

13134

13134

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline (Photogrammetric)Field No. _____ Office No. T-13134

LOCALITY

State Puerto RicoGeneral locality Southwest CoastLocality Punta Ventana19 66-69

CHIEF OF PARTY

Alfred C. Holmes. Director, AMC

LIBRARY & ARCHIVES

DATE _____

DESCRIPTIVE REPORT - DATA RECORD

T-13134

OBJECT NO. (II):

PH-6708

FIELD OFFICE (III):

None

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center, Norfolk, VA

OFFICER-IN-CHARGE

Alfred C. Holmes, Director

INSTRUCTIONS DATED (II) (III):

OFFICE - Nov. 14, 1967

OFFICE - SUPPLEMENT 1 - Nov. 4, 1968

METHOD OF COMPILATION (III):

Wild B-8 Plotter

MANUSCRIPT SCALE (III):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:7,500 Pantographed To 1:5,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

JUN 1975

GEOGRAPHIC DATUM (III):

Puerto Rico

VERTICAL DATUM (III):

MEAN ~~LOW~~ ^{HIGH WATER} EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

REFERENCE STATION (III):

None

LAT.:

LONG.:

☒

ADJUSTED

☐ UNADJUSTED

PLANE COORDINATES (IV):

STATE

ZONE

Y =

X =

Puerto Rico

1

MAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE,
OR (IV) WASHINGTON OFFICE.

WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

DESCRIPTIVE REPORT - DATA RECORD

T-13134

FIELD INSPECTION BY (II): None		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air Photo Compilation - Date of Photography - Nov. 15, 16, 1966		
PROJECTION AND GRIDS RULED BY (IV): A. Bethea		DATE Oct. 10, 1968
PROJECTION AND GRIDS CHECKED BY (IV): L. F. Van Scoy		DATE Oct. 14, 1968
CONTROL PLOTTED BY (III): Aerotriangulation Points: - B. Nicholson Triangulation Stations: - None		DATE Nov. 12, 1968
CONTROL CHECKED BY (III): Aerotriangulation Points: - J. Steinberg Triangulation Stations: - None		DATE Nov. 12, 1968
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): I. I. Saperstein		DATE Oct. 31, 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III): Wild B-8	PLANIMETRY By: A. L. Shands	DATE Mar. 14, 1969
	Reviewed By: C. H. Bishop	Mar. 14, 1969
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): A. L. Shands		DATE March 17, 1969
SCRIBING BY (III): C.J. Woodson		DATE Sept. 2, 1971
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): Compilation: C.H. Bishop Field Edit: R. Smith Scribing and Stick Up: B. Barge, F. Margiotta		DATE 3/24/69 May 1969 9/71, 7/72
REMARKS: Field Edit By: - R.E. Kesselring		DATE: April 1969

DESCRIPTIVE REPORT - DATA RECORD

T-13134

CAMERA (KIND OR SOURCE) (III):

U.S.C. & G.S. Types "L" & "M" Wild RC-8 & RC-9

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-L-8405 thru 66-L-8407	Nov. 15, 1966	10:39	1:15,000	0.75 above MLW

PREDICTED TIDE (III)

DIURNAL

	RATIO OF RANGES	MEAN RANGE	MEAN RANGE
REFERENCE STATION: Galveston, Texas			1.4
SUBORDINATE STATION: Quanica, P.R.	0.50		0.7
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

