

6881

Diag. Cht. No. 904

Form 504 Rev. April 1935	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. T6881 Field Sheet "J"
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES	
APR 20 1942	
Acc. No. _____	
State _____ Puerto Rico	
LOCALITY	
Roosevelt Roads Naval Base	
Quebradas Botija + Palma	
Project C. S. # 268	
-193- 1941	
CHIEF OF PARTY	
Ray L. Schoppe	

U. S. GOVERNMENT PRINTING OFFICE

DECLASSIFICATION BY NOAA  
PURSUANT TO DOC SYSTEMATIC REVIEW  
GUIDELINES AS DESCRIBED IN SECTION  
3.3 (a), EXECUTIVE ORDER 12356

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

CONFIDENTIAL  
T6881

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. " J "

REGISTER NO. T6881

CONFIDENTIAL

State Puerto Rico

General Locality East End, Near Ensenada Honda

Locality ~~Highway at Quebradas~~ Dotija and Palma,  
~~Roosevelt Roads Naval Base~~

Scale 1 / 4800 Date of survey October - December, 19 41

Vessel Shore Party

Chief of party Ray L. Schoppe

Surveyed by N. F. Emannueli

Inked by R. Colon

Heights in feet above M. H. W. to ground to tops of trees

Contour, ~~Approximate contour~~ Form line interval 5 feet

Instructions dated May 20, (Radiogram), 19 41

Remarks: Special Survey for the Navy Department

GPO 266853

Alidade No. 215 was used on this sheet.



PROJECT C. S. # 268

Field Number - Sheet "J" ~~T-6881~~

This sheet covers a part of the proposed Roosevelt Roads Naval Base. It is one of a series of thirteen sheets. This sheet covers the west slope of the hills between the Dagua River and Quebrada Palma. It also covers the flat cultivated cane fields and the dense swamp that border Quebrada Palma. ~~T-6882~~ Algodones Cay is surveyed on Sheet "K", but the sandy islets between Algodones Cay and the mangrove is surveyed on this sheet. This is one of several sheets that border Algodones Bay.

At one time, it was proposed to include all of the area of this sheet in the Naval Base. But about two days before the field work was finished, it was announced that at the present time, this area would not be purchased.

(a) Descriptive.

Like all other sheets in this area, the steep sided hills on this sheet are not distinctive. They are mostly covered with cleared pasture land. The flats are planted in sugar cane wherever drainage permits. Land that is too low for drainage and cultivation is covered with a dense swamp of mangrove, tall grass and bushes. Good sized trees are formed on the edges of ditches and creeks. The southern edge of the mangrove area at the mouth of Quebrada



Palma is bordered by several long narrow sandy islands. They rise only a foot or two above M. H. W. and are little more than sand bars. Numerous cocoanut palms are found on these islands.

The road or trail that runs along the west side of Quebrada Palma is so bad that it is worthy of description. On horseback, it can be travelled without too much hazard. On foot, it is almost impossible because of deep, sticky mud holes. By means of a modern type of two wheeled ox cart, fitted with huge ballon tires, the owners transport light loads over this road. Large numbers of rocks and roots of trees make this method too rough for the transportation of instruments. We finally gave up trying to use the road, and changed to boat transportation for the survey of these sandy islands. Seldom can a "road" be found that is so nearly impassible. The ox cart described above, is a type commonly used in local cane fields where swampy conditions are encountered.

(b) Landmarks.

There are no landmarks on this sheet. *See Rev., par. 3*

(c) Control.

Control points on this sheet were located by triangulation in 1941. A special report on this triangulation has been submitted. All triangulation on the project in 1941, is observed with second order accuracy. But the recovered stations, MURPHY 2, PUERCA, CEIBA and PRIETO are a part of the adjusted third order scheme which covers Puerto Rico and the



Virgin Islands.

On this sheet, topography is controlled by stations DON, ABRA, LOMA, VERDE, CANA, DAGUAO, COLINA, CURVA, VALLE, MONTIDA and STACK (Hacienda Grande). Topographic signals RAM, FAT, NEW, GAL, Windmill and Derrick were located by theodolite cuts. And signals LOG, LEN, BAD and CAN were poles, set up for temporary use and located and plotted by sextant angles. The outer edges of mangrove in this vicinity was located from them and then plotted by sextant angles taken from a pulling boat.

The elevation of all triangulation stations on this sheet were computed from vertical angles and checked by rod readings to M. H. W. These elevations then were used for vertical control of the plane table work.

(d) Traverse.

Traverses were then run between points located by three point fixes but such traverses were short. If closure was greater than three meters, the traverse was entirely re-run. If less, it was adjusted. No detail was taken from traverse points until the correct location was selected.

(e) Survey Methods.

Three point fixes were obtained wherever possible. But much of this sheet is covered by tall sugar cane. In a few cases, enough cane was cut to permit signals to be seen for a three point fix. By making set-ups at road intersections, etc.,



the cutting of cane was reduced to a minimum.

When work on this sheet was started, the field party was not entirely untrained. But close supervision was maintained by Lieut. Riddell. It was planned that he visit each party at least once a day. (See notes in the Descriptive Report for sheet "A".) <sup>T-6872</sup>

(f) Form Lines.

No offshore verification of form lines was possible. Various aerial photographs, - some vertical and some oblique, were available and form lines were carefully checked with them.

(g) Revision Work.

None on this sheet. This is an independent survey.

(h) Incomplete Portions.

Several small sand bars lying in the mangrove swamp, approximately 300 meters west of  $\Delta$  ABRA, were sketched. Their location was checked from aerial photographs. They appear to have a highwater line, but they are probably covered at extreme high water.

