

12146

Original

12146

12146

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline (<i>Photogrammetric</i>)
Field No.	Office No. T-12146
LOCALITY	
State	Puerto Rico
General locality	East Coast
Locality	Punta Fajardo
1961-64 1958-1964	
CHIEF OF PARTY	
M. L. Olivier, Chief of Field Party 708	
V. Ralph Sobieralski, Tampa District Office	
LIBRARY & ARCHIVES	
DATE	1 JUL 1968

USCOMM-DC 5087

DESCRIPTIVE REPORT - DATA RECORD

T - 12146

PROJECT NO. (II): PH-6106		
FIELD OFFICE (III): PUERTO RICO		CHIEF OF PARTY M. L. OLIVIER
PHOTOGRAMMETRIC OFFICE (III): TAMPA, FLORIDA		OFFICER-IN-CHARGE V. RALPH SOBIERALSKI
INSTRUCTIONS DATED (II) (III): Field and office - August 30, 1961 Amend. " " - January 15, 1962 * * Interior planimetry restricted to those features useful to photo hydro support. dso		
METHOD OF COMPILATION (III): Kelsh plotter		
MANUSCRIPT SCALE (III): 1:5,000		STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III): 1:3,000
DATE RECEIVED IN WASHINGTON OFFICE (IV): APRIL 13, 1968 MAY 25 1962		DATE REPORTED TO NAUTICAL CHART BRANCH (IV):
APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):
GEOGRAPHIC DATUM (III): Puerto Rico		VERTICAL DATUM (III): MHW MEAN LOW 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): CENTRAL FAJARDO NORTH STACK (USGS) 1941		
LAT.: 18°19'38.85" (1194.4m.)	LONG.: 65°38'52.98" (1555.7m.)	<input checked="" type="checkbox"/> ADJUSTED <input type="checkbox"/> UNADJUSTED
PLANE COORDINATES (IV): = 180,005.2 ft. x = 772,346.1 ft. ✓		STATE Puerto Rico
		ZONE Puerto Rico
ROMAN 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

FIELD INSPECTION BY (III): M. L. Olivier		DATE: No field in- spection report avail- able, nor were dates shown on back of field photos. Field work probably done in Dec. 1961 (<i>Date of Report</i>)
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air photo compilation. Date of photography: October 1961		
PROJECTION AND GRIDS RULED BY (IV): A.R. (W.O.)	DATE April 1962	
PROJECTION AND GRIDS CHECKED BY (IV): A.R. (W.O.)	DATE April 1962	
CONTROL PLOTTED BY (III): V. P. Cackowski	DATE April 1962	
CONTROL CHECKED BY (III): V. P. Cackowski	DATE April 1962	
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): R. E. Fuechsel (W.O.)	DATE March 1962	
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY I. I. Saperstein	DATE May 1962
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): I. I. Saperstein	DATE May 1962	
SCRIBING BY (III): <i>A. Shands</i>	DATE <i>July 1966</i>	
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): W. H. Shearouse (<i>Compilation Manuscript</i>) <i>R.E. Smith</i> <i>Final</i>	DATE May 1962 <i>July 1966</i>	
REMARKS: <i>" Limited field edit " by Ens. D. P. Van Weden in 1967 see page 16 of this report.</i>		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild "W" camera

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
61-W-1722	Oct. 26, 1961	1545	1:15,000 Diapositive	0.7
61-W-1723	"	"	" "	"
61-W-1724	"	"	" "	"
58-S-2810	1958	1112	1:10,000 (color photos)	
58-S-2813	"	"	" "	"
58-S-3062 thru 3065	"	1148	" "	"

Predicted TIDE (III)

	RATIO OF RANGES	MEAN RANGE	Diurnal SPRING RANGE
REFERENCE STATION: San Juan	-	1.1	1.3
SUBORDINATE STATION: Bahia de Fajardo	1.0	1.1	1.4
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

Atlantic Marine Center

M. M. Slattery
M. M. Slattery

DATE:

June 1967

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

3

RECOVERED:

1

IDENTIFIED:

1

NUMBER OF BM(S) SEARCHED FOR (II):

1

RECOVERED:

1

IDENTIFIED:

1

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

0

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

1

REMARKS:

6.

