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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. F
State	British West Indies
LOCALITY	
Trinidad	
Gulf of Paria	
Five Islands	
1920-41	
CHIEF OF PARTY	
Fred. L. Peacock	

6775

Form 637a
20 Nov 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG.
NO.

TOPOGRAPHIC TITLE SHEET

~~RESTRICTED~~

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

Field No. ~~17~~

REGISTER NO. **T6775** ~~RESTRICTED~~

TRINIDAD

State British West Indies

General locality ~~Trinidad~~ GULF OF PARIA

Locality Five Islands, Gulf of Paria

Scale 1:4800 Date of survey December 27, 1940 to Jan. 10, 1941

Vessel OCEANOGRAPHER

Chief of party Fred. L. Peacock

Surveyed by C. D. Meaney and Ira T. Sanders

Inked by C. D. Meaney and Ira T. Sanders

Heights in feet above ~~7.5-foot Carenage Bay Tide Staff~~ M.H.W. to ground ~~rocky or not rocky~~

Contour, ~~Approximate contour interval~~ 10 feet

Instructions dated November 9, 1940, 19

Remarks: Declination inked (North end of needle 15' W, South

end of needle 15' W). Also pencil declination with North on

of needle on zero. Standardized both ways.

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET "P"

FIVE ISLANDS

GULF OF PARIA, off TRINIDAD, B.W.I.

U.S.C. & G.S.S. OCEANOGRAPHER

Project H. T. 257

November, 1940 to January, 1941

Scale: 1:4800

INSTRUCTIONS:

The Director's instructions dated November 9, 1940 to the Commanding Officer, Ship OCEANOGRAPHER are authority for this survey. ✓

SURVEYED BY:

All features shown with black ink and topographic signals were located and inked by Lieutenant (j.g.) Ira T. Sanders, U.S.C & G. Survey. Features in red were determined by Lieutenant C. D. Meaney, U.S.C. & G. Survey. The report was written from information submitted by both officers. ✓

LOCATION:

Five Islands or Las Cotorras, the subject of this topographic sheet are shown on H. O. Chart No. 2115. They lie from one and one-quarter to one and seven tenths miles south of Trinidad Island, British West Indies, and one and one tenth to one and three tenths miles eastsoutheasterly of Point Gourde between latitude $9^{\circ} 39.2' N$, and $9^{\circ} 39.5' N$; and longitude $80^{\circ} 35.7' W$, and $80^{\circ} 36.2' W$. There are six islands in the group. The smallest, Craig Island, and the largest, Caledonia Island, are joined together by a concrete and stone wall, three feet wide, the top of the wall is about one foot above mean high water.

GENERAL DESCRIPTION:Caledonia Island:

Caledonia Island, the north island of the group and the largest, has a bold rugged coast line. The island, itself, is very rocky, gray in color and limestone in composition. There are three peaks which rise sharply from the shore line. The top of the highest peak is 76 feet above mean high water. It is located on the southwest part of the island. The most prominent object is a Banyan-tree. The base of this tree has its roots near the thirty-six foot contour. The top of this tree projects above the highest ground level of the island. There is very little top soil on this part of the island. The northwest side of Caledonia is wooded. There are two peaks, 69 and 68 feet above mean high water. From seaward there appears to be only one peak. Several houses have been built on the southwest part of the Island. There are two small boat landings, one in the cove near the center on the south side and one near the center on the northside.

Tree not shown.

Craig Island:

Craig Island is a gray colored, rugged limestone, formation rising twenty feet out of the water. Near the center

20 ft. elevation not shown.

and top of this island is a cottage. The highest point of the roof is thirty-six feet above mean high water. There are several trees on this Island. There is a small boat landing on the north side of the Island west of the concrete and stone wall connecting Craig and Caledonia Islands.

Lenagan Island:

Lenagan Island is very rugged. The coastline of the west side of the Island is made up of bluffs rising from nine to thirty-three feet high. There are few trees on the Island. There are two prominent houses, one on the top and one near and east of the top. The highest ground level is thirty-three feet above mean high water. There is a small boat landing and boathouse near the northeast point of this Island. There are several buildings on the Island in addition to the two prominent houses noted above.

Rock Island:

Rock Island is low and as the name implies, rocky. There are several buildings on the Island. The maximum ground elevation is fourteen feet. The Island is composed of limestone of a probable volcanic origin. There is a small boat landing on the northeast point of the Island.

