**DESCRIPTIVE REPORT**

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>SHORELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Office No.</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

**LOCALITY.**

<table>
<thead>
<tr>
<th>State</th>
<th>PUERTO RICO</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>EAST COAST</td>
</tr>
<tr>
<td>Locality</td>
<td>ISLA CABRAS</td>
</tr>
</tbody>
</table>

**CHIEF OF PARTY**

M. L. Olivier, Photo Party 708
V. Ralph Sobieralski, Tampa District Office

**LIBRARY & ARCHIVES**

**DATE** 1 JUL 1968
PROJECT NO. (I): Ph-6106 (21042)

FIELD OFFICE (III):
Puerto Rico

PHOTOGRAMMETRIC OFFICE (III):
Tampa, Florida

INSTRUCTIONS DATED (II) (III):
Field & Office - Aug. 30, 1961
Amendment: **Jan. 15, 1962**

*Interior photography restricted to those features useful to Photogrammetric Office.

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): NVD

Elevations shown as (2) 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.)

PLAN COORDINATES (IV):

\[ x = 145,387.77 \text{ Ft.} \quad x = 785,273.86 \text{ Ft.} \]

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.
**FIELD INSPECTION BY (I):**
M. L. Olivier

**DATE:** Dec. 1961
Date taken from CSI card

**MEAN HIGH WATER LOCATION (III): (STATE DATE AND METHOD OF LOCATION):**

<table>
<thead>
<tr>
<th>Method</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Air Photo Compilation</td>
<td>Oct. 1961</td>
</tr>
<tr>
<td>Date of photography</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mar. 1965</td>
</tr>
</tbody>
</table>

**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):**
I. I. Saperstein

**DATE:** Feb. 1962

**CONTROL CHECKED BY (III):**
I. I. Saperstein

**DATE:** Feb. 1962

**RADAR BLOCS OR STEREOSCOPIC CONTROL EXTENSION BY (III):**
Washington Office

**DATE:** Jan. 1962

**STEREOSCOPIC INSTRUMENT COMPILATION (III):**

<table>
<thead>
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<th>Planimetry</th>
<th>Date</th>
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<tbody>
<tr>
<td>I. I. Saperstein</td>
<td>Feb. 1962</td>
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</tbody>
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**CONTOURS:**
Inapplicable

**MANUSCRIPT Delineated BY (III):**

<table>
<thead>
<tr>
<th>I. I. Saperstein</th>
<th>Date</th>
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<tbody>
<tr>
<td>Reviewed by: M. M. Slavney</td>
<td>Mar. 1962</td>
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</table>

**SCIBING BY (III):**

<table>
<thead>
<tr>
<th>R. Purvis</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed by: W. H. Shearouse</td>
<td>May 1963</td>
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</tbody>
</table>

**PHOTOGRAMMETRIC OFFICE REVIEW BY (III):**
M. M. Slavney

**DATE:** May 1963

**REMARKS:**
### Descriptive Report - Data Record

**Camera (Kind or Source) (III):**

Wild "W" and "S"

**Photographs (III):**

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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</thead>
<tbody>
<tr>
<td>58-S-2580 thru 2584</td>
<td>1958</td>
<td>1215</td>
<td>1:10,000</td>
<td>* (Color Photos)</td>
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<tr>
<td>59-S-3922, 3923, 3942</td>
<td>4-18-59</td>
<td>?</td>
<td>&quot;</td>
<td>Batho. Imp. Points</td>
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<tr>
<td>61-W-1583 thru 1585</td>
<td>10-19-61</td>
<td>1457</td>
<td>1:15,000</td>
<td>(Diapositives)</td>
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<tr>
<td>61-W-1787 thru 1790</td>
<td>10-20-61</td>
<td>1647</td>
<td>1:10,000</td>
<td>(Color Photos)</td>
</tr>
<tr>
<td>65-L-1330 &amp; 1331</td>
<td>3-5-65</td>
<td>1535</td>
<td>1:5000 ratio from 1:15000 *</td>
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</table>

**Tide (III):**

<table>
<thead>
<tr>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
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</thead>
</table>

*No subordinate station in area. Chart 922 shows range of tide in Ensenada Honda as 0.7 ft.*

**Reference Station:**

**Subordinate Station:**

Atlantic Marine Center

Washington Office Review By (IV): [Signature]

Date: Nov. 1967

Proof Edit By (IV): [Signature]

Date:

Number of Triangulation Stations Searched For (III): 10

Recovered: 4

Identified: 1

Number of BM(S) Searched For (III): 2

Recovered: 0

Identified: 0

Number of Recoverable Photo Stations Established (III): 0

Number of Temporary Photo Hydro Stations Established (III): 4 (one north of manuscript)

**Remarks:**

[Blank]

[Blank]
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12156

Shoreline manuscript T-12156 is one of eight 1:5,000 scale maps in Ph-6106 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-12153 and T-12154, 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.

