

6376a

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 8 1935

Acc. No.

Form 504
Rev. Dec. 1933

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic }
Hydrographic }

Sheet No. U

State Florida

LOCALITY

Nassau Sound and Sawpit Creek.

193 4

CHIEF OF PARTY

Hubert A. Paton.

U. S. GOVERNMENT PRINTING OFFICE: 1934

6376a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

NOV 18 1935

REG. NO.

TOPOGRAPHIC TITLE SHEET

Acc. No.

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. U 6376a

REGISTER NO. 1243

State Florida

General locality Nassau Sound ¹² and Sawpit Creek

Locality Sawpit Creek 11

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

~~Vessel~~ Party No. 26.

Chief of party Hubert A. Paton

Surveyed by J. M. LeRoy

Inked by C. T. Schwalb

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated December 5., 1934

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET U
NASSAU SOUND AND SAWPIT CREEK, FLORIDA
PARTY NO. 26 PROJECT H. T. 168

Sept. 1934.

INSTRUCTIONS:

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

LIMITS:

This sheet extends from the extreme southern tip of Amelia Island, south to the junction of Sawpit Creek, Sister Creek, and Fort George River, and from the center of Black Hammock Island, east to the Atlantic Ocean.

It takes in the lower part of Nassau Sound, all of Sawpit Creek, with its tributary streams.

METHODS:

The signals on this sheet were located by occupying the control stations and drawing cuts to the signals. There were no traverses run, except a short one necessary to rod in the shore of the island in Nassau Sound. This traverse was checked by a three point fix which indicated a zero closure.

CONTROL:

There are 35 triangulation stations on this sheet. The control was sufficient for the work. Since the survey, the U. S. Engineers report, the removal of one of the stations "Sawpit Creek near Range No. 3, 1933".

DATUM:

The datum used on this sheet is "North American, 1927". The stations had been computed on the "North American" datum, using as a base the line, "Horseshoe-Mt. Cornelia". By comparing the values of the first-order stations, the following correction factors were obtained to reduce all stations to the 1927 datum:

Latitude + 1.3 meters
Longitude - 8.7 meters

SHORELINE:

The shoreline of this area was traced from photographs by a party under Lieut. (j.g.) S. B. Grenell, who made all the field inspection also. Only a limited amount was rodged in as a check. The agreement between the shoreline determined by the two methods was satisfactory in Mud River and Sawpit Creek. In Nassau Sound, the junctions were not so good. The small creeks near Station Simp seem to be about 15 meters too far to the east on the photo-topographic sheet. The islands in the sound are subject to rapid changes, which may account for some of the discrepancies there.

The shoreline of Nassau Sound consists of hard sand, which is continually being shifted by wave and tide action. In the vicinity of Station Roc, there is a rocky ledge making out from shore, which bares three feet at low water. The shoreline of Sawpit Creek, and Mud Creek consists of salt marsh, often with large mud flats bare at low water.

The pencil shoreline was transferred from photographs to aid the topographer and is of no further value.

NAMES:

No new names are recommended for this sheet.

JUNCTIONS:

This sheet joins sheet T on the north and sheet V on the south. There were several triangulation stations common to the adjacent sheets at which the work joined without error.

MAGNETIC MERIDIAN:

The magnetic declination as scaled from declinoire arrow is $1^{\circ} 13'$ east. The declinoire correction, obtained at Brunswick, is $0^{\circ} 10'$ east making the true declination $1^{\circ} 23'$ east.

RANGES:

Only the ranges south of triangulation station Spot U.S.E. were located on this sheet. The ranges north of Spot U.S.E. were located on Sheet T.

Since the survey, one of these ranges "Sawpit Creek Range #3" has been destroyed by the removal of the rear beacon. The remaining ranges are:

| | True Azimuth |
|--|------------------|
| Sawpit Creek Range #5 (Beacon No. 55)..... | $63^{\circ} 27'$ |
| (Beacon No. 53) | |
| Sawpit Creek Range #2 (Beacon No. 72)..... | $4^{\circ} 53'$ |
| (Beacon No. 70) | |

PERMANENT MARKED STATIONS:

Due to the large number of triangulation stations no permanent hydrographic stations were marked; however, the following signals, consisting mostly of beacons and ranges, are described on Form #524:

Joy, Abe, Elm, Fob, His, Had, Is, Gus, Far, Two, Jim, Jam, Saw, Six, Foe, Man, Pod, Erg, Nel, Jut, Sad.