Bernard Kurs, AMC

DATE:
Jan. 1973

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): None

RECOVERED:
NoneIDENTIFIED:
None

NUMBER OF BM(S) SEARCHED FOR (II): None

RECOVERED:
NoneIDENTIFIED
None

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): None

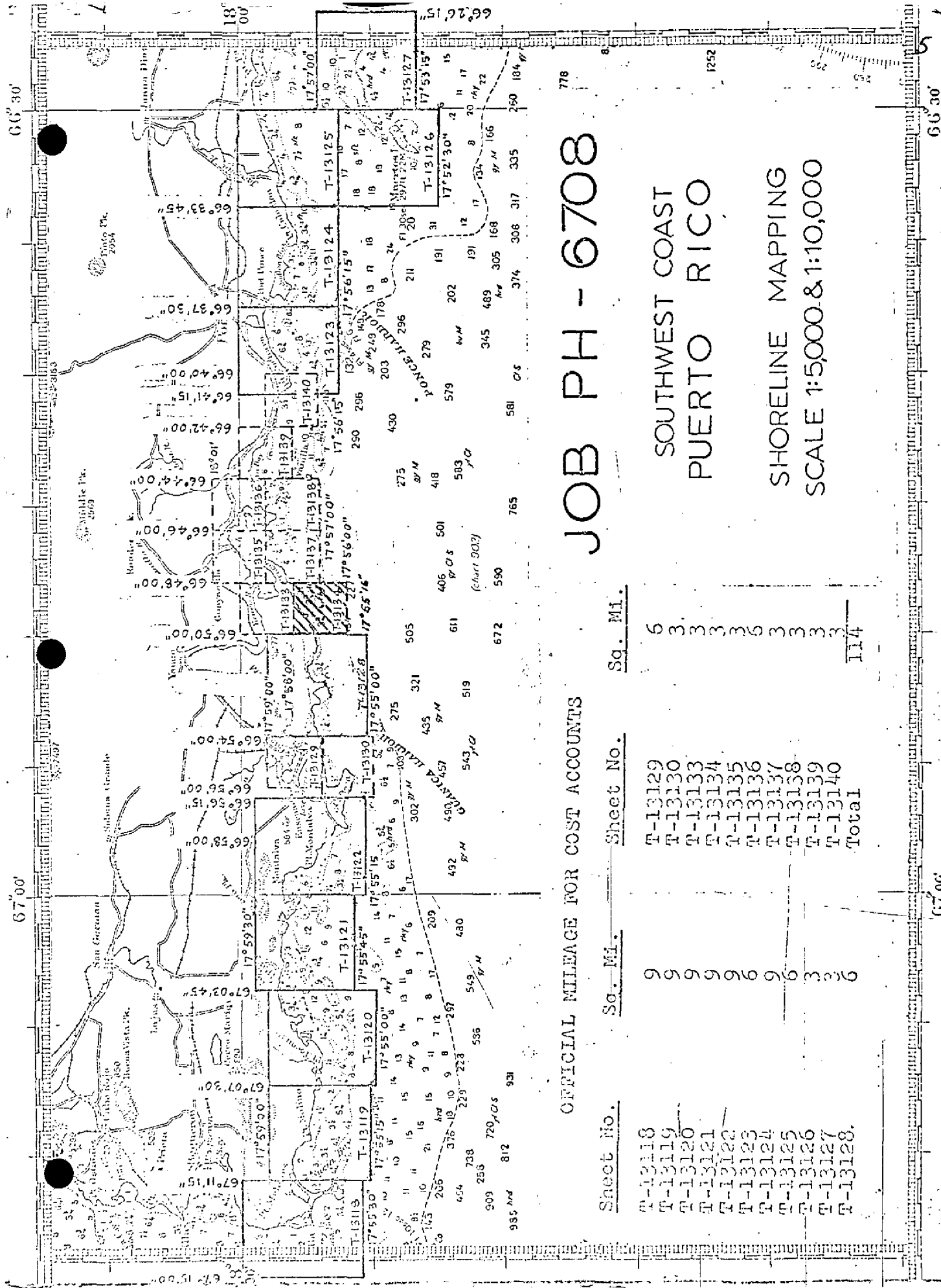
NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): None

REMARKS:

4

T-13134

COMPILATION RECORD	COMPLETION DATE	REMARKS
Alongshore Area For Hydro.	March 1969	Superseded
Field Edit Applied; Compilation Complete	May 1969	Superseded
Final Review	Jan. 1973	



OFFICIAL MILEAGE FOR COST ACCOUNTS

JOB PH - 6708

Sheet No.

Sq. Mi.

Sheet No.

Sq. Mi.

T-13118
T-13119
T-13120
T-13121
T-13122
T-13123
T-13124
T-13125
T-13126
T-13127
T-13128.

9
9
9
9
9
9
9
9
9
9
9

T-13129
T-13130
T-13133
T-13134
T-13135
T-13136
T-13137
T-13138
T-13139
T-13140
Total

6
3
3
3
3
3
3
3
3
3
114

SOUTHWEST COAST
PUERTO RICO
SHORELINE MAPPING
SCALE 1:50,000 & 1:10,000

SUMMARY TO ACCOMPANY

DESCRIPTIVE REPORT

T-13134

Shoreline survey T-13134 is one of twenty-one similar surveys in project PH-6708. The project is on the south shore of Puerto Rico and extends from Cabo Rojo to Cayo Berberia. This survey covers the shoreline from just east of Punta Vaquero to slightly north of Punta Ventana.

There was no field work prior to the compilation of this manuscript.

Compilation was by B-8 plotter using November, 1966 photography and at 1:5,000 scale. A copy of the incomplete manuscript along with ozalids and specially prepared photographs were furnished for the preparation of the boat sheet, location of photo-hydro signals and field edit use.

