

ORIGINAL

T-12161

T-12161

NOAA FORM 76-35

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## DESCRIPTIVE REPORT

Type of Survey *Shoreline*  
Job No. *PH-6904* Map No. *T-12161*  
Classification No. Edition No. *1*  
Field Edited Map

### LOCALITY

State *Puerto Rico*  
General Locality *South Coast*  
Locality *Punta Yeguas*

1970 TO 1976

### REGISTRY IN ARCHIVES

DATE

|                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                     |                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| NOAA FORM 76-36A<br>(3-72)                                                                                                                                                                                         |  | U. S. DEPARTMENT OF COMMERCE<br>NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.                                                                                                                                             |                        |
| <b>DESCRIPTIVE REPORT - DATA RECORD</b>                                                                                                                                                                            |  | TYPE OF SURVEY<br><input checked="" type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED                                                                             |                        |
| PHOTOGRAMMETRIC OFFICE<br>Coastal Mapping Division, AMC<br>Norfolk, Va.                                                                                                                                            |  | SURVEY <del>T#</del> 12161<br>MAP EDITION NO. (1)<br>MAP CLASS Final<br>JOB PH-6904                                                                                                                                 |                        |
| OFFICER-IN-CHARGE<br><br>Jeffrey G. Carlen, CDR                                                                                                                                                                    |  | LAST PRECEDING MAP EDITION<br>TYPE OF SURVEY<br><input type="checkbox"/> ORIGINAL<br><input type="checkbox"/> RESURVEY<br><input type="checkbox"/> REVISED<br>JOB PH-<br>MAP CLASS<br>SURVEY DATES:<br>19__ TO 19__ |                        |
| <b>I. INSTRUCTIONS DATED</b>                                                                                                                                                                                       |  |                                                                                                                                                                                                                     |                        |
| 1. OFFICE                                                                                                                                                                                                          |  | 2. FIELD                                                                                                                                                                                                            |                        |
| Compilation 10/16/70                                                                                                                                                                                               |  | April 7, 1969<br>Jan 23, 1970<br>Jan 31, 1972<br>Nov 16, 1972                                                                                                                                                       |                        |
| <b>II. DATUMS</b>                                                                                                                                                                                                  |  |                                                                                                                                                                                                                     |                        |
| 1. HORIZONTAL: <input type="checkbox"/> 1927 NORTH AMERICAN                                                                                                                                                        |  | OTHER (Specify)<br>Puerto Rico                                                                                                                                                                                      |                        |
| 2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER<br><input checked="" type="checkbox"/> MEAN LOW-WATER<br><input type="checkbox"/> MEAN LOWER LOW-WATER<br><input type="checkbox"/> MEAN SEA LEVEL |  | OTHER (Specify)                                                                                                                                                                                                     |                        |
| 3. MAP PROJECTION<br><br>Polyconic                                                                                                                                                                                 |  | 4. GRID(S)<br>STATE Puerto Rico ZONE 1                                                                                                                                                                              |                        |
| 5. SCALE<br><br>1:10,000                                                                                                                                                                                           |  | STATE ZONE                                                                                                                                                                                                          |                        |
| <b>III. HISTORY OF OFFICE OPERATIONS</b>                                                                                                                                                                           |  |                                                                                                                                                                                                                     |                        |
| OPERATIONS                                                                                                                                                                                                         |  | NAME                                                                                                                                                                                                                | DATE                   |
| 1. AEROTRIANGULATION BY<br>METHOD: Analytic LANDMARKS AND AIDS BY                                                                                                                                                  |  | R. Kelly                                                                                                                                                                                                            | Sep 1970               |
| 2. CONTROL AND BRIDGE POINTS PLOTTED BY<br>METHOD: Coradomat CHECKED BY                                                                                                                                            |  | P. Dempsey                                                                                                                                                                                                          | Oct 1970               |
| 3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY<br>COMPILATION CHECKED BY<br>INSTRUMENT: Wild B-8<br>SCALE: 1:20,000<br>CONTOURS BY<br>CHECKED BY                                                                         |  | B. Barge<br>A. Shands<br>NA<br>NA                                                                                                                                                                                   | Mar 1971<br>Mar 1971   |
| 4. MANUSCRIPT DELINEATION PLANIMETRY BY<br>CHECKED BY<br>CONTOURS BY<br>CHECKED BY<br>METHOD: Smooth drafted<br>SCALE: 1:10,000<br>HYDRO SUPPORT DATA BY<br>CHECKED BY                                             |  | B. Barge<br>R. Pate<br>NA<br>NA<br>B. Barge<br>R. Pate                                                                                                                                                              | Apr 1971<br>Mar 1972   |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY                                                                                                                                                                        |  | R. Pate                                                                                                                                                                                                             | Mar 1972               |
| 6. APPLICATION OF FIELD EDIT DATA BY                                                                                                                                                                               |  | D. Butler                                                                                                                                                                                                           | Aug 1976               |
| 7. COMPILATION SECTION REVIEW BY                                                                                                                                                                                   |  | F. Margiotto                                                                                                                                                                                                        | Sep 1976               |
| 8. FINAL REVIEW BY                                                                                                                                                                                                 |  | F. Marigotta                                                                                                                                                                                                        | Sep 1976               |
| 9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY                                                                                                                                                                     |  | A. L. Shands                                                                                                                                                                                                        | Oct 1977               |
| 10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY                                                                                                                                                                     |  | A. L. Shands                                                                                                                                                                                                        | Dec 1977               |
| 11. MAP REGISTERED - COASTAL SURVEY SECTION BY                                                                                                                                                                     |  | J. B. Phillips<br>R. T. Carter                                                                                                                                                                                      | Jan. 1978<br>Mar. 1978 |