Pelican Island:

Pelican Island is low and rocky, projecting from three feet to twenty-three feet above mean high water. There are several buildings on the Island. There is a small boat landing on the west side of the Island.

Nelson Island:

Nelson Island is the second largest island of the group, nearly the same area as Caledonia. There are several buildings on the western half of the Island. The highest point of the Island is forty-seven feet above mean high water and is located west of the center. Steep bluffs form most of the coast line. east

GENERAL:

The Five Islands are a quarantine station for Port-of-Spain. They are used to house victims of smallpox, prisoners, and interned aliens. Caledonia and Pelican are, at times, used by vacationers. Outhouses built on the edge of cliffs provide the only present means for sewage disposal. The buildings on Nelson Island are capable of housing several hundred persons. This Island is used by the Harbor Police. All the Islands are Crown Property. The lee of the Islands furnish excellent shelter for small boats. Water is stored in tanks which are filled from rain water collected from the roofs of houses. One tenth of a mile off the Islands, there is more than four fathoms of water. The low water and high water lines co-incide except for a rubbel formation adjacent to the wall connecting Craig Island with Caledonia Island. The cliffs along the shore line vary in height from three to thirty-three feet.

In general the houses on the islands are painted white, the roofs are red. They show prominently.

Emergency communication with Port-of-Spain is maintained by means of a small radio set on Nelson Island.

LAND MARKS:

The tangents of the Islands are excellent points to determine the position of a ship while cruising in the vicinity and for approaching an anchorage in Carenage Bay.

CONTROL:

Control for the work on this sheet consisted of third order triangulation stations, SINET, ALICE, PHONE, CROWN, and CONVICT; all established by parties from the Ship OCEANOGRAPHER, in connection with the survey of Project H.T. 257 in 1940 and stations LENAGAN and ROCK established by the Department of Lands and Surveys, Trinidad and Tobago, B.W.I. A thorough but unsuccessful search was made for CALEDONIA on Caledonia

Island, PELICAN on Pelican Island, and NELSON on Nelson Island, which were established by the Department of Lands and Surveys, Trinidad and Tobago. ✓

SURVEY METHODS:

The numerous buildings and the rugged terrain made traversing impracticable. Details were located from points determined by an azimuth and distance, with a resection check on a distant triangulation station, or from three-point fixes on triangulation stations, SINET, ALICE, and CONVICT. ✓

The buildings are shown to scale as accurately as possible from stadia measurements. ✓

GEOGRAPHIC NAMES:

The authority for the use of Geographic names appearing on this sheet is based on maps of the area supplied by the Department of Lands and Surveys, Trinidad and Tobago, B.W.I., Sheet A and Sheet A19, Provisional; and H. O. Chart 2115. These names are printed in pencil on the sheet. ✓

NEW NAMES:

No new names appear on this sheet. ✓

DISCREPANCIES WITH EXISTING SURVEYS:

In general, the features and details conform very closely with those appearing on British surveys covering these islands. The scale of previous surveys made available to the OCEANOGRAPHER do not show comparable detail. On previous surveys the wall joining Craig and Caledonia Islands is not shown, and two rocks, instead of three, are shown off the southwest point of Pelican Island. The elevations shown on sheet "A" Department of Lands and Surveys, Trinidad and Tobago agree very closely with the *elevation of the* highest points of the Islands. Elevations shown on H.O. Chart 2115 do not agree. ✓

DECLINATION:

The direction of magnetic north observed at triangulation station LENAGAN (Latitude 10-39-26.408, Longitude 61-36-00.861) is ~~80° 34'~~^{80° 30'}W. A three point fix on Caledonia Island in Latitude 10-39-30 and 54.0 meters, Longitude 61-35-30 and 733.0 meters was taken and the observed declination was 6° ~~18'~~^{10'}W. The declinoire with alidade No. 210 was used. The magnetic north was drawn on the sheet with the north end of the needle pointing 15' west of north and the south end pointing 15' west of south. The declinoire was standardized at Fort Story, Va. with the needle in that position. The observations are shown in a magnetic report submitted by Lieutenant C. D. Meaney.

Chart Value approx. 7°20'W. No abnormal conditions indicated.

