

12157

ORIGINAL

12157

12157

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE
Field No.	Office No. T-12157
LOCALITY	
State	PUERTO RICO
General locality	EAST COAST
Locality	PUNTA PUERCA
1962 1958-1965	
CHIEF OF PARTY	
M. L. Olivier, Photo Party 708	
V. Ralph Sobieralski, Tampa District Office	
LIBRARY & ARCHIVES	
DATE	11 JUL 1968
1 JUL 1968	

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T - 12157

PROJECT NO. (II): Ph-6106 (21042)		
FIELD OFFICE (II): 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>scd</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): CAMP 1941		
LAT.: 18°13'55.090" (1693.7m.)	LONG.: 65°36'40.397" (1186.8m.)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): = 145,387.77 Ft. x = 785,273.86 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: 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. 1961 <i>Mar. 1965</i>		
PROJECTION AND GRIDS RULED BY (IV): A. Riley		DATE Jan. 1962
PROJECTION AND GRIDS CHECKED BY (IV): I. I. Fitzgerald		DATE Jan. 1962
CONTROL PLOTTED BY (III): I. I. Saperstein		DATE Mar. 1962
CONTROL CHECKED BY (III): V. P. Cackowski		DATE Mar. 1962
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): R. E. Fuechsel		DATE Mar. 1962
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY I. I. Saperstein	DATE Mar. 1962
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): I. I. Saperstein " " Reviewed by: W. H. Shearouse		DATE Mar. 1962 Mar. 1962
SCRIBING BY (III): R. Purvis " Reviewed by: W. H. Shearouse		DATE May 1963 May 1963
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): M. M. Slavney		DATE May 1963
REMARKS: <i>Field edit by G. F. Wirth Sept. 1962</i>		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild "W" and "S"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
58-S-2576 thru 2579	1958	1215	1:10,000	* (COLOR PHOTOS)
58-S-2744 thru 2746	1958	1042	1:10,000	"
61-W-1680, 1680	10-26-61	1503	1:30,000 (Diapositives)	
For other photo coverage see report for T-12156				
65-L-1330, 1331	Mar. 5, 1965	1535	1:15,000	Color *

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: *No subordinate station in area. Chart 922 shows range of tide in Ensenada Honda as 0.7 ft.			
SUBORDINATE STATION:			
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

Atlantic Marine Center

M. M. Slawey

DATE:

Dec. 1967

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): 14**

RECOVERED:
8IDENTIFIED:
3

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

2

RECOVERED:
0IDENTIFIED
0

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

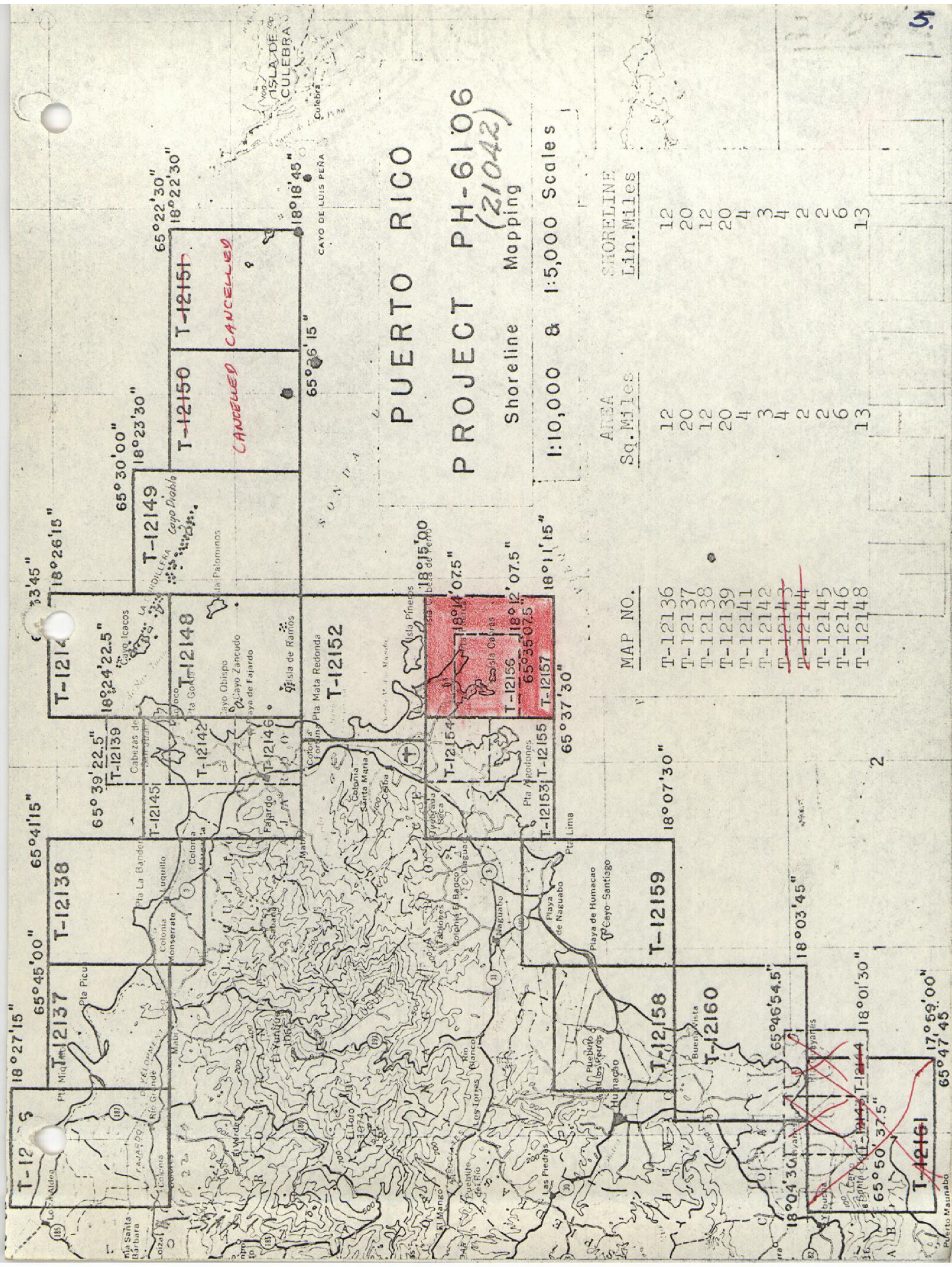
0

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

4

REMARKS:

**Ten of these were reported in report for T-12156.



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

6.

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12157

Shoreline manuscript T-12157 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, and reveals that much of this map was compiled at 1:5,000 scale as T-12156; and reduced for inclusion in T-12157. 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.D.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 on April 15, 1959 and with the "W" camera on October 26, 1961. Compilation was by Kelsh Plotter with 1:15,000 scale diapositives from the "W" camera on October 19, 1961 used for compilation of T-12156; and 1:30,000 diapositives from the "W" camera on October 26, 1961 for the remainder of T-12157. Color photographs, at 1:10,000, taken in 1958 were furnished for reference in compilation, but were not available for final review. Color photographs, 1:15,000, of March 5, 1965 in the area of Ensenada Honda were used to revise this area during final review. The stereo bridge was run and adjusted to field identified control in the Washington Office. Ratio prints, at 1:10,000 scale were processed from the October 1961 photographs, and furnished for hydro-support.

Field work preceding compilation consisted of control identification for the stereo bridge, and field inspection for compilation. The manuscript was [REDACTED] field edited, six rock heights, etc. were verified, in conjunction with hydro support.

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

FIELD INSPECTION REPORT

- 4 -

2. AREAL FIELD INSPECTION

T-12139, T-12142, T-12143, 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.

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 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.

