<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Shoreline (Photogrammetric)</th>
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<tr>
<td>Field No.</td>
<td>Office No. T-13121</td>
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<tr>
<td>State</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>General locality</td>
<td>Southwest Coast</td>
</tr>
<tr>
<td>Locality</td>
<td>Bahia Fosforescente</td>
</tr>
<tr>
<td></td>
<td>1966-1968</td>
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<tr>
<td>CHIEF OF PARTY</td>
<td>Alfred C. Holmes, NOAA</td>
</tr>
<tr>
<td></td>
<td>Director, Atlantic Marine Center</td>
</tr>
<tr>
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<td>LIBRARY &amp; ARCHIVES</td>
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</table>
DESCRIPTIVE REPORT - DATA RECORD
T-13121

PROJECT NO. (III):
PH-6708

FIELD OFFICE (III): CHIEF OF PARTY
None

PHOTOGRAMMETRIC OFFICE (III): OFFICER-IN-CHARGE
Atlantic Marine Center Alfred G. Holmes, RADM

INSTRUCTIONS DATED (II) (III):
Field - September 27, 1966
December 14, 1967
Office - November 14, 1967

METHOD OF COMPILATION (III):
Wild B-8 Plotter

MANUSCRIPT SCALE (III): STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:10,000 1:5,000 pantographed to 1:10,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO. DATE:

DATE REGISTERED (IV):
JUN 1975

GEOGRAPHIC DATUM (III):
Puerto Rico

VERTICAL DATUM (III):

EXCEPT AS FOLLOWS:
Elevations shown as (2) refer to mean high water
Elevations shown as (3) refer to sounding datum
i.e., mean low water

REFERENCE STATION (III):
PAPAYO, 1966

LAT.: 17° 58' 29.69755"
LONG.: 67° 01' 35.50604"

PLANE COORDINATES (IV):

Y = 51, 743.24 ft. X = 293, 857.52 ft.

STATE ZONE
Puerto Rico
1
**DESCRIPTIVE REPORT - DATA RECORD**

**FIELD INSPECTION BY (III):**

None

**DATE:**

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

Air Photo Compilation - Date of Photography: Nov. 15 & 16, 1966

**DATE:**

**PROJECTION AND GRIDS RULED BY (IV):**

<table>
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<th>A. Bethea</th>
<th>DATE</th>
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**PROJECTION AND GRIDS CHECKED BY (IV):**

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**RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):**

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<th>I. Saperstein</th>
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**PLANIMETRY:**

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**CONTOURS:**

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**REMARKS:**

FIELD EDIT BY: R. E. Kesselring

3/26/68
### Descriptive Report - Data Record

#### Camera (Kind or Source) (iii):

L" & "M"

#### Photographs (iii)

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<th>Number</th>
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<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<tr>
<td>66M(c) 636</td>
<td>11/15/66</td>
<td>0854</td>
<td>1:60,000</td>
<td>0.3' above MLW</td>
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<tr>
<td>66M(c) 646 &amp; 647</td>
<td>11/15/66</td>
<td>0904</td>
<td>1:60,000</td>
<td>0.3' above MLW</td>
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<tr>
<td>66L(c) 8310-8312</td>
<td>11/15/66</td>
<td>0944</td>
<td>1:30,000</td>
<td>0.4' above MLW</td>
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<tr>
<td>66L(c) 8330-8332</td>
<td>11/15/66</td>
<td>0955</td>
<td>1:30,000</td>
<td>0.4' above MLW</td>
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<tr>
<td>66L-8511R &amp; 9512R</td>
<td>11/16/66</td>
<td>0926</td>
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#### Predicted Tide (iii)

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<th>Spring Range</th>
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<tr>
<td></td>
<td>1.4</td>
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#### Reference Station:
Galveston, Texas

#### Subordinate Station:
Paraguera (Isla Maguey)

#### Washington Office Review by (iv):
Leo F. Beugnet, Atlantic Marine Center

#### Date:
June, 1970

#### Proof Edit by (iv):

#### Number of Triangulation Stations Searched For (iii):

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#### Number of BM(s) Searched For (iii):

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#### Number of Recoverable Photo Stations Established (iii):

#### Number of Temporary Photo Hydro Stations Established (iii):

#### Remarks:
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<th>Completion Date</th>
<th>Remarks</th>
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<td>Alongshore Area for Hydro</td>
<td>January 1968</td>
<td>Superseded</td>
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<tr>
<td>Field Edit applied</td>
<td>April 1968</td>
<td>Superseded</td>
</tr>
<tr>
<td>Manuscript Complete</td>
<td></td>
<td></td>
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<tr>
<td>Field-Edit Final Review</td>
<td>June 1970</td>
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SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-13121

Shoreline survey T-13121 is one of twenty-one similar surveys in job PH-6708. The job is comprised of ten 1:5,000 and eleven 1:10,000 scale surveys located along the south coast of Puerto Rico. This survey covers the area from Arrecife Coral eastward to Punto Penones. See page 5 for the location of the survey within the job.

Field work preceding compilation consisted of pre-marking of the necessary horizontal control. There was no field or shoreline inspection prior to compilation. The survey was field edited in March 1968.

Compilation was at 1:10,000 using the 1:30,000 scale color and infrared photography of November 15 and 16, 1966. Copies of the manuscript, classified incomplete, along with ozalids, specially prepared photographs and a field edit ozalid were subsequently provided for preparation of the boat sheet, location of photo-hydro signals and for field edit use.

The manuscript was a vinylite sheet 3 minutes 45 seconds in latitude by 3 minutes 45 seconds in longitude. After application of field edit it was scribed, stick-up applied and reproduced on cronaflex. Final review was accomplished in the Atlantic Marine Center in June 1970. One cronaflex positive and a negative are forwarded for record and registry.
FIELD INSPECTION REPORT
PH-6708
T-13121

There was no field inspection prior to compilation.
PHOTOGRAMMETRIC PLOT REPORT
Job PH-6702
Puerto Rico

October 31, 1967

21. Area Covered

This report covers the southwest part of Puerto Rico, consisting of eight (8) 1:10,000 scale T-sheets, T-13118 thru T-13125, and thirteen (13) 1:5,000 scale T-sheets, T-13128 thru T-13140. Photography covering sheets T-13126 and T-13127 was not bridged at this time due to lack of control.

22. Method

Analytic aerotriangulation methods were used to bridge Strip 1, 1:60,000 scale color diapositives, using premarked and office identified control. Numerous tie points were located to control the compilation photography. Strips 3, 5, 5A, 6, 7 and 8 were bridged by analytic methods. Strips 2 and 4 were bridged by stereoplanigraph in order to facilitate the work.

The attached sketch of the strips bridged shows the placement of triangulation used in the final strip adjustment. Closures to control are shown for each strip on the IBM readout, along with all bridge points on Puerto Rico plane coordinates.

23. Adequacy of Control

Horizontal control is adequate to control Strip 1. All other strips were bridged using tie points and horizontal control and is adequate.

The premarked paneling at station PAGEN was removed prior to photography and the subpoint could not be identified. It was decided, therefore, to and Strip 1 with photo 66-M-625 and Strip 6 with photo 66-L-8433. However, it is believed that sheet T-13125 can be adequately compiled.

Station GUANICA L.H. 1900 does not have a valid position. Geodesy did not tie to this station during the 1966 work, and no adjustment was made to the new Puerto Rico datum. (Station has been reported destroyed.) The positions shown on Form 725d computed by Geodesy is arbitrary. Therefore, GUANICA L.H. Subpoint 1 and subpoint 2 are unreliable and were not held in the bridge.
It is to be noted that all horizontal control used on this job and the final pass point positions are on the new Puerto Rico Datum. A Xerox copy of triangulation station positions issued by Geodesy is submitted to the Compilation office with this job. Previously published CP's and plane coordinates should not be used for plotting.

24. **Supplemental Data**

Vertical control needed for the adjustment was taken from USGS quadrangles.

25. **Photography**

The definition and quality of the RC-9 "M" and RC-8 "L" color photography was fair and good respectively. Smoke covers parts of some photographs on Strips 3 and 5A, but should not hinder compilation of the shoreline.

Although sheets T-13137 thru T-13140 are covered by 1:15,000 scale photographs, these photographs were not bridged, nor can they be used for compilation on the plotter because of water areas. Strip 3, therefore, should be used to compile the above sheets.

Ratio prints have been ordered for the 1:30,000 and 1:15,000 scale photographs to compilation scale, on black and white base.

Several points were transferred to ratio print 56-L-8394 in order that a reef on T-13140 may be compiled graphically.

Respectfully submitted

[Signature]

I. I. Saperstein

Approved and Forwarded

[Signature]

Henry F. Eichert, Chief
Aerotriangulation Section
1. CABO ROJO (USAF) 1966
2. CERRO VERTERO 2 (USAF) 1934
3. ENSENADA, SOUTH RR. SUGAR CO.
   CENT. GUANICA WEST & EAST STACKS. 1966
   GUANICA MUNIC. W.T. 1966
4. VAQUERO, 1900
5. TURNE 2, 1966
6. GUAYANILLA, UNION CARBIDE CO. W.T. 1966
7. REY, 1966
8. PONCE, RADIO STATION WELO MAST, 1966
   PONCE BAY FRONT & REAR RANGE LTS. 1966
9. CARDOÑA ISLAND 1 N 1900
10. PONCE, DON Q RUM CO. STACK, 1966
11. BAHIA DE GUANICA RANGE FRONT
    & REAR LTS. 1966

AEROTRIANGULATION
PUERTO RICO
Southwest Coast
PH-6708
Oct. 1967

LEGEND
△ Control Used in Adjustment
○ 1:60,000 Photos (color)
○ 1:30,000 Photos ("")
○ 1:15,000 Photos (""")
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR μ-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
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</thead>
<tbody>
<tr>
<td>CERRO VERTERO 2 (USGS), 1934</td>
<td>Geodesy Pad 27068</td>
<td>Puerto</td>
<td>17° 59' 11.09184&quot;</td>
<td>433.3 ✓ (1144.3) ✓</td>
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<tr>
<td></td>
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<td>67° 00' 31.19778&quot;</td>
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<td>Forward (Back)</td>
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<tr>
<td>PAPAYO, 1966</td>
<td></td>
<td></td>
<td>17° 58' 29.69755&quot;</td>
<td>913.0 ✓ (931.6) ✓</td>
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<tr>
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<td>27042</td>
<td>67° 01' 35.50604&quot;</td>
<td>1016.7 ✓ (720.7) ✓</td>
<td>Forward (Back)</td>
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</table>
COMPILATION REPORT
T-13121

31. Delineation:

The shoreline and all other features were compiled using the Wild B-8 with color photography. The infrared photographs were used as a check on the shoreline compilation. There was no field inspection.

32. Control:

See Photogrammetric Plot Report attached.

33. Supplemental Data:

None

34. Contours and Drainage:

Contours are inapplicable.

Drainage was delineated from office interpretation of the photographs.

35. Shoreline and Alongshore Details:

The shoreline, shallow lines foul areas coral reefs, and submerged rocks were delineated from office interpretation of the photographs. No low water line shown.

36. Offshore Details:

Since there was no prior field inspection and due to penetration over water areas, underwater features and hazards to navigation could not be delineated with accuracy. See Notes to the Hydrographer.

37. Landmarks and Aids:

There are no Aids.

One Landmark has been shown and appropriate copies of Form 567 have been forwarded to the Washington Office under date April 1968.
38. **CONTROL FOR FUTURE SURVEYS:**

No statement.

39. **JUNCTIONS:**

There are no contemporary surveys to the north or south. Junctions are in agreement with T-13122 to the east and T-13120 to the west.

40. **HORIZONTAL AND VERTICAL ACCURACY:**

No statement.

46. **COMPARISON WITH EXISTING MAPS:**

A comparison has been made with USGS quadrangle PARCUERAR, P. R., scale 1:20,000, dated 1957.

47. **COMPARISON WITH NAUTICAL CHARTS:**

A comparison was made with C&GS Chart 901, (West Coast of Puerto Rico), scale 1:100,000, 9th Edition, dated March 1965; and previous bureau survey South Coast of Puerto Rico, Point Brea to Margarita Reef, 1:20,000, dated Feb. 12, to May 20, 1903, Register No. 2638.

**ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:**

None.

**ITEMS TO BE CARRIED FORWARD:**

None.

Approved for forwarding:  
Melvin J. Umbach, CDR, NOAA  
Chief, Photogrammetry Division, AMC

Submitted:  
L. L. Graves  
Cartographic Technician

Approved:  
Alfred C. Holmes, RADM, NOAA  
Director, Atlantic Marine Center
<table>
<thead>
<tr>
<th>Arrecife Enmedio</th>
<th>Isla La Mata de la Gata</th>
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<td>Arrecife Mario</td>
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<td>Arrecife Media Luna</td>
<td>La Paraguera</td>
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<td>Bahia Montalva</td>
<td>Mar Caribe</td>
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<td>Caleta Parguera</td>
<td>Pasa del Medio</td>
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<td>Cayo Mata Seca</td>
<td>Salinas el Papayo</td>
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<td></td>
<td>Turzumote I</td>
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</table>

Approved by: A. J. Wright  
A. Joseph Wright  
Chief Geographer

Prepared by: Frank W. Pickett  
Cartographic Technician
NOTES FOR THE HYDROGRAPHER

There are no photo hydro stations or recoverable topographic stations within the limits of this sheet. All reefs, shoals, shallow areas, foul areas, and submerged rocks are from office interpretation of the color photographs. There was considerable penetration on the color photography; due to this and without the aid of any prior shoreline inspection, these offshore features have been shown only as aid to the hydrographer. They may be only bottom changes, coral, or marine vegetation. The delineation of all these features should be verified, and if any exist that are not shown they should be located. Also, any that are shown that do not exist should be deleted.

If landmarks or non-floating aids to navigation exist in the area, please locate and submit Form 567.

See notes on the FIELD EDIT OZALID.
### PHOTOGRAMMETRIC OFFICE REVIEW

<table>
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<tr>
<th>1. PROJECTION AND GRIDS</th>
<th>2. TITLE</th>
<th>3. MANUSCRIPT NUMBERS</th>
<th>4. MANUSCRIPT SIZE</th>
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<td>RES</td>
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#### CONTROL STATIONS

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<th>6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)</th>
<th>7. PHOTO HYDRO STATIONS</th>
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#### BENCHMARKS

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<th>9. PLOTTING OF SEXTANT FIXES</th>
<th>10. PHOTOGRAMMETRIC PLOT REPORT</th>
<th>11. DETAIL POINTS</th>
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<td>Bridge (W.O.)</td>
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#### ALONGSHORE AREAS (Nautical Chart Date)

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<th>12. SHORELINE</th>
<th>13. LOW-WATER LINE</th>
<th>14. ROCKS, SHOALS, ETC.</th>
<th>15. BRIDGES</th>
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#### AID TO NAVIGATION

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<th>17. LANDMARKS</th>
<th>18. OTHER ALONGSHORE PHYSICAL FEATURES</th>
<th>19. OTHER ALONGSHORE CULTURAL FEATURES</th>
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<th>23. STEREOSCOPIC INSTRUMENT CONTOURS</th>
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<th>25. SPOT ELEVATIONS</th>
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<th>29. RAILROADS</th>
<th>30. OTHER CULTURAL FEATURES</th>
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#### MISCELLANEOUS

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<th>34. JUNCTIONS</th>
<th>35. LEGIBILITY OF THE MANUSCRIPT</th>
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#### DISCREPANCY OVERLAY

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<tr>
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<th>37. DESCRIPTIVE REPORT</th>
<th>38. FIELD INSPECTION PHOTOGRAPHS</th>
<th>39. FORMS</th>
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#### REVIEWER

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<tr>
<td>R. J. Pate</td>
<td>2/13/68</td>
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#### SUPERVISOR

<table>
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<th>DATE</th>
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<tbody>
<tr>
<td>Albert C. Rauck, Jr.</td>
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#### REMARKS (See attached sheet)

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 under item 43.

#### REMARKS

Field Edit applied from Field edit ozalid, matte ratio prints 66-L-8310 and 8312, color contact prints 66-L-8310, 8311, 8312, 8330, 8332.
FIELD EDIT REPORT
T-13121
Job PH-6708
Southwest Coast of Puerto Rico

Field edit was performed in accordance with Instructions - PHOTO-HYDRO SUPPORT AND FIELD EDIT - Job PH-6708, dated December 14, 1967, and with Photogrammetry Instructions concerning field edit.

52. Adequacy of compilation.

Compilation was adequate. One reef, at the eastern edge of the sheet was compiled incorrectly and the western tip of another reef was left off. This reef is at the junction of T-13120 and T-13121 and the tip properly falls on T-13120. One mangrove limit was omitted. Three small and insignificant piers were overlooked.

54. Recommendations.

None.

55. Examination of proof copy.

Dr. Luis R. Almodovar of La Parguera, Lajas, Puerto Rico, will be happy to examine a proof copy of this map.

56. Landmarks and non-floating aids to navigation.

One landmark, TWIN SILOS, was recommended for proposed chart 948 only. It was reported on Form 567 and the original and two copies are enclosed with this report. Three landmark houses were recommended and were circled on the photographs and indicated on the field edit ozalid. The larger compiled houses should be retained on proposed chart 948.

No non-floating aids to navigation are contained in this sheet.

57. Reefs, shoals, rocks and foul areas.

The reefs on this map are coral. The majority of them are probably bare or awash at the sounding datum. Observations of the heights of the reefs were taken at various times and indicated on the field edit ozalid. A few soundings were taken along the inshore edge of them to indicate average depths. One reef, charted as Arrecife Emmedio, was incorrectly compiled. Bottom vegetation was shown as part of the reef and the reef itself labeled "foul" instead of "reef". Some small areas of fast land were omitted on two of the reefs and a small submerged reef was overlooked.

Two small shoals were added and one area classified as a shoal.
57(cont.)

Rock delineation was good. Two submerged rocks were deleted and a few, on the reefs, were re-classified.

Foul areas are as mapped, except for the reef mentioned above. The offshore edges of the reefs, in the limits labeled shallow, are more correctly foul. This will be further confirmed by the hydrographer.

58. Drainage and flooded areas.

See this heading in the report for T-13118.

59. Geographic names.

The majority of the names on this map are in undisputed local usage. There are three undisputed new names and three disputed names, one of which was discussed in the report for T-13120. Two names have fallen into disuse and are recommended for deletion.

The undisputed new names are:

ARRECIFE MARIO - Mario is a proper name, no one could say with authority, the reason for this name.

ISLA LA MATA DE LA GATA or MATA DE LA GATA - meaning grove of the cat. Mata is a bush or small grove, the cat refers to a coral formation that is reputed to look like a cat from seaward.

MAGIMO - refers to the largest of the mangrove islands in this chain.

Local authorities agree unanimously on these names. See the listing under this heading in the report for T-13120.

Disputed names are:

ARRECIFE LAUREL - which is charted as ARRECIFE CORRAL. This name was discussed in the report for T-13120.

TURRUMOTE I - which is charted as CAYO CORRAL. Turrumote means pile or heap which pretty well describes this reef. There are two Turrumote's in the area (TURRUMOTE II is on T-13122) which accounts for the numeral.

ARRECIFE CORRAL - which is charted as ARRECIFE EMMEDIO. A corral is a pen or an enclosure and this is supposed to refer to the shape of the reef.

All of the authorities listed in the report for T-13120 agree on the latter two names. Five of the six agree on the first. Turrumote is probably a generic name. However, the field editor's Spanish was not sufficient to grasp all the nuances of the speech.
It would probably be more beneficial to the local inhabitants to have these names on the charts, rather than to retain the charted names for navigators. Many of the people residing in this area navigate a great deal of their food from the water and spend a good part of their lives on it. It is a mark of distinction, locally, to be named a good boatman. These people, of course, don't need charts. It would be advantageous, however, for them to be able to mention an area to a visitor and then be assured that the visitor would be able to proceed to that same area by consulting a chart.

Names recommended for deletion are:

EL ZOOLOGICO - refers to a place that no longer exists.

PUERTO QUIJANO - the origin of the name appears to be lost. No one consulted was familiar with it.

CAYO COLLADO - this term is confusing to local residents and apparently refers to another area.

All of the authorities listed in the report for T-13120 agree that these names are no longer in local use and should be deleted.

Ozalid copies of T-13120, T-13121, and T-13122 are enclosed with the field edit ozalids. These copies have data pertinent to those geographic names mentioned under this same side heading in the reports for each of them.

60. Photography.

Photography was excellent. The color photography caused a lot of comment among local residents, and particularly among the scientists at the Institute of Marine Science on Isla Magueyes. Everyone is looking forward, expectantly, to the issue of the new chart.

Richard E. Kesselring
Surveying Technician
March 26, 1968
61. **GENERAL STATEMENT**

See Summary which is page 6 of the Descriptive Report.

62. **COMPARISON WITH REGISTERED SURVEYS**

Comparison was made with a copy of registered survey No. 2469, 1:20,000 scale, made in 1900. Considering the elapsed time between the two surveys the comparison of the shoreline was very good.

Not all of the offshore reefs are shown on the registered survey. Those that are shown are symbolized by dots. The comparison of the reefs has been indicated on the comparison print with a blue dashed line; the comparison with the shoreline with a solid blue line.

Registered survey No. 2469 is superseded by T-13121 for nautical chart construction purposes.

63. **COMPARISON WITH MAPS OF OTHER AGENCIES**

Comparison was made with USGS PARGUERA, P. R., 1:20,000 scale, 7 1/2 minute quadrangle, edition of 1957.

The shoreline of the USGS quadrangle is not in good agreement with that of T-13121. Isla Magueyes appears to be displaced approximately 90 meters in a southeasterly direction. All differences between the two surveys, including the offshore reefs, have been noted on the comparison print in brown.

64. **COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS**

Comparison was made with copies of boat sheet H=8984, WH-10-1A-68 and WH-10-1B-68. The only shoreline on these two boat sheets is that along the south shore of the mainland and several of the larger islands in the area. None of the smaller mangrove islands and none of the reefs are shown.
Conflicts between sounding on the boat sheet and mangrove islands on this survey were noted at the following locations:

Lat. $17^\circ 58' 05"$
" $17^\circ 58' 22"$
" $17^\circ 58' 23"$

Long. $67^\circ 02' 58"$
" $67^\circ 02' 55"$
" $67^\circ 02' 12"$

It is believed that when these soundings are correctly plotted on the smooth sheet these conflicts will no longer exist.

65. **COMPARISON WITH NAUTICAL CHARTS**

A visual comparison was made with nautical chart 901, 10th edition, March 25, 1968. The two surveys are in good general agreement.

66. **ADEQUACY OF RESULTS AND FUTURE SURVEYS**

This survey complies with instructions and meets the National Standards of Map Accuracy.

The reefs shown on this survey with the reef symbol and labeled coral reef awash are from infrared photographs 66L-8510 through 66L-8512 obtained November 16, 1966.

Reviewed by:

Approved for forwarding:  
Melvin J. Umbach, CDR, NOAA
Chief, Photogrammetry Division, AMC

Approved:

Alfred C. Holmes, RADM, NOAA
Director, Atlantic Marine Center

Approved:

Chief, Photogrammetric Branch, Chief, Coastal Mapping Division
Dashed areas are reefs from USGS PARQUEP, PR. Quadrangle
Reef area from USGS PARQUERA, PR. Quadrangle

Reef area from Registered Survey No. 2469
NOTE:
The geometric location and delineation of features is on the mean high-water line on this survey.

The contemporary bathymetric survey of the area where available, has assisted for the final delineation.

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Blue from Registered Survey 2069

Brown from USGS PARGUERA, PR. Quad.

Cayo Mata Sr.
Puerto Quijano

Isla Matei

Bakia Montalva

Punta Penones

Blue from Registered Survey 2469
Brown from USGS Quadrangle

y = 50,000 FT

y = 45,000 FT
I recommend that the following objects which have not 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 B. Wilson

<table>
<thead>
<tr>
<th>STATE</th>
<th>POSITION</th>
</tr>
</thead>
</table>
| Puerto Rico | ISLA MATEI
Two grey concrete silos with silver hemispherical tops.
ht. = 50' (150') |

<table>
<thead>
<tr>
<th>DESCRIPTION</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>
</tr>
</thead>
<tbody>
<tr>
<td>TWIN SILOS</td>
<td>17 59</td>
<td>15</td>
<td>67 00</td>
<td>Puerto 1301</td>
<td>2/21/68</td>
<td>(only)</td>
</tr>
</tbody>
</table>

* 948 is a proposed chart

This form shall be prepared in accordance with Hydrographic Manual, Publication 20-2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and non-floating 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