LIST OF PLANETABLE POSITIONS:

Signal or feature:

WASH. Rock bare 2' H.W.	10-39-30	123.0 m.	61-35-30	582.0 m.	✓
PIER. Extreme tip small landing ramp.	10-39-30	70.0 m.	61-35-30	680.0 m.	✓
DOC. Extreme tip small landing ramp.	10-39-00	950.0 m.	61-35-30	772.0 m.	✓
Northwest corner, outer angle of wharf on Nelson Island	10-39-00	552.0 m.	61-36-00	57.0 m.	✓
FLAG. Flagpole, Rock Island	10-39-00	528.0 m.	61-36-00	161.0 m.	✓
KAY. N.E. corner, house on Lenagan Island	10-39-00	851.0 m.	61-35-30	909.0 m.	✓

CONTOURING:

All elevations determined are shown on the sheet and represent the height of the ground in feet above a provisional plane of mean high water, or 7.3 feet on the tide staff at Carenage Bay, Point Gourde. Elevations on Craig Island and Caledonia Island were determined with alidade, hypsograph, and planetable. The height of the ground at setups near the shore was determined by measuring to the water level and by applying the necessary tidal reduction for the provisional plane of mean high water. The elevations of the other setups was determined by alidade and hypsograph and checked on elevations previously determined.

Consider
plane as
M.H.W.

Elevations on Pelican and Rock Islands were determined by leadline reading to the water level corrected to the same provisional plane of mean high water. ✓

Elevations near the shore on the east and northeast side of Nelson Island were determined by leadline readings to the water level. Other elevations were determined by alidade and hypsograph. ✓

Elevations on the north side of Lenagan Island were determined by leadline. Other elevations were determined by alidade and hypsograph. ✓

Ten foot contours are shown wherever practicable. Many of the bluffs are over twenty feet high and at these points the ten and twenty foot elevations merge with the shore line. The scale of the sheet is not large enough to show all details of such rugged topography. ✓

OVERLAYS:

Two overlays are submitted. One shows the shoreline, buildings, and five foot contours. The other shows the area where trees are located. Former attached to this report. ✓
Latter lost.

PHOTOGRAPHS:

Photographs of all the Islands are also submitted. The names of the Islands are lettered on the front of the photographs. The location from which the pictures were taken is shown on the back. Photos attached to this report. ✓

STATISTICS:

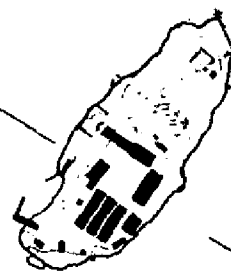
Statute miles of shore line.....	1.30 miles
Square miles of area.....	0.25 sq. miles ✓
Number of elevations determined.....	145 elevations

Respectfully submitted,

C. D. Meaney
C. D. Meaney, Lt., C&GS,
U.S.C. & G.S.S. OCEANOGRAPHER.

Approved and forwarded:

Fred. L. Peacock
Fred. L. Peacock, Lt. Comdr., C&GS,
Commanding Ship OCEANOGRAPHER.



Sheet "F"

10° 39' 30"

6° 36' 00"

1. General Information

2. Survey Data

3. Survey Results

4. Survey Methods

5. Survey Results

6. Survey Results

Chief of Party - J. H. Brown
 Surveyed and mapped - J. H. Brown, J. H. Brown
 Employed by - J. H. Brown, J. H. Brown
 Inspected by - J. H. Brown

1. Functions of the Survey

This is a survey of the area of the island of ... and is intended to provide information for the ... of the island.

2. Comparison with Other Surveys

Comparison of the results of this survey with those of other surveys of the island is as follows:

3. Comparison with the Results of Other Surveys

The results of this survey are compared with those of other surveys of the island as follows: ... of the island. The results of this survey are compared with those of other surveys of the island as follows:

4. Comparison with Other Surveys

Comparison of the results of this survey with those of other surveys of the island is as follows:

5. Comparison with Other Surveys

Comparison of the results of this survey with those of other surveys of the island is as follows:

6. Comparison with Other Surveys

Comparison of the results of this survey with those of other surveys of the island is as follows:

examined and approved:

Thos B. Reid

Chief, Survey Section

E. H. Green

Chief, Section of Hydrography

L. J. Brown

Chief, Division of Charts

Stude

Chief, Division of Coastal
Surveys