DESCRIPTIVE REPORT

Topographic Sheet No. 1A & 1B

State: Bahamas Islands

LOCALITY
Mayaguana Island

Abraham Bay

1930

CHIEF OF PARTY
G. C. Mattison
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. "1A" & "1B"

REGISTER NO. T6787 a & b

State ________________ Bahamas Islands

General locality ________________ Mayaguana Island

Locality ________________ Abraham Bay

Scale 1:4,800 Date of survey November-December, 1940

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

Chief of party ________________ G. C. Mattisom

Surveyed by ________________ E. B. Lewey

Inked by ________________ E. B. Lewey

Heights in feet above M.E.W. to ground ________________

Contour, Approximate continuous, Interval ________________ feet

Instructions dated Project H.T.-258, November 9, 1940

Remarks: Sheets "1A" and "1B" are on opposite sides of the same aluminum mounted sheet.
DESCRIPTIVE REPORT

To Accompany

Topographic Sheets "1A" and "1B", 1940

Mayaguana Island, Bahama Islands.

G. C. Mattison, Chief of Party.

INSTRUCTIONS:

This work was done in accordance with the Director's Instructions for Project H.T.-258 dated November 9, 1940.

LIMITS:

These sheets cover the northern and western shore of Abraham Bay, starting about one half mile northwest of Start Point and extending three and one half miles in a north-easterly direction. The area surveyed extends, on an average one-half mile inland from the waterline.

GENERAL DESCRIPTION:

Start Point is at the west entrance to Abraham Bay and is prominent from the westward. It is brush covered and low, only 10 feet above Mean High Water. From Start Point the shoreline is fairly straight and runs in a northeasterly direction. In General the shoreline is sandy and adjacent to the water is covered with low brush, grass, and some palmottos. There are a few stretches
of coral ledges in the vicinity of Start Point. A low
ridge, six to ten feet high, runs parallel to the beach and
about 25 meters inshore. Behind this ridge the land drops
slightly and then rises gradually to the first main ridge
(averaging 60 feet in height) which is 500 to 700 meters
from the beach and starts about one-half mile from Start
Point. A high ridge parallels this ridge about 3/4 mile
to the northward with a low valley (six to ten feet in
elevation) between. A broken coral reef from 100 to 400
meters offshore extends the full length of the shoreline
covered by these sheets. (See #4423)

Three quarters of a mile to the NNE of Start Point
is a low marshy area containing several salt ponds. These
ponds are less than one foot above M.H.W. and show evidence
of rise and fall - apparently they are connected by under-
ground passage with the ocean. The ground here is covered
almost entirely with thin flat rocks of limestone appearance.
There are several holes in this vicinity - some as deep as
eight feet.

A low valley extends to the NE from Start Point and
another to the NW. These valleys are fairly flat, from six
to ten feet in elevation, and extend at least a mile from
the point. However, the one to the NW is narrow - about
500 meters in width.
SOIL

The surface of the ground is rocky throughout. The rocks are of limestone appearance, quite brittle, and irregular in shape. Between the rocks is a soft, light, sandy soil but of very little depth. The soil is deeper in the low places and thinner on the ridges.

VEGETATION:

The entire area is covered with impenetrable brush and trees in which are scattered patches of corn. The brush is from six to eight feet in height; the trees from 15 to 20. Both brush and trees are of the hard wood variety - mostly mahogany and lignum-vitae.

CONTOURS:

Contour interval of five feet.

Between cleared lines the contours are controlled by photographs, being sketched in by use of a stereoscope. Scale of the photographs approximately 1:9800.

CONTROL:

The survey was controlled by a Local Grid Plane coordinates with Triangulation Station ABE as Point of Origin. Coordinates of ABE: 6,000 Meters North, 15,000 Meters East.
SURVEY METHODS:

Standard Planetable Survey Methods were used.

Spirit levels were run along the beach and cleared trails. Elevation of Bench Marks and Turning Points were determined in this manner. Bench Marks are noted on the sheets but the Turning Points are not; except for the way the elevations are shown. Elevations of Bench Marks and Turning Points are shown to thousandths. Elevations determined by planetable are shown to tenths.

All elevations are in feet above MNW as determined by tide staff in Abraham Bay.

All topographic signals were located by traverses run between triangulation stations.

CLOSURES:

All traverses closed satisfactory.