T-12161  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

|                                                                                                                                                                                           |        |                                                                                 |          |                   |                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------|----------|-------------------|----------------------------------------------|
| CAMERA(S)<br>Wild RC 8 "E"                                                                                                                                                                |        | TYPES OF PHOTOGRAPHY<br>LEGEND<br>(C) COLOR<br>(P) PANCHROMATIC<br>(I) INFRARED |          | TIME REFERENCE    |                                              |
| TIDE STAGE REFERENCE<br><input checked="" type="checkbox"/> PREDICTED TIDES<br><input type="checkbox"/> REFERENCE STATION RECORDS<br><input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY |        |                                                                                 |          | ZONE<br>Atlantic  | <input checked="" type="checkbox"/> STANDARD |
|                                                                                                                                                                                           |        |                                                                                 |          | MERIDIAN<br>60th  | <input type="checkbox"/> DAYLIGHT            |
| NUMBER AND TYPE                                                                                                                                                                           | DATE   | TIME                                                                            | SCALE    | STAGE OF TIDE     |                                              |
| 70E(C) 6436 - 6439                                                                                                                                                                        | 3/7/70 | 12:02                                                                           | 1:20,000 | 0.9 ft. above MLW |                                              |
| 70E(C) 6153 - 6155                                                                                                                                                                        | 3/5/70 | 11:13                                                                           | 1:40,000 | 0.6 ft. above MLW |                                              |

REMARKS

## 2. SOURCE OF MEAN HIGH-WATER LINE:

The MHWL was compiled from the above listed photography.

## 3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

None compiled.

## 4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

| SURVEY NUMBER | DATE(S) | SURVEY COPY USED | SURVEY NUMBER | DATE(S) | SURVEY COPY USED |
|---------------|---------|------------------|---------------|---------|------------------|
|               |         |                  |               |         |                  |

## 5. FINAL JUNCTIONS

| NORTH                                | EAST              | SOUTH     | WEST    |
|--------------------------------------|-------------------|-----------|---------|
| T-12143 (1:5,000)<br>T-12144 1:5,000 | T-12144 (1:5,000) | No Survey | T-12151 |

REMARKS

T-12161  
HISTORY OF FIELD OPERATIONSI. ☒ FIELD INSPECTION OPERATION☐ FIELD EDIT OPERATION

| OPERATION                           | NAME                                                                                                                                                               | DATE     |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 1. CHIEF OF FIELD PARTY             | J. Wilson                                                                                                                                                          | Feb 1970 |
| 2. HORIZONTAL CONTROL               | RECOVERED BY J. Wilson                                                                                                                                             | Feb 1970 |
|                                     | ESTABLISHED BY None                                                                                                                                                |          |
|                                     | PRE-MARKED OR IDENTIFIED BY P.B.W.                                                                                                                                 | Feb 1970 |
| 3. VERTICAL CONTROL                 | RECOVERED BY None                                                                                                                                                  |          |
|                                     | ESTABLISHED BY None                                                                                                                                                |          |
|                                     | PRE-MARKED OR IDENTIFIED BY None                                                                                                                                   |          |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY None                                                                                                                         |          |
|                                     | LOCATED (Field Methods) BY None                                                                                                                                    |          |
|                                     | IDENTIFIED BY None                                                                                                                                                 |          |
| 5. GEOGRAPHIC NAMES INVESTIGATION   | TYPE OF INVESTIGATION<br><input type="checkbox"/> COMPLETE<br><input type="checkbox"/> SPECIFIC NAMES ONLY<br><input checked="" type="checkbox"/> NO INVESTIGATION |          |
| 6. PHOTO INSPECTION                 | CLARIFICATION OF DETAILS BY None                                                                                                                                   |          |
| 7. BOUNDARIES AND LIMITS            | SURVEYED OR IDENTIFIED BY NA                                                                                                                                       |          |

## II. SOURCE DATA

|                                                                                                |                 |                                                                                                  |                     |
|------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------|---------------------|
| 1. HORIZONTAL CONTROL IDENTIFIED                                                               |                 | 2. VERTICAL CONTROL IDENTIFIED                                                                   |                     |
|                                                                                                |                 | NA                                                                                               |                     |
| PHOTO NUMBER                                                                                   | STATION NAME    | PHOTO NUMBER                                                                                     | STATION DESIGNATION |
| 70E(C) 6154<br>& 5980                                                                          | YEGUAS, 2, 1965 |                                                                                                  |                     |
| 3. PHOTO NUMBERS (Clarification of details)                                                    |                 |                                                                                                  |                     |
| None                                                                                           |                 |                                                                                                  |                     |
| 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED                                                 |                 |                                                                                                  |                     |
| None                                                                                           |                 |                                                                                                  |                     |
| PHOTO NUMBER                                                                                   | OBJECT NAME     | PHOTO NUMBER                                                                                     | OBJECT NAME         |
|                                                                                                |                 |                                                                                                  |                     |
| 5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE  |                 | 6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE |                     |
| 7. SUPPLEMENTAL MAPS AND PLANS                                                                 |                 |                                                                                                  |                     |
| None                                                                                           |                 |                                                                                                  |                     |
| 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) |                 |                                                                                                  |                     |
| 1 Form 152                                                                                     |                 |                                                                                                  |                     |

