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RESTRICTED

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Form 504 Rev. Dec. 1933	
DEPARTMENT OF COMMERCE U.S. COAST AND GEODETIC SURVEY R. S. PATTON, DIRECTOR	
DESCRIPTIVE REPORT	
Topographic } Hydrographic	Sheet No. E
State British West Indies	
LOCALITY	
Jamaica Island	
Portland-Bight	
Old Harbor Bay	
1921	
CHIEF OF PARTY	
G.C. Mattison	

6797

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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. E

REGISTER NO.

T6797

RESTRICTED

State Jamaica, B. W. I.

General locality Portland Bight

Locality Old Harbour Bay - ~~Vicinity Old Harbour Village~~

Scale 1:4800 Date of survey Feb. 25, 26, 27, 1941

Vessel U. S. C. & G. S. S. HYDROGRAPHER

Chief of party G. C. Mattison

Surveyed by J. C. Tison, Jr.

Inked by J. C. Tison, Jr.

Heights in feet above none to ground to tops of trees

Contour, Approximate contour, Form line interval none feet

Instructions dated February 18, 1941 (Radiogram), 19

Remarks: Survey requested by U. S. Army Engineers in letter of February 13, 1941

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET FIELD NO. E T-6797 (1941)

OLD HARBOUR BAY

VICINITY OF OLD HARBOUR
BAY VILLAGE

JAMAICA, B. W. I.

FEBRUARY 1941

INSTRUCTIONS

This survey was executed at the request of U. S. Army Engineers in letter of February 13, 1941 and authorized by The Director in radiogram dated February 18, 1941.

EXTENT

The sheet includes a topographic survey of the shoreline of Old Harbour Bay from vicinity of Latitude $17^{\circ} 53' 53''$ and Longitude $77^{\circ} 05' 38''$ westward to Longitude $77^{\circ} 06' 57''$; and delineation of salt flats back of the shoreline inshore to the edge of impenetrable woodland.

Limits of
mangrove eastward
to $\lambda 77^{\circ} 05' 22''$
transferred from
H-6639 (1941)

CONTROL

Third order triangulation stations "Leo" and "Bay Eccentric", 1941 and intersection stations "Col" and "How", 1941, furnished control for the topography.

TRAVERSES

A planetable traverse was run from triangulation station "Leo, 1941" westward to triangulation station "Bay Eccentric 1941". The closing error was three meters and adjustment was made in the field according to standard practice.

No other closed traverses were run on the sheet.

METHODS

Standard U. S. Coast and Geodetic Survey methods were used throughout.

From triangulation station "Bay Eccentric" westward to topographic station "Roc" an unclosed traverse was run, taking care at each set-up to check orientation and distance by resecting on triangulation stations "Col" and "How".

In delineating the salt flats back of the shoreline, a short unclosed traverse was run inshore from triangulation station "Bay Eccentric", then extended eastward and westward along the open areas of the flats. Another such traverse was taken inshore and to westward at topographic station "Gar". Considerable sketching, supplemented by as many rod readings as possible, was resorted to in outlining the limits of various types of vegetation.

The mangrove line to eastward of signal "Abe", shown on the sheet by means of a dashed pencil line^{*}, was located by sextant fixes on the hydrographic sheet, and transferred.

* inked in green

H-6639 (17+1)

Topographic stations for hydrographic use were located either by direct stadia readings, by three or more intersecting outs, or by a combination of the two methods.

From signal "Son" westward, all set-ups for locating the shoreline were made in from one to two feet of water outside the mangroves. The bottom in all cases was found to be firm.

GENERAL INFORMATION

This section of the shoreline of Old Harbour Bay is low and flat and from offshore appears heavily wooded with low trees. No prominent objects exist adjacent to the beach, and the soattered small shacks and huts located between signals "Gar" and "Dir" are partially obscured by trees.

From signal "Dir" southward and eastward the shoreline consists of dense red mangroves, about fifteen feet high, with from two to three feet of water along their outer limits. Signal "Cro" is on the north side of a narrow opening in the mangrove line which admits to a small circular bay in the mangroves. This bay was not surveyed because of the difficulties presented in attempting to take planetable control inside.

From signal "Dir" westward to signal "Him" the beach is sandy and there are scattered fishermen's huts from signal "Gar" eastward. Between the beach and the indicated salt flats is a narrow sand ridge from two to three feet above high water on which grow scattered thorny trees. East of the flats the ground is sandy and flat back of the shoreline, and this strip of beach serves as the waterfront for Old Harbour Village. Here the native fishermen beach their dugouts and repair fish traps and nets.

The two creeks shown between signals "Him" and "Gar" are fresh, with steep banks, and evidently drain considerable inland areas. Both are choked by sand at their mouths, there being only one or two inches of water in their channels where they cross the offshore sand flats at low tide. The indicated mangroves along their banks are of the "red" variety.

The easterly creek passes inland through Old Harbour Village, and the northern half of the salt flat on its eastern side is thickly dotted with native houses; being also the site of a large fish and produce market.

From signal "Him" westward for about 240 meters, the shoreline is sandy but very low; large black mangrove trees, thick but open underneath, growing just back of the high water line. The remainder of the shoreline westward to the small point of land at triangulation station "Bay Eccentric" is fringed by a narrow strip of red mangroves, and it is the outer edge of these mangroves which is shown on the sheet as the shoreline. The high water line is actually from ten to fifteen meters inshore, and back of it grow large black mangrove trees, open underneath except for scattered cactus. The ground is firm and has an elevation of from 0.5 to 0.7 feet above mean high water.

