

12159

ORIGINAL

12159

12159

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE
Field No.	Office No. T-12159
LOCALITY	
State	PUERTO RICO
General locality	EAST COAST
Locality	PUNTA LIMA TO
PLAYA DE HUMACAO	
1958 - 1962	
CHIEF OF PARTY	
M. L. Olivier, Photo Party 708	
V. Ralph Sobieralski, Tampa District Office	
LIBRARY & ARCHIVES	
DATE	1 JUL 1968

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T -12159

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 and Office - Aug. 30, 1961 Amendment: Field and Office - Jan. 15, 1962 * <i>* Interior planimetry restricted to those features useful to photo hydro support</i> <i>SGS</i>		
METHOD OF COMPILATION (III): Kelsh plotter		
MANUSCRIPT SCALE (III): 1:10,000	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:6,000	
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 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): LIMA 3, 1941		
LAT.: 18°10'57.657" (1772.5m.)	LONG.: 65°41'41.829 (1229.3m.)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): y = 127,367.52 Ft. x = 756,291.39 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 (II): M. L. Olivier		DATE: Oct. 1961
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air photo compilation Date of photograph April 1959, Oct. 1961		
PROJECTION AND GRIDS RULED BY (IV): A. Riley		DATE Nov. 1961
PROJECTION AND GRIDS CHECKED BY (IV): D.K.H. (W.O.)		DATE Nov. 1961
CONTROL PLOTTED BY (III): I. I. Saperstein		DATE Feb. 1962
CONTROL CHECKED BY (III): I. I. Saperstein		DATE Feb. 1962
RADIO PLOTTER STEREOSCOPIC CONTROL EXTENSION BY (III): Washington Office		DATE Nov. 1961 Jan. 1962
STEREOSCOPIC INSTRUMENT COMPILATION (III): REPORT 504 LI	PLANIMETRY I. I. Saperstein	DATE Feb. 1962
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): I. I. Saperstein " " Reviewed by: M. M. Slavney		DATE Feb. 1962 Mar. 1962
SCRIBING BY (III): P. W. Leikhim " " Reviewed by: W. H. Shearouse		DATE May 1962 May 1962
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): W. H. Shearouse		DATE May 1962
REMARKS: Field edit by G. F. Wirth, Sept. 1962		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild "S" and "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
58-S-2615 thru 2626	1958	1227 to 1229	1:10,000	(COLOR PHOTOS)
59-S-3926, 3927	4-18-59	1123	Diapositives 1:30,000 "	*
61-W-1675, 1676	10-26-61 ✓	1500, 1501	" 4 "	

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: *No subordinate station in this area, but tidal bench mark gives a range of 0.4 ft. so tide is considered negligible			
SUBORDINATE STATION:			
SUBORDINATE STATION:			

Atlantic Marine Center
WASHINGTON OFFICE REVIEW BY (IV):

M. M. Slawney

DATE:

Feb. 1968

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

9**

RECOVERED:

9**

IDENTIFIED:

3**

NUMBER OF BM(S) SEARCHED FOR (II):

3

RECOVERED:

1

IDENTIFIED

1

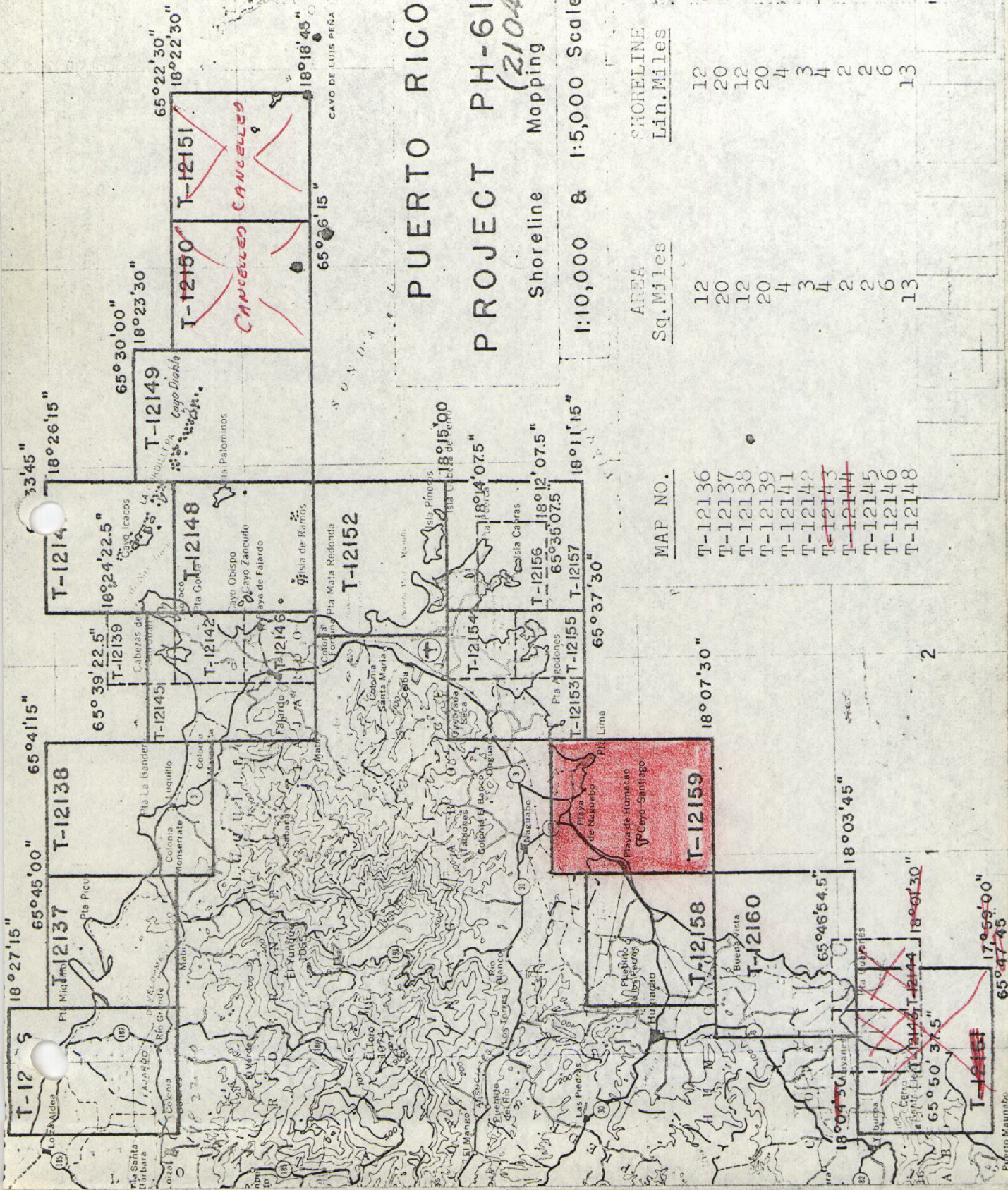
NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

0

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): 0

REMARKS:

**Including one station north of project. There are ten stations shown, one SAM 1901, is on a restricted island and was not searched for.



PUERTO RICO

PROJECT PH-6106 (21042) Mapping

Shoreline

1:10,000 & 1:5,000 Scales

AREA
Sq. Miles

Shoreline
Lin. Miles

MAP NO.

T-12136	12	12
T-12137	20	20
T-12138	12	12
T-12139	20	20
T-12141	4	4
T-12142	3	3
T-12143	4	4
T-12144	2	2
T-12145	2	2
T-12146	6	6
T-12148	13	13

4

2

17° 59' 00"

Puerto Maunabo

(5)

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12159

Shoreline manuscript T-12159 is one of sixteen 1:10,000 scale maps in Ph-6106 Puerto Rico, which also contains eight 1:5,000 scale maps. The sketch on page 5 of this report shows the position of this map 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 time~~ cancelled. *m.m.s.*

This is a stereo instrument project in advance of hydrographic surveys of the area. Compilation was by Kelsh Plotter using 1:30,000 diapositives of the April 18, 1959 "S" photography and October 26, 1961 "W" photography. Color photographs of 1958 gave some coverage and were used as an aid to compilation; they were not available for final review. The stereo bridge was run in the Washington Office. Ratio prints at 1:10,000 scale were processed from the 1959 and 1961 photographs and furnished for hydro support.

Field work preceding compilation consisted of control identification for the stereo bridge on contact prints, with most of the field inspection on the 1:10,000 ratio prints of the 1959 "S" photographs. Field inspection for the eastern part of the map was done on contact prints of the 1961 "W" photographs. The manuscript was field edited in September 1962 in conjunction with hydro support.

The compilation manuscript was a vinylite sheet 4 minutes and 45 seconds in latitude, and 3 minutes and 45 seconds in longitude. The smooth manuscript was on cronaflex for registry and record after final review.

FIELD INSPECTION REPORT
Project Ph-6106
Maps T-12158 thru T-12161

(6) 7
- 4 -

2. AREAL FIELD INSPECTION

These shoreline sheets are located on the southeasterly side of Puerto Rico. The area is rural except for two beach resorts. The shoreline area is very undeveloped.

Field inspection was performed on photographs 59-S-3925 through 59-S-3937. The photographs contained some clouds but were otherwise of good quality. No difficulty was encountered in the interpretation in the field. Some shoreline areas around the mouths of streams had changed since photography. These changes are shown on the photographs in violet ink.

A large amount of rainfall fell during field inspection making it very difficult to reach some of the interior features. Some of the marsh and swamp areas may have to be clarified by the field editor.

3. HORIZONTAL CONTROL

All Coast and Geodetic Survey control stations except one were searched for. No attempt was made to recover SAN, 1901 because this station is located on an island used as a breeding ground for monkeys. Nobody is allowed on the island. One might possibly obtain permission to visit the island if contact is made with the Laboratory of Perinatal Physiology, Post Office Box 5095, San Juan, Puerto Rico.

Only those stations as specified on the project diagram were photo-identified. To meet this requirement some United States Geological Survey control was used. The following U. S. G. S. control stations were recovered and photo-identified: HUMACAO PLAYA CHURCH, 1934; COLON, 1941; and NAGUABO CHURCH, 1934.

The following Coast and Geodetic Survey control stations were searched for but not recovered: YEGUAS, 1901; BARBACOA, 1901; LIMA 3, 1941; and RON ROIG LARGE RED STK., 1901.

4. VERTICAL CONTROL

All tidal bench marks in the area were searched for but only one was recovered.

5. CONTROL AND DRAINAGE

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

Drainage is mostly perennial and 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. Most of the swamp areas were designated as mangrove.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line was inspected by walking along the beach and by examination from strategic points.

The shoreline, in places, was visited at low water. The distance from the mean low water line to the mean high water line was given at these points.

The foreshore is steep in some areas and flat in other areas.

Docks, wharves, piers, etc. are covered on the photographs.

There are no submarine cables.

8. OFFSHORE FEATURES

Some offshore rocks were visited and their heights above water and the time and date have been noted on the photographs. Other heights of rocks were determined from shore. There are a few areas where it appears on the photographs that the water is breaking over an underwater growth or submerged rocks. These places will require investigation by the hydrographic party.

9. LANDMARKS AND AIDS

Landmarks and aids to navigation located by photogrammetric methods are shown on the contact prints. All others were located previously by triangulation and have not been disturbed.

Quite a few landmarks were selected, and since all were not inspected from seaward, the hydrographic party may need to delete those not thought to be of landmark value. All heights of new landmarks to be charted were determined. Heights of existing landmarks were determined and verified where possible.

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

10. BOUNDARIES, MONUMENTS, AND LINES

Boundaries were excluded by the project instructions.

11. OTHER CONTROL

Existing objects that are suitable for photo hydro control were identified on the field inspection photographs. These are shown on the photographs by three digit numbers beginning with 100. Not many objects were selected because of the scarcity of such. Many of the landmarks and aids will be suitable for photo hydro control.

12. OTHER INTERIOR FEATURES

All buildings and roads have been classified in accordance with project instructions dated 30 August 1961. It will be noted by looking at the photographs covering sugar cane areas that many open spaces appear to be roads. Only those open spaces that seemed permanent and well traveled were classified as roads.

Clearances were determined for the following bridges and are listed: (See photo 59-S-3927 for names of rivers)

<u>Bridge</u>	<u>Hor. Clearance</u>	<u>Vert. Clearance</u>	<u>Time</u>	<u>Date</u>
Rio Santiago	17.3 ft.	4.7 ft.	10:25 AST	10-6-61
Rio Blanco	26.9 ft.	5.1 ft.	10:30 AST	10-6-61
Rio Anton Ruiz	26.9 ft.	5.2 ft.	10:43 AST	10-6-61
Boca Prieta	18.9 ft.	5.5 ft.	10:50 AST	10-6-61

13. GEOGRAPHIC NAMES

An investigation of geographic names was not required by the project instructions. Some discrepancies in the names of rivers were found. The names of rivers are shown correctly on the photographs.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Contact photographs and horizontal control data was forwarded to the Washington Office 3 October 1961.

Submitted
24 October 1961

Michael L. Olivier
Michael L. Olivier
Chief, Photo Party 708

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.

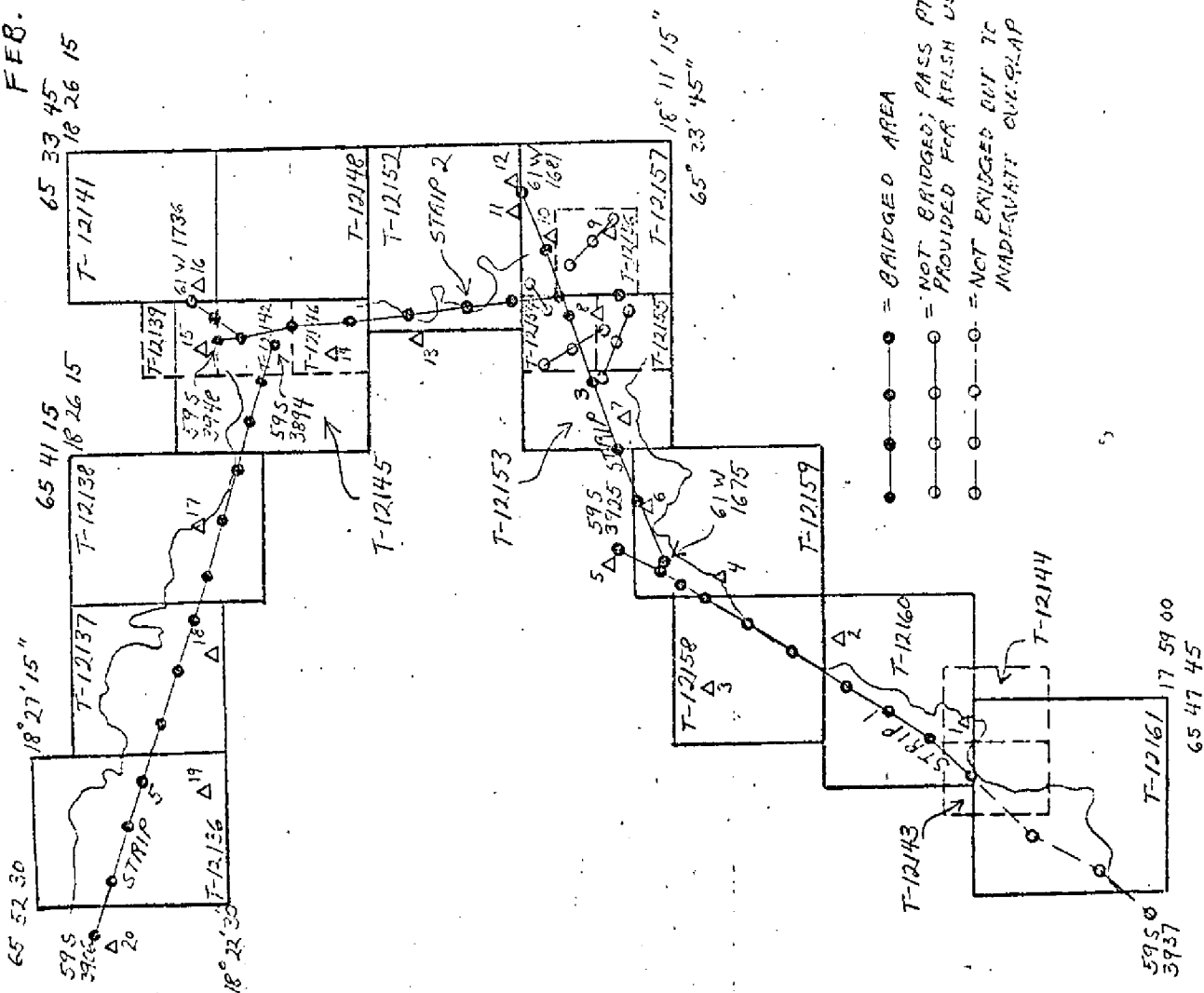
Submitted by:

R. E. Fuechsel
R. E. Fuechsel

Approved:

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

FEB. 1962



1. GUAYANES 2, 1923-SUB. 1+2
2. ZATATA, 1901-SUB. 1+2
3. PASTO VIEJO EASTERN
SUGAR ASSN. WA. COIN
STACK, 1941
4. HUMACAO PLAYA CH,
(USGS) 1934
5. NAGUERO CH.(USGS) 1934
6. COLON (USGS) 1941-SUB. 1+2
7. LOMA 1941-SUB. 1+2
8. MONDA 1941-SUB. 1+2
9. CAERAS IS. LT., 1941
10. MONDO, 1926-SUB. 1+2
11. PINJERITA 2, 1941-SUB. 1+2
12. CAERAZ DE FERRAZ LT., 1923
13. FENERO, 1941-SUB. 1+2
14. CENTRAL FAJARDO
NORTH STACK, 1941
15. CAPE 1901-SUB. 1+2

DESCRIPTIVE REPORT CONTROL RECORD

MAP T-12159 PROJECT NO. PH-6106 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID-OR PROJECTION LINE IN METERS (1 ft. = 304.8006 meters) FORWARD (BACK)
ALTURA, 1941	-	Puerto Rico	133 681.83 753 874.14	
LINEA, 1941	-	Puerto Rico	127 972.36 754 221.78	
LIMA 3, 1941	-	Puerto Rico	127 367.52 756 291.39	
BAHIA, 1941	-	Puerto Rico	130 602.26 756 172.58	
HUMACAO CUSTOM HOUSE EAST GABLE, 1901	-	Puerto Rico	121 527 739 171.1	
PUNTA, 1941	-	Puerto Rico	126 378.74 756 617.80	
NAGUABO CHURCH (USGS) 1934	-	Puerto Rico	NORTH OF MAP LIMITS	
COLON (USGS), 1941	-	Puerto Rico	133 428.40 751 781.46	
HUMACAO PLAYA CHURCH (USGS), 1934	-	Puerto Rico	121 922.43 739 341.76	
SAN, 1901	-	Puerto Rico	117 867.62 (Field inspection report states 742 807.25 "Island could not be visited" no form 526)	
COMPUTED BY M. M. Slavney	DATE 12/19/61	CHECKED BY I. I. Saperstein	DATE 12/19/61	<u>11</u>

(12) #.

COMPILATION REPORT T-12159

PHOTOGRAMMETRIC PLOT REPORT

The stereo bridges were run in the Washington Office.

31. DELINEATION

The Kelsh plotter was used. The field inspection was adequate and no difficulty was encountered in the interpretation of the photographs. Delineation was accomplished in two parts at different times. The delineation from approximate Longitude $65^{\circ}41'15''$ westward was done in December 1961 from April 1959 "S" photographs, showing interior details in addition to shoreline. The details eastward of Longitude $65^{\circ}41'15''$ were compiled in February 1962 from October 1961 "W" photographs.

The color photography was used as an aid for locating rocks, underwater features and shallow areas. The flight was offshore and missed the shoreline areas in the center of the manuscript.

Numerous shoreline pass points have been dropped as an aid to the photo-hydro party.

32. CONTROL

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline and low water line were delineated according to the field inspection, which was adequate. Several piers and rock ledges have been shown.

COMPILATION RECORD

COMPLETION DATE

REMARKS

Alongshore area for hydro	Dec. 1961 Feb. 1962	Superseded
Alongshore area revised from field edit. Manuscript complete	Nov. 1962	<i>Superseded</i>
<i>FINAL REVIEW</i>	<i>FEB. 1968</i>	

36. OFFSHORE DETAILS

The only offshore details are rocks and some mangrove.

37. LANDMARKS AND AIDS

Five landmarks and one aid to navigation have been reported on Form 567 and were submitted to the Washington Office December 29, 1961.

38. CONTROL FOR FUTURE SURVEYS

No marked topographic stations were established, but two natural objects were located by the Kelsh plotter and listed under item 49.

39. JUNCTIONS

Junctions have been made with T-12158 to the west; T-12153 to the east. No contemporary survey to the north or south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS NAGUABO quadrangle, scale 1:20,000, edition of 1957. The comparison is favorable.

Comparison has been made with C&GS topographic survey Nos. T-6876b and T-6882, scale 1:4,800, dated 1941 and planetable survey T-2540, scale 1:20,000, dated 1901. All surveys appear to be in fairly good agreement.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 923, scale 1:20,000, edition of August 3, 1929, revised August 18, 1958 and Chart 940, scale 1:25,000, edition of May 2, 1949, revised April 13, 1959. Both charts and manuscript are in agreement.

See item 49 concerning wreck southeast of Playade Humacao.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Irving I. Saperstein
Irving I. Saperstein
Cartographer (Photo)

APPROVED AND FORWARDED

V. Ralph Sobieralski
V. Ralph Sobieralski
Tampa District Officer

PHOTOGRAMMETRIC OFFICE REVIEW

T. 12159

(16) 23 16.

1. PROJECTION AND GRIDS MMS		2. TITLE MMS		3. MANUSCRIPT NUMBERS MMS		4. MANUSCRIPT SIZE MMS		
		1a. Classification label Unclassified						
CONTROL STATIONS	5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY MMS			6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS) XX				
	7. PHOTO HYDRO STATIONS XX		8. BENCH MARKS MMS		9. PLOTTING OF SEXTANT FIXES XX		10. PHOTOGRAMMETRIC PLOT REPORT W.O.	
	11. DETAIL POINTS MMS							
ALONGSHORE AREAS (Nautical Chart Data)	12. SHORELINE MMS		13. LOW-WATER LINE MMS		14. ROCKS, SHOALS, ETC. MMS		15. BRIDGES XX	
	16. AIDS TO NAVIGATION MMS		17. LANDMARKS MMS			18. OTHER ALONGSHORE PHYSICAL FEATURES MMS		
	19. OTHER ALONGSHORE CULTURAL FEATURES MMS							
PHYSICAL FEATURES	20. WATER FEATURES MMS			21. NATURAL GROUND COVER MMS				
	22. PLANETABLE CONTOURS XX			23. STEREOSCOPIC INSTRUMENT CONTOURS XX				
	24. CONTOURS IN GENERAL XX			25. SPOT ELEVATIONS XX				
	26. OTHER PHYSICAL FEATURES MMS							
CULTURAL FEATURES	27. ROADS MMS		28. BUILDINGS MMS		29. RAILROADS MMS			
	30. OTHER CULTURAL FEATURES MMS							
BOUNDARIES	31. BOUNDARY LINES XX			32. PUBLIC LAND LINES XX				
MISCEL- LANEOUS	33. GEOGRAPHIC NAMES MMS				34. JUNCTIONS MMS			
	35. LEGIBILITY OF THE MANUSCRIPT MMS		36. DISCREPANCY OVERLAY XX		37. DESCRIPTIVE REPORT MMS			
	38. FIELD INSPECTION PHOTOGRAPHS MMS			39. FORMS MMS				
	SIGNATURE OF REVIEWER M. M. Slattery			SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT William A. Rasure				
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 George J. Saperstein				SIGNATURE OF SUPERVISOR M. M. Slattery				

USE REVERSE SIDE FOR REMARKS

USC OMM-DC 25353-P61

GEOGRAPHIC NAMES
FINAL NAME SHEET

PH-6106 (Puerto Rico)
T-12159

- ✓ Bahia Algodones
- ✓ Bahia Lima
- ✓ Boca Prieta
- "Corribean Sea" → ~~Caribbean Sea~~ *Mar Caribe - g.p.* * * see below
- ✓ Cayo Santiago
- * ~~Hucares~~
- ✓ Pasaje de Vieques
- ✓ Playa de Humacao
- ✓ Playa de Naguabo
- ✓ Puerto de Humacao
- ✓ Puerto Naguabo
- ✓ Punta Lima
- ✓ Punta Santiago
- ✓ Rio Anton Ruiz
- ✓ Rio Blanco
- ✓ Rio Santiago
- * ~~San Luis~~

* Feature not delineated, name not used.

Approved by:

A. J. Wraight
A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Frank W. Pickett
Cartographic Technician

O. K. 5-4-68-g.p.

* * NOTE: The last BEN decision was "Corribean Sea" (1944). Mar Caribe is used on nautical charts. SGB

49. NOTES FOR THE HYDROGRAPHER

No marked topographic stations were established but two natural objects were identified by the field inspector; they were located with the Kelsh plotter and are listed on Form 567 as landmarks.

OIL TANK

SCHOOL HOUSE (S. Corner)

} *Topo Stations ; 3 other landmarks
are triangulation stations.*

The field inspector furnished elevations for some of the numerous rocks he identified. The elevations of these rocks were shown substantially the same as the field inspector indicated, there being practically no tide. (Tidal bench marks in the area show 0.4 ft. of tide). The elevations of the rocks were verified as far as possible by the Kelsh plotter. See item 8 of Field Inspection Report.

No indication of the submerged wreck between the pier at Playa de Humacao and Cayo Santiago was given by the field inspector, nor could it be seen under the plotter. This wreck should be investigated by the hydro party.

Questionable offshore areas on the photographs which could not be interpreted by the Kelsh plotter have been outlined by a dashed line to be investigated by the hydrographer.

STRIKE OUT TWO

NON-LOADING AIDS OR LANDMARKS FOR CHARTS

Tampa District Office

December 27, 1961

The positions given have been checked after listing by

I. I. Ederstein

V. Ralph Soble¹ *Chief of Party.*

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. 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.

STRIKE OUT TWO

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Tampa District Office

December 21, 1961

The positions given have been checked after listing by

I. I. GORSTAL

V. Balu Gopalakrishnan *Chief of Party.*

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. 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 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 "BED" 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 DUN to ABE. Rock height revisions in the following areas: HUG, GEO, and WIG.
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 GUT.
Photos - 61W1559 and 61W1560.

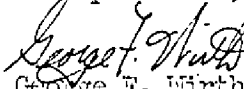
T-12156 - Rock height revisions in the following areas: EVA (2), KEN, and CRY.
Photos - 61W1584 and 1585.

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

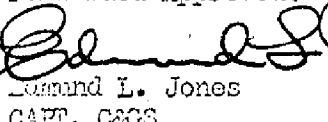
T-12157 - None

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
LT, C&GS

Forwarded Approved:


Edmund L. Jones
CAPT, C&GS
Comdg., Ship EXPLORER

REVIEW REPORT T-12159
SHORELINE
February 1968

61. GENERAL STATEMENT:

See Summary on page 6 of this report.

An ozalid Comparison Print (pages 20 through 23), which shows the differences noted in Items 62 through 65, is included with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Registered Survey 6876b; 1:4,800; Dec. 1941
Registered Survey 6881 ; 1:4,800; Dec. 1941
Registered Survey 6882 ; 1:4,800; Dec. 1941
Registered Survey 4323 ; 1:20,000; Feb. 24, 1927

Differences with this survey are shown on the Comparison Print in blue, as are the limits of surveys 6876b, 6881, and 6882, and where 4323 was used.

Shoreline differences with the 1:4,800, 1941 surveys are minor, the largest about 15 meters in Bahia Lima. The pier and boathouse at latitude 18° 11.1', longitude 65° 41.83' are new since 1941; otherwise these surveys are in good agreement with T-12159.

Survey 4323 shows shoreline differences to 50 meters; the most serious are:

1. The shape and extent of the point at lat. 18° 11.08', long. 65° 42.50' (page 21).

2. The shoreline of Cayo Santiago and the islet southwest of Cayo Santiago on 4323 are correct on T-12159.

3. The shoreline at latitude 18° 11.3', longitude 65° 42.7'; and at Playa de Humacao (pages 21 & 23).

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.

The quadrangle is in fair agreement, the largest differences in shoreline are about 40 meters at Punta Santiago, at Cayo Santiago, and at the mouths of the rivers. The quadrangle details are on the Comparison Print in brown.

23 49

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

BOAT SHEET EX 10-1-62 (H-8637); 1:10,000; 1962

BOAT SHEET EX 10-2-62A,B,&C(H-8638); 1:10,000; 1962

The boat sheets made no shoreline changes, but did add some rocks, change others rock classifications, added some "foul areas" etc.; all of which are shown ^{and discussed} on the Comparison Print *in green*.

65. COMPARISON WITH NAUTICAL CHARTS:

Chart 923; 1:20,000; 3rd edition, May 9, 1966


Chart 940; 1:25,000; 6th edition, July 25, 1966

These are some shoreline differences to 40 meters, some additional rocks and rock discrepancies, rock ledges, and river changes; all of which are shown in red on the Comparison Print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with the project instructions, Bureau requirements and the National Standards of Map Accuracy. The only accuracy tests were measurements to the shoreline during field edit.

Reviewed by:

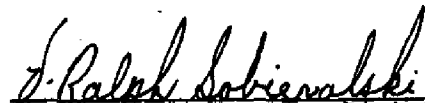

M. M. Slavney

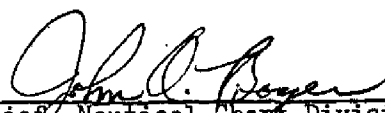
Approved by:


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

Approved by:

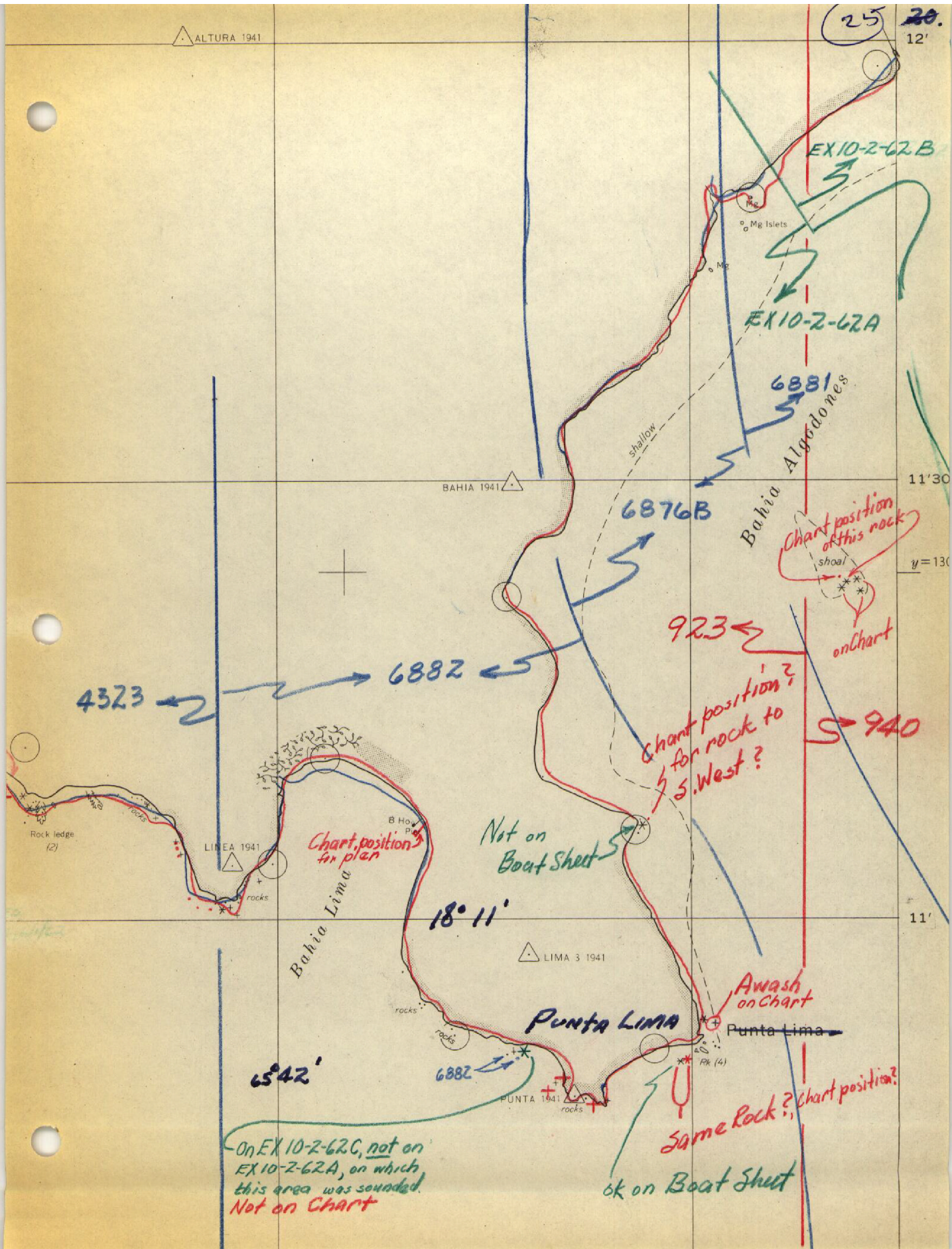

Chief, Photogrammetric Branch JBS

 JUL 1 1968
Chief, Photogrammetry Division


Chief, Nautical Chart Division

NOTES TO VERIFIER
T-12159, Project PH-6106
BOAT SHEETS EX-10-1-62 and EX-10-2-62A,B, and C

Please note Items 62, 64, and 65, and the Comparison Print (pages 20 through 23) of the Descriptive Report.



61-W-1676

COLON (USGS) 194

Playa de Naguabo

Puerto Naguabo

SCHOOLHOUSE 1961
(SE corner) ht = 19 (52)

Sunken barge
in ruins

Not visible here on photos
595-3926, 3927. 61W 1675
Not on Boat Sheet

Not visible on photos.
Not noted by hydro.

Bares 1.0 at 1000
61/62 (something here on
photo, but?)

Rocks & displaced
on Chart

EX 10-2-62A

18°11'
EX 10-2-62C

"Rock bares 1.0, 1100,
61/62"

Chart 923
Reg. Survey 4323

65°43'

27 22

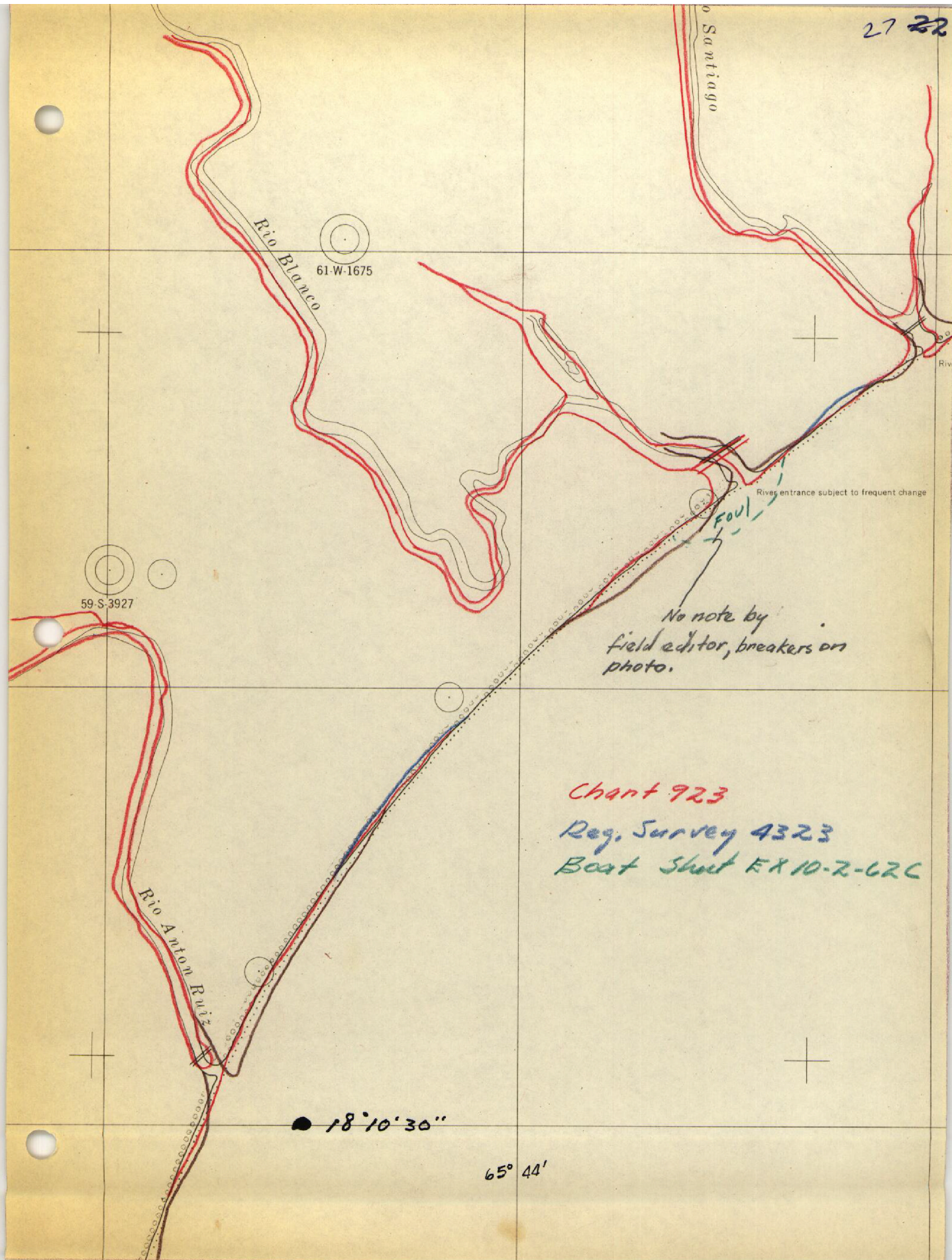
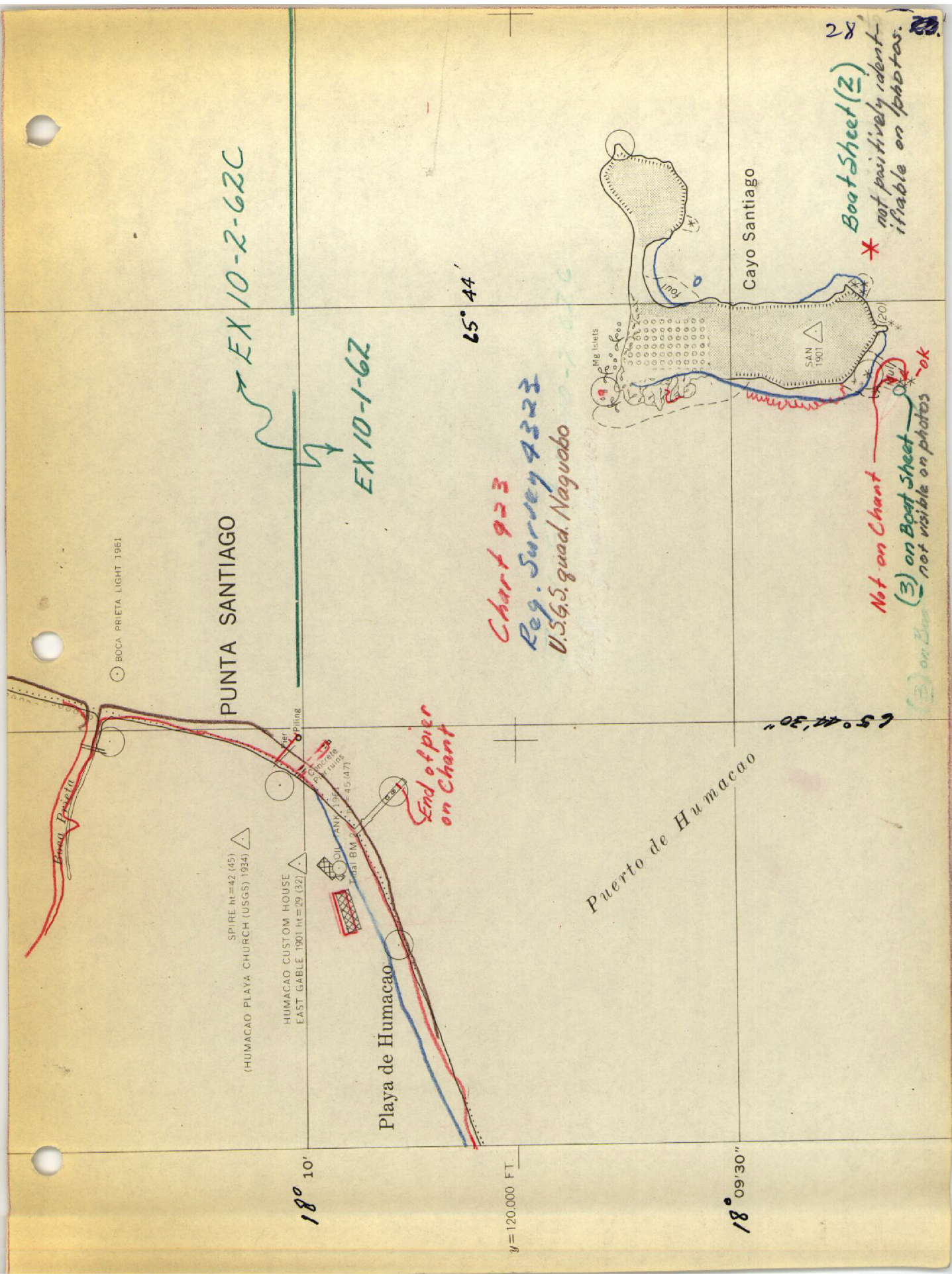


Chart 923
Reg. Survey 4323
Boat Sheet EX 10-2-62C



PUNTA SANTIAGO

SPIRE H=42 (45)
(HUMACAO PLAYA CHURCH (USGS) 1934)

HUMACAO CUSTOM HOUSE
EAST GABLE 1901 H=29 (32)

Playa de Humacao

End of pier
on Chart

Chart 923
Reg. Survey 4323
U.S.G.S. quad. Naguabo

Puerto de Humacao

Cayo Santiago

28
Boat Sheet (2)
not positively ident-
ifiable on photos

Not on Chart
(3) on Boat Sheet
not visible on photos

120,000 FT.

