, long. $65^{\circ} 37'.9$ were revised from 1965 photographs during Final Review. <i>(Photo centers 65-2-183 & 1336 fall outside the map limits)</i>	October 1967	

field inspector labeled about 10 feet above mean high water checked out 7 feet above mean high water. Stereo elevations have been shown on some of the other rocks delineated. These rocks appeared black on the Kelsh, therefore it was difficult to be sure of their exact elevation, but the elevations are believed to be within a foot. From the color photographs there were other rocks, or what appeared to be rocks, but because they could not be positively identified on the Kelsh they have been enclosed with a broken line within a "rocky area".

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Junctions have been made with T-12154 to the north; T-12153 to the west; T-12157 to the east. No contemporary survey to the south (water).

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS Quadrangle NAGUABO, P.R., scale 1:20,000, made from aerial photographs taken in 1941, revised 1957. The shoreline is in fair agreement but there are many more rocks than are shown on the quadrangle.

Comparison was also made with U. S. Navy Hydrographic Office Topographic Map NAVAL STATION - ROOSEVELT ROADS, scale 1 inch = 400 feet, compiled from aerial photographs in 1959. No major differences were noted.

47. COMPARISON WITH NAUTICAL CHARTS


Comparison has been made with chart 922, scale 1:10,000, edition of March 6, 1944, corrected to February 4, 1961. Comparison is favorable, with the exception that there are more rocks shown on the chart than could be identified in the office from the photographs.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

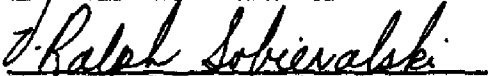
None.

ITEMS TO BE CARRIED FORWARD

None.


Rexford E. Smith
Carto Photo Aid

APPROVED AND FORWARDED


V. Ralph Sobieralski
Tampa District Officer

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6106 (Puerto Rico)

T-12155

See below * ~~Caribbean Sea~~ → Mar Caribe - P.P.
~~Ensenada~~ - P.P.
~~Ensenada Honda~~

- ✓ Pasaje de Vieques
- ✓ Playa Blanca
- ✓ Punta Algodones
- ✓ Punta Cascajo

Approved by:

A. J. Wraight

A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

O.K.
May 29, 1965

* NOTE: The last Geographic Names Board decision (1944) was "Caribbean Sea". Mar Caribe is used on nautical charts. SGB

FORM 182
(8-61)

PHOTOGRAMMETRIC OFFICE REVIEW
T- 12155

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

50.

1. PROJECTION AND GRIDS WHS	2. TITLE WHS		3. MANUSCRIPT NUMBERS WHS	4. MANUSCRIPT SIZE WHD
CONTROL STATIONS	5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY WHS		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 XX
	11. DETAIL POINTS IIS			
	12. SHORELINE WHS			
ALONGSHORE AREAS (Nautical Chart Data)	13. LOW-WATER LINE WHS		14. ROCKS, SHOALS, ETC. WHS	15. BRIDGES XX
	16. AIDS TO NAVIGATION XX		17. LANDMARKS XX	18. OTHER ALONGSHORE PHYSICAL FEATURES WHS
	19. OTHER ALONGSHORE CULTURAL FEATURES WHS			
PHYSICAL FEATURES	20. WATER FEATURES XX		21. NATURAL GROUND COVER XX	
	22. PLANETABLE CONTOURS XX		23. STEREOSCOPIC INSTRUMENT CONTOURS XX	
	24. CONTOURS IN GENERAL XX		25. SPOT ELEVATIONS XX	
	26. OTHER PHYSICAL FEATURES WHS			
CULTURAL FEATURES	27. ROADS XX		28. BUILDINGS XX	29. RAILROADS XX
	30. OTHER CULTURAL FEATURES XX			
BOUNDARIES	31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
	33. GEOGRAPHIC NAMES WHS			
MISCELLANEOUS	34. JUNCTIONS WHS		35. LEGIBILITY OF THE MANUSCRIPT WHS	
	36. DISCREPANCY OVERLAY XX		37. DESCRIPTIVE REPORT MMS	
	38. FIELD INSPECTION PHOTOGRAPHS WHS		39. FORMS XX	
	SIGNATURE OF REVIEWER W. H. Shearouse		SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT M. M. Slavney	
40. FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT - Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side.				
SIGNATURE OF COMPILER [Signature]			SIGNATURE OF SUPERVISOR [Signature]	