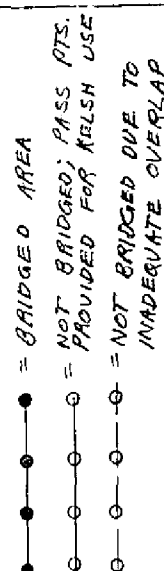
Submitted by:

R. E. Fuechsel
R. E. Fuechsel

Approved:

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

Feb. 1962



TRIANGULATION LIST

1. GUAYANES 2, 1923-SUB. 1+2
2. CATATA, 1901-SUB. 1+2
3. PASTO VIEJO EASTERN
SUGAR ASS'N. WH. CON.
STACK, 1941
4. HUMACAO PLAYA CH.,
(USGS) 1934
5. NAGUABO CH. (USGS) 1934
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. PINERITA 2, 1941-SUB. 1+2
12. CABEZA DE PERRO LT., 1923
13. PENEDO, 1941-SUB. 1+2
14. CENTRAL FAJARDO
NORTH STACK, 1941
15. CAPE, 1901-SUB. 1+2

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 12157

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. = 3048006 meter) FORWARD (BACK)
MUNDO, 1926	-	Puerto Rico	146 931.47	
ISLA, 1941	-	Puerto Rico	789 015.37	
	-		149 267.53	
PERRO, 1941	-	Puerto Rico	787 772.56	
	-		151 875.77	
	-		796 085.64	
CABEZA DE PERRO LIGHT 1923		Puerto Rico	152 584.03	OUTSIDE LIMITS
			797 228.97	
PINERITA 2, 1941	-	Puerto Rico	150 822.21	
	-		790 883.58	
GOAT, 1901	-	Puerto Rico	139 176.82	
	-		185 257.78	
CAMP, 1941	-	Puerto Rico	145 387.77	
	-		785 273.86	
ROLONCITO, 1941	-	Puerto Rico	147 088.95	
	-		784 507.84	
	-		138 777.31	
CABRAS ISLAND LIGHT, 1941	-	Puerto Rico	789 343.88	
	-		145 188.91	
PUERCA, 1900	-	Puerto Rico	790 604.07	
	-		138 950.43	
SOUTH CABRAS ISLAND, 1900	-	Puerto Rico	789 441.13	
	-		145 851.51	
PIER, 1941	-	Puerto Rico	781 989.80	
COMPUTED BY I. I. Saperstein	DATE 3/14/62	CHECKED BY V. P. Cackowski	DATE	

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MAP- 12157 PROJECT NO. PH-6106 SCALE OF MAP 1:10,000 SCALE FACTOR _____

[illegible]

COMPILATION REPORT T-1215731. DELINEATION

The Kelsh plotter was used for delineation. The field inspection was generally adequate. Shoreline and shoreline pass points south of latitude 18°14'07.5" were transferred from a reduction of T-12156 (compiled at 1:5,000).

The interior detail has not been shown in accordance with amendment to instructions dated January 15, 1962.

Delineation was carried into T-12152 to the north, which is not yet compiled.

The color photographs were used as an aid in delineating rocks, coral and shallow areas.

32. CONTROL

The density and placement of bridge points was adequate.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

None.

35. SHORELINE AND ALONGSHORE DETAILS

The mean high water and low water lines were delineated according to the field inspection which was adequate. The shoal and shallow lines were delineated by office interpretation of the photographs.

36. OFFSHORE DETAILS

Rocks, rock ledges and coral reefs that could be seen have been shown. A rock ledge shown on field inspection photograph 59-S-3941 at Cabra de Tierra could not be seen and was shown as offshore rocks.

COMPILATION RECORD

COMPLETION DATE

REMARKS

Manuscript Complete	April 1962	Superseded
Alongshore area revised from field edit. Manuscript complete	Nov. 1962	<i>Superseded</i>
<i>Ensenada Honda area revised during final review</i>	<i>Dec. 1967</i>	

37. LANDMARKS AND AIDS

Two landmarks, one north of sheet (on T-12152) and two aids to navigation, one north of sheet (on T-12152) have been shown.

Forms 567 are being submitted for those aids and landmarks not previously submitted on T-12156.

One landmark north of sheet (on T-12152) has been noted for deletion and form 567 is submitted.

38. CONTROL FOR FUTURE SURVEYS

Four photo-hydro stations were located and were listed under item 49 in report for T-12156.

Shoreline pass points have been located by the Kelsh plotter for use of the hydrographer.

39. JUNCTIONS

Junctions have been made with T-12153 to the west and T-12152 to the north - water area to the east and south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

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

Comparison has been made with U. S. Navy Hydrographic Office topographic maps 3, 4 and 7, Roosevelt Roads Naval Station, scale 1:4,800, dated 1959. The comparison is good.

