

T-13359

ORIGINAL

T-13359

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-13359 .....

Classification No. .... Edition No. 1 .....

Field Edited Map

### LOCALITY

State ..... Puerto Rico .....

General Locality ..... South Coast .....

Locality ..... Rio Grande De Patillas .....

1970 TO 1976

### REGISTRY IN ARCHIVES

DATE .....

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.					
<b>DESCRIPTIVE REPORT - DATA RECORD</b>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">           TYPE OF SURVEY  <input checked="" type="checkbox"/> ORIGINAL  <input type="checkbox"/> RESURVEY  <input type="checkbox"/> REVISED         </td> <td style="width: 50%;">           SURVEY TP. <u>13359</u>            MAP EDITION NO. <u>(1)</u>            MAP CLASS <u>FINAL</u>            JOB <u>PH-6904</u> </td> </tr> </table>		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>13359</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>FINAL</u> JOB <u>PH-6904</u>		
TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	SURVEY TP. <u>13359</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>FINAL</u> JOB <u>PH-6904</u>						
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division Norfolk, Va.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"> <b>LAST PRECEDING MAP EDITION</b> </td> </tr> <tr> <td style="width: 50%;">           TYPE OF SURVEY  <input type="checkbox"/> ORIGINAL  <input type="checkbox"/> RESURVEY  <input type="checkbox"/> REVISED         </td> <td style="width: 50%;">           JOB <u>PH-</u>            MAP CLASS <u></u>            SURVEY DATES:            19__ TO 19__         </td> </tr> </table>		<b>LAST PRECEDING MAP EDITION</b>		TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB <u>PH-</u> MAP CLASS <u></u> SURVEY DATES: 19__ TO 19__
<b>LAST PRECEDING MAP EDITION</b>							
TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	JOB <u>PH-</u> MAP CLASS <u></u> SURVEY DATES: 19__ TO 19__						
OFFICER-IN-CHARGE  Jeffrey G. Carlen, Cdr							
<b>I. INSTRUCTIONS DATED</b>							
<b>1. OFFICE</b>		<b>2. FIELD</b>					
Compilation                      Oct. 16, 1970		April 7, 1969 Jan. 23, 1970 Jan. 31, 1972 Nov. 16, 1972					
<b>II. DATUMS</b>							
1. HORIZONTAL: <input type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify) <u>Puerto Rico</u>					
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input checked="" type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL		OTHER (Specify)					
3. MAP PROJECTION  Polyconic		4. GRID(S) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">STATE    Puerto Rico</td> <td style="width: 50%;">ZONE    1</td> </tr> <tr> <td>STATE</td> <td>ZONE</td> </tr> </table>		STATE Puerto Rico	ZONE 1	STATE	ZONE
STATE Puerto Rico	ZONE 1						
STATE	ZONE						
5. SCALE 1:10,000							
<b>III. HISTORY OF OFFICE OPERATIONS</b>							
<b>OPERATIONS</b>		<b>NAME</b>	<b>DATE</b>				
1. AEROTRIANGULATION METHOD: Analytic                      LANDMARKS AND AIDS BY		R. Kelly	Sep 1970				
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat                      PLOTTED BY CHECKED BY		P. Dempsey	Oct 1970				
3. STEREOSCOPIC INSTRUMENT COMPILATION INSTRUMENT: Wild B-8 SCALE: 1:20,000                      PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY		B. Barge L. Neterer NA NA	Feb 1971 Feb 1971				
4. MANUSCRIPT DELINEATION  METHOD: Smooth drafted SCALE: 1:10,000                      PLANIMETRY BY CHECKED BY CONTOURS BY CHECKED BY HYDRO SUPPORT DATA BY CHECKED BY		B. Barge L. Neterer NA NA B. Barge L. Neterer	May 1971 May 1971  May 1971 May 1971				
5. OFFICE INSPECTION PRIOR TO FIELD EDIT                      BY		L. Neterer	Mar 1972				
6. APPLICATION OF FIELD EDIT DATA                      BY CHECKED BY		C. Parker L. Neterer	Aug 1976 Aug 1976				
7. COMPILATION SECTION REVIEW                      BY		L. Neterer	Aug 1976				
8. FINAL REVIEW                      BY		A. L. Shands	Nov 1977				
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH                      BY		A. L. Shands	Dec 1977				
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH                      BY		J. B. Phillips	Jan. 1978				
11. MAP REGISTERED - COASTAL SURVEY SECTION                      BY		R. D. Cator	Mar. 1978				