The manuscript was a vinylite sheet 2 minutes longitude by 2 minutes latitude. After field edit was applied the manuscript was scribed, stuck-up and reproduced on cronaflex. Final review was at AMC in January, 1973. One cronaflex and negative of the final reviewed manuscript are being forwarded for record and registry.

FIELD INSPECTION REPORT

T-13134

Project PH-6708

There was no field inspection before the compilation of this map.

PHOTOGRAMMETRIC PLOT REPORT

Job PH-6708

Puerto Rico

October 31, 1967

21. Area Covered

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

22. Method

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

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

23. Adequacy of Control

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

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

Station GUANICA L.H. 1900 does not have a valid position. Geodesy did not tie to this station during the 1966 work, and no adjustment was made to the new Puerto Rico datum. (Station has been reported destroyed.) The positions shown on Form 725d computed by Geodesy is arbitrary. Therefore, GUANICA L.H. Subpoint 1 and subpoint 2 are unreliable and were not held in the bridge.

It is to be noted that all horizontal control used on this job and the final pass point positions are on the new Puerto Rico Datum. A Xerox copy of triangulation station positions issued by Geodesy is submitted to the Compilation office with this job. Previously published GP's and plane coordinates should not be used for plotting.

24. Supplemental Data

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

25. Photography

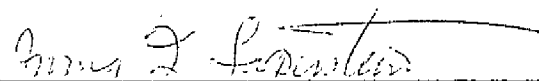
The definition and quality of the RC-9 "M" and RC-8 "L" color photography was fair and good respectively. Smoke covers parts of some photographs on Strips 3 and 5A, but should not hinder compilation of the shoreline.

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


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

Several points were transferred to ratio print 66-L-8394 in order that a reef on T-13140 may be compiled graphically.

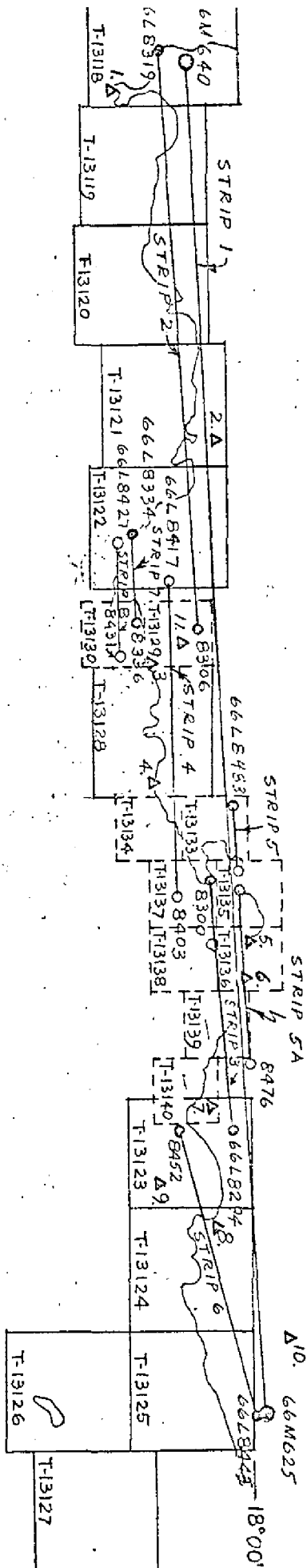
Respectfully submitted


I. I. Saperstein

Approved and Forwarded


Henry P. Eichert, Chief
Aerotriangulation Section

66°30'



1. CABO ROJO (USAF) 1966
2. CERO VERTERO 2 (USAS) 1934
3. ENSENADA, SOUTH P.R. SUGAR CO.
CENT. GUANICA WEST & EAST STACKS, 1966
GUANICA MUNIC. W.T. 1966
4. VAQUERO, 1900
5. TURN 2, 1966
6. GUAYANILLA, UNION CARBIDE CO. W.T. 1966
7. REY, 1966
8. PONCE, RADIO STATION WELO MAST, 1966
PONCE BAY FRONT & REAR RANGE L.T.S. 1966
9. CAÑADOÑA ISLAND L.H. 1900
10. PONCE, DON Q RUM CO. STACK, 1966
11. BAHIA DE GUANICA RANGE FRONT
& REAR L.T.S. 1966

AEROTRIANGULATION

PUERTO RICO
Southwest Coast

PH-6708

Oct. 1967

LEGEND

- Control used in Adjustment
- 1:60,000 Photos (color)
- 1:30,000 Photos (")
- 1:15,000 Photos (")

DESCRIPTIVE REPORT CONTROL RECORD

[illegible]

Compilation Report

T-13134

31. DELINEATION

The Wild B-8 stereoplotter was used.