T-12161

## HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

| OPERATION                           | NAME                                                                                                                                                               | DATE                    |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1. CHIEF OF FIELD PARTY             | W. Hull                                                                                                                                                            | Jun 1976                |
| 2. HORIZONTAL CONTROL               | RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY                                                                                                      | None<br>None<br>None    |
| 3. VERTICAL CONTROL                 | RECOVERED BY<br>ESTABLISHED BY<br>PRE-MARKED OR IDENTIFIED BY                                                                                                      | NA<br>NA<br>NA          |
| 4. LANDMARKS AND AIDS TO NAVIGATION | RECOVERED (Triangulation Stations) BY<br>LOCATED (Field Methods) BY<br>IDENTIFIED BY                                                                               | None<br>W. Hull<br>None |
| 5. GEOGRAPHIC NAMES INVESTIGATION   | TYPE OF INVESTIGATION<br><input type="checkbox"/> COMPLETE<br><input type="checkbox"/> SPECIFIC NAMES ONLY<br><input checked="" type="checkbox"/> NO INVESTIGATION |                         |
| 6. PHOTO INSPECTION                 | CLARIFICATION OF DETAILS BY                                                                                                                                        | None                    |
| 7. BOUNDARIES AND LIMITS            | SURVEYED OR IDENTIFIED BY                                                                                                                                          | NA                      |

## II. SOURCE DATA

|                                                                                                |              |                                                                                                  |                     |
|------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------|---------------------|
| 1. HORIZONTAL CONTROL IDENTIFIED                                                               |              | 2. VERTICAL CONTROL IDENTIFIED                                                                   |                     |
| None                                                                                           |              | NA                                                                                               |                     |
| PHOTO NUMBER                                                                                   | STATION NAME | PHOTO NUMBER                                                                                     | STATION DESIGNATION |
|                                                                                                |              |                                                                                                  |                     |
| 3. PHOTO NUMBERS (Clarification of details)                                                    |              |                                                                                                  |                     |
| 70E(C) 6437, 6439, 6440                                                                        |              |                                                                                                  |                     |
| 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED                                                 |              |                                                                                                  |                     |
| None                                                                                           |              |                                                                                                  |                     |
| PHOTO NUMBER                                                                                   | OBJECT NAME  | PHOTO NUMBER                                                                                     | OBJECT NAME         |
|                                                                                                |              |                                                                                                  |                     |
| 5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE  |              | 6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE |                     |
| 7. SUPPLEMENTAL MAPS AND PLANS                                                                 |              |                                                                                                  |                     |
| None                                                                                           |              |                                                                                                  |                     |
| 8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division) |              |                                                                                                  |                     |
| Field Edit Ozalid<br>Field Edit Report<br>1 Form 76-40                                         |              |                                                                                                  |                     |

T-12161  
RECORD OF SURVEY USE

## I. MANUSCRIPT COPIES

| COMPILATION STAGES                           |          |                      | DATE MANUSCRIPT FORWARDED |                   |
|----------------------------------------------|----------|----------------------|---------------------------|-------------------|
| DATA COMPILED                                | DATE     | REMARKS              | MARINE CHARTS             | HYDRO SUPPORT     |
| Compilation complete,<br>pending field edit. | Apr 1971 | Class III manuscript |                           | 1/2/75<br>12/2/75 |
| Field edit applied.<br>Compilation complete. | Aug 1976 | Class I manuscript   | 9/22/76                   |                   |
| Final Reviewed                               | Oct 1977 | Final                | 12/30/77                  |                   |
|                                              |          |                      |                           |                   |

## II. LANDMARKS AND AIDS TO NAVIGATION

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

| NUMBER | CHART LETTER<br>NUMBER ASSIGNED | DATE<br>FORWARDED | REMARKS             |
|--------|---------------------------------|-------------------|---------------------|
| 1      |                                 | 9-29-76           | Landmark for Charts |
|        |                                 |                   |                     |
|        |                                 |                   |                     |
|        |                                 |                   |                     |
|        |                                 |                   |                     |
|        |                                 |                   |                     |
|        |                                 |                   |                     |