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-13359  
COMPILATION SOURCES

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 8 "E"	TYPES OF PHOTOGRAPHY LEGEND  (C) COLOR (P) PANCHROMATIC (I) INFRARED	TIME REFERENCE	
TIDE STAGE REFERENCE <input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY		ZONE Atlantic	<input checked="" type="checkbox"/> STANDARD
		MERIDIAN 60th	<input type="checkbox"/> DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
70E(C) 6219-6221	3/5/70	13:22	1:20,000	0.8 ft. above MLW
70E(C) 6148-6149	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 photographs.

## 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
No survey	T-13358	No survey	T-13361 1:5,000

REMARKS

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEYT-13359  
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 ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None
3. VERTICAL CONTROL	RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED ( <i>Triangulation Stations</i> ) BY LOCATED ( <i>Field Methods</i> ) BY IDENTIFIED BY	None None None
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <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

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

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: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (*Sketch books, etc. DO NOT list data submitted to the Geodesy Division*)

None

NOAA FORM 76-36C  
(3-72)

T-13359

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

## 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 ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	None None None	
3. VERTICAL CONTROL RECOVERED BY ESTABLISHED BY PRE-MARKED OR IDENTIFIED BY	NA NA NA	
4. LANDMARKS AND AIDS TO NAVIGATION RECOVERED (Triangulation Stations) BY LOCATED (Field Methods) BY IDENTIFIED BY	None W. Hull None	Mar 1976
5. GEOGRAPHIC NAMES INVESTIGATION TYPE OF INVESTIGATION <input type="checkbox"/> COMPLETE <input type="checkbox"/> SPECIFIC NAMES ONLY <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

None

2. VERTICAL CONTROL IDENTIFIED

NA

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION

3. PHOTO NUMBERS (Clarification of details)

70E(C) 6218

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ 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  
Field Edit Report  
2-Forms 76-40



## I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit.	5/12/71	Class III manuscript		10/30/72 1/2/75 12/2/75
Field edit applied. Compilation complete.	8/76	Class I manuscript	9/22/76	
Final Review	11/77	Final	12/30/77	

## II. LANDMARKS AND AIDS TO NAVIGATION

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

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
21		9/28/76	Landmarks for charts

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: Sept. 28, 1976  
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