There was no field inspection. The photography was adequate.

32. CONTROL

See Photogrammetric Plot Report dated October 31, 1967.

33. SUPPLEMENTAL DATA

None

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage was delineated from office interpretation of the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

The mean high water line and all alongshore detail was delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

None

37. LANDMARKS AND AIDS

None

38. CONTROL FOR FUTURE SURVEYS

None

39. JUNCTIONS

Junction have been made with T-13128 (1:10,000) to the west, T-13133 to the north and T-13137 to the east. There is no contemporary survey to the south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41. COMPARISON WITH PREVIOUS SURVEYS

Comparison was made with Previous Survey, Register No. 2534, Ratonas Island to Guanica Harbor, Scale 1:20,000, dated February to April 1901.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS Quadrangle PUNTA VERRACO, PR, scale 1:20,000 dated 1958.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 902 SOUTH COAST of PUERTO RICO - GUANICA LIGHT TO PUNTA TUNA LIGHT, Scale 1:100,000, 8th Edition, dated March 15, 1965.

ITEMS TO BE APPLIED TO NAUTICAL CHART IMMEDIATELY

None

ITEMS TO BE CARRIED FORWARD

None

Submitted by:

A. L. Shands

Approved:

A. L. Shands
Cartographic Technician

Alfred C. Holmes

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

December 11, 1972

GEOGRAPHIC NAMES

FINAL NAME SHEETS

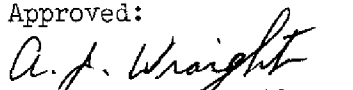
Ph-6708 (Puerto Rico)

TP-13134

Mar Caribe

Punta Ventana

Approved:



A. Joseph Wright
Chief Geographer

Prepared by:



Charles E. Harrington
Cartographer

T-13134

19. NOTES FOR THE HYDROGRAPHER:

None

PHOTOGRAMMETRIC OFFICE REVIEW

T13134

1. PROJECTION AND GRIDS CHB	2. TITLE CHB	3. MANUSCRIPT NUMBERS CHB	4. MANUSCRIPT SIZE CHB
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY None	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX	7. PHOTO HYDRO STATIONS XX	
8. BENCH MARKS X	9. PLOTTING OF SEXTANT FIXES X	10. PHOTOGRAMMETRIC PLOT REPORT Bridge-W.O.	11. DETAIL POINTS CHB
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE CHB	13. LOW-WATER LINE X	14. ROCKS, SHOALS, ETC. CHB	15. BRIDGES X
16. AIDS TO NAVIGATION None	17. LANDMARKS None	18. OTHER ALONGSHORE PHYSICAL FEATURES CHB	19. OTHER ALONGSHORE CULTURAL FEATURES CHB
PHYSICAL FEATURES			
20. WATER FEATURES CHB	21. NATURAL GROUND COVER X	22. PLANETABLE CONTOURS XX	
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES X
CULTURAL FEATURES			
27. ROADS CHB	28. BUILDINGS X	29. RAILROADS X	30. OTHER CULTURAL FEATURES X
BOUNDARIES			
31. BOUNDARY LINES XX	32. PUBLIC LAND LINES XX		
MISCELLANEOUS			
33. GEOGRAPHIC NAMES CHBQ	34. JUNCTIONS CHB	35. LEGIBILITY OF THE MANUSCRIPT CHB	
36. DISCREPANCY OVERLAY CHB	37. DESCRIPTIVE REPORT CHB	38. FIELD INSPECTION PHOTOGRAPHS None	39. FORMS CHB
40. REVIEWER Charles H. Bishop		SUPERVISOR, REVIEW SECTION OR UNIT Albert C. Rauck, Jr. <i>Albert C. Rauck, Jr.</i>	
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 R.E. Smith Reviewed By: R.J. Pate		SUPERVISOR May 8/69 May 16/69 <i>Albert C. Rauck, Jr.</i> Albert C. Rauck, Jr.	
43. REMARKS Field Edit Applied From: Field Edit Ozalid, Color Contact Photo No. 66-L-8406; Matte Ratio Photos. Nos. 66-L-8405 & 8406			

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FIELD EDIT REPORT
SOUTHWEST COAST OF PUERTO RICO
JOB PH- 6708
MAP T- 13134

52. ADEQUACY OF COMPILATION

Compilation was adequate. The shoreline on this map is composed of irregular rocky coast and, except for minor details was correctly and completely compiled. Bluff delineation was correct and no changes were recommended.