COMPARISON WITH OLD SURVEYS:

The new work checks the old very well. The only changes that have taken place are in and around the entrance to Nassau Sound. This change is due to the variable tides and currents and the shifting nature of the sand encountered there.

LANDMARKS:

List of aids to navigation are appended hereto.

There are no objects sufficiently prominent to be used as landmarks.

Respectfully submitted,

Approved and forwarded,

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

J. M. LeRoy
J. M. LeRoy,
Surveyor, U. S. C. & G. S.

Applied to drawing of Chart 577 - Dec 20, 1935 - JFW

REVIEW OF GRAPHIC CONTROL SURVEY T-6376a, SCALE 1:10 000,

Date of Review 6/8/36

1. This survey has been reviewed in connection with Air Photo Compilation Nos. T-5235, , 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-5235, , 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.

See review T-5235 for discussion of high water line differences.

Ralph Jure Derry 6/9/36

V.B.G. Jones

6376b

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 8 1935

Acc. No.

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. V

State Florida

LOCALITY

Ft. George River & Sisters Creek

U. S. G. S.

1934

CHIEF OF PARTY

Hubert A. Paton

U. S. GOVERNMENT PRINTING OFFICE: 1934

6376b

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
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REG. NO.

NOV 18 1935

Acc. 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. V

6376 b

1243

REGISTER NO.

State Florida

General locality St Johns River

~~Duval County~~

13

Locality Fort George River and Sisters Creek

~~and~~

32

Scale 1:10,000 Date of survey October, 1934

Vessel _____ Party No. 26

Chief of party Hubert A. Paton

Surveyed by J. M. LeRoy

Inked by C. T. Schwalb

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated December 5, 1933

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET V
FORT GEORGE RIVER, FLORIDA.
PARTY NO. 26 PROJECT H.T. 168

February 1, 1935.

INSTRUCTIONS:

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

LIMITS:

This sheet extends from the junction of Sawpit Creek, Sisters Creek and Fort George River, south to a point one mile south of Mayport, and from a line between the lower end of Black Hammock Island and Mile Point on the St. Johns River, east to the Atlantic Ocean.

This includes Fort George River and Fort George Inlet, Sisters Creek from Sisters Island north, and the St. Johns River from Mile Point to the inshore end of the jetties.

METHODS:

The signals on this sheet were located by setting up on the control stations and drawing cuts to the signals. Only a few short traverses of one to two set-ups were necessary to locate the shore line at the mouth of Fort George River. There were no appreciable errors to be adjusted.

CONTROL:

There are 37 control stations on this sheet which were recovered. All of the main-scheme stations of the 1926 triangulation in the St. Johns were recovered, though 4 of the beacons that were located at that time have been lost. The existing control is entirely sufficient for any work of general nature.

DATUM:

The datum used on this sheet is North American 1927. The stations established by Lieut. C. M. Durgin in 1932 and 1933 had been computed on North American Datum, using the line "Horseshoe, 1853-Mt. Cornelia, 1853" as a base. To correct his values to the new datum, it was necessary to apply the following factors:

Latitude - 0.7 meters.
Longitude -10.3 meters.

JDS

The stations established by Lieut. W. H. Bainbridge in 1926 had also been computed on the North American Datum, using the line "Bluff Water Tower E.O.P." in Jacksonville, as a base. The correction factors for his values were as follows:

Latitude - 3.4 meters.
Longitude - 3.7 meters.

Both of these factors were obtained by comparison of the two values for certain of the first-order triangulation stations in the vicinity which had been adjusted to the desired datum.

SHORELINE:

The shore line on this sheet consists of soft marsh in Sisters Creek, hard sand in the Fort George River and dredged sand in the St. Johns River.

A party under the direction of Lieut. (j.g.) S. B. Grenell compiled the shoreline of Sisters Creek and Ft. George River as far south as $30^{\circ}25'$. Enough shoreline was rodded in at the mouth of Ft. George River, to connect with the photographic shoreline, and a small amount was rodded in at other places on the sheet as a check.