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 15, 1959. Compilation was with Kelsh Plotter from 1:15,000 photographs made with the "W" camera on October 19, 1961. Color prints at 1:10,000, taken October 20, 1961 with the "W" camera, were furnished for reference in compilation; they were not available for final review. The stereo-bridge was run and adjusted to field identified control in the Washington Office. 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 edit in conjunction with photo-hydro support.

Revision of the area bordering Ensenada Honda was done during final review from 1:15,000 scale March 5, 1965 color photographs, because extensive changes were made by construction after the 1962 field edit.

The compilation manuscript was a vinylite sheet 2 minutes, 00 seconds in latitude, and 2 minutes 22.5 seconds in longitude. The smooth manuscript was on cronaflex for registry and record after final review.
2. AREAL FIELD INSPECTION

TH/2139, TH/2142, TH/2145, TH/2146, and TH/2152 through TH/2157.
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-6105-3 dated 20 November 1961.

Submitted
5 December 1961

Michael L. Olivier
Chief Photo-Party 708
21. **Area Covered:**

T-12136 through T-12139; T-12141 through 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:

A 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. Fuechel

Approved:

E. H. Ramey, Chief
Aerotriangulation Section
TRIANGULATION LIST

1. GUAJAR, 1923- SUB. 1 & 2
2. CATATA, 1901- SUB. 1 & 2
3. PASTO VIEJO EASTERN
   SUGAR ASSN. WH. CEN.
   STACK, 1941
4. NIMACAO PLAYA CH.
   (USGS) 1934
5. NARGOBO CH (USGS) 1934
6. COLEI (USGS) 1941- SUB. 1 & 2
7. GOMA 1941- SUB. 1 & 2
8. HONDA 1941- SUB. 1 & 2
9. CABRAS IS. LT., 1941
10. MUNDO, 1926- SUB. 1 & 2
11. AHERITA 2, 1941- SUB. 1 & 2
12. CASEZA DE 11°45' LT., 1923
13. PENEED, 1941- SUB. 1 & 2
14. CENTRAL PAJARDO
   NORTH STACK, 1941
15. CAPE, 1901- SUB. 1 & 2
16. CAPE SAN JUAN LIGHT- 
   HOUSE, 1900
17. LUQUILLO CH (USGS) 
   1934
18. PALMER (USGS) 1939- 
   SUB. 1 & 2
19. RIO GRANDE CHURCH 
   (USGS) 1934- SUB. 1 & 2
20. SANTA INEZ, 1902-
   SUB. 1 & 2
During the bridging of strip 3, points were established to facilitate the graphical setting of various models to compile the large-scale sheets 7-12154, 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; 1584-85. These models are at a scale twice as large as that of the scale of the photos used in strips 2 and 3. Therefore, the models mentioned above should be used in lieu of strip 2 for the large-scale compilation.

Do not use \( \Delta \) PINERITA 2, 1941-55. This site 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 593 3921. These should be positioned during compilation phase.
PHOTOMETRIC PLOT REPORT

The stereo bridge was run in the Washington Office in January 1962. No bridging report has been received at this time, but notes on Puerto Rico strip 3 were submitted.

31. DELINEATION

The Kelsh plotter was used for delineation. The field inspection was generally adequate. No Field Inspection Report was received. It is noted that the field inspection was done on the April 1959 photographs while the actual compilation was accomplished using October 1961 photographs.

The interior detail has not been shown according to the amendment to instructions dated January 15, 1962.

The color photographs were used as an aid in delineating rocks and shallow areas. No color photography was available for the southeast end of Punta Puerca.

32. CONTROL

The density and placement of bridge points was adequate. It will be noted that the bridge was run using 1:30,000 diapositives so that some points appeared quite large when viewed using the 1:15,000 diapositives.

See "Notes on Puerto Rico strip 3."