The small point of land at triangulation station "Bay Eccentric" is low and flat, is composed largely of gravel, and has an elevation of about 1-1/2 feet above mean high water. Red mangroves line the shore for a distance of about ten meters outside the high water line and it is their outer edge which is shown as the shoreline on the sheet. Triangulation station "Bay Eccentric" is at the east side of the brick ruins of an old sugar plant which once occupied most of the area of the point. According to natives, a wharf* for loading sugar once extended offshore from the south extremity of the point.

* Barksfield
wharf
H.O. Chart
1683

Westward from triangulation station "Bay Eccentric" to the limit of the survey, the shoreline is dense red mangroves. They extend inland to the salt flats and are from fifteen to twenty feet high.

The salt flats shown on the sheet are hard and level and appear to be composed of ordinary soil on the surface. They are absolutely bare of vegetation in large areas and in others are found scattered growths of small black mangrove bushes and cactus. The average elevation above mean high water is from 0.5 to 1.0 foot, as ascertained by planetable elevations taken in-shore at several points from an estimated mean high water line along the beach. According to natives who live in the vicinity, the flats are flooded by from two to four inches of water at times of very high tides, when the surface becomes muddy and slick but never extremely soft.

The dense woodland to the north of the flats is composed largely of cactus and thorny trees. There is no noticeable change in elevation of the ground surface at transition from the flats.

COMPARISON WITH OTHER SURVEYS

No other surveys were available for comparison.

STATISTICS

Statute miles of shoreline:	2.3
Area square statute miles:	0.2

Respectfully submitted,

James C. Tison, Jr.
James C. Tison, Jr.,
Jr. H. & G. Engineer,
C. & G. Survey.

Approved and forwarded:

G. C. Mattison
G. C. Mattison,
H. & G. Engineer,
Commanding HYDROGRAPHER.

LIST OF SIGNALS

to accompany

DESCRIPTIVE REPORT FOR TOPOGRAPHIC SHEET FIELD NO. E

OLD HARBOUR BAY

VICINITY OF OLD HARBOUR
BAY VILLAGE

JAMAICA, B. W. I.

1. TRIANGULATION STATIONS

Leo 1941
 BAY Eccentric 1941
 Col 1941 (Outside HWL)
 How 1941 (Outside HWL)

2. TOPOGRAPHIC STATIONS

<u>Name</u>	<u>Description</u>	<u>Remarks</u>
Abe	Banner on pole outside mangrove line	Not recoverable
Bun	Cloth in tree	Not recoverable
Cap	Cloth in mangroves	Not recoverable
Cro	Cloth in mangroves	Not recoverable
Dir	Banner on pole just outside mangrove line	Not recoverable
Elm	South gable of thatched hut	Not recoverable
Foo	South gable of shack	Not recoverable
Gar	Banner on tree	Not recoverable
Gim	Banner at end of old wharf	Not recoverable
Him	Tripod signal inside HWL	Not recoverable
Nap	Banner on pole just outside HWL	Not recoverable
Pap	Cloth in mangrove	Not recoverable
Roc	Cloth in mangrove	Not recoverable
Son	Banner on pole just outside mangrove line	Not recoverable

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY

Register No. 6797

Field No. E

Jamaica, British West Indies, Portland Bight, Old Harbor Bay
Surveyed in February 1941, Scale 1:4,800
Instructions dated February 18, 1941 (Director's
radiogram supplementing project HT-260)

Plane Table Survey

Aluminum Mounted

Chief of Party - G. C. Mattison
Surveyed by - J. C. Tison, Jr.
Inked by - J. C. Tison, Jr.
Reviewed by - H. P. Stegman
Inspected by - H. R. Edmonston

1. Junctions with Surveys

No contemporary topographic surveys adjoin the present survey.

2. Comparison with Prior Surveys

No prior surveys have been made in this area by the U. S. Coast and Geodetic Survey.

3. Comparison with Hydrographic Office Chart No. 1683
(Latest Print dated June 1938) Scale 1:99,415

a. Topography

This small scale chart contains little information that needs specific consideration in this review. The Barksfield Wharf, in Lat. $17^{\circ}53.7'$, Long. $77^{\circ}06.5'$, and the wharf in Lat. $17^{\circ}54.2'$, Long. $77^{\circ}05.75'$ are now in ruins.

(See D.R. pp 3 & 5)

b. Magnetic Meridian

The value of the magnetic declination obtained at station Bay Eccentric 1941 agrees closely with the charted value. The descriptive report does not state that the declinoire was checked or that any corrections were applied.

4. Compliance with Instructions for the Project

The plan, character and extent of the survey satisfy the instructions for the project.

5. Condition of Survey

- a. The inking of topographic details is excellent.
- b. The descriptive report is clear and satisfactorily covers all matters of importance.

6. Additional Field Work Recommended

None

7. Superseded Surveys

No prior surveys have been made by this Bureau in this area.

Examined and approved:

Chief, Surveys Section

Chief, Division of Charts

Chief, Section of Hydrography

Chief, Division of Coastal
Surveys