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12146

Shoreline manuscript T-12146 is one of eight 1:5,000 scale maps in Ph-6106, Puerto Rico, which also contains sixteen 1:10,000 scale maps. The sketch on page 5 of this report shows the position of this manuscript in the project. It is noted that 1:5,000 scale maps T-12143 and T-12144 and 1:10,000 scale maps T-12150, T-12151, and T-12161 of this project are in a "postponed" status until some future date. *cancelled.*

74ms

This is a stereo-instrument project in advance of hydrographic surveys of the area. Field inspection was done on 1:10,000 ratio prints of 1:30,000 panchromatic photographs made with the "S" camera April 18, 1959. 1:15,000 panchromatic photographs made with the "W" camera on October 26, 1961 were used for compilation. 1:10,000 color prints made in 1958 (no date) with the "S" camera, were furnished for reference during compilation. 1:10,000 color prints ("S" camera) made February 17, 1962 were used for reference during final review. The stereo-bridge was run and adjusted to field identified control in the Washington Office. Compilation was done with the Kelsh Plotter. Ratio prints, at 1:5,000 scale were processed, and provided for photo-hydro support.

Field work preceding compilation consisted of control identification and field inspection was provided for compilation. The map carries a "Date of Field Edit 1964". It is a "limited field edit done concurrent with hydrography". The field edit notes were on the cronaflex T sheets forwarded to the smooth plotting nautical chart section of the Atlantic Marine Center. *See page 16.*

The compilation manuscript was a vinylite sheet 1 minute and 45 seconds in latitude and longitude. The smooth manuscript was on cronaflex for registry and record after final review.

FIELD INSPECTION REPORT -4-

2. AREAL FIELD INSPECTION

T-12139, T-12142, T-12145, T-12146, and T-12152 through T-12157,
These shoreline sheets are located on the eastern coast of Puerto Rico. The area is undeveloped except for the village of Fajardo and the Roosevelt Roads Naval Reservation.

Field inspection was performed on photographs 59-S-3940 through 59-S-3949 and 59-S-3915 through 59-S-3923. Some difficulty of interpretation of the apparent MHWL was encountered around mangrove areas.

Three housing areas within the naval station were not field inspected. It is believed that the 1961 photographs will cover these spots. Also a small marina in Ensenada Honda was left for the 1961 photographs. A new marina, under construction, on the south side of Cayo Obispo (a small island just east of Playa de Fajardo) was left for field edit.

3. HORIZONTAL CONTROL

All Coast and Geodetic Survey control stations except four within the project limits were searched for. HOUSE, 1901; KID, 1941; MONTE, 1941; and NORTH, 1941 were not searched for because no descriptions were furnished. Only those stations as specified on the project diagram were photo-identified. One U. S. Geological Survey control station (CENTRAL FAJARDO, NORTH STACK, 1941) was recovered and photo-identified.

There were many triangulation stations that could not be recovered especially around the naval base. It is believed that much of this control was destroyed during construction of the base.

4. VERTICAL CONTROL

All tidal bench marks in the area were searched for. The one at Playa de Fajardo was recovered but the two in Ensenada Honda could not be found.

5. CONTOURS AND DRAINAGE

Contours were not a part of the work requirements for this project.

The drainage patterns can be distinguished on the photographs.

6. WOODLAND COVER

Woodland cover has been classified in accordance with the requirements for topographic maps. Wooded areas are adequately covered by the field inspection photographs.

Swamp areas were designated as mangrove. There is considerable mangrove throughout the area.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line was inspected from a small boat and by walking along the shoreline.

The shoreline in places was visited at low water. The mean low water line is shown on the photographs in green ink.

The foreshore is steep in some places and somewhat flat in other places.

Docks, piers, wharves, etc. are adequately covered on the field inspection photographs.

One submerged cable was identified on the photographs.

8. OFFSHORE FEATURES

Some offshore rocks were visited and their heights above MHW were noted. Coral is distinguishable on the photographs.

9. LANDMARKS AND AIDS

Landmarks and aids to navigation located by photogrammetric methods are shown on the contact prints. One landmark, a tower on Pineros Island, was identified on the field inspection photographs.

All landmarks and aids to be charted or deleted are adequately covered on Form 567.

10. BOUNDARIES, MONUMENTS, AND LINES

Boundaries were excluded by the project instructions.

11. OTHER CONTROL

Existing objects suitable for photo hydro control were identified on the field inspection photographs. These are shown on the photographs by three digit numbers. Many of the landmarks and aids can be used for photo hydro control.

12. OTHER INTERIOR FEATURES

All buildings and roads have been classified in accordance with project instructions dated 30 August 1961.

13. GEOGRAPHIC NAMES

An investigation of geographic names was not required by the project instructions. It was noticed that the geographic names on the existing charts and quads of this area agree with one another and with the general opinion of the local people.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Contact photographs were forwarded to the Washington office by Letter of Transmittal No. PH-6106-3 dated 20 November 1961.