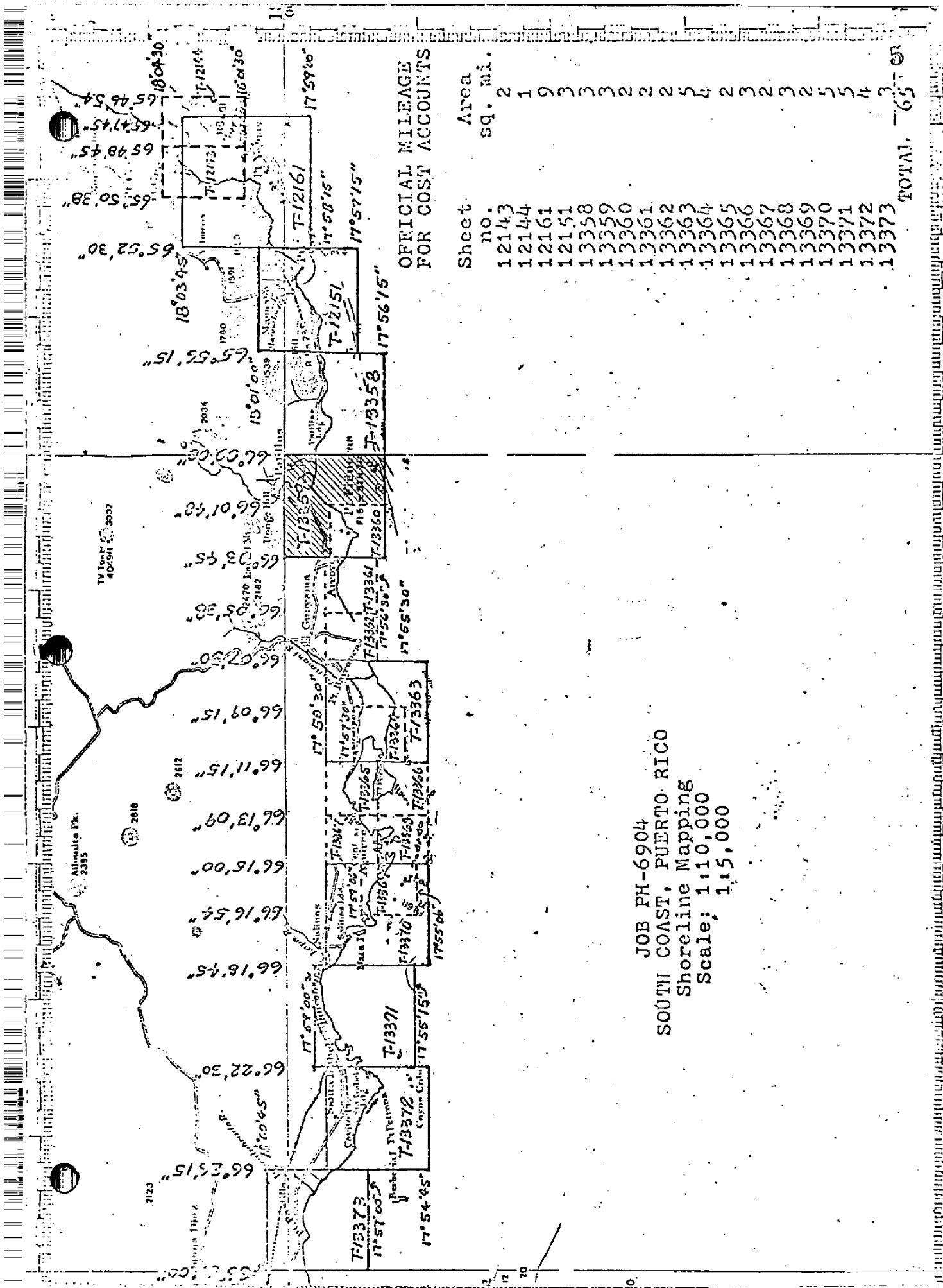
## III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.  
2. ☐ CONTROL STATION IDENTIFICATION CARDS; ☒ FORM NOS <sup>76-40</sup>~~367~~ 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 EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY	
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL	





OFFICIAL MILEAGE  
FOR COST ACCOUNTS

Sheet no.	Area sq. mi.
12143	2
12144	1
12161	9
12151	9
13358	9
13359	9
13360	9
13361	9
13362	9
13363	9
13364	9
13365	9
13366	9
13367	9
13368	9
13369	9
13370	9
13371	9
13372	9
13373	9
TOTAL	65.9

JOB PH-6904  
SOUTH COAST, PUERTO RICO  
Shoreline Mapping  
Scale: 1:10,000  
1:5,000

