

6877 a&b

Diag. Ch. No. 904

6877 a&b

Form 504 Rev. April 1935	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Topographic } Hydrographic }	Sheet No. _____ Field Sheet "F+G"
U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES	
APR 20 1942	
Acc. No. _____	
State Puerto Rico	
LOCALITY	
Near Roosevelt Roads Naval Base	
Vic. of Points Figueroa and Figuerita	
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

TOPOGRAPHIC TITLE SHEET

REG. NO.

T6877a

CONFIDENTIAL

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. " F "

REGISTER NO. T6877a

CONFIDENTIAL

State Puerto Rico

General Locality ~~East End near Ensenada Honda~~ Near Roosevelt Roads

Locality ~~Roosevelt Roads Naval Base~~ Vic. of Points Figuera and Figuerita

Scale 1 / 4800 Date of survey July - August, 19 41

Vessel Shore Party

Chief of party Ray L. Schoppe

Surveyed by N. Caola and Lt. F. A. Riddell

Inked by E. Torruellas and F. A. Riddell

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. 249 was used on this sheet.

~~T-6877b~~
Sheet "G 2" is on the back of this sheet.

PROJECT C. S. # 268

Field Number - Sheet "F" T-6877a

This sheet covers a part of Roosevelt Roads Naval Base. It is one of a series of thirteen sheets. This sheet covers the northern end of the naval reservation from the vicinity of the Majagua River to the town of Ceiba. For notes that apply to all sheets of the series, reference is made to the Descriptive Report of Sheet "A", of this project. T-6872

In order to conserve aluminum, this sheet is laid out on the back of sheet G-2 of this same project. T-6877b

(a) Descriptive.

Much of the northern half of this sheet is covered by a complicated area of mangrove, mud flats, marsh, and sand bars. Cocconut trees seem to flourish on these sand bars. Practically all of the remainder of the sheet is planted in sugar cane. The railroad, which forms the west boundary of the property, has five sugar cane loading sidings within the limit of this sheet. The town of Ceiba lies about 1/4 mile west of the railroad, but since the railroad forms the western limit of the Naval Base property, no surveys were made in Ceiba.

(b) Landmarks.

The cross on the belfry of the Catholic Church in Ceiba is prominent. Also, the stack of an abandoned sugar

mill at barrio Santa Maria is prominent. This is an old brick stack, about 75 ft. high. It is partly in ruin and it may fell down at any time.

(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 this 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, the topography is controlled by stations PINEDO, STACK, CROSS, MOUND, FIGUERITA and PALMA.

Vertical control is based on high water and on bench marks refers to Mean Sea Level and is corrected by 0.3 ft. for mean high water.

Before project C. S. # 268 started, the Navy Survey Parties had done considerable levelling in this area. It was therefore agreed that bench marks and elevations as determined by Naval Survey Parties, would furnish vertical control for the project. An adjusted line of U. S. G. S. bench marks on the line between Fajardo and Humacao, runs along the highway just west of the Naval Base property, and a connection to the U. S. G. S. bench marks furnished the basic information. Later in the season, after a tide gauge

had been in operation, it was noted that there was a discrepancy between tide gauge elevations and bench marks. An investigation by the Naval Survey Parties showed that their entire bench mark system needed re-checking. The corrections were not large enough to necessitate relocation of contours. In general they were less than 0.50 ft. and in no instance, I believe, were they more than 0.75 ft. Finally accepted values were not available from the Naval Survey Party until after our field work was finished. I have therefore omitted the location, and elevation of many bench marks, which otherwise would have been indicated. As noted above, M. H. W. is regarded as 0.3 ft. above the elevations of U. S. G. S. bench marks.

(d) Traverse.

A few traverses were run between points located by three point fix. Such traverses were short. If closure was greater than three meters, the traverse was re-run. If less, it was adjusted. No detail was taken from traverse points until final location was selected.

(e) Survey Methods.

On this sheet, topography was started with inexperienced personnel at station MOUND. See general notes in the descriptive report of sheet "A". Within the limits of this sheet, the outer edge of the mangrove was located from plane table set ups in shoal water.

(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.

No revision work was done but shore line agreed reasonably well with the copies of old topographic sheets.

(h) Incomplete Portions.

There are no incomplete portions.

(i) Deviation from Standard Practice.

Since this was a special job, it was found necessary to modify standard practice in many respects. The information most needed, was an accurate location of contours. Much of the shoreline will be modified by dredging, filling, etc.

As noted above, the scale was selected to suit the convenience of the construction engineers:- 1 inch equals 400 feet and form lines were laid out for 5 feet intervals. This is much closer than would be required for chart construction. Because of the inability of the local surveyors to visualize the shape and form of natural features, it was necessary to take twice as many elevations as would ordinarily be necessary. When we tried to stretch out the intervals, it was found that errors crept into the location of contours.