Submitted
5 December 1961

Michael L. Olivier

Chief, Photo-Processing

MAP T- 12146 PROJECT NO. PH-6106 SCALE OF MAP 1:5,000 SCALE FACTOR _____

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS (1 Ft. = 3048006 meter) FORWARD (BACK)
CENTRAL FAJARDO N. STACK 1941 (USGS)		Puerto Rico	180 005.2	
BARRANCAS 2 1923		Puerto Rico	772 346.1	
			182 430.44	Not Plotted
			779 694.34	
COMPUTED BY V. P. Cackowski	DATE 4/3/62	CHECKED BY O	DATE	70

COMPILATION REPORT T-12146

PHOTOGRAMMETRIC PLOT REPORT

The stereo bridge was run in the Washington Office using 1:30,000 diapositives (see report for T-12157). A sub-bridge was run in this office, dropping pass points from the 1959 1:30,000 diapositives to control the 1961 1:15,000 diapositives. The 1:15,000 diapositives were then used in compiling the 1:5,000 manuscripts. (T-12146 and T-12142, south half.)

It will be noted that pass point no. 247401 (Radio Tower WMDD) identified by the field inspector on contact print 59-S-3947 was dropped on the 1:30,000 bridge (strip 2), and a note added to the IBM readout tape "This is a sketched position". Careful study of the 1:30,000 photographs failed to show the tower. However, when the 1:15,000 diapositives were used, the tower could be seen and was dropped. A difference of 7.5 meters in position from the Washington Office location was observed.

31. DELINEATION

The Kelsh plotter was used. The field inspection was generally adequate and no difficulty was encountered in the delineation of the shoreline.

The interior detail has been omitted in accordance with amendment to instructions dated January 15, 1962.

The color photographs were used as an aid in delineating coral, rocks, shoal and shallow areas.

Delineation has been carried east of the neat line to make use of the 1961 photographs.

32. CONTROL

The density and placement of bridge points was adequate. (See item Photogrammetric Plot Report).

33. SUPPLEMENTAL DATA

None.

34. CONTROL AND DRAINAGE

Inapplicable.

COMPILATION RECORD

COMPLETION DATE

REMARKS

Shoreline and alongshore pass points compiled.	May 1962	<i>Superseded.</i>
<i>Manuscript Complete</i>	<i>July 1966</i>	<i>Superseded</i>
<i>Some revisions in final Review</i>	<i>June 1967</i>	

35. SHORELINE AND ALONGSHORE DETAILS

The mean high-water and low-water lines were delineated according to the field inspection which was adequate. All piers, sea walls and rocks that could be seen were shown. Shallow and shoal areas were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

Numerous coral reefs have been shown and are delineated accordingly. Other offshore areas have been outlined with a dashed line but are questionable. These areas should be investigated by the hydrographic party.

37. LANDMARKS AND AIDS

There are no aids. Two landmarks have been located and form 567 submitted with this report. Radio Tower (WMDD) is not of landmark value according to the field inspector and was shown merely as a topographic feature.

38. CONTROL FOR FUTURE SURVEYS

One photo-hydro station was located and is listed under item 49.

Shoreline pass points have been located by the Kelsh plotter for photo-hydro support.

39. JUNCTIONS

Junctions have been made with T-12142 to the north; T-12148 (1:10,000) to the east; T-12152 (1:10,000) to the south. This sheet is the southeast part of T-12145 (1:10,000).

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41. SHORELINE CHANGE

It may be of interest to note that triangulation station BARRANCAS 2, 1923 now plots 100 meters offshore from Punta Fajardo. This emphasizes the erosion that has occurred at this point of land.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS quadrangles FAJARDO and CAYO ICACOS, scale 1:20,000, edition of 1958. The comparison is favorable except that Punta Fajardo has eroded, and a new marina is under construction on Cayo Obispo.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with chart 917, 1:40,000, edition of May 6, 1930, revised October 12, 1959, and chart 921, 1:10,000, edition of December 1930, corrected to April 14, 1952. The major discrepancy seems to be in the horseshoe curve of Rio Fajardo, which appears on the chart about 40 meters north of its present position. The differences mentioned under item 46 are also applicable to the charts.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

I. I. Saperstein
I. I. Saperstein
Cartographer (Photo)

APPROVED AND FORWARDED

V. Ralph Sobieralski
V. Ralph Sobieralski
Tampa District Officer

48. GEOGRAPHIC NAME LIST

Names were taken from the final name sheets prepared by the Washington Office on USGS quadrangles FAJARDO and CAYO ICACOS, scale 1:20,000, edition of 1958.