## 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.



FIELD INSPECTION

T-13359

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

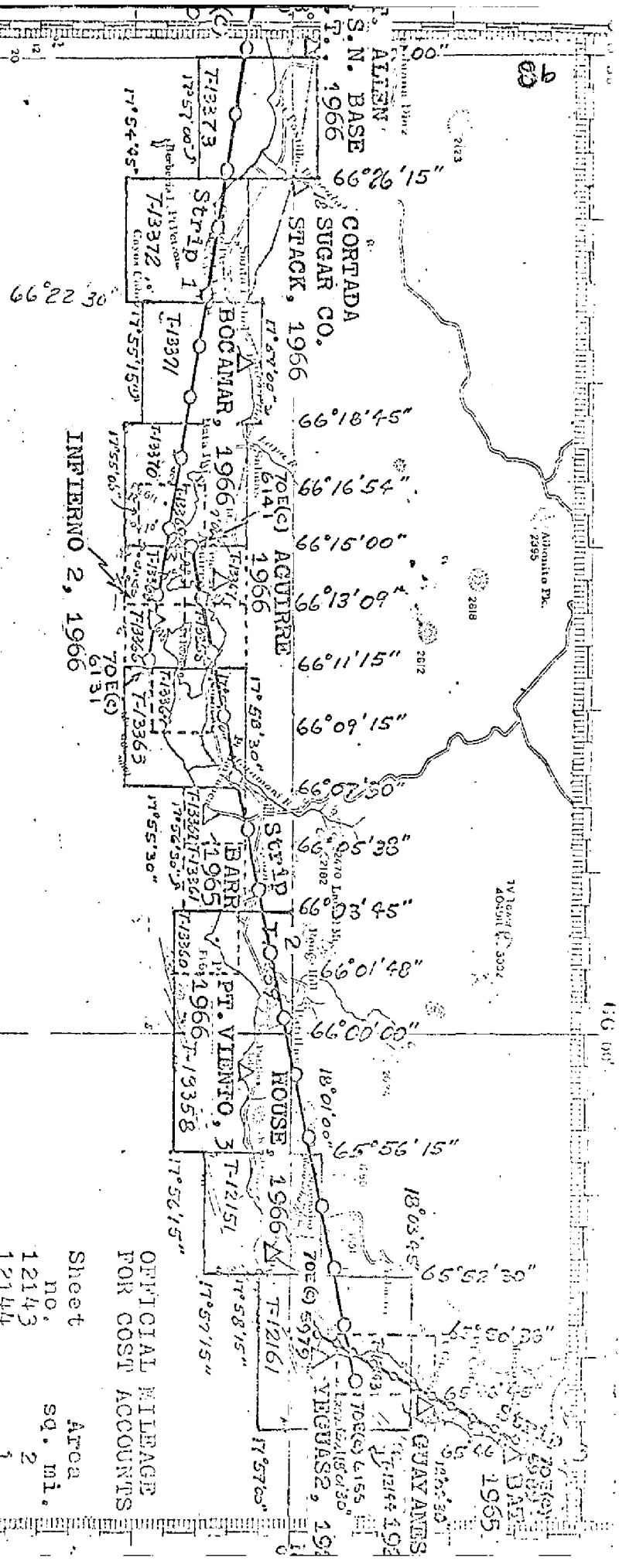
RC-8 E color photography was adequate as to coverage overlap and definition.

