Topographic

State Georgia - Florida

LOCALITY

St. Marys River (upper part)

Visinity of Tiger Island

St. Marys River (Upper Port)

CHIEF OF PARTY

Hubert A. Paton
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. ... P ... 

REGISTER NO. 6191A

State .......... Georgia - Florida .......... 

General locality .......... Vicinity of Tiger Island .......... 

Locality .......... St. Marys River (Upper Part) .......... 

Scale 1:10,000 .......... Date of survey .......... July, 1934 .......... 

Vessel .......... Party No. 26 .......... 

Chief of Party .......... Hubert A. Paton .......... 

Surveyed by .......... C. N. Strong .......... 

Inked by .......... C. T. Seawalk .......... 

Heights in feet above ground to tops of trees .......... 

Contour, Approximate contour, Form line interval .......... feet .......... 

Instructions dated .......... Dec. 8, 1923 .......... 

Remarks: .......... 

C. P. O.
INSTRUCTIONS:

The work on this sheet was done in accordance with Instructions dated Dec. 5, 1933.

LIMITS:

This sheet covers a portion of St Marys River, reaching from the mouth of Burrill Creek up to a point about 3 miles above the town of Crandall, Florida.

METHODS:

The signals on this sheet were located by planetable cuts from the various triangulation stations and from certain intermediate stations located by graphical triangulation. No traverses were necessary.

All work was done in accordance with the methods outlined in Special Publication No. 144.

CONTROL:

There are 9 triangulation stations on the sheet, including 3 stations newly established and 6 which had been previously recovered. The control was ample for the work.

Recovery notes for the following stations accompany this sheet: Crandall 1933, Crandall, North Gable of House 1933, Roses 1932, and Scrubby 1933. Descriptions and recovery notes for the other 5 stations have already been forwarded to the Washington Office.

DATUM:

Triangulation station Roses 1932 was plotted directly on North American 1927 Datum. A correction of Latitude + 2.3 meters and Longitude - 6.0 meters, based upon information received from the Washington Office, was applied to the other stations, all of which had been calculated on the North American Datum using the line Bat-Stafford as a base.

MAGNETIC MERIDIAN:

The magnetic meridian, as obtained by the planetable declinometer at triangulation station Crandall 1933, has a variation of 0° 39' east of the true meridian.
The declinometer had been checked at Brunswick Magnetic Station where an index correction of 0° 05' east, was obtained. The corrected magnetic variation is 0° 44' east.

JUNCTIONS:

This sheet joins sheet 0 on the east and has triangulation station Burrill 1933 common to the two sheets.

The following signals were located on both sheets:

<table>
<thead>
<tr>
<th>Signals</th>
<th>Discrepancies (meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>0</td>
</tr>
<tr>
<td>Yak</td>
<td>1</td>
</tr>
<tr>
<td>Owl</td>
<td>0</td>
</tr>
<tr>
<td>Cow</td>
<td>0</td>
</tr>
<tr>
<td>Eno</td>
<td>0</td>
</tr>
</tbody>
</table>

PERMANENT STATIONS:

The signal "Use" has been described as a recoverable topographic station. This station was located on both sheet P and 0 and the description, on form # 52, accompanies sheet 0.

SHORELINE:

A total of 1.5 kilometers of shoreline was located on this sheet.

With the exception of about \( \frac{1}{3} \) mile in the vicinity of Crandall and Reids Bluff and about 1\( \frac{2}{3} \) miles along the foot of Roses Bluff, the shoreline on this sheet consists entirely of soft marsh with sloping banks of soft mud below the grass line.

No shoreline has been received for this area from the photo-compile party, so that a comparison with it cannot be made.

The pencilled shoreline on this sheet was taken from old surveys and is of no value.

NAMES:

The high, sandy bluff, about 1\( \frac{1}{3} \) miles in length, forming the west and south shore of Bell River at the right-angle turn about 1\( \frac{1}{3} \) miles downstream from the junction of Bell and St. Marys Rivers, is known as Roses Bluff.
The community south of Triangulation Station North Gable of House is known as Crandall and the high sandy bluff about $\frac{1}{2}$ mile southeast is named Reids Bluff. All these terms are in use on Geological Survey Maps and it is recommended they be adopted for use on the charts of this bureau.

COMPARISON WITH OLD SURVEYS:

The topography on this sheet checks very well with that of old surveys.

LANDMARKS FOR CHARTS:

Lists of Landmarks for Charts and Aids to Navigation, on form # 567 accompany this report.