Traverses run up the cleared trails were checked by running independent traverses from the inner end back to traverse stations on the beach. Exception: The two traverses run into the salt ponds to the NNE of Start Point, one from Triangulation Station MAC and one from the beach at Topographic Station RIB (approximately 500 meters SW of Triangulation START) checked each other within 5.0 meters. The traverses were not re-run, but adjusted.

Traverses run along the beach were tied into triangulation stations on either end.
GEOGRAPHIC MAJORS:

MAYAGUANA ISLAND, ABRAHAM BAY, and START POINT are the only names used on these sheets.

These names are locally used and are shown on existing charts.

PLANETABLE POSITIONS:

A list of planetable positions - topographic stations marked with Standard Topographic Station Disks, Bench Marks, and Reference Marks - with their elevations is attached to this report.

STATISTICS:

A table of statistics is attached.

Respectfully submitted,

Ernest E. Lewey,
Jr. H. & G. Engineer,

Approved and forwarded:

H. C. Mattison,
H. & G. Engineer,
Chief of Party,
### Topographic Stations

**Sheet** "LA" T-6787a

<table>
<thead>
<tr>
<th>Station</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jay</td>
<td>3,772.4</td>
<td>12,443.0</td>
<td>Topo. Disk, 8,038 ft.</td>
</tr>
<tr>
<td>Kib</td>
<td>3,507.0</td>
<td>12,144.0</td>
<td>&quot;</td>
</tr>
<tr>
<td>Amo</td>
<td>3,290.8</td>
<td>11,780.0</td>
<td>&quot;</td>
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**Sheet** "LB" T-6787b

<table>
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<th>Station</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zed</td>
<td>5,420.0</td>
<td>14,182.8</td>
<td>Topo. Disk, 3,698 ft.</td>
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<tr>
<td>Pet</td>
<td>4,895.6</td>
<td>13,595.6</td>
<td>&quot;</td>
</tr>
<tr>
<td>Dub</td>
<td>4,628.0</td>
<td>13,310.5</td>
<td>&quot;</td>
</tr>
<tr>
<td>Nig</td>
<td>4,294.0</td>
<td>13,028.5</td>
<td>&quot;</td>
</tr>
<tr>
<td>Lew</td>
<td>4,034.9</td>
<td>12,750.5</td>
<td>&quot;</td>
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</tbody>
</table>
**Bench Marks**

**Sheet "1A" T-6787a**

<table>
<thead>
<tr>
<th>Bench Mark</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Height, in ft (above MSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BM #17</td>
<td>3,999.0</td>
<td>12,250.0</td>
<td>24.586</td>
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<tr>
<td>BM #18</td>
<td>4,104.0</td>
<td>12,162.8</td>
<td>56.959</td>
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<tr>
<td>BM #19</td>
<td>3,427.4</td>
<td>11,751.0</td>
<td>15.224</td>
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<td>BM #20</td>
<td>3,590.0</td>
<td>11,655.0</td>
<td>12.660</td>
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<td>BM #27</td>
<td>3,619.0</td>
<td>12,080.0</td>
<td>13.976</td>
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<tr>
<td>BM #28</td>
<td>3,775.3</td>
<td>11,940.0</td>
<td>36.094</td>
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<tr>
<td>BM #35</td>
<td>3,244.0</td>
<td>11,407.2</td>
<td>11.456</td>
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<td>BM #36</td>
<td>3,556.0</td>
<td>11,177.2</td>
<td>9.554</td>
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**Reference Marks**

**Sheet "1A" T-6787a**

<table>
<thead>
<tr>
<th>Reference Mark</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Height, in ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM #1 (Rock)</td>
<td>3,111.6</td>
<td>11,513.2</td>
<td>2.693</td>
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<tr>
<td>RM #2 (Rock)</td>
<td>3,102.0</td>
<td>11,499.0</td>
<td>2.809</td>
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<tr>
<td>RM #1 (RAM)</td>
<td>2,920.0</td>
<td>10,919.5</td>
<td>3.014</td>
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<tr>
<td>RM #2 (RAM)</td>
<td>2,923.1</td>
<td>10,901.0</td>
<td>2.514</td>
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### Bench Marks