Submitted by,

*Robert B. Kelly*  
Robert B. Kelly

Approved and forwarded,

*Henry P. Eichert*  
Henry P. Eichert  
Chief, Aerotriangulation  
Section



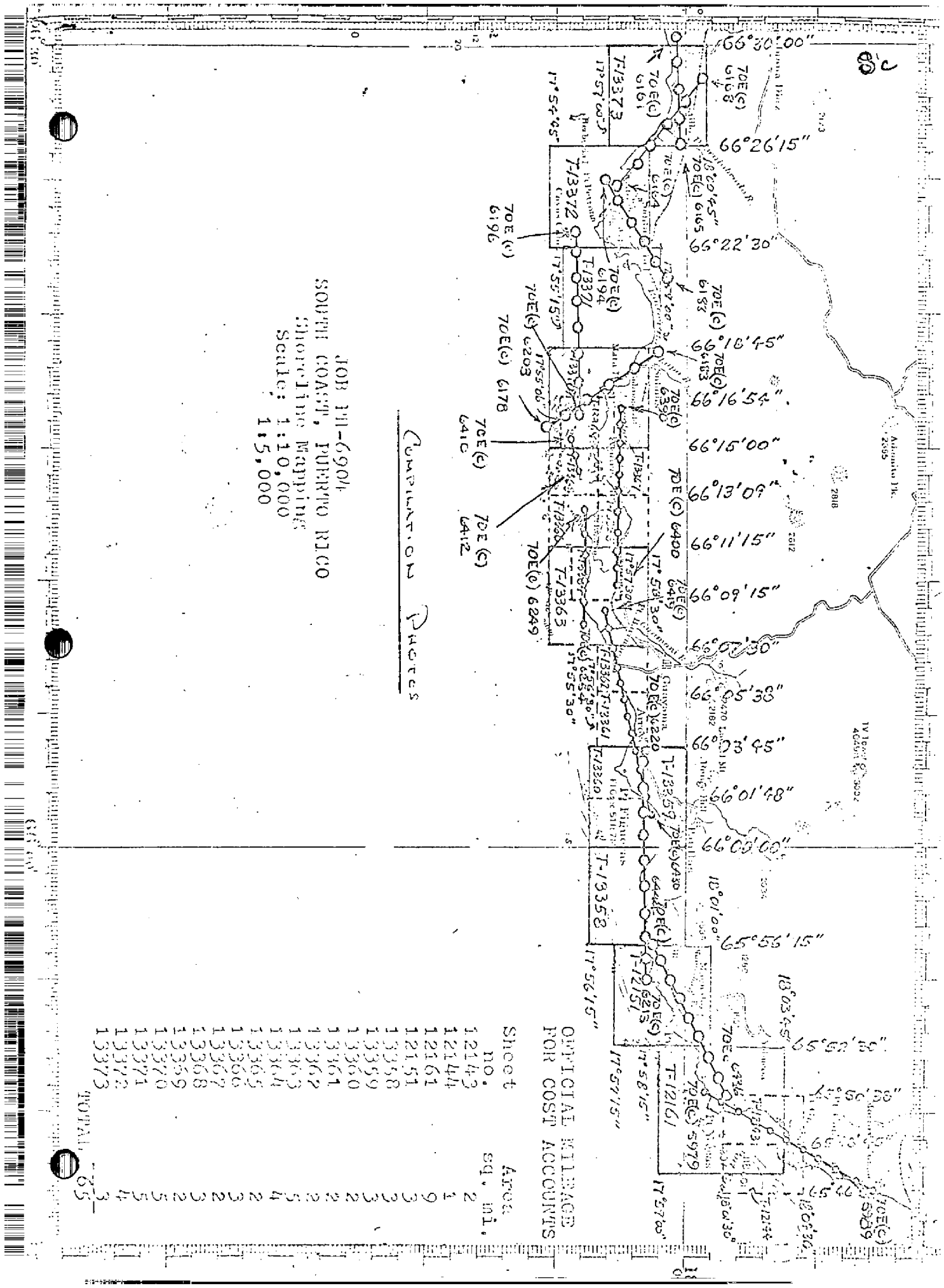
JOB PH-6904  
 SOUTHERN COAST, PUERTO RICO  
 Shoreline Mapping  
 Scale: 1:10,000  
 1:5,000

OFFICIAL MILEAGE FOR COST ACCOUNTS

Sheet no.	Area sq. mi.
12143	1
12144	1
12161	1
12151	1
13358	1
13359	1
13360	1
13361	1
13362	1
13363	1
13364	1
13365	1
13366	1
13367	1
13368	1
13369	1
13370	1
13371	1
13372	1
13373	1
TOTAL	15

# COMPUTATION SHEETS

JOB 111-6901  
 SOUTH COAST, PUERTO RICO  
 Shoreline Mapping  
 Scale: 1:10,000  
 1:5,000



OFFICIAL MILEAGE  
 FOR COST ACCOUNTS

Sheet no.	Area sq. mi.
12142	2
12144	1
12161	1
12151	1
13358	1
13359	1
13360	1
13361	1
13362	1
13363	1
13364	1
13365	1
13366	1
13367	1
13368	1
13369	1
13370	1
13371	1
13372	1
13373	1

## 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 N.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-13359

31. DELINEATION:

The Wild B-8 was used. Stereo instrument work was done with 1:40,000 scale photography. Points were selected common to 1:20,000 scale ratios which were processed for hydro support.

32. CONTROL:

See AEROTRIANGULATION REPORT, dated September, 1970.

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are inapplicable. Drainage was determined from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS:

Shoreline and alongshore details were determined from office interpretation of the photographs.

36. OFFSHORE DETAILS:

None.

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 Form 76-36B, item 5 of this Descriptive Report concerning junctions.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

A comparison was made with USGS Quadrangle GUAYAMA, Puerto Rico, scale 1:20,000, dated 1960.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with National Ocean Survey chart 902, scale 1:100,000, 10th edition, dated March 28, 1970 (covr. thru N.M 13/70).

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

*A. C. Rauck, Jr.* FOR  
B. L. Barge  
Cartographic Technician  
May 21, 1971

Approved:

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

October 11, 1977

## GEOGRAPHIC NAMES

## FINAL NAME SHEET

PH-6904 (South Coast, Puerto Rico)

T-13359

Mar Caribe

Puerto Patillas

Río Chico

Río Grande de Patillas

Approved by:

*Charles E. Harrington*  
Charles E. Harrington  
Staff Geographer - C51x2

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

## PHOTOGRAMMETRIC OFFICE REVIEW

TP - 13359

1. PROJECTION AND GRIDS LON	2. TITLE LON	3. MANUSCRIPT NUMBERS LON	4. MANUSCRIPT SIZE LON
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY LON	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) NA		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES NA	10. PHOTOGRAMMETRIC PLOT REPORT LON	11. DETAIL POINTS LON
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE LON	13. LOW-WATER LINE NA	14. ROCKS, SHOALS, ETC. LON	15. BRIDGES NA
16. AIDS TO NAVIGATION LON	17. LANDMARKS LON	18. OTHER ALONGSHORE PHYSICAL FEATURES LON	19. OTHER ALONGSHORE CULTURAL FEATURES LON
PHYSICAL FEATURES			
20. WATER FEATURES LON	21. NATURAL GROUND COVER NA		22. PLANETABLE CONTOURS NA
23. STEREOSCOPIC INSTRUMENT CONTOURS NA	24. CONTOURS IN GENERAL NA	25. SPOT ELEVATIONS NA	26. OTHER PHYSICAL FEATURES LON
CULTURAL FEATURES			
27. ROADS LON	28. BUILDINGS LON	29. RAILROADS NA	30. OTHER CULTURAL FEATURES LON
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES LON	34. JUNCTIONS LON		35. LEGIBILITY OF THE MANUSCRIPT LON
36. DISCREPANCY OVERLAY LON	37. DESCRIPTIVE REPORT LON	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS LON
40. REVIEWER <i>Lowell O. Neterer, Jr.</i> Lowell O. Neterer, Jr. 5/71		SUPERVISOR, REVIEW SECTION OR UNIT <i>Albert C. Rauck, Jr.</i> Albert 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.</i> C. Parker 8/76 Reviewer: L.O. Neterer 8/76		SUPERVISOR <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
43. REMARKS			



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



[illegible]

## REVIEW REPORT

## SHORELINE

T-13359

November 9, 1977

61. GENERAL STATEMENT:

See Summary, page 6 of this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

No comparison was made.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

No comparison was made.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with H-9597 (MI-10-2-76). Foul areas shown adjacent to the shoreline on the map were not verified by the hydrographer. The field editor mentioned only that the shoreline adjoining these foul areas is subject to changes resulting from stream runoff. The areas appear discolored on the photographs which may indicate the presents of marine growth but this reviewer was not able to detect the presents of any rocks or other debris. The position of the hydrographers soundings however, reveals that he purposely avoided the area. This might indicate that some danger does exist. Because of this, the foul limits are being retained on the map.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 25677, 1:100,000 scale, 13th edition, dated December 13, 1975. There are no significant differences.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

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

Submitted by:

*A. L. Shands*

A. L. Shands  
Final Reviewer

Approved for Forwarding:

*Joseph W. Vonasek*

Joseph W. Vonasek  
Chief, Photogrammetric Branch, AMC

Approved:

*D. K. Anderson*

Chief, Photogrammetric Branch

*James G. Galt*

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