- * ~~ARRECIFE CORONA CARRILLO~~
- * ~~ARRECIFE MATA CABALLOS~~
- * ~~ARRECIFE RONCADOR~~

> BAHIA DE FAJARDO

- * ~~CAYO ANOGADO~~
- * ~~CAYO OBISPO~~
- * ~~CAYO ZANCUDO~~

- > PLAYA DE FAJARDO
- > PUERTO RICO
- > PUNTA FAJARDO

> RIO FAJARDO

* On a "dog-ear" extension of T-12146 (Now part of T-12148)

Names approved
May 29, 1968

A. J. Wright
Frank W. Fickett

49. NOTES FOR THE HYDROGRAPHER

One photo-hydro station was located:

108 (SE gable P.O.)

Several offshore areas have been outlined with a dashed line and are questionable. Their true nature could not be determined in the office and should be investigated by the hydrographic party.

The coral areas were identified but not delimited by the field inspector. Limits shown are from study of Kelsh models and color photographs, when available. The coral limits do not necessarily define the low-water line; this has been left for investigation by the hydrographer.

FORM 182 (3-61)		PHOTOGRAMMETRIC OFFICE REVIEW		U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
50.		T- 12146		Compilation Manuscript	
1. PROJECTION AND GRIDS WHS		2. TITLE WHS		3. MANUSCRIPT NUMBERS WHS	
		Unclassified		4. MANUSCRIPT SIZE WHS	
CONTROL STATIONS	5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY WHS		6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS) XX		
	7. PHOTO HYDRO STATIONS WHS	8. BENCH MARKS WHS	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT W.O.	
	11. DETAIL POINTS RES				
ALONGSHORE AREAS (Nautical Chart Data)	12. SHORELINE WHS	13. LOW-WATER LINE WHS	14. ROCKS, SHOALS, ETC. WHS	15. BRIDGES XX	
	16. AIDS TO NAVIGATION XX	17. LANDMARKS WHS	18. OTHER ALONGSHORE PHYSICAL FEATURES WHS		
	19. OTHER ALONGSHORE CULTURAL FEATURES WHS				
PHYSICAL FEATURES	20. WATER FEATURES XX		21. NATURAL GROUND COVER XX		
	22. PLANETABLE CONTOURS XX		23. STEREOSCOPIC INSTRUMENT CONTOURS XX		
	24. CONTOURS IN GENERAL XX		25. SPOT ELEVATIONS XX		
	26. OTHER PHYSICAL FEATURES XX				
CULTURAL FEATURES	27. ROADS XX	28. BUILDINGS WHS	29. RAILROADS WHS		
	30. OTHER CULTURAL FEATURES WHS				
BOUNDARIES	31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX		
MISCEL- LANEOUS	33. GEOGRAPHIC NAMES WHS		34. JUNCTIONS WHS		
	35. LEGIBILITY OF THE MANUSCRIPT WHS	36. DISCREPANCY OVERLAY XX	37. DESCRIPTIVE REPORT WHS		
	38. FIELD INSPECTION PHOTOGRAPHS WHS		39. FORMS WHS		
	SIGNATURE OF REVIEWER William H. Shearouse		SIGNATURE OF SUPERVISOR REVIEW SECTION OR UNIT Milton M. Slavney		
40. FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT-Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side.					
SIGNATURE OF COMPILER		March during final review in June 1967		SIGNATURE OF SUPERVISOR Milton M. Slavney	

FIELD EDIT REPORT

T-12146

No field edit report was submitted as such. The Item "SHORELINE INSPECTION", on page 2 of Descriptive Report for "Control and Shoreline" for OPR 423, 1964, which is a part of the hydrographic records states: "A limited field edit was carried on concurrently with hydrography for each boat sheet. What field edit notes were made were placed on the cronaflex T sheets and marked on appropriate photos in green ink. T sheets and accompanying photographs were sent to the Washington Office on September 15, 1964."

"All offshore detail shown on the T- sheet was verified or deleted by the hydrographic party."

This completed the Item.

M. M. Slavney
M. M. Slavney
Final Review

REVIEW REPORT T-12146
SHORELINE
AUGUST 1967

61. GENERAL STATEMENT:

See Summary accompanying Descriptive Report (page 6).

An ozalid Comparison Print showing the differences noted in Items 62, 63, 64, and 65 is enclosed with the original of this report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Registered Survey 2478; 1:10,000; 1900

Registered Survey 2538; 1:20,000; 1901

The shoreline from these surveys is on the Comparison Print in blue.