(i) Deviation from Standard Practices.

See notes in the Descriptive Report for sheet "A", of this project.

(j) Junctions.

At all junctions between sheets, a small overlap was run and if contours did not make a good fit, the field



work was re-run until the correct elevations were located.

No adjustments were then necessary.

(k) Names.

Old names are well established. No new names are offered.

(l) Plane table positions.

Triangulation stations furnish good control for plane table work on this sheet. No marked plane table stations were established. Derricks are frequently moved and can not be depended on for control.

(m) Photographs.

The entire area has been photographed at least three times. The U. S. Geological Survey is now compiling an aero-topographic map of the whole island. Their pictures are all single lens prints. I had several of them for a few days, but none were available when sheets were finally inked. The Army Engineers have some rather good looking prints of the entire coast line but I have no information as to the control that they used nor as to the accuracy of the scale, etc. Several years ago, the Puerto Rico Reconstruction Administration had a mosaic made from aerial photographs. This gives good detail in some regions but at Ensenada Honda and the Dagua River area, the prints are not distinct.

(n) Changes in Shoreline.

There are no changes in the shoreline of this sheet.



- 6 -

## (o) Marshes.

The marshland on this sheet is described in the opening paragraph of this report.


## (p) Magnetism.

On this sheet two observations by declinoire were made. One, near CURVA at 11:00 A. M., 60th meridian time, November 8, 1941, gives a value of  $6^{\circ}20'$  west and one, near COLINA at 8:30 A. M., 60th meridian time, October 15th gives a value of  $7^{\circ}00'$  west. The average of eight observations on this project gives a mean value of  $6^{\circ}20'$  west.

## (q) Statistics.

Shoreline	2.1 miles
Roads	2.9 miles
Creeks	0.9 mile
Railroad	1.2 mile

Respectfully submitted,

  
Ray L. Schoppe, Lt. Comdr. U.S.C. & G.S.  
Officer in Charge  
San Juan Magnetic Observatory



## Remarks

## Decisions

1		181656
2		182656
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## GEOGRAPHIC NAMES

Survey No.

T6881

CONFIDENTIAL

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
	A,	B,	C,	D	E	F	G	H	K
<u>Algodones Bay</u>									1
<u>Quebrada Palma</u>									2
<u>Quebrada Botija</u>									3
<u>Algodones Cay</u>									4
									5
									6
<u>Roosevelt Roads</u>									7
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Names underlined in red approved  
by L. Heck 06/18/42



# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
DESCRIPTIVE REPORT  
~~PHOTOSTATIC~~

~~No. 11~~

No. T **T6881**  
CONFIDENTIAL

received April 20, 1942  
registered April 23, 1942  
verified  
reviewed  
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
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RETURN TO

82	R. W. Knox
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*1 Paul*

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. 6881

Field No. J

Puerto Rico, East End, near Ensenada Honda,  
Quebradas Botija and Palma  
Surveyed October - December 1941; Scale 1:4,800  
Instructions dated May 20, 1941 (radiogram), project 268

Plane Table Survey

Aluminum Mounted

Chief of Party - Ray L. Schoppe  
Surveyed by - N. F. Emannuelli  
Inked by - R. Colon  
Reviewed by - Harold W. Murray  
Inspected by - H. R. Edmonston, August 22, 1944

1. Junctions with Adjacent Surveys

The junctions on the north, east, south and west with 1941 surveys T-6880, T-6879, T-6882 and T-6876b are excellent.

The northwest limit of the present survey is the limit of the present project.

2. Comparison with Prior Surveys

T-2540 (1901), scale 1:20,000

Topographic details on this survey are primarily confined to shoreline and these are adequately covered by the larger scale present survey. The present survey supersedes this earlier survey.

3. Comparison with Charts 917 (latest print date 2-25-44)  
923 (latest print date 8-3-43)

The shoreline details on the present survey have been applied to the chart prior to review. The inland details, however, remain to be applied.

The charted stack (landmark) on Chart 917 in Lat.  $18^{\circ}13.05'$ , Long.  $65^{\circ}41.19'$  falls in a sugar cane field and is not shown on the present survey. The stack



appears to be an incorrect charting of one located on T-2540 (1901) because if the coordinates of the stack on this survey are divided by two, the position will agree exactly with that charted. It is moreover noted as a coincidence that a range drawn through these two positions and extended slightly over 1/2 mile northwestward will approximately agree with a stack located by the 1941 triangulation party. As regards charting, both the charted stack and the one on T-2540 are considered nonexistent in the positions now shown for the reason that if it were in existence it would be prominent as a landmark and would have been located either by the triangulation party of 1941 or the topographer and in particular the latter since it would be helpful for orientation purposes. The stack on the present survey was not recommended as a landmark by the Chief of Party (see D.R., page 2).

The delineation of the charted reef in Lat.  $18^{\circ}11.9'$ , Long.  $65^{\circ}40.9'$  originates with H-2582 (1902) and should be retained.

4. Condition of Survey

Satisfactory.

5. Compliance with Project Instructions

Satisfactory.

6. Additional Field Work Recommended

This is a thoroughly complete and satisfactory survey. It is therefore adjudged a basic survey.

7. Superseded Surveys

T-2540 (1901) in part

Examined and approved:

*Robert W. Key*  
Chief, Surveys Branch

*J. S. Bond*  
Chief, Division of Charts

*Earl O. Henton*  
Chief, Section of Hydrography

*G. H. Rude*  
Chief, Division of  
Coastal Surveys

## NAUTICAL CHARTS BRANCH

SURVEY NO. 6881

### Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.