

4543

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1883

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Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
R.S. Patton	
U. S. COAST & GEODETIC SURVEY. LIBRARY AND ARCHIVES	
NOV 13 1930	
Acc. No. _____	
State: Florida	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Sheet No. 4543 4543
LOCALITY	
Florida, East Coast,	
Garfield Point to Walton	
30 1928	
CHIEF OF PARTY	
O.S. Reading, H. & G.E.	

Applied to Chart 582 Oct 5 1937 Chas R Binkley

Descriptive Report to Accompany
Air Photo Topographic Sheet

No. 4543 - Garfield Point to Walton, Florida East Coast.

This sheet is a compilation of a single strip of four-lens air photographs taken by the Army Air Corps camera No. 26-1 on April 29, 1928. Photograph No. 571, which defines the southern boundary of the sheet, was taken about 9:20 A.M. and photograph No. 599, which terminates the northern extremity, was taken at about 9:30 A.M., which is approximately half an hour before a minus low tide in this vicinity as obtained from the predicted tide tables.

A Loening amphibian plane was piloted by Lieutenant J. A. Dexter at an approximate height of 9,460 feet, giving an average scale of about 1:18,920 (scale factor = 1.057) to the photographs.

LIMITS

The area of this sheet is covered by a single strip about three and one-half miles inland from the sea coast. Garfield Point defines the northern extremity while the town of Walton marks the southern boundary.

The south end of this sheet joins with air photo topographic sheet No. 4542, photograph No. 571, and the north end makes a junction with air photo topographic sheet No. 4545, photograph No. 599.

CONTROL.

In addition to topographic sheets Nos. 1650, 4537, 4538 and 4539, two roads extending in an east and west direction were traversed with a steel tape. A theodolite was set up at the intersection of the road and railroad and solar azimuths determined. All turning points, azimuth stations, pluses to cross-roads, trails, etc., are shown by small red circles. All the triangulation positions marked thus * were computed in the field from Fort Pierce Port District data. All triangulation shown on this sheet was done in 1930 with exception of Ridge 2.

COMPILATION.

A projection was laid on the celluloid sheet to the approximate scale of the photographs (about 1:18,920), as determined by a preliminary radial plot, and the triangulation and control traverses were plotted. Photostats of topographic sheets 1650, 4537, 4538 and 4539 were then made to this scale. Sheet No. 1650 was traced in blue ink and sheets Nos. 4537, 4538 and 4539 were traced in black ink on the celluloid sheet. A radial line graphic traverse was then plotted holding strictly to topographic control

sheets 4537, 4538 and 4539 and the general trend of the old topography (sheet 1650).

The railroad system in the vicinity of Fort Pierce was compiled from blue-prints obtained from the principal assistant engineer of the Florida East Coast Railway Company.

The boundaries of sheets 4537, 4538, and 4539, which were used in the compilation of this sheet, are shown by a light dashed pencil line.

The Sanborn map of the town of Fort Pierce was used in conjunction with the photographs for the street system. Only such streets as were found to show on the photographs were used in this compilation.

The blue-prints (22859 & 22860) were used in the compilation of the Fort Pierce Inlet and Harbor.

This sheet was prepared from two photographic negatives and no attempt was made to make a junction between the two negative plates.

DIFFERENCES FROM FORMER TOPOGRAPHY.

In general, the differences between the photographic sheet and the topographic sheets of 1883 (sheet No. 1650) and 1930 (sheet Nos. 4537, 4538 and 4539) are small. The old Indian River Inlet is now closed, as shown also by topographic sheet 4538 which comprises only the outer coast. Along the Indian River side of this old inlet considerable change in the island formations are noticed, and at some places there is no resemblance to the old topography of 1883 (sheet 1650). The shoals as shown on this sheet were those identified on the photographs (by the aid of the stereoscope) and verified by the hydrographic party working in that locality under Chief of Party Lieutenant Charles Shaw. Only three slight changes were made necessary according to their inspection.

In the vicinity of Δ Top 1930 and to the south the new shore line does not agree closely with that of 1883. Likewise to the north of Δ Top 1930 the new shore line is northward of the 1883 shoreline at the outlet of the creek leading up toward the old Δ Bend as shown on the 1883 sheet.

It was noted that the north junction of topographic sheet 4539 failed to agree with topographic sheet 4537 in that the position of the south jetty is further to the south and the high water line is located seaward about twenty meters more than topographic sheet 4537. The blue-prints in conjunction with the photographs and topographic sheets were used to compile this area. The high water line was shown as on topo. sheet 4537 because of 1:5000 scale.

Because of knowledge gained through inspection by the photo control party of 1929, it was deemed advisable to make certain slight corrections to the tracing of topographic sheet 4537. The

road to the east of Δ Pierce 2 is amore gradual curve and there is a slight change in the wharf just to the north of Δ Pog; also the south bulkhead to the south of Δ Gable is in a straight line instead of being broken as shown on topographic sheet 4537.

NAMES.

The names appearing on this sheet are those appearing on chart 1112, 163 and 3259 and the state highway map of this locality.

SYMBOLS.

The standard topographic symbols were used together with the following special symbols in order to bring out the topographic character of the locality: A single full line was used for a ditch, a double full line for all improved, graded and paved highways and streets, a double dashed line for