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

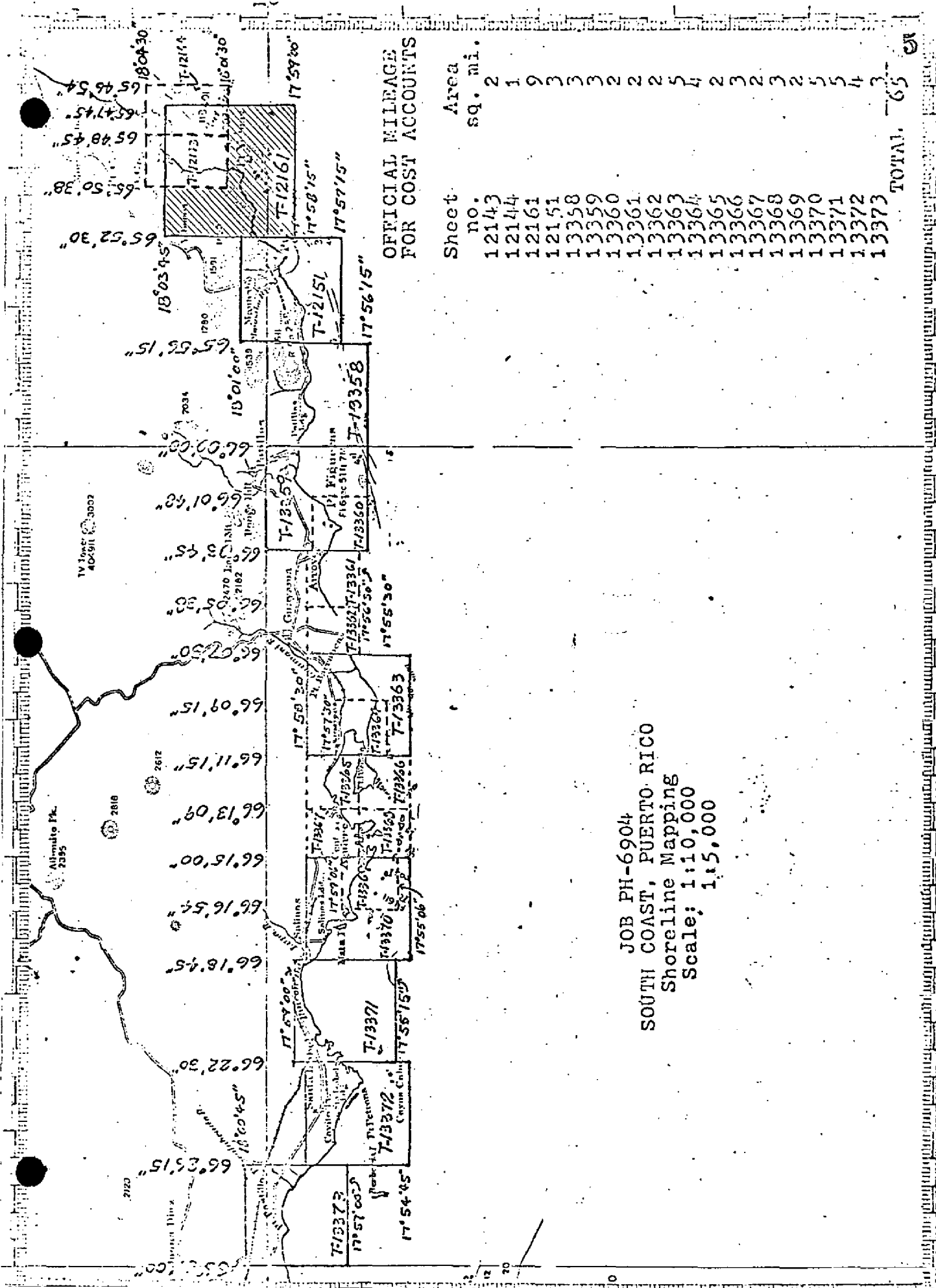
## III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.  
 2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS <sup>76-40</sup> ~~857~~ SUBMITTED BY FIELD PARTIES.  
 3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C.  
 ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: \_\_\_\_\_

## IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

|                   |                                 |                          |                                                                                                                                                                                                                                                             |
|-------------------|---------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SECOND<br>EDITION | SURVEY NUMBER<br>TP - _____ (2) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br><br>MAP CLASS<br><input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
|                   | DATE OF PHOTOGRAPHY             | DATE OF FIELD EDIT       |                                                                                                                                                                                                                                                             |
| THIRD<br>EDITION  | SURVEY NUMBER<br>TP - _____ (3) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br><br>MAP CLASS<br><input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
|                   | DATE OF PHOTOGRAPHY             | DATE OF FIELD EDIT       |                                                                                                                                                                                                                                                             |
| FOURTH<br>EDITION | SURVEY NUMBER<br>TP - _____ (4) | JOB NUMBER<br>PH - _____ | TYPE OF SURVEY<br><input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY<br><br>MAP CLASS<br><input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
|                   | DATE OF PHOTOGRAPHY             | DATE OF FIELD EDIT       |                                                                                                                                                                                                                                                             |



# OFFICIAL MILEAGE FOR COST ACCOUNTS

| Sheet no. | Area sq. mi. |
|-----------|--------------|
| 12143     | 2            |
| 12144     | 1            |
| 12161     | 9            |
| 12151     | 3            |
| 13358     | 3            |
| 13359     | 3            |
| 13360     | 2            |
| 13361     | 2            |
| 13362     | 2            |
| 13363     | 5            |
| 13364     | 4            |
| 13365     | 2            |
| 13366     | 2            |
| 13367     | 2            |
| 13368     | 2            |
| 13369     | 5            |
| 13370     | 5            |
| 13371     | 4            |
| 13372     | 3            |
| 13373     | 3            |
| TOTAL     | 65           |

## SUMMARY TO ACCOMPANY

## DESCRIPTIVE REPORTS

T-12143, T-12144, T-12151, T-12161 and  
T-13358 thru T-13362

The maps included in this summary cover the eastern portion of project PH-6904. They are all standard shoreline maps which were prepared to provide shoreline in support of hydrographic operations and nautical chart construction. These maps cover the south coast of Puerto Rico from Punta Icacos westward to Punta Barrancas.