Comparison has also been made with USC&GS topographic survey 6872, 6873 and 6875, scale of 1:4,800, edition of 1941. These surveys are obsolete for comparison purposes.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with chart No. 922, scale 1:10,000, edition of March 6, 1944, revised February 4, 1961, and chart No. 917, scale 1:40,000, edition of May 6, 1930, revised Oct. 12, 1959. See report of T-12156 for comparison with chart No. 922. The comparison with chart No. 917 is favorable except for the wreck mentioned in the report for T-12156.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

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

APPROVED AND FORWARDED 25 JUL 1963

V. Ralph Sobieralski
V. Ralph Sobieralski
Tampa District Officer

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GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6106 (Puerto Rico)

T-12157

- ✓ Bahía de Puerca
- ✓ Cabra de Tierra
- ~~Caribbean Sea~~ BEYOND T-12157
- ✓ Cayo Cabritas
- ✓ Cayo Pinerito
- ✓ Ensenada Honda
- ✓ Isla Cabeza de Perro
- ✓ Isla Cabras
- ✓ Isla Pineros
- ✓ Pasaje de Vieques
- ✓ Pasaje Medio Mundo
- ✓ Punta Puerca
- ~~Roads Roosevelt~~ Not Used
- ~~Roosevelt Roads Naval Reservation~~ Not Delineated
- ✓ Sonda de Vieques NOT USED

Approved by:

A. J. Wraight

A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

O.K. 5-3-68 - J.P.

49. NOTES FOR THE HYDROGRAPHER

See report for T-12156.

The hydrographer is requested to investigate the point at
Cabra de Tierra for a rock ledge.

FORM 182 (2-61)		PHOTOGRAMMETRIC OFFICE REVIEW T- 12157		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
1. PROJECTION AND GRIDS MMS		2. TITLE MMS (a. Classification label) Unclassified		3. MANUSCRIPT NUMBERS MMS	
				4. MANUSCRIPT SIZE MMS	
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) MMS		
	7. PHOTO HYDRO STATIONS MMS	8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT W.O. (EHR)	
	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 XX		
PHYSICAL FEATURES	20. WATER FEATURES MMS		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 MMS				
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		
MISCELLANEOUS	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 <i>M. M. Slawney</i>		SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT <i>M. M. Slawney</i>		
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 <i>R. E. Smith Jr.</i>			SIGNATURE OF SUPERVISOR <i>M. M. Slawney</i>		

Tampa District Office

March 5, 1962

The positions given have been checked after listing by

I. I. Saperstein

V. Bal'zh Sobleral'ski	Chief of Party.
------------------------	-----------------

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.

* TABULATE SECONDS AND METERS

TO BE CHARTED

ZYXZYX EXISTO

250x90x25

STRIKE OUT TWO

NONFLOATING/ AIDS/OR LANDMARKS FOR CHARTS

Tampa District Office April 4, 1962

I recommend that the following objects which have ~~been~~^{been} inspected from seaward to determine their value as landmarks be charted on ~~(H1112-1001)~~^(H1112-1001) the charts indicated.

The positions given have been checked after listing by

I. I. Saperstein

V. Ralph Sobieralski
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.

*** TABULATE SECONDS AND METERS**

USCOMM-DC 271206

MONITORING AIDS OR LANDMARKS FOR CHARTS

~~ZXPQ BE EXCHANGED~~
~~ZXPQ BE EXCHANGED~~
TO BE DELETED

STRIKE OUT TWO

I recommend that the following objects which have ~~(has been)~~ 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

I. I. Saparstein

V. Ralph Sobieralski *Chief of Party.*

PURBATO RICO

[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.

* TABULATE SECONDS AND METERS

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 CUT.
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 *Six rock notes, height verification, one deletion, etc. were from T-12156 which was reduced and included in T-12157*

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:

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

REVIEW REPORT T-12157
SHORELINE
December 1967

61. GENERAL STATEMENT:

See Summary on page 6 of this report.

Most of the western area of this survey was compiled at 1:5,000 scale as T-12156, and reduced for inclusion in T-12157. Much of T-12156, the Ensenada Honda area, was revised during final review using 1965 color photographs because construction had made large shoreline changes after the 1962 field edit.