An extra man was assigned to each party who did nothing except operate the hypsograph, and compute elevations and horizontal distances. None of the local surveyors could do this without forgetting other details of plane table operation.

(j) Junctions, etc.

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

- 6 -

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.

Old surveys, on a smaller scale, are generalized. Apparently, no changes of any importance have occurred.

(o) Marshes.

The marsh land at Point Figuera and Point Figuerita is extensive, but there is nothing distinctive about it. No description is needed.

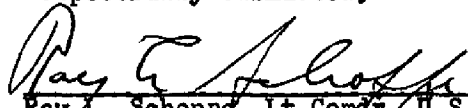
(p) Declination.

Just north of station MOUND a value of $6^{\circ}25'$ west was observed by declinoire at 10:30 A. M. 60th meridian time, July 21, 1941. For the whole project, a mean value of $6^{\circ}20'$ west, was obtained from eight observations.

(q) Statistics.

Shoreline	3.0 miles
Roads	2.4 miles
Creeks	1.8 miles
Railroad	2.1 miles

Respectfully submitted,


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

Remarks

Decisions

1		182656
2		
3		182656
4		"
5		182656
6		"
7		
8	For title	182653-54
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M 234		

GEOGRAPHIC NAMES

Survey No.

T6877a

CONFIDENTIAL

Name on Survey

A,

B,

C,

D

E

F

G

H

K

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

Majagua Bay ✓

1

Majagua River ✓

2

Point Figuerita ✓

3

Point Figuera ✓

4

Port Medio Mundo ✓

5

Ceiba ✓

6

7

Roosevelt Roads

8

Names underlined in red approved

9

Quebrada Ceiba

by L. Hect on 6/18/42

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M 234

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

CONFIDENTIAL
T6877b

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. " G₂ "

REGISTER NO. T6877b
CONFIDENTIAL

State Puerto Rico
General Locality Roosevelt Roads East End near Ensenada Honda
Locality Pt. Cascajo and Vic. Roosevelt Roads Naval Base
Scale 1 / 4800 Date of survey September - October 19 41
Vessel Shore Party.
Chief of party Ray L. Schoppe
Surveyed by R. Fantauzzi
Inked by A. Dezziel
Heights in feet above M. H. W. to ground to tops of trees
Contour, Approximate contour, from line interval 5 feet
Instructions dated May 20 (Radiogram), 1941
Remarks: Special survey for the Navy Department

In order to complete the area at Cascajo Point at the earliest possible date, this sheet and sheet G₁ covering the same area, were surveyed simultaneously. T-6878

Alidade No. 94 was used on this sheet.

T-6877a
Sheet "F" is on the back of this sheet.

PROJECT C. S. # 268

Field Number - Sheet "G-2" T-6877b

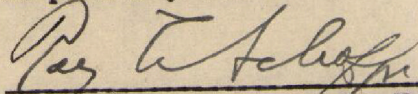
Originally, it was intended to survey this area on one sheet. But Comdr. H. W. Johnson, C. E. C., U. S. N., Officer in Charge of Construction needed the topography of this region for use at the earliest possible moment. At his request, a second field party was set to work on Point Cascajo and sheet T-6877b T-6878 T-6877b G-2 was laid out for them. Sheets G-1 and G-2 cover the same area and should be considered as one sheet.

These two sheets cover a part of Roosevelt Roads Naval Base. They are two, of a series of thirteen sheets. They cover the area on the southwest side of Ensenada Honda, and extend around Point Cascajo, Playa Blanco and Algodones Point to the eastern edge of Algodones Bay.

A descriptive report for this area is filed under Sheet T-6878 "G-1" and reference is hereby made to it.

In order to conserve aluminum this sheet is laid out on the back of sheet T-6877a "F" of this project.

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
3		"
4		U.S.G-B
5		"
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8	For title	182653-54
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GEOGRAPHIC NAMES

Survey No.

16877b

CONFIDENTIAL

Name on Survey

On Chart No. A, B, C, D, E, F, G, H, K
 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

Algodones Bay

Ensenada Honda ✓

Playa Blanca ✓

Point Algodones ✓

Point Cascajo ✓

Roosevelt Roads

Names underlined in red approved
 L. Heck on 6/18/42

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
xPHOTOSTAT OF

~~No. Hk~~

No. T **16877** a+b
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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Paul

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. 6877a

Puerto Rico, Near Roosevelt Roads,
Vicinity of Points Figuera and Figuerita
Surveyed July - August 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 - F. A. Riddell and N. Caola
Inked by - F. A. Riddell and E. Torruellas
Reviewed by - Harold W. Murray
Inspected by - H. R. Edmonston, August 25, 1944

1. Junctions with Adjacent Surveys

Junctions on the south and southeast with T-6874 and T-6876a of 1941 are excellent.