Respectfully submitted,

[Signature]

Charles N. Strong,
Surveyor, C. & G. S.

Approved and forwarded,

[Signature]

Hubert A. Paton,
Lieut. C. & G. S.,
Chief of Party.
LANDMARKS FOR CHARTS

Jacksonville, Fla.

January 10th, 1935

Hubert A. Peaton, Chief of Party

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>House, North gable,(5),(1)</td>
<td>30° 43'</td>
<td>69° 31'</td>
<td>1927</td>
</tr>
<tr>
<td>(north gable of house)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This object has been viewed from the water area.

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it: for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
LANDMARKS FOR CHARTS

Jacksonville, Fla.

January 10, 1935

AIDS TO NAVIGATION
DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LATITUDE</td>
<td>LONGITUDE</td>
<td>DATUM</td>
</tr>
<tr>
<td></td>
<td>D. M. METERS</td>
<td>D. P. METERS</td>
<td></td>
</tr>
<tr>
<td>Devils Elbow Front Range (white diamond daymark on pile)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devils Elbow Rear Range (white circular daymark on tripod)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hubert A. Paton, Chief of Party.

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor; 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
1. This survey has been reviewed in connection with Air Photo Compilation Nos. T-5129, , with particular attention to the following details:

- (a) Projection has been checked in the Field.
- (b) Accuracy of location of plane table control points.
- (c) Discrepancies between detail on this survey and the air photo compilations listed above.
- (d) Discrepancies found in descriptions submitted on Form 524 when compared with the air photo compilations listed above.

2. Refer to the reviews and descriptive reports of air photo compilations Nos. T-5129, , for a more complete discussion of any errors or discrepancies found.

Any material errors found on this survey are noted in subsequent paragraphs of this review, and these have been reported to the Field Records Section and the Cartographic Section.

Notes and corrections resulting from the review are shown on this survey in green.
DESCRIPTIVE REPORT 6191b

State: Georgia, Florida
Locality: St. Marys Entrance

1934

Chief of Party
Hubert A. Paton

U.S. GOVERNMENT PRINTING OFFICE: 1934
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. W

REGISTER NO. 6191b

State Georgia - Florida

General locality St. Marya Entrance

Locality

Scale 1:10000 Date of survey July, 1924 1922

Vessel Party No. 26

Chief of Party Hubert A. Paton

Surveyed by C.H. Strong

Inked by C.T. Schmelb

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated Dec. 5, 1923

Remarks
INSTRUCTIONS:

The work on this sheet was done in accordance with instructions dated Dec. 5, 1933.

LIMITS:

This sheet covers St. Marys Entrance, including the southern tip of Cumberland Island and the northern portion of Amelia Island as far south as Fernandina.

METHODS:

The signals on this sheet were located by plane-table cuts from the various triangulation stations and from other stations previously located by graphic triangulation. It was necessary to run a short traverse along the northeast shore of Amelia Island, tying in on points previously located by cuts from these stations.

All work was done in accordance with the methods outlined in Special Publication No. 144.

CONTROL:

There are 3 triangulation stations on the sheet, all of which were recovered. The control was ample for the work. △ FERNANDINA SCHOOL HOUSE BELFRY has been destroyed since the completion of the field work upon the sheet.

DATUM:

Three △ stations, DUNGENESS WATER TANK 1905, DUNGENESS HOUSE CUPOLA 1905 and AMELIA ISLAND LIGHTHOUSE 1905, were plotted directly on North American 1927 Datum. The other stations had been computed on the North American Datum, using the line Bat-Stafford as a base. These values were corrected as follows:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>+2 meters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitude</td>
<td>-7 meters</td>
</tr>
</tbody>
</table>

This permitted the stations to be plotted with no appreciable error.
MAGNETIC MERIDIAN:

The magnetic meridian, as obtained by the plane-
table declinometer at Δ BEACH 2 1933, has a variation of
8°00' east of the true meridian.

The declinometer had been checked at Brunswick
Magnetic Station where it gave a declination of 0°30' East as
compared with the correct declination of 0°35' East at
Brunswick. Applying the declinometer correction of 0°05' East,
the corrected magnetic variation is 1°05' East.

JUNCTIONS:

This sheet joins Sheet Q on the south, Sheet N on
the west, and Sheet M at the northwest corner.

Δ FERNANDINA SCHOOL HOUSE HELFRY 1933 is common
to Sheets W and Q.