Photographs of the area were flown in March, 1970. Glare covers most of the water area. The black and white ratio photographs made from color contact prints are dark and the resolution is not good. Delineation of offshore and alongshore area details was made difficult by these factors.

No clarification of details was made prior to compilation. Precompilation field work was limited to the recovery and identification of horizontal control necessary for bridging.

Compilation was done at the Atlantic Marine Center by instrument and graphic methods. The Wild B-8 stereoplotter was used.

These maps were field edited in March and April, 1976. The edit items were applied to the maps at the Atlantic Marine Center in August and September, 1976.

Final review was performed at the Atlantic Marine Center in October and November, 1977. The original base manuscripts were forwarded to the Washington Science Center for reproduction and final registration.



7

FIELD INSPECTION REPORT

T-12161

There was no field inspection prior to office compilation.

Aerotriangulation Report  
PH-6904  
South Coast of Puerto Rico  
September 1970

21. Area Covered

This report covers the Southern Coast of Puerto Rico, consisting of (9) 1:10,000 scale T-sheets, 12151, 12161, 13358, 13359, 13363, 13370 thru 13373 and (11) 1:5,000 scale T-sheets, 12143, 12144, 13360 thru 13362 and 13364 thru 13369.

22. Method

Two strips 1:40,000 and one strip of 1:5,000 scale color photography were bridged by analytical methods to provide horizontal control points for compilation and shoreline points for ordering 1:10,000 and 1:5,000 scale ratio prints. The attached sketch of the strips bridged shows the placement of horizontal control points used in the strip adjustments. A list of closures to control is part of this report. Positions of all compilation points and control stations have been plotted on the manuscripts by the Coradi.

23. Adequacy of Control

The horizontal control used is on the new adjustment of the Puerto Rico datum. All control was adequate and held well within the accuracy required by National Standards of Map Accuracy at 1:10,000 and 1:5,000 scales. Tie points were used to augment datum tie between strips 1, 2 and 3.

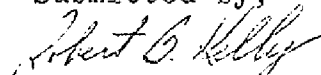
24. Supplemental Data

U. S. Geological Survey quadrangles were used to provide elevations for vertical adjustment of bridges.


25. Photography

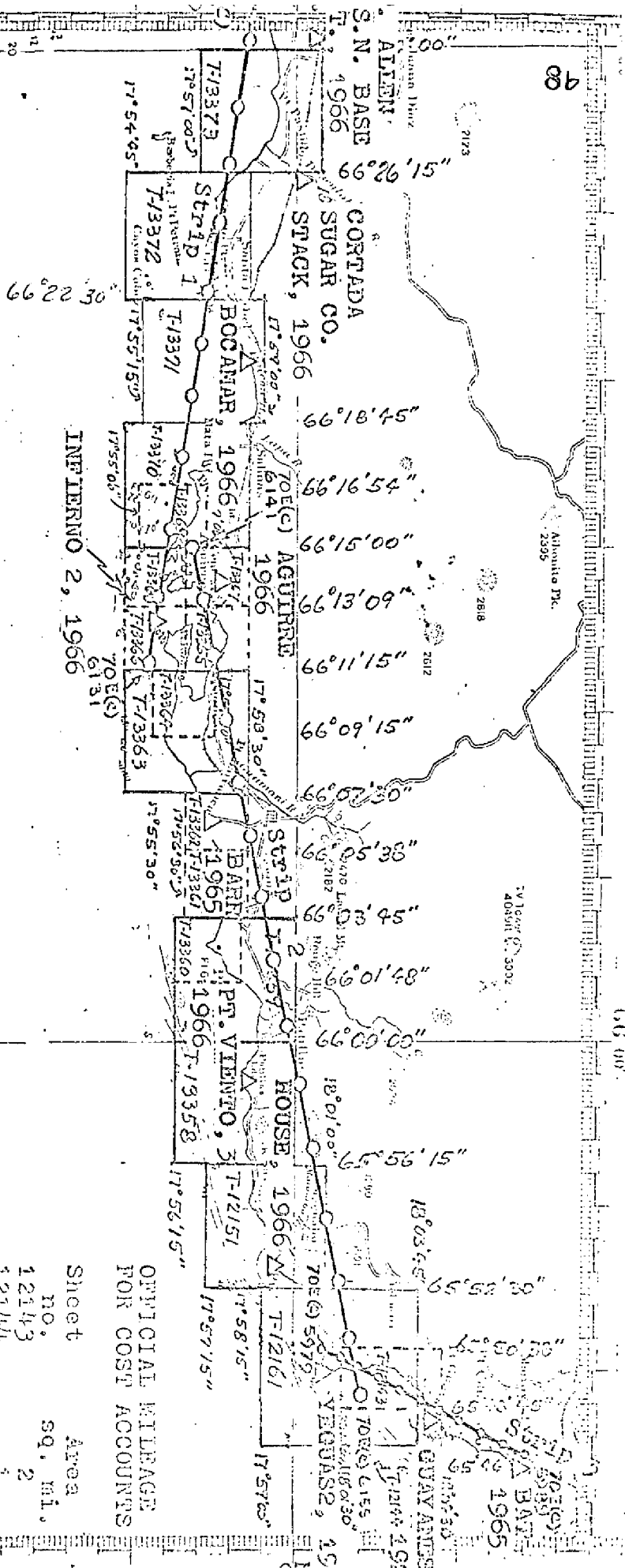
RC-8 E color photography was adequate as to coverage overlap and definition.

