

T-13362

ORIGINAL

T-13362

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-13362.....

Classification No. Edition No. ¹.....

Field Edited Map

LOCALITY

State Puerto Rico.....

General Locality .. South Coast.....

Locality Playita Machete.....

19 70 TO 19 76

REGISTRY IN ARCHIVES

DATE

NOAA FORM 76-36A (3-72) U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED	
DESCRIPTIVE REPORT - DATA RECORD		SURVEY TP. <u>13362</u> MAP EDITION NO. <u>(1)</u> MAP CLASS <u>Final</u> JOB PH. <u>6904</u>	
PHOTOGRAMMETRIC OFFICE Coastal Mapping Division AMC Norfolk, Va. OFFICER-IN-CHARGE Jeffrey G. Carlen, Cdr		LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED JOB PH. _____ MAP CLASS _____ SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED			
1. OFFICE		2. FIELD	
Compilation October 16, 1970		April 7, 1969 January 23, 1970 January 31, 1972 November 16, 1972	
II. DATUMS			
1. HORIZONTAL: <input type="checkbox"/> 1927 NORTH AMERICAN		OTHER (Specify) Puerto Rico	
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) STATE Puerto Rico ZONE 1	
5. SCALE 1:5,000		STATE ZONE	
III. HISTORY OF OFFICE OPERATIONS			
OPERATIONS		NAME	DATE
1. AEROTRIANGULATION BY METHOD: Analytic LANDMARKS AND AIDS BY		R. Kelly	Sept 1970
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY		P. Dempsey	Oct 1970
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY INSTRUMENT: Wild B-8 CONTOURS BY SCALE: 1:7,500 CHECKED BY		B. L. Barge A. L. Shands NA NA	Feb 1971 Feb 1971
4. MANUSCRIPT DELINEATION PLANIMETRY BY CHECKED BY METHOD: Smooth drafted CONTOURS BY SCALE: 1:5,000 CHECKED BY HYDRO SUPPORT DATA BY		B. L. Barge R. Pate NA NA B. Barge R. Pate	Aug 1971 Mar 1972
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY		R. Pate	Mar 1972
6. APPLICATION OF FIELD EDIT DATA BY		C. Blood	Sept 1976
7. COMPILATION SECTION REVIEW CHECKED BY		A. L. Shands	Sept 1976
8. FINAL REVIEW BY		A. L. Shands	Dec 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. T. Cator	Mar 1978

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEYT-13362
COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC 8 "E"		TYPES OF PHOTOGRAPHY LEGEND		TIME REFERENCE	
TIDE STAGE REFERENCE		(C) COLOR (P) PANCHROMATIC (I) INFRARED		ZONE	<input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> DAYLIGHT
<input checked="" type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY				Atlantic	
				MERIDIAN	
				60th	
NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE	
70E(C) 6421 - 6423	3/7/70	12:06	1:15,000	0.9 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-13361	No survey	T-13363

REMARKS

T-13362

HISTORY OF FIELD OPERATIONS

☒ 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 NA	
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY NA	
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 <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

2. VERTICAL CONTROL IDENTIFIED

N/A

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
70E(C)6145	BARR 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: ☐ 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)

1-Form 152

HISTORY OF FIELD OPERATIONS

I. ☐ FIELD INSPECTION OPERATION☒ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY	M. V. Hull	Mar 1976
2. HORIZONTAL CONTROL	RECOVERED BY W. V. Hull	Mar 1976
	ESTABLISHED BY None	
	PRE-MARKED OR IDENTIFIED BY None	
3. VERTICAL CONTROL	RECOVERED BY NA	
	ESTABLISHED BY NA	
	PRE-MARKED OR IDENTIFIED BY NA	
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY W. V. Hull	Mar 1976
	LOCATED (Field Methods) BY	
	IDENTIFIED BY	
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 W. V. Hull	Mar 1976
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) 6421 & 6422

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
70E(C)6422	STACK		

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)

1-Field Edit Ozalid

2-Forms 76-40

NOAA FORM 76-36D
(3-72)

T-13362

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

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Compilation complete, pending field edit.	Aug 1970	Class III manuscript		Oct 1972 Jan 1975
Field edit applied. Compilation complete.	Sept 1976	Class I manuscript	Sept 1976	
Final Review	Dec 1977	Final	Dec 1977	

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1		9/28/76	Landmark for Charts
1		9/28/76	Landmark for deletion

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: Sept. 28, 19763. ☐ 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 ~~5XX~~ 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	

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

T-13362

There was no field inspection prior to office compilation.

8a

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

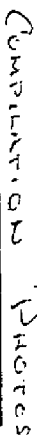
RC-8 E color photography was adequate as to coverage overlap and definition.