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.
<table>
<thead>
<tr>
<th>Compilation Record</th>
<th>Completion Date</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alongshore area for hydro</td>
<td>Mar. 1962</td>
<td>Superseded</td>
</tr>
<tr>
<td>Alongshore area revised from field edit.</td>
<td>Manuscript complete Nov. 1962</td>
<td>Superseded</td>
</tr>
<tr>
<td>Ensenada-Hondo shoreline revised from 1965 color photogs C5-A-1730,31 during final review</td>
<td>Nov. 1967</td>
<td></td>
</tr>
</tbody>
</table>
36. **OFFSHORE DETAILS**

Rocks and rock ledges that could be seen have been shown.

37. **LANDMARKS AND AIDS**

One aid and one landmark north of sheet have been shown. One landmark has been noted for deletion. Forms 567 are being submitted for each.

38. **CONTROL FOR FUTURE SURVEYS**

Four photo-hydro stations have been located (one north of manuscript) and are listed under item 49.

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

39. **JUNCTIONS**

Junctions have been made with T-12151 to the northwest; T-12155 to the southwest (water); T-12157 (1:10,000) 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 map No. 7 - Roosevelt Roads Naval Station, scale 1:48,000 dated 1959. The comparison is good.
Comparison has also been made with USC&GS topographic survey nos. 6872 and 6873, scale 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. The comparison is favorable except that the wrecks about 1700 yards northeast of Cayo Cabritas can not be seen on the photographs. Numerous small islets shown on the chart at approximate latitude 18°13'55", longitude 65°35'33" do not appear on the photographs.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

APPROVED AND FORWARDED

V. Ralph Sobieralski
Tampa District Officer

I. I. Saperstein
Cartographer (Photo)
GEOGRAPHIC NAMES
FINAL NAME SHEET

PH-6106 (Puerto Rico)
T-12156

Bahia de Puerca
Cabra de Tierra
Cayo Cabritas
Ensenada Honda
Isla Cabras
Pasaje de Vieques
Punta Puerca
\* Radas-Roosevelt
\* Roosevelt Roads Naval Reservation
Sonda de Vieques (Beyond map limits)

\* Reservation not delineated; Names omitted from Chart 922 for security (?)

Approved by:
A. J. Wraith
Chief Geographer

Prepared by:
Frank W. Pickett
Cartographic Technician

O.K. 6-3-68
49. **NOTES FOR THE HYDROGRAPHER**

Four photo-hydro stations were established:

111 (NW Gable, ho. most NW of group) north of manuscript.

112 (N Gable, small ho.)

114 (Chimney)

115 (E vent of 5 on bldg.)

A wreck, about 1700 yards northeast of Cayo Cabritas shown on chart 922 could not be seen on the photographs and should be investigated by the hydrographer.

Areas outlined with a dashed line and labeled subm ledge and ledge should be investigated by the hydrographer.
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by

I. I. Seperstein

<table>
<thead>
<tr>
<th>STATE</th>
<th>PUERTO RICO</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>EAST COAST</td>
<td>ISLA CABRAS</td>
</tr>
<tr>
<td>(CABRAS ISLAND LIGHT, 1941)</td>
<td>ht = 50 (71)</td>
</tr>
</tbody>
</table>

*No date given - taken from Central Station Identification Card*
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks becharted (deleted from) the charts indicated.

The positions given have been checked after listing by

I. I. Saperstein

STATE: PUERTO RICO

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
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<tbody>
<tr>
<td>HOUSE (lighted)</td>
<td>Light on building (gone)</td>
<td></td>
<td>18 13</td>
<td>65 36</td>
<td></td>
<td>Puerto Rico</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Page 19 is now removed in the

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.
<table>
<thead>
<tr>
<th></th>
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<tr>
<td>DETAIL POINTS</td>
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<tr>
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<td>(Nautical Chart Data)</td>
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<td>LOW-WATER LINE</td>
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<td>AIDS TO NAVIGATION</td>
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<td>MMS</td>
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<tr>
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**Note:** 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.)
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-12150 - Mean high water line revision in area of "BMD" appears necessary. Rock height revisions necessary in the following areas: HH, LG, FOX, AND BIX.
Photos = 5953933, and 3932.

T-12158 - Mean high water line revision along entire beach line appears necessary.
Photos = 5953931, 3930, 3929, and 3928.

T-12159 (2 copies) - Mean high water line revision in area of HH to LEB. Rock height revisions in the following areas: HUG, CRY, and WHE.
Photos = 5953927, 3926, and 61M1676.

T-12153 - Rock height revision in area of JIM.
Photos = 61M1678 and 1679.