The shorelines determined by the two methods check very well on this sheet with one exception. Near Ribault Club, the line shown on the photo-topographic sheet is probably the storm high water line; as shown by a line of drift and dead water hyacinths.

The pencilled shorelines were transferred from the photo-topographic sheet or from old surveys, to serve as a guide to the topographer. It is of no further value.

No shore was rodded in the St. Johns River as the U. S. Engineers have made a very careful survey of this section in 1934.

The shoreline of the lower part of Sisters Creek was located on Sheet "X".

JUNCTION:

This sheet joins sheet V on the North and sheet X on the west. The following stations were common to adjacent sheets:

Sheet U & V

Cedar U.S.E. 1933
Sis U.S.E. 1932
George 1861

Sheet V & X

| | |
|-----------------|------------------------------------|
| Round Pond 1853 | St. Johns R. Ward bank R.R. Light. |
| Perry U.S.E. | Mile Pt. U.S.E., 1926 |
| T P 6 U.S.E. | R2 B2 1926 |
| Shell U.S.E. | Sherman 1908 |
| Point U.S.E. | Cedar 1926 |
| Cliff U.S.E. | Mayport Pogie Plant Tall Stack |

MAGNETIC MERIDIAN:

The Magnetic Meridian, as determined by the declinatoire is $1^{\circ} 04'$ East of true meridian. The index correction for this instrument, determined at the Brunswick Magnetic Station in February 1934, was $0^{\circ} 10'$ East. The corrected declination is $1^{\circ} 14'$.

RANGES:

These are 5 ranges on this sheet, as follows:

| NAME | TRUE AZIMUTH |
|--|-------------------|
| St. Johns River Ward Bank Range..... | $276^{\circ} 40'$ |
| Cross-Over Range | $271^{\circ} 23'$ |
| Note: this range is not in use. The beacons are still in place, but are not lighted. | |
| Magic City Range | $66^{\circ} 11'$ |
| Mayport Cut Range..... | $23^{\circ} 14'$ |
| Ribault Club Range | $320^{\circ} 24'$ |
| Note: This is a private range with temporary beacons. | |

PERMANENT STATIONS:

The following permanently marked stations were described on form #524. Sketches were made only on those in the St. Johns River; as the photographs for the area North of the river had already been compiled at the time of the survey.

Stations

| | | | | |
|------|-------|-----|------------------------|-------|
| Bar | Eve | Lay | Pal | Ward |
| Bib | Front | Lis | Pig | (Air) |
| Chim | Gin | Nat | Rear | |
| Dad | Iron | On | Tun | |
| Dun | Laf | One | U.S.E. B M #5 (sketch) | |

NEW NAMES:

The name "Haul-Over Creek" is suggested for the narrow winding stream connecting the St. Johns River with Fort George River, about $1\frac{1}{2}$ miles above the mouth of each river. It is so called by the inhabitants of Mayport, Ft. George Island, and by the U. S. Engineers. Shad Creek, near station R 2 B 2, is a name in common use locally, and is recommended for adoption.

LANDMARKS:

A list of landmarks and non-floating aids to navigation are attached.

The following landmarks shown on Chart No. 577 were verified by topography and have been viewed from the water area and should be retained on the Charts:

| | |
|-------|--|
| TOWER | (St. Johns River Lighthouse, abandoned). |
| TANK | (Ribault Club Water Tank). |

COMPARISON WITH OLD SURVEYS:

This survey checked the old work very closely. There was, however, quite a bit of change in the shoreline at the mouth of the Ft. George and St. Johns Rivers. This was caused by the jetties and by dredging operations in the St. Johns River.

Respectfully submitted,

Approved and forwarded,

J M LeRoy

J. M. LeRoy,
Surveyor, C. & G. S.

Hubert A. Paton

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

Applied to drawing of Chart 577 - Dec. 20, 1935 - JMW

REVIEW OF GRAPHIC CONTROL SURVEY T-6376 b , SCALE 1:10 000 ,Date of Review ^{5/1/36}
6/8/36

1. This survey has been reviewed in connection with Air Photo Compilation Nos. T-5672, T-5235, , 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-5672, T-5235, , 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.

See review T-5235 for discussion of high water line differences.

Ralph Moore Berry 6/9/36

V B Jones