USE REVERSE SIDE FOR REMARKS

FIELD EDIT NOTES
OPR 423-1962
USC&GS Ship EXPLORER

All field edit notes have been delineated on the mylar T-Sheets. In general, the only discrepancies found were differences in the delineation of the mean high water line along sand beaches. These discrepancies were resolved with distance measurements from the hydrographic signals to the mean high water line. The azimuth used was a perpendicular line from the mean high water line to the respective signal. Each T-Sheet is discussed separately below with a listing of the necessary photos.

T-12160 - Mean high water line revision in area of "BYD" appears necessary. Rock height revisions necessary in the following areas: HER, LOG, FOX, AND DIX.
Photos - 59S3933, and 3932.

T-12158 - Mean high water line revision along entire beach line appears necessary.
Photos - 59S3931, 3930, 3929, and 3928.

T-12159 (2 copies) - Mean high water line revision in area of BUN to ABT. Rock height revisions in the following areas: HUG, GEO, and WIR.
Photos - 59S3927, 3926, and 61W1676.

T-12153 - Rock height revision in area of JIM.
Photos - 61W1678 and 1679.

T-12155 - Rock height revision in area of CUT.
Photos - 61W1559 and 61W1560.

T-12156 - Rock height revisions in the following areas: EVA (2), KIM, and CRY.
Photos - 61W1584 and 1585.

T-12154 - Pier revision at OIL.
Photos - None

T-12157 - None

All T-Sheets, since they contain final locations of hydrographic signals, must be returned to this command as soon as possible as they are needed to plot hydrographic smooth sheets.

Respectfully submitted:
10 September 1962

George F. Wirth
George F. Wirth
LT, C&GS

Forwarded Approved:

Samuel L. Jones
Samuel L. Jones
CAPT, C&GS
Commanding Officer, Ship EXPLORER

16.

REVIEW REPORT T-12155
SHORELINE
September 1967

61. GENERAL STATEMENT:

See Summary accompanying Descriptive Report (page 6).

Construction, filling, and dredging have taken place in large areas of Ensenada Honda and contiguous bays since the field edit. They were revised using 1:5,000 ratio prints of 1965, 1:15,000 color photographs 65-L-1331 and 1336, both of whose centers fall off this map.

An ozalid Comparison Print, showing the differences noted in Items 62 and 65, is enclosed with the original copy of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Registered Topographic Survey: T-6877b; 1:4,800; Oct. 1941
Registered Topographic Survey: T-6878 ; 1:4,800; Oct. 1941
Registered Topographic Survey: T-6879 ; 1:4,800; Nov. 1941

The shoreline and rocks from these registered surveys are on the Comparison Print in blue.

The delineation of the shoreline where it consists of the Mean High Water line has been carefully re-examined during final review; this has also been done for the rocks offshore. It was not possible to verify many of the "rocks" shown on the Registered Surveys, by office interpretation; and as noted in Item 35 of the Descriptive Report, the shoreline inspection was "skimpy". The only Field Edit notes consisted of two rock heights and one "jetty"; so the field edit did not help resolve these differences.

There are understandable differences in the mangrove shoreline. It is noted that in two areas the Registered Surveys did not attempt to map the mangrove shoreline but confined themselves to the "fast land" or M.H.W. line with some mangrove symbols delineated; these are at latitude $18^{\circ} 12' .4$, longitude $65^{\circ} 30' .3$ from T-6878, and at latitude $18^{\circ} 12' .35$, longitude $65^{\circ} 39' .2$ from T-6879.

This survey supersedes the previous registered surveys for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

NAGUOBO, P.R., U.S.G.S. QUAD.; 1:20,000; 1943 revised 1957

Detailed comparison was not made because the quadrangle would require a 4x enlargement. The general comparison seems favorable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

BOAT SHEET EX 5-3-65A and B, (H-8862); 1:5,000; 1965
 BOAT SHEET EX10-2-62B; (H-8638); 1:10,000; 1962

Boat Sheet EX 5-3-65A & B was too faint and smudged to be useful.