54. RECOMMENDATIONS

There are no recommendations.

55. EXAMINATION OF PROOF COPY

Sr. Oscar Padilla, Urb. Estella Box 28, Guayanilla, Puerto Rico, will be happy to examine a proof copy of the map. Sr. Padilla is the senior harbor pilot of Bahía de Guayanilla.

56. GEOGRAPHIC NAMES

The names on this map are correct and in current local usage.

57. LANDMARKS AND NONFLOATING AIDS TO NAVIGATION

There are no landmarks or fixed aids to navigation within the limits of this map.

58. ROCKS, REEFS, SHOALS AND FOUL AREAS

Rock compilation was excellent. A few insignificant rocks awash were overlooked and one or two rocks were incorrectly classified. Several submerged rocks were compiled, but, except in one area, the field editor was unable to verify them. These submerged rocks may exist, but bottom characteristics and sea conditions did not permit verification of rocks that were not breaking the surface. Two reefs were indicated on the field edit as located by prior survey. The northeasterly one consists of many sunken rocks, submerged from two to three feet, is small in area, and definitely submerged. The area where the other reef was indicated was searched extensively but no evidence of a reef was found, nor of the bare rock also indicated. There may be a submerged reef in the vicinity but it could not be identified visually.

There are no shoals on this map.

The majority of the foul areas delineated were deleted. One new foul area was indicated. The rocky shoreline on this coast appears to be atypical for while there are many bare

rocks and rocks awash, the area between and surrounding them appears to be remarkably free of sunken rocks.

59. PHOTOGRAPHY

Photography consisted of 1:5000 ratio matte black and white prints and 1:15000 color contact prints. The photography was adequate.

60. DISPOSITION OF DATA

All field edit data was transmitted to the photo branch, Atlantic Marine Center.


Richard E. Kesselring

REVIEW REPORT

SHORELINE

T-13134

61. GENERAL STATEMENT

See summary which is page 6 of the Descriptive Report.

62. COMPARISON WITH REGISTERED SURVEYS

A visual comparison was made with a copy of registered survey No. 2468, 1:20,000 scale, dated 1900. There is general agreement between the two surveys.

Registered survey No. 2468 is superseded by T-13134 for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

A visual comparison was made with USGS Punta Verraco, PR quadrangle, 1958 at 1:20,000 scale. The shoreline on the quadrangle is very generalized but seems to be in agreement with this survey. Two small reef areas appear on the quad within the limits of this survey. The field editor searched for them but found no trace of their existence.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

A comparison was made with boat sheet H-9183 MI-10-3-70 at 1:10,000 scale. The shoreline of this boat sheet is the incomplete manuscript. Since there was no shoreline changes indicated by the field editor there are no differences.

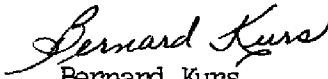
65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Chart 928, 1:10,000 scale dated March 4, 1972. This could only be done on a short piece of shoreline in the Punta Ventana area since the limits end at this point. Differences are noted on the comparison print. The remainder of the shoreline is covered by Chart 902, 1:100,000 scale dated Feb. 26, 1972. The scale of the chart could only show general agreement.


66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey meets project instructions and it also meets the National Standards of Map Accuracy.


Reviewed by:


Bernard Kurs
Cartographer

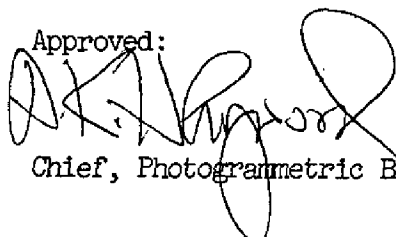
Approved for forwarding:


Melvin J. Umbach, CDR, NOAA
Chief, Coastal Mapping Division, AMC

Approved:


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

Approved:

 Chief, Photogrammetric Branch

 Chief, Coastal Mapping Division

x=368,000 FT.

48'45"

66°48'30"

x=370,000 FT.

17°58'

Coral reef awash

CHART 928

(2)

* Awash

(3)

Punta Ventana

(3)

(7)

(4)

* Awash

* Awash

Awash

(2)

* Awash

(2)

(10)

wash

* Awash

(6)

Subm Rks

57'45"

17°57'30"

NOTE: The predicted tide range is less than 1 foot therefore no distinction has been made for rocks or coral awash at M.H.W. or M.L.W. All are indicated as awash.

NOTE:

Photogrammetric location and delineation of features are from the mean high-water line on this survey and may not be complete or final. The contemporary

T-13134