Submitted by,

  
Robert B. Kelly

Approved and forwarded,

  
Henry P. Eichert  
Chief, Aerotriangulation  
Section



SOUTH COAST, PUERTO RICO  
Shoreline Mapping  
Scale: 1:10,000

Bridgeway Photos

INFERNO 2, 1966

OFFICIAL MILEAGE  
FOR COST ACCOUNTS

| Sheet no. | Area sq. mi. |
|-----------|--------------|
| 12143     | 2            |
| 12144     | 1            |
| 12161     | 9            |
| 12151     | 3            |
| 13358     | 3            |
| 13359     | 2            |
| 13360     | 2            |
| 13361     | 2            |
| 13362     | 2            |
| 13363     | 2            |
| 13364     | 2            |
| 13365     | 2            |
| 13366     | 2            |
| 13367     | 2            |
| 13368     | 2            |
| 13369     | 2            |
| 13370     | 2            |
| 13371     | 2            |
| 13372     | 2            |
| 13373     | 2            |
| TOTAL     | 65           |



## LEGEND

- $\Delta$  CONTROL USED IN ADJUSTMENT  
 ( ) CLOSURES OF BRIDGE TO CONTROL SHOWN  
 IN PARENTHESES  
 $\Delta$  CONTROL USED AS CHECK.

## STRIP 1

- $\Delta$  FT. ALLEN U.S.N. BASE W.T. (0.0, 0.0)  
 $\Delta$  " " " SUB STA. A (-0.4, 0.0)  
 $\Delta$  CORTADA SUGAR CO. STACK 1966 (+0.8, +0.1)  
 $\Delta$  " " " SUB STA. A (+1.2, +1.2)  
 $\Delta$  BOCANAR, 1966 SUB. STA. A (0.0, 0.0)  
 $\Delta$  INFIerno 2, 1966 (0.0, 0.0)

## STRIP 2

- $\Delta$  INFIerno 2, 1966 (-0.6, +0.3)  
 $\Delta$  AGUIRRE, 1966 (-1.3, +0.6)  
 $\Delta$  BARR, 1965 (-0.6, -1.0)  
 $\Delta$  Pt VIENTO 3, 1966 (-1.2, -0.8)  
 $\Delta$  HOUSE, 1966 SUB STA. A (+1.1, +0.4)  
 $\Delta$  YEGUAS 2, 1965 (+1.1, -0.6)  
 $\Delta$  YEGUAS 2, 1965 SUB STA. A (+0.3, -0.2)

## STRIP 3

|   |                            |            |
|---|----------------------------|------------|
| △ | YEGUAS 2, 1965             | (0.0, 0.0) |
| △ | YEGUAS 2, 1965 SUB. STA. A | (0.0, 0.0) |
| △ | GUAYANES 2, 1923           | (0.0, 0.0) |
| △ | BAT, 1965                  | (0.0, 0.0) |



## COMPILATION REPORT

T-12161

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter, except most of the drainage shown was delineated by graphic method. Due to glare there was some difficulty in defining the offshore areas.

The stereo instrument work was done with 1:40,000 scale photography. Points were selected common to 1:20,000 scale photography which was ratioed to 1:10,000 scale.

32. CONTROL:

See the attached Aerotriangulation Plot Report, dated September, 1970.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project. Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

Alongshore details and the mean high water line were delineated by the Wild B-8 stereoplotter from office interpretation of the photographs.

36. OFFSHORE DETAILS:

See item #31.



37. LANDMARKS AND AIDS:

Preliminary forms 76-40 for Landmarks and/or Aids were prepared by the Compilation Office and forwarded to the Field Editor and/or Hydrographer for verification, location, or deletion.

38. CONTROL FOR FUTURE SURVEYS:

None.

39. JUNCTIONS:

See the attached form 76-36B, item 5 of the Descriptive Report concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS Quadrangle Punta Guayanes, P. R, scale 1:20,000, dated 1960.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with Chart 924, scale 1:20,000 3rd edition, dated January 3, 1968.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

*A. C. Rauck, Jr. FOR*  
Bernice L. Barge  
Cartographic Technician  
4/6/71

Approved:

*Albert C. Rauck, Jr.*  
Albert C. Rauck, Jr.  
Chief, Coastal Mapping Section

ADDENDUM TO COMPILATION REPORT

T-12161

FIELD EDIT

The field editor was very general in the identification of rocks and alongshore area details. This caused confusion to the office compiler.

Submitted by:

*A. L. Shands*

A. L. Shands  
Final Reviewer  
10/20/77

October 11, 1977

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6904 (South Coast, Puerto Rico)

T-12161

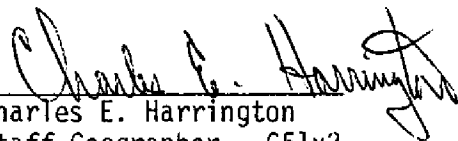
Arrecife Sargent

Mar Caribe

Punta Toro

Punta Yeguas

Approved by:

  
Charles E. Harrington  
Staff Geographer - C51x2

NOAA FORM 75-74  
(7-75)U.S. DEPARTMENT OF COMMERCE  
NOAA  
NATIONAL OCEAN SURVEY

## PHOTOGRAMMETRIC OFFICE REVIEW

TR - 12161

|                                                                                                                                                                           |                                                                                                   |                                                                                   |                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|
| 1. PROJECTION AND GRIDS<br>RJP                                                                                                                                            | 2. TITLE<br>RJP                                                                                   | 3. MANUSCRIPT NUMBERS<br>RJP                                                      | 4. MANUSCRIPT SIZE<br>RJP                     |
| CONTROL STATIONS                                                                                                                                                          |                                                                                                   |                                                                                   |                                               |
| 5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY<br>RJP                                                                                                   | 6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations)<br>NA |                                                                                   | 7. PHOTO HYDRO STATIONS<br>NA                 |
| 8. BENCH MARKS<br>NA                                                                                                                                                      | 9. PLOTTING OF SEXTANT FIXES<br>NA                                                                | 10. PHOTOGRAMMETRIC PLOT REPORT<br>RJP                                            | 11. DETAIL POINTS<br>RJP                      |
| ALONGSHORE AREAS (Nautical Chart Data)                                                                                                                                    |                                                                                                   |                                                                                   |                                               |
| 12. SHORELINE<br>RJP                                                                                                                                                      | 13. LOW-WATER LINE<br>NA                                                                          | 14. ROCKS, SHOALS, ETC.<br>RJP                                                    | 15. BRIDGES<br>NA                             |
| 16. AIDS TO NAVIGATION<br>NA                                                                                                                                              | 17. LANDMARKS<br>NA                                                                               | 18. OTHER ALONGSHORE PHYSICAL FEATURES<br>NA                                      | 19. OTHER ALONGSHORE CULTURAL FEATURES<br>RJP |
| PHYSICAL FEATURES                                                                                                                                                         |                                                                                                   |                                                                                   |                                               |
| 20. WATER FEATURES<br>RJP                                                                                                                                                 | 21. NATURAL GROUND COVER<br>NA                                                                    |                                                                                   | 22. PLANETABLE CONTOURS<br>NA                 |
| 23. STEREOSCOPIC INSTRUMENT CONTOURS<br>NA                                                                                                                                | 24. CONTOURS IN GENERAL<br>NA                                                                     | 25. SPOT ELEVATIONS<br>NA                                                         | 26. OTHER PHYSICAL FEATURES<br>RJP            |
| CULTURAL FEATURES                                                                                                                                                         |                                                                                                   |                                                                                   |                                               |
| 27. ROADS<br>RJP                                                                                                                                                          | 28. BUILDINGS<br>NA                                                                               | 29. RAILROADS<br>NA                                                               | 30. OTHER CULTURAL FEATURES<br>RJP            |
| BOUNDARIES                                                                                                                                                                |                                                                                                   |                                                                                   |                                               |
| 31. BOUNDARY LINES<br>NA                                                                                                                                                  |                                                                                                   | 32. PUBLIC LAND LINES<br>NA                                                       |                                               |
| MISCELLANEOUS                                                                                                                                                             |                                                                                                   |                                                                                   |                                               |
| 33. GEOGRAPHIC NAMES<br>RJP                                                                                                                                               | 34. JUNCTIONS<br>RJP                                                                              |                                                                                   | 35. LEGIBILITY OF THE MANUSCRIPT<br>RJP       |
| 36. DISCREPANCY OVERLAY<br>RJP                                                                                                                                            | 37. DESCRIPTIVE REPORT<br>RJP                                                                     | 38. FIELD INSPECTION PHOTOGRAPHS<br>NA                                            | 39. FORMS<br>RJP                              |
| 40. REVIEWER<br><i>A. C. Rauck, Jr. FOR</i><br>R. J. Pate 3/29/72                                                                                                         |                                                                                                   | SUPERVISOR, REVIEW SECTION OR UNIT<br><i>A. C. Rauck, Jr.</i><br>A. C. Rauck, Jr. |                                               |
| 41. REMARKS (See attached sheet)                                                                                                                                          |                                                                                                   |                                                                                   |                                               |
| FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT                                                                                                              |                                                                                                   |                                                                                   |                                               |
| 42. 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. |                                                                                                   |                                                                                   |                                               |
| COMPILER <i>A. C. Rauck, Jr. FOR</i><br>David Butler 8/76                                                                                                                 |                                                                                                   | SUPERVISOR <i>A. C. Rauck, Jr.</i><br>A. C. Rauck, Jr.                            |                                               |
| Reviewer: F. Marigotta 9/76                                                                                                                                               |                                                                                                   |                                                                                   |                                               |
| 43. REMARKS <i>A. C. Rauck, Jr. FOR</i>                                                                                                                                   |                                                                                                   |                                                                                   |                                               |