An ozalid Comparison Print (pages 25 through 27), 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 6872; 1:4,800; August 1941
Registered Survey 6873; 1:4,800; August 1941
Registered Survey 6875; 1:4,800; October 1941

The areas covered by these registered surveys, and the differences with T-12157 are shown in blue on the Comparison Print.

1.- The shoreline of Ensenada Honda north of latitude $18^{\circ} 13'$ has been changed extensively by construction, filling, and dredging (See Item 61, parag. 2) since the 1941 surveys were done.

2.- The shoreline of Bahía De Puerca has been changed by construction, filling, and dredging, and a causeway to Isla Cabras has been built since the 1941 surveys.

3.- The present shoreline at the southeast part of Punta Puerca is about 30 meters offshore the 1941 shoreline.

4.- The remainder of the maps are in good agreement, with understandable differences in mangrove shoreline.

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

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

PUNTA PUERCA, P.R.; U.S.G.S. quad.; 1:20,000; 1943, revised 1955.

Details from the quadrangle are on the Comparison Print in brown.

1.- The changes in Ensenada Honda north of latitude $18^{\circ} 13'$ are from construction after the quadrangle was revised.

2.- There are shoreline differences up to 65 meters on the northwest area of Isla Cabras, the west side of Cabra de Tierra, and along the west side of Pasaje Medio Mundo.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

BOAT SHEET EX 5-3-65A & B; 1:5,000; 1965

BOAT SHEET EX10-3-62; 1:10,000; 1962

Boat sheet EX 5-3-65A & B was too faint and smudged to permit comparison.

The shoreline of Boat Sheet EX 10-3-62 was from the Advance Compilation of T-12157, and no changes were made on the boat sheet. There are, however, numerous bare rocks and rocks awash on the boat sheet that are not on T-12157. These are on the Comparison Print in green.

1.- A "rock awash" from EX 10-3-62 at latitude $18^{\circ} 13.56'$ is shown on this map as bare 4 feet (4). The field edit submitted on Cronaflex (an ozalid copy is presently retained) carried the note: bares 4.0 ft., $1418-45^{\circ}$, 19 June 1962. This rock is also shown awash on Charts 922 and 940.

2.- The Comparison Print shows 26 "rocks awash" that are on Boat Sheet EX 10-3-62 that are not on T-12157. Photographs 61-W-1680 and 1681 were carefully examined but positive identifications could not be made, and neither the field inspector or the field editor noted them. It is noted that some had images that were visible on the photographs but it was not possible to identify them as rocks, awash or otherwise; and these are noted on the Comparison Print.

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

The shoreline and offshore details of the charts that differ with T-12157 are shown on the Comparison Print in red. Chart 922 was used to its northern and western limits, which are shown on the Comparison Print.

1.- The shoreline differences are considered minor; the largest being 15 or 20 meters on Isla Pineros and Cabeza de Perro.

2.- The chart agrees with the boat sheet on the rock awash designated as bare 4 ft. by the field editor - please see note 1 in Item 64 and the Comparison Print.

3.- The charts show numerous rocks awash, islet, some dolphins etc. that do not appear on T-12157. A thorough check was made of the generalized notes of the field inspector and the sparse field edit, as well as photographs 65-L-1330 and 1331, and 61-W-1680 and 1681. The Comparison Print shows the cases in which an image appears on the photograph that may be the "rock awash" etc, but for which office identification can not be made.

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

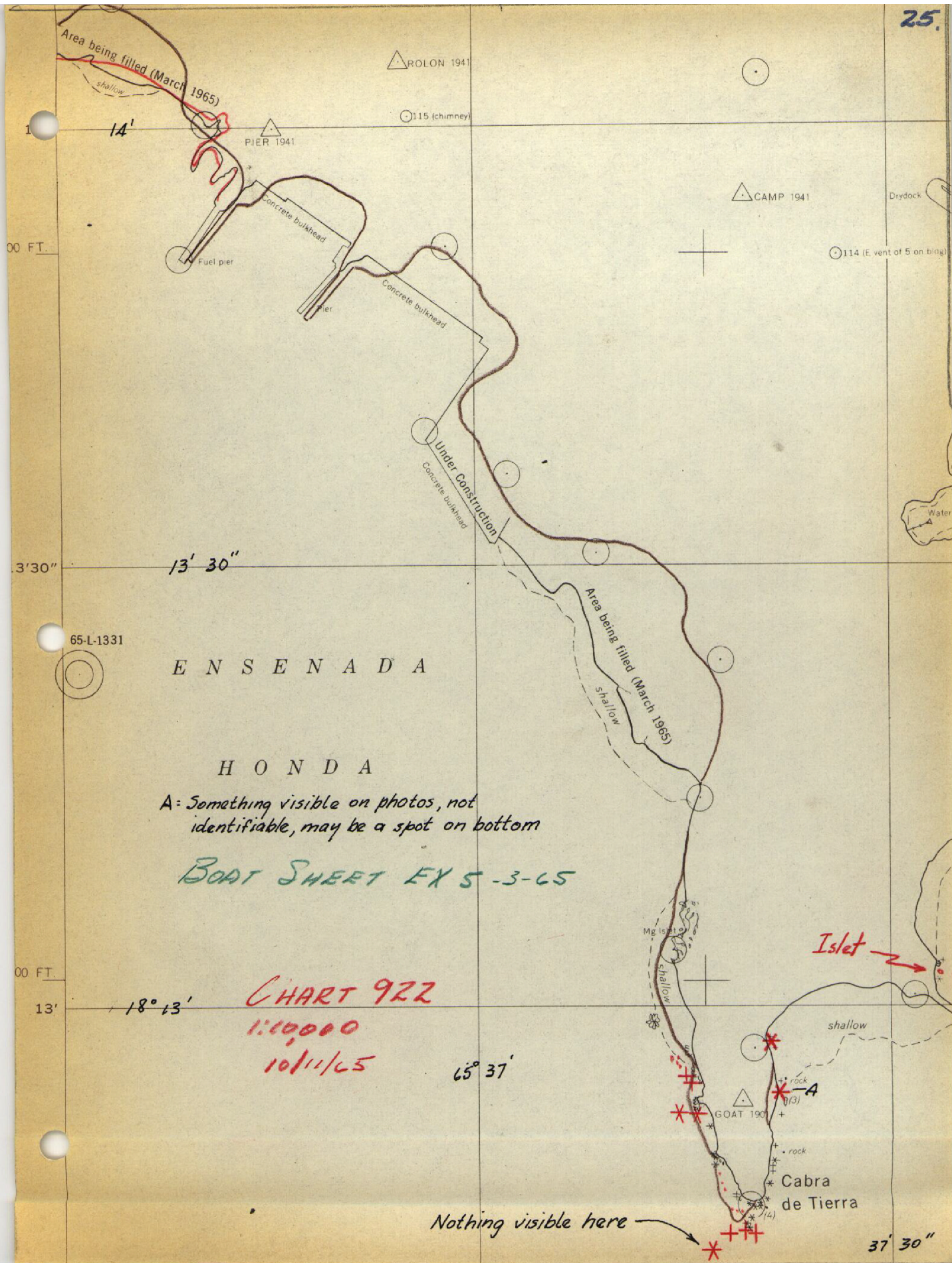
Approved by:

Charles D. Munro
Chief, Cartographic Branch *PHB*
Photogrammetric

John D. Boyer
Chief, Chart Division

J. Ralph Sobieralski JUL 1 1968
Chief, Photogrammetry Division

Chief, Operations Division



Bahia de Puerca

Punta Puerca.

13' 30"

Awash on Chart & Boat Sheet
Field edit note on Crona-
flex T sheet "Bares 4.0ft
1418-45°W
19 June, 1962

Cayo Cabritas

Dol

Islet

A= Something visible here on
photos, not identifiable,
may be on bottom

CHART
922

1:10000
10/11/65

CHART 940

BOAT SHEET
EX 10-3-62

18° 13'

ISLA

SOL 1941

SOUTH CABRAS ISLAND

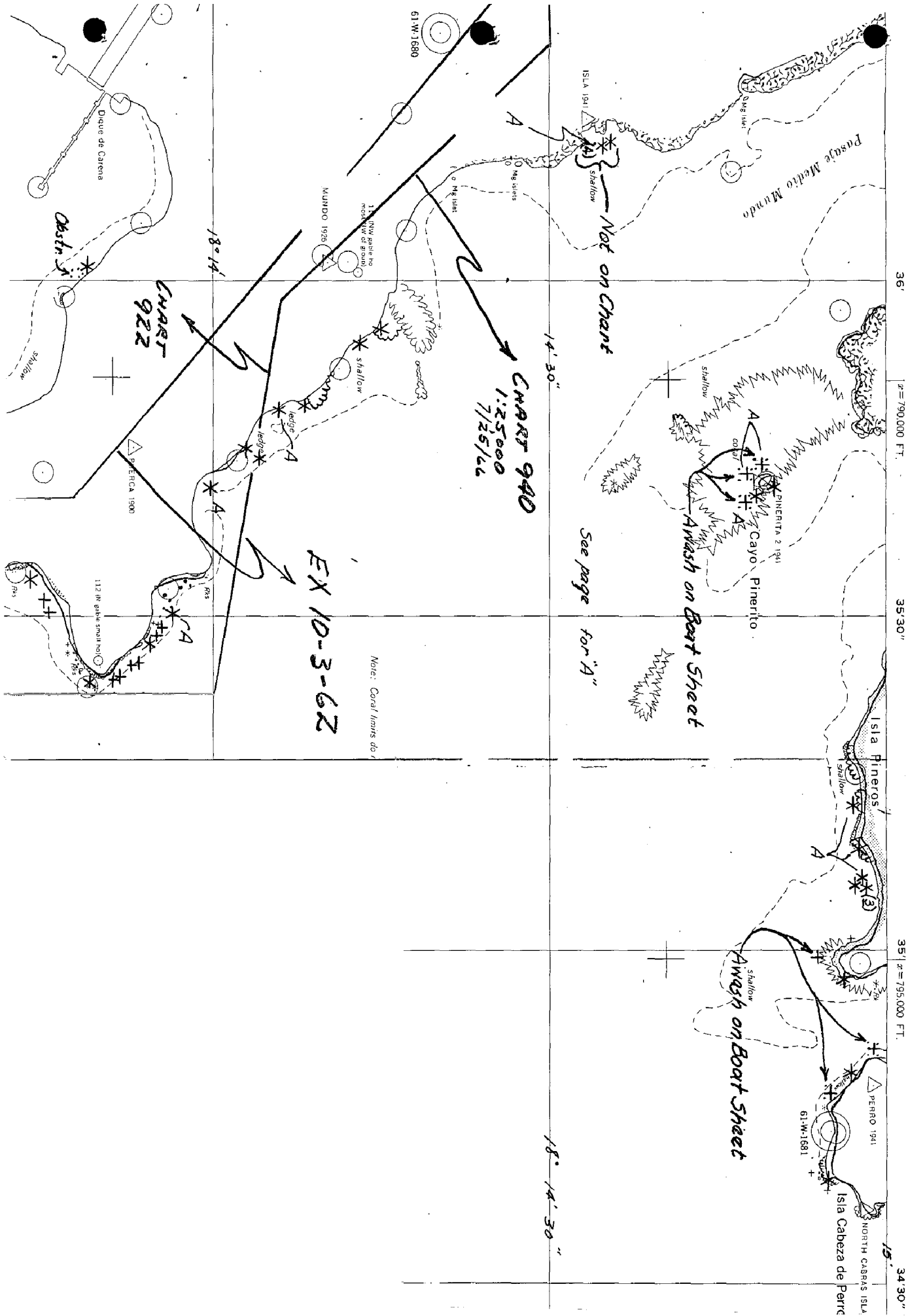
CABRAS

ISLA CABRAS LIGHT
(CABRAS ISLAND LIGHT 1941)

65° 36'

35' 30"

18° 12' 30"



Note: Coral limits do

NOTES TO VERIFIER
T-12157 Project Ph-6106
BOAT SHEETS EX 5-3-65 (H-8862) and EX 10-3-62 (H-8811)

Please note Items 61, 64, and 65 and pages 25, 26, and 27 of
the Descriptive Report.