Submitted by,

Robert B. Kelly
Robert B. Kelly

Approved and forwarded,

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

OFFICIAL INTELLIGENCE
FOR COST ACCOUNTS

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

LEGEND

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

STRIP 1

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

STRIP 2

- Δ INFIerno 2, 1966 (-0.6, +0.3)
 Δ AGUIRRE, 1966 (-1.3, +0.6)
 Δ BARR, 1965 (-0.6, -1.0)
 Δ Pt VIENTO 3, 1966 (-1.2, -0.8)
 Δ HOUSE, 1966 SUB STA. A (+1.1, +0.4)
 Δ YEGUAS 2, 1965 (+1.1, -0.6)
 Δ 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-13362

31. DELINEATION:

Delineation was by the Wild B-8 stereoplotter.

Photography was adequate.

32. CONTROL:

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

33. SUPPLEMENTAL DATA:

None.

34. CONTOURS AND DRAINAGE:

Contours are not applicable to the project.
Drainage was delineated by the Wild B-8 stereoplotter.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline and alongshore details were delineated by the Wild B-8 stereoplotter from office interpretation of the photographs.

36. OFFSHORE DETAILS:

Delineation of offshore details was difficult and may be incomplete due to glare on photographs.

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 on

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 Guayama, Puerto Rico, scale 1:20,000, dated 1960.

47. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with the following Chart 925, scale 1:20,000, 3rd edition, dated June 30, 1969.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

Submitted by:

A. C. Rauch, Jr. FOR
B. Barge
Cartographic Tech.
October 18, 1971

Approved:

Albert C. Rauch, Jr.
Albert C. Rauch, Jr.
Chief, Coastal Mapping Section

October 11, 1977

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6904 (South Coast, Puerto Rico)

T-13362


Mar Caribe

Playita Machete

Puerto Arroyo

Punta Barrancas

Approved by:


Charles E. Harrington
Staff Geographer - C51x2

PHOTOGRAMMETRIC OFFICE REVIEW

TP-13362

12

1. PROJECTION AND GRIDS RJP	2. TITLE RJP	3. MANUSCRIPT NUMBERS RJP	4. MANUSCRIPT SIZE RJP
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RJP	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) RJP		7. PHOTO HYDRO STATIONS NA
8. BENCH MARKS NA	9. PLOTTING OF SEXTANT FIXES RJP	10. PHOTOGRAMMETRIC PLOT REPORT RJP	11. DETAIL POINTS RJP
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RJP	13. LOW-WATER LINE RJP	14. ROCKS, SHOALS, ETC. RJP	15. BRIDGES RJP
16. AIDS TO NAVIGATION RJP	17. LANDMARKS RJP	18. OTHER ALONGSHORE PHYSICAL FEATURES RJP	19. OTHER ALONGSHORE CULTURAL FEATURES RJP
PHYSICAL FEATURES			
20. WATER FEATURES RJP		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 RJP
CULTURAL FEATURES			
27. ROADS RJP	28. BUILDINGS RJP	29. RAILROADS RJP	30. OTHER CULTURAL FEATURES RJP
BOUNDARIES			
31. BOUNDARY LINES NA		32. PUBLIC LAND LINES NA	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RJP		34. JUNCTIONS RJP	35. LEGIBILITY OF THE MANUSCRIPT RJP
36. DISCREPANCY OVERLAY RJP	37. DESCRIPTIVE REPORT RJP	38. FIELD INSPECTION PHOTOGRAPHS NA	39. FORMS RJP
40. REVIEWER <i>A. C. Rauck, Jr.</i> FOR R. J. Pate 3/20/72		SUPERVISOR, REVIEW SECTION OR UNIT <i>A. C. Rauck, Jr.</i> 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 C. Blood <i>C. Blood</i> 9/10/76 A. L. Shands 9/13/76 <i>A. L. Shands</i>		SUPERVISOR <i>A. C. Rauck, Jr.</i> A. 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 Hull
Wesley A. Hull
Captain, NOAA
Commanding Officer
NOAA Ship Mt Mitchell MSS-22

REVIEW REPORT

T-13362

SHORELINE

December 1, 1977

61. GENERAL STATEMENT:

See Summary, Page 6 of this Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Not applicable.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Not applicable.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with a copy of Final Verified Smoothsheet H-9597 (MI-10-2-76). Due to glare and indistinct imagery the coral reef awash shown on the smoothsheet is probably a better portrayal of those features than can be had from the photography. Therefore no attempt was made to delineate these features on the map.

The areas adjacent to the shoreline labeled "breakers" on the smoothsheet are apparently foul with rocks or obstructions. Glare prevents the accurate delineation of the foul area. Three obvious rocks however, were identified and located on the map during final review.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart 25689, 1:20,000 scale, 5th edition dated May 7, 1977. The coral ledge awash charted from Punta Barrancas westward are not delineated on this map for the reasons mentioned in paragraph 64 above.

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

Approved for forwarding:

Joseph W. Vonasek

Joseph W. Vonasek
Chief, Photogrammetric Branch, AMC

Approved:

A. K. Hayward

Chief, Photogrammetric Branch

James L. ...

Chief, Coastal Mapping Div.