2. Comparison with Prior Surveys

T-2538 (1901), scale 1:20,000

This sheet covers all of the present survey. Agreement of shoreline details is good; however, differences in both shoreline and mangrove are noted in the vicinity of Point Figuera. In the inland area, differences of 100 meters exist in the locations of roads and streams. In Lat. $18^{\circ}16.7'$, the stream trending eastward is apparently nonexistent. This fact was earlier noted in Chart Letter 121 (1938) on a section of Chart 917. The railroad details on the present survey as well as on other sheets of the present project are apparently subsequent developments.

The old survey shows extensive ledge detail off Points Figuera and Figuerita. In the latter instance, hydrography on H-2527 (1901) indicates that this is an area in which the depths range from 7 feet to just awash. The delineation as charted from H-2527 is satisfactory. Off Point Figuera, H-2527 shows a slightly modified representation and the sounding lines stop at the edge of the ledge. The representation as charted should be retained. Except as noted, the present survey is adequate to supersede the older topographic survey.

3. Comparison with Chart 917 (latest print date 2-25-44)

Portions of the present survey shoreline and landmarks have been applied to the chart prior to this review. The remaining details remain to be applied.

A portion of the charted inland road and stream detail originates with Chart Letter 121 (1938) on a section of Chart 917. This information is superseded by the present survey.

4. Condition of Survey

Satisfactory.

5. Compliance with Project Instructions

Satisfactory.

6. Additional Field Work Recommended

This is a thoroughly complete and comprehensive survey and it is therefore adjudged a basic survey.


7. Superseded Surveys


T-2538 (1901) in part

Examined and approved:


Chief, Surveys Branch


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of
Coastal Surveys

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. 6877b

Field No. G-2

Puerto Rico, Roosevelt Roads - Ensenada Honda,
Pt. Cascajo and Vicinity
Surveyed September - October 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 - R. Fantauzzi
Inked by - A. Deziel
Reviewed by - Harold W. Murray
Inspected by - H. R. Edmonston, August 24, 1944

1. Junctions with Adjacent Surveys

Junctions with surrounding 1941 surveys T-6878 and T-6879 are excellent.

2. Comparison with Prior Surveys

T-2539 (1901) and T-2540 (1901), scales 1:10,000
and 1:20,000

These smaller scale surveys taken together cover all of the present survey. Agreement of shoreline detail is good. However, differences of as much as 60 meters are noted in mangrove limits and larger differences are noted in contoured features such as hills and valleys. The rock detail off the point in Lat. $18^{\circ}13.43'$, Long. $65^{\circ}38.25'$ was discussed in the review of T-6878 (1941), par. 2.

In Lat. $18^{\circ}12.36'$, Long. $65^{\circ}37.7'$; T-2539 shows several generalized rocks awash depicting a foul area between the island and an off-lying rocky ledge. On H-2533 (1901), these same rocks are shown as sunken rocks (charted). The latter representation is adequate for charting and it should therefore be retained on the chart. The notation "foul" has been added in color on the present survey in this area.

About 250 meters southwest of the rocks in the preceding paragraph, H-2533 shows a rocky area extending 70 meters offshore. This length is twice that of the detail shown on the topographic surveys. The hydrographer's delineation is based on a note in the records (pos. 146 o) stating "20 meters off rocks on small point." No three-point fix was obtained at the end of this line and the soundings are therefore plotted on time and crossline agreement. For present charting purposes, the detail on H-2533 should be retained.

Except as noted above, the larger scale present survey is adequate to supersede the older topographic surveys.

3. Comparison with Chart 922 (latest print date March 6, 1944)

Portions of the present survey shoreline details were applied to the chart prior to this review. The remainder of the topographic details remain to be charted.

4. Condition of Survey

Satisfactory.

5. Compliance with Project Instructions

Satisfactory.

6. Additional Field Work Recommended

This is a thoroughly complete and comprehensive survey and it is therefore adjudged a basic survey.

Subsequent improvements which might be made by the U. S. Naval authorities in the vicinity of Ensenada Honda may invalidate a portion of the present survey.

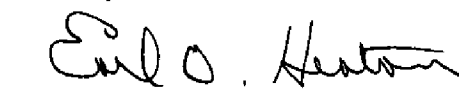
7. Superseded Surveys


T-2539 (1901) in part
T-2540 (1901) " "

Examined and approved:


Chief, Surveys Branch


Chief, Division of Charts


Chief, Section of Hydrography


Chief, Division of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. 6877 ^{arb}

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.