The following signals were located on both Sheet
W and Sheet N:

<table>
<thead>
<tr>
<th>Signal</th>
<th>Discrepancies (meters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aid</td>
<td>0</td>
</tr>
<tr>
<td>Jet</td>
<td>1</td>
</tr>
<tr>
<td>Roc</td>
<td>1</td>
</tr>
</tbody>
</table>

Also, the following triangulation stations are
common to Sheets W and N:

DUNGENESS HOUSE CUPOLA 1905
DUNGENESS WATER TANK 1905
BEACH 2 1933
TIGER ISLAND FRONT RANGE LIGHT 1933
TIGER ISLAND REAR RANGE LIGHT 1934
PILOTS LOOKOUT 1905

Triangulation stations DUNGENESS HOUSE CUPOLA 1905
and DUNGENESS WATER TANK 1905 are common to Sheets W, and M.

PERMANENT STATIONS:

The U. S. E. station, Wall, was recovered and
described as a permanent topographic station.
CHIM and VANE have also been described as recoverable topographic stations. Descriptions of all three stations accompany this report on Form #524. Sketches of prominent objects near these stations were not furnished because the field inspection for the photo-compilation sheets was being done by the party under Lieut. (j.g.) S. B. Grenell.

NAMES:

(See Report of Sheet N).

The flat sandy point on the southeast extremity of Cumberland Island in the vicinity of the North Jetty is known locally as Pelican Banks.

The stream shown on the charts as Southbase Creek is known locally as South Point Creek.

On Chart No. 453, the term Fernandina Entrance is used instead of "St. Marys Entrance", see Coast Pilot Atlantic Coast, Section D, and Chart No. 1242. The latter term is in more common use and it is recommended.

COMPARISON WITH OLD SURVEYS:

The southeastern point of Cumberland Island, in the vicinity the North Jetty, ("Pelican Banks") has built out several hundred meters since the last survey. This point consists of low, flat sandy beach, and a few inches' difference in the elevation causes an entirely different configuration of the H. W. Line. The small sandy island between the North Jetty and the main channel has doubled in size, and the area between the island and Pelican Banks appears to be filling in.

The shore near the western end of the South Jetty is also building out slowly, especially on the rounded point about 800 meters south of the jetty.

AIDS TO NAVIGATION:

A copy of Form #567 is attached.
SHORELINE:

A total of 11.0 kilometers of sandy shoreline was rodded in on this sheet.

The shoreline of Cumberland Island, from Triangulation Station BEACH 2 1933 around to the outer coast and the shoreline of Amelia Island from the mouth of Clark Creek around to the outer coast, consist of sandy beach. Practically all the remaining shoreline shown on the sheet is marshy.

The shoreline shown in pencil is that obtained from the aerial photographs except where two pencilled lines are shown, in which case the line that has been partially erased came from old surveys and was put on the sheet merely as a guide. The shoreline actually rodded in is shown in ink and the other lines are of no value.

The rodded-in shoreline does not agree with that from the photographs because of the difference in the methods used. The photographs show the edge of the vegetation or the storm waterline, whereas the true high waterline is some distance offshore. The tide tables were consulted and proper allowance made for the stage of the tide in locating this line. Examination of the coarseness and compactness of the sand proved to be of assistance. The shore is subject to rapid changes near the inlets, which accounts for some of the discrepancies, also. A short section of the inshore end of the south jetty was located. It coincides with parallel 30° 42'.

Respectfully submitted,

Charles N. Strong.
Surveyor, C. & G. S.

Approved and forwarded.

Hubert A. Paton,
Lieut. C. & G. S.
Chief of Party.

14/6
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Jacksonville, Fla.

January 10, 1935

AIDS TO NAVIGATION

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Hubert A. Paton, Chief of Party

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMELIA ISLAND LIGHT, (lighthouse, white conical, 107 feet high).</td>
<td>LATITUDE 81° 26' 0&quot;</td>
<td>LONGITUDE 89° 4' 0&quot;</td>
<td>North American 1927</td>
</tr>
<tr>
<td></td>
<td>D.M. METERS 0</td>
<td>D.P. METERS 0</td>
<td>North American 1933</td>
</tr>
</tbody>
</table>

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The projection is poor on this sheet. Parallel 30° 44' is 3 meters south of correct position. Parallel 30° 42' is from 1 meter to 2 meters north of correct position and Parallel 30° 41' is from 1 meter to 4 meters north of correct position as marked in pencil on the plan table sheet. The control was plotted from the incorrect projection. This sheet was reviewed in connection with the review of air photo compilation T-5282 covering the area north of 30° 42.5'. For detailed discussion see review of T-5282.

D. H. Benson