

6390

Graphic Control

U. S. COAST & GEODETIC SURVEY
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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. 00

State Florida

LOCALITY

St. Johns River

(San Mateo to Dunns Creek)

193 5

CHIEF OF PARTY

Hubert A. Patton

U. S. GOVERNMENT PRINTING OFFICE: 1934

Graphic Control

MEMORANDUM

IMMEDIATE ATTENTION

~~SURVEY~~
 DESCRIPTIVE REPORT } ~~No. H~~
~~PHOTOSTAT OF~~ } No. T 6390

{ received Feb. 3, 1936
 { registered Feb. 11, 1936
 { verified
 { reviewed
 { approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
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C. K. Green

Feb 12, 1936

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

FEB 3 1936

REG. NO.

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. 00 T6390

REGISTER NO.

State Florida

General locality St. Johns River

Locality San Mateo to Dums Creek

Scale 1:5,000 Date of survey July, 1935

Vessel Party No. 26

Chief of party Hubert A. Paton

Surveyed by C. N. Strong

Inked by C. N. Strong

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated August 23, 1934

Remarks:

Land

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET 00
ST. JOHNS RIVER, FLORIDA
PARTY NO. 26 - PROJECT H. T. 168

July 6, 1935.

INSTRUCTIONS:

The work on this sheet was done in accordance with instructions dated August 23, 1934.

LIMITS:

This sheet covers the portion of the St. Johns River extending from San Mateo to the mouth of Dunns Creek.

PURPOSE:

The chief purpose of the topographic work was to locate signals for the control of the hydrography. All docks, old piling and menaces to navigation were also located, as well as considerable portions of shoreline.

METHODS:

As the triangulation stations were so arranged that it was not possible to run a system of graphic control along the river, it was necessary to run two traverses along the shore, the first between triangulation stations ASH and EDGEWATER, and the second between triangulation stations EDGEWATER and MAT. A partial scheme of graphic triangulation was employed in the former case in order to cross the river, and a rod reading from triangulation station EDGEWATER to the last intermediate station closed the traverse without error.

The second traverse was run along the east bank of the river and the closure was effected by taking cuts upon triangulation station MAT from the last three traverse stations. A closing error of 6 meters, approximately in the direction of the line of progress of the traverse, was found. The positions of the intermediate stations were adjusted in accordance with the method outlined in Special Publication No. 144 and all topographic details located from unadjusted planetable positions were made to conform with the adjustment of each station.

In most cases it was necessary to set up offshore because of the overhanging trees. A number of the traverse stations required the construction of temporary wooden stands because of the deep water and soft bottom near the shore. The shoreline was obtained by rod readings on or near the tree line, the offset distances to the true high water line being estimated. No form lines were located.

CONTROL:

The control was supplied by four triangulation stations located by Lieut. K. G. Crosby in 1935. The control was ample for the work required.

DATUM:

The triangulation stations were all plotted on North American 1927 Datum from Lieut. Crosby's unadjusted 1935 field computations.

MAGNETIC MERIDIAN:

The magnetic meridian, as obtained by the planetable declinoire at triangulation station EDGEWATER 1935, has a variation of $0^{\circ} 40'$ east of the true meridian.

The declinoire had been checked at Green Cove Springs Magnetic Station May 1935 where a declination of $0^{\circ} 38'$ east was obtained, as compared with the correct declination of $0^{\circ} 42'$ east. Applying the declinoire correction of $0^{\circ} 04'$ east, the corrected magnetic variation at triangulation station EDGEWATER is $0^{\circ} 44'$ east.

JUNCTIONS:

This sheet joins sheet NN on the northeast and sheet PP on the southwest.

Triangulation stations MAT 1935 and BEACON NO. 76 1935 are common to sheets NN and OO. Triangulation station ASH 1935 falls on both sheets OO and PP.

There are no hydrographic signals located on both sheets NN and OO and no signals were located common to sheets OO and PP.

PERMANENT STATIONS:

Signals Bea and Gab were described as recoverable topographic stations on form cards (#524) which accompany this report. The former is Edgewater Grove Beacon No. 55 and the latter is the gable of a house which is a conspicuous landmark.

RANGES:

There are no ranges on this sheet.

NAMES:

The following names should be retained upon the charts: San Mateo, Edgewater, Buzzard Island, Dunns Creek.

SHORELINE:

The shoreline along the west side of the river, within the limits of this sheet, is swampy with overhanging trees and bushes, making the true high water line indistinct. The water is usually deep close to the shore and the bottom is soft and muddy. Inside the treeline the swampy areas are a tangled mass of tree roots with old vegetable matter covering moist, loamy soil. There are no houses or permanent structures of any kind along the west shore, only one dilapidated shack being found. The ruins of two or three old docks were located on the sheet.

The east shore above Edgewater is of a similar character. There is a concrete bulkhead at Edgewater in front of the old Ingersoll estate and a shorter bulkhead near signal Poi. Otherwise, the remaining shoreline is quite similar to the west bank, except that in a few places there are sandy bluffs 6 to 10 feet high at the foot of which the water is shallow with a firm sandy bottom. The east bank is fringed by the ruins of a number of old docks, the piling of which is still standing although in many cases partially submerged. Usually the outermost piling extends well above the water. The approximate outlines of these old docks are indicated on the sheet by broken lines.

A total of 2.2 miles of shoreline was located on the sheet. Where readings could not be taken directly upon the high water line because of overhanging trees, the rod was held a few meters offshore and the offset distance estimated. The inked dots indicate points on the high water line as accurately as it could be determined, with the intermediate portions sketched as indicated by the full inked lines. The pencilled shoreline was taken from old surveys to aid the topographer and is of no further value. The variation between the inked and pencilled shoreline should not be taken as an indication of change as the old shoreline was not superimposed accurately upon the sheet.

Because of the deeper water close inshore the floating masses of water hyacinths, which are always to be found on the St. Johns River, do not hang up along the shore as commonly as in the lower portions of the river. However, there is usually a narrow fringe of matted hyacinths to be found, especially in the swampy areas where the trees grow out beyond the high water line. The outer edge of these flocs will probably show as a solid line, thus causing the photo-compilers some trouble in delineating the true high water line. That line is usually the inshore edge of the hyacinths. The problem of selecting the true high water line from the aerial photographs will be further complicated by the outline of the densely crowded overhanging trees, which will probably show as a definite line some distance out from the high water line.

There are four fish traps located on this sheet, as well as other groups of small stakes used for fishing purposes. These are not especially dangerous to navigation as they are usually groups of slender poles placed fairly close inshore. There are also the usual snags, sunken logs and broken off piling. All of these that could be found were located on the sheet.

COMPARISON WITH PREVIOUS SURVEYS:

The shoreline appears to conform quite closely with that of previous surveys. As stated above, the shoreline shown in pencil is not an accurate representation of the old shoreline. The aerial photos have not yet been compiled for this area so that no comparison can be made.

The latest editions of Charts # 508 and # 684 show the culture correctly except that Buzzard Island is heavily wooded on the channel side.

LANDMARKS AND AIDS TO NAVIGATION:

Lists of landmarks and non-floating aids to navigation accompany this report on Form # 567. There are no landmarks other than houses and most of them are nearly obscured by the heavy foliage along the shore.

Respectfully submitted,

C. N. Strong

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

Approved and forwarded,

Hubert A. Paton

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

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Palatka, Florida

July 6, 1935

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:

[illegible]

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, flagstaves and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Palatka, Florida

AIDS TO NAVIGATION

July 6, _____, 1935

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