T-12155 - Rock height revision in area of CUT.
Photos = 61M1559 and 61M1560.

T-12154 - Rock height revisions in the following areas: EVA (2), KEN, and CRY.
Photos = 61M1594 and 1585.

T-12154 - Pier revision at OHL.
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 P. Mirth
LT, CGS

Forwarded Approved:

[Signature]

Commander
CAPT, CGS
Comdr., Ship EXPLORER
61. **GENERAL STATEMENT:**

See Summary accompanying Descriptive Report (page 6).

Shoreline revisions were made to the map in the area bordering Ensenada Honda during final review, using color photographs 65-L-1330 and 1331. Extensive construction, dredging, and filling after the 1962 field edit were responsible for the changes.

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

62. **COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:**

Registered Topographic Survey 6872; 1:4,800; August 1941
Registered Topographic Survey 6873; 1:4,800; August 1941

The differences in shoreline, rocks, ledges, etc. from these registered surveys are on the Comparison Print in blue.

The area north of latitude 18° 13'1 bordering Ensenada Honda has been changed extensively by construction, dredging and filling between 1962 and 1965.

The areas bordering Ensenada Honda, and Bahía De Puerca as well as the causeway to Isla Cabras have been changed by filling and construction since the 1941 surveys were made.

The remainder is in fair agreement with the exception of a 30 meter shoreline difference at Punta Puerca.

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 1957

Detailed comparison was not made because the quadrangle would require a 4× enlargement. With the exception of areas affected by construction, the general comparison seems favorable.

64. **COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:**

Boat Sheet EX-5-3-65A & B (H-8862); 1:5,000; 1965

Boat Sheet EX-10-3-62 (H-8811); 1:10,000; 1962
The areas covered by these boat sheets, and notes pertaining to them are on the Comparison Print in green.

Shoreline and other data on Boat Sheets EX-5-3-65A & B were too faint and smudged for comparison.

Boat Sheet EX-10-3-62 shows 6 "rocks awash" that are not on this survey. They were not noted by the field inspector or the field editor, and though photographs 61-W-1680, 1681 hint at 5 of them, no positive office identification could be made of these:

Latitude 18° 14.1', Longitude 65° 35.8'
" 18° 13.99', " 65° 35.68'
" 18° 13.94', " 65° 35.51'
" 18° 13.73', " 65° 35.35'
" 18° 13.62', " 65° 35.56'

There was no hint of the rock at latitude 18° 14.05', longitude 65° 35.75' on the photographs.

Boat Sheet EX-10-3-62 shows a "rock awash" at latitude 18° 13.62', longitude 65° 35.65' which the field editor had a leader to and noted "bare 4.0 ft., 14.8 - 45°W, 19 June 1962" on the cronafx "T" sheet used in hydro-support.

65. COMPARISON WITH NAUTICAL CHARTS:

Chart 922; 1:10,000; 6th Edition, October 11, 1965

The shoreline and offshore details from Chart 922 that differ with this survey are shown on the Comparison Print in red. The Comparison Print also carries notes of efforts made to resolve the differences. The field inspection gave generalized notes, and the field edit was confined to checking the height of six rocks.

1- The chart shows a rock awash in an offshore exposed position at latitude 18° 12.72', longitude 65° 36.72'. Color photographs 65-L-1332 and 1333 indicate there may be some submerged rocks or coral in the area, but no evidence of a "rock awash" is discernible.

2- Delineation of rocks, ledges, etc. have been checked in the following areas using the available photographs, and appear to be correct on T-12156:
Around Cayo Cabritas, 18° 13.35', 65° 36.1'
At latitude 18° 12.9', longitude 65° 36.75'
  "  18° 12.9',  "  65° 36.63'
  "  18° 12.93',  "  65° 36.16'
  "  18° 13.38',  "  65° 36.32'
  "  18° 13.7',  "  65° 35.5'

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 made in the field.

Reviewed by:

M. M. Slavney

Approved by:

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

Approved by:

Charles Tremain
Chief, Cartographic Branch

Ralph Sobieralski
Chief, Photogrammetry Division

John C. Rogers
Chief, Chart Division

Chief, Operations Division
NOTES TO VERIFIER
T-12156 Project PH-6106
BOAT SHEET NO. EX-5-3-65 (H-8862)

Please note the paragraph in Item 61 pertaining to delineation changes from 1965 photographs during final review, and the paragraphs in Items 65.
# 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.

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