There are shoreline differences to 100 meters; the largest change is at Punta Fajardo. The discrepancy in position of Rio Fajardo is shown, as are the old piers at Playa de Fajardo.

T-12146 supersedes the previous registered surveys for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

FAJARDO, P.R. quad.; U.S.G.S.; 1:20,000; 1958

The quadrangle shoreline is on the Comparison Print in purple.

Shoreline differences to 50 meters are shown.

The quadrangle shows a pier at latitude 18° 20'.2, longitude 65° 37'.88 that does not exist on this survey.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Boat Sheet EX-5-1-64 (H-8813); 1:5,000; 1964

Notes pertaining to details from the boat sheet are on the Comparison Print in green.

a. The boat sheet shows two wrecks that do not appear on this map. One sunken, at latitude 18° 20'.32, longitude 65° 37'.85; another that bars at latitude 18° 20'.18, longitude 65° 30'.77. It is noted that T-12146 shows a wreck, alongside a pier, about 50 meters SSW of this wreck. The wreck on T-12146 was from field inspection and is visible on photographs 59-S-3946, 61-W-1723 and 1724, and color photographs 62-S-487 and 488.

b. One object labelled post; at latitude $18^{\circ} 20' .01$, longitude $65^{\circ} 30' .11$; and an unlabelled 2.5 mm circle presumed to be a post or pile, at latitude $18^{\circ} 20' .1$, longitude $65^{\circ} 30' .14$, are not visible on the photographs, and were not noted by the field inspector or during the "limited field edit".

c. It is noted that 1962 color photographs 62-S-486 and 487 show some work dredging, sheet piling or ?, at the mouth of Rio Fajardo. However, no mention is made in the field edit and/or boat sheet. The boat sheet carries the note "mud flat too shoal to sound" directly over the area. Office interpretation is too inconclusive to justify any delineation, particularly after the 1964 hydrographer makes no mention of anything in the area.

65. COMPARISON WITH NAUTICAL CHARTS:

Chart 921; 1:10,000; 8th Edition; June 27, 1966

Chart 921 southern limits are, latitude $18^{\circ} 18' .95$. Chart 917 (1:40,000 5/16/66) would ordinarily be used; however, its scale requires an 8x enlargement; it was therefore not used.

Chart details conflicting with this map are shown on the Comparison Print in red.

- a. There are some shoreline differences to 35 meters, the largest along the coast from latitude $18^{\circ} 18' .95$ to $18^{\circ} 19' .35$.
- b. The chart shows the two wrecks noted in Item 64, paragraph (a).
- c. A wreck that bares partially is shown at latitude $18^{\circ} 20' .33$, longitude $65^{\circ} 37' .95$ on the chart, that is not on this map. It is not visible on the photographs, was not noted by the field inspector or the field edit; nor is it on Boat Sheet EX-5-1-64.
- d. The two posts (?) noted in Item 64, paragraph (b) are on Chart 921, one as "sign", and the other an unlabelled circle.
- e. The chart shows a number of rocks awash near latitude $18^{\circ} 20'$, longitude $65^{\circ} 37' .55$ to the shoreline, that are not on T-12146; and Boat Sheet EX-5-1-64 makes no note of them.
- f. The chart shows an area just offshore at latitude $18^{\circ} 20' .4$ "Being Filled" which is not on T-12146. It was not noted by the field inspector or field edit; and it is not on Boat Sheet EX-5-1-64.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

The map meets the Bureau Requirement and the National Standards for Map Accuracy. No accuracy tests were run in the field.

Reviewed by:

M. M. Slavney
M. M. Slavney

Approved by:

J. Bull
J. Bull, RADM, USESSA
Director, Atlantic Marine Center

Charles H. Hance
Chief, Cartographic Branch
Photogrammetric
A.D.B.

John P. Bryan
Chief, Chart Division

Ralph Sobieski JUN 19 1968
Chief, Photogrammetry Division

Chief, Operations Division

NOTES TO VERIFIER
T-12146 Project PH-6106
BOAT SHEET NO. EX-5-1-64 (H-8813)

Please note the discrepancies listed in Item 64, paragraphs (a), (b), and (c) which is not a discrepancy between the boat sheet and T-12146, but something which does appear on photographs 62-S-486 and 487 at the mouth of Rio Fajardo. Also see Item 65, paragraphs (a) through (f) of the Descriptive Report from T-12146, and the Comparison Print included with the "original" of this report.