**Sheet "LB" T-4787b**

<table>
<thead>
<tr>
<th>Bench Mark</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Height, ft. (above MHW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. M. # 11</td>
<td>5,605.0</td>
<td>13,927.4</td>
<td>11.939</td>
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<td>B. M. # 12</td>
<td>5,602.5</td>
<td>13,646.9</td>
<td>52.705</td>
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<td>B. M. # 13</td>
<td>5,151.8</td>
<td>13,337.7</td>
<td>20.371</td>
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<tr>
<td>B. M. # 14</td>
<td>5,307.7</td>
<td>13,171.5</td>
<td>52.955</td>
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<td>B. L. # 15</td>
<td>4,504.5</td>
<td>12,794.0</td>
<td>19.287</td>
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<td>B. L. # 16</td>
<td>4,669.3</td>
<td>12,595.2</td>
<td>87.309</td>
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<td>B. M. # 21</td>
<td>4,821.0</td>
<td>13,046.4</td>
<td>23.184</td>
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<td>B. M. # 22</td>
<td>4,961.6</td>
<td>12,874.2</td>
<td>56.153</td>
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<td>B. M. # 25</td>
<td>4,215.2</td>
<td>12,585.0</td>
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<td>B. L. # 26</td>
<td>4,390.8</td>
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<td>55.140</td>
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<td>B. L. # 33</td>
<td>5,370.6</td>
<td>13,715.8</td>
<td>8.235</td>
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<td>B. L. # 34</td>
<td>5,579.4</td>
<td>13,528.2</td>
<td>47.856</td>
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<td>B. L. # 37</td>
<td>5,866.5</td>
<td>14,337.7</td>
<td>2.347</td>
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### Reference Marks

<table>
<thead>
<tr>
<th>Reference Mark</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Height, ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. M. # 1 (May)</td>
<td>5,082.6</td>
<td>13,792.2</td>
<td>7.183</td>
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<tr>
<td>R. M. # 2 (May)</td>
<td>5,052.6</td>
<td>13,768.6</td>
<td>6.609</td>
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<tr>
<td>R. M. # 1 (Start)</td>
<td>3,935.0</td>
<td>12,528.2</td>
<td>18.046</td>
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<tr>
<td>R. M. # 2 (Start)</td>
<td>3,931.3</td>
<td>12,513.6</td>
<td>15.534</td>
</tr>
</tbody>
</table>
STATISTICS

SHEET "1A"

Statute miles of shoreline 1.7
Statute miles of cleared trails 4.6
Area surveyed, square stat. miles 0.7
Elevations determined by level 54
Elevations determined by planetable 712

SHEET "1B"

Statute miles of shoreline 1.7
Statute miles of cleared trails 5.2
Area surveyed, square stat. miles 0.8
Elevations determined by level 89
Elevations determined by planetable 489
SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY NO. 6787a&b (1940) FIELD NO. 1A and 1B

Bahama Islands, Mayaguana Island, Abraham Bay
Surveyed in November - December, 1940, Scale 1:4,800
Instructions dated November 9, 1940 (HYDROGRAPHER)

Plane Table Survey

Chief of Party - G. C. Mattison
Surveyed by - E. B. Lewey
Inked by - E. B. Lewey
Reviewed by Harold W. Murray, May 6, 1941
Inspected by H. R. Edmonston

1. Junctions with Surveys
   a. The junctions on the west with T-6790 (1941),
      on the north (T-6787a only) with T-6791 (1941),
      and on the east with T-6788a (1940) are excellent.
   b. The junction of T-6787a with T-6787b is excellent.

2. Comparison with Prior Surveys
   No prior surveys have been made by this Bureau in this area.

3. Comparison with H.O.Chart 2805 (New Print date July 1938)
   Information shown on the chart is purely of a recon-
   naissance nature and need not be considered in this review.

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 features was excellent.
   b. The Descriptive Report was clear and satisfactorily
      covers all matters of importance.
   c. No magnetic meridian observations are indicated on
      the smooth sheet, however, the variation shown on
      H.O.Chart 2805 is only 2 degrees.
6. **Additional Field Work Recommended**

This is an excellent survey and no additional field work is necessary.

7. **Superseded Surveys**

No prior surveys are on register in this area.

Examined and approved:

[Signatures]

Thos. B. Reed,  
Chief, Surveys Section

J. C. Brown  
Chief, Division of Charts

C. H. Green  
Chief, Section of Hydrography

Chief, Division of Coastal Surveys