Details from Boat Sheet EX10-2-62B are on the Comparison Print in green.

The boat sheet gives data on three rocks near latitude $18^{\circ} 12.13'$, longitude $65^{\circ} 38.56'$, and one rock near $18^{\circ} 12.10'$, $65^{\circ} 38.8'$. The latter rock is on Chart 922 as awash; the boat sheet shows it "covers 2 ft. at 1448, 5/31/62" when the predicted tide stage is near low water. None of these rocks were definitely identifiable on the photographs.

The boat sheet is obscure in the area of latitude $18^{\circ} 12.02'$, longitude $65^{\circ} 38.47'$, where chart 922 shows an island about 50 meters long (see paragraph 3 Item 65).

65. COMPARISON WITH NAUTICAL CHARTS:

Chart 922; 1:10,000; 6th Edition; October 11, 1965
 Chart 940; 1:25,000; 3rd Edition; July 25, 1966 (not used)

1. The shoreline and offshore details from Chart 922 are shown on the Comparison Print in red. Chart 922 covers all but the area west of longitude $65^{\circ} 38.87'$, which falls on Chart 940; however, Chart 940 requires 5x enlargement and was not used.

2. Rocks shown on Chart 922, but not delineated on T-12155 are shown on the Comparison Print. The photographs were re-examined carefully but positive office identification could not be made; and too few notes were made by the field inspector and/or the field editor (please see paragraph 2 of Item 62).

3. Delineation of the rock islets near latitude $18^{\circ} 12.02'$, long. $65^{\circ} 38.47'$ appears to be correct on T-12155 after detailed examination of photographs 61-W-1559 and 1560. The tide stage, from predicted tides for photo 61-W-1559 is about 1.0 ft. above MLW, and this photograph shows water over much of the 50 meter island on Chart 922. The rocks at latitude $18^{\circ} 12.05'$, longitude $65^{\circ} 38.72'$ also appear to be correct on T-12155.

4. Chart 922 shows rocks awash at latitude $18^{\circ} 12.37'$, longitude $65^{\circ} 37.63'$, and at latitude $18^{\circ} 12.09'$, longitude $65^{\circ} 38.8'$ that could not be identified on the photographs. Color photo 65-L-1338 shows a whitish spot that may be the rock at latitude $18^{\circ} 12.28'$, longitude $65^{\circ} 37.86'$ on Chart 922, but positive identification could not be made and no note was made by the field inspector or the field editor.

5. Shoreline changes in the area between latitude $18^{\circ} 12.3'$ and $18^{\circ} 13.2'$, longitude $65^{\circ} 37.75'$ and $65^{\circ} 38.3'$ have obviously taken place between the completion of field edit in September 1962 and Chart 922 publication in October 1965.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with the project instructions, Bureau requirements, and the National Standards of Map Accuracy. No accuracy tests were run in the field.

Reviewed by:

M. M. Slavney

 M. M. Slavney

Approved by:

For *P. C. Stark*

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

Charles L. ...

 Chief, Cartographic Branch *AMB*
Photogrammetric

J. Ralph Sobieralski JUL 1 1968

 Chief, Photogrammetry Division

John D. Boyer

 Chief, Chart Division

 Chief, Operations Division

NOTES TO VERIFIER
T-12155 Project Ph-6106(21042)
Boat Sheet No. EX-5-3-65A & B(H-8862)

Please note Items 62, 64 and 65 of the Final Review Report
for T-12155.

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. _____

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
940	2/27/74	<i>D. Carillo</i>	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>Adequately Applied</i>
<i>917</i> <i>(25663)</i>	<i>9/27/74</i>	<i>R. Naito</i>	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>19</i> <i>Adequately Appld</i> <i>and Field</i>
<i>904</i> <i>(25650)</i>	<i>11/5/74</i>	<i>R. Naito</i>	Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>25</i>
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