FIELD EDIT REPORT  
PROJECT PH-6904  
SOUTH COAST, PUERTO RICO  
T-13362, T-13361, T-13360  
T-13359, T-13358, T-12151  
T-12161, T-12143, T-12144

This report is submitted for five 1:5,000 scale maps and four 1:10,000 scale maps. The Field Edit was accomplished during the spring season of 1976 by the NOAA SHIP MT MITCHELL MSS-22 personnel.

52 ADEQUACY OF COMPILATION

The compilation is generally good. After the application of field edit data and data from engineering drawings of Arroyo and Yabucoa, the compilation will be adequate for charting.

53 MAP ACCURACY

Map compilation as to horizontal position is good. A modified field test was conducted on several points. Horizontal control was field identified, transferred to the manuscript, position scaled and compared to the computed coordinates and generally the agreement was less than one meter.

54 RECOMMENDATIONS

None

55 GEOGRAPHIC NAMES

No discrepancies were noted except those that were questioned on the field sheet. Names of persons interviewed about names in question are shown on T-13362, Photo 70E6421, 70E6218, T-13358, and T-12151.

56 SHORELINE AND ALONGSHORE FEATURES

The entire shoreline was checked by either walking, truck or small boat. All rock heights were estimated by going alongside or near in a small boat. On some near shore rocks, heights were estimated by walking the shoreline. Field Edit was conducted on days when sea conditions were moderate to calm. During launch hydro, the officer in charge, referenced many alongshore features, but in general the sea conditions were rough and the hydro launch did not get as near to the objects as the small boat used by the field editors.

All field edit data is indicated on the Field Edit Ozalid and photographs and are cross referenced.

There is a small marina under construction in Arroyo. Engineering drawings are furnished with this report. At Punta Figuras shoreline that is subject to frequent change was located by sextant angle and tape measurements; the field data and shoreline change is shown on manuscript T-13360.

On the eastern limit of T-12151, a small section of shoreline is in error and should be corrected as indicated on Photo 70E6440.

On T-12143, Yabucoa harbor area, construction is still underway. The main harbor is completed with construction underway on the southeast side. Engineering drawing of the harbor and new construction are enclosed with this report. Nautical Chart 25661 7th Edition May 24/75 already reflects the main harbor. Tie-points were located throughout the harbor to assist in tying in with the engineering drawings. The shoreline immediately north of the riprap breakwater, as indicated on T-12143, is subject to daily change due to sand borrowing operations both landward and seaward of the mean high water line. The mouth of the stream is plugged on occasion with sand and debris, but continues to break through near the mouth as compiled. I recommend that the shoreline be charted as shown on photos and as compiled with note of frequent change.

#### 57 LANDMARKS AND AIDS


Form 76-40 was submitted for all nautical landmarks and fixed aids to navigation in the descriptive reports for the hydrographic surveys. Copies of those forms are attached to this report.

#### 58 GENERAL STATEMENT

All field edit notes have been made in violet ink on the field edit ozalids and ratio photographs.

It is recommended that photography of opportunity be obtained of the Yabucoa Harbor area and of the Palmas Del Mar harbor area, just north of Yabucoa. A special report was submitted on Palmas Del Mar to Director, Atlantic Marine Center with copy to CAM5.

Submitted 18 June 1976

  
Wesley A. Hull  
Captain, NOAA  
Commanding Officer  
NOAA Ship Mt Mitchell MSS-22





## REVIEW REPORT

T-12161

## SHORELINE

61. GENERAL STATEMENT:

See Summary which is page 6 of this Descriptive Report.

This map overlaps two 1:5,000 scale maps, T-12143 and T-12144, from lat. 18° 01' 30" northward to its north limit and long. 65° 50' 38" eastward to its east limit. Details in the overlap area are shown on the 1:5,000 scale maps only.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No comparison was made.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

No detailed comparison was made.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with H-9608 (MI-10-4-76) There are no significant differences.

65. COMPARISON WITH NAUTICAL CHARTS:

The map was compared with Chart 25659 1:20,000 scale, 5th edition, dated August 23, 1973. The configuration of the shoreline is in good general agreement. However, the placement of the shoreline on the chart differs with that on the map in several areas.

The ledge awash shown on the chart just west of Punta Toro is not visible on the photographs. The field editor indicates the area is foul with submerged rocks.



66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This map complies with the project instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

Submitted by:

*A. L. Shands*

A. L. Shands  
Final Reviewer  
October 20, 1977

Approved for forwarding:

*Joseph W. Vonasek*

Joseph W. Vonasek  
Chief, Photogrammetric Branch, AMC

Approved:

*A. K. Hargis*

Chief, Photogrammetric Branch

*James L. Latta*

Chief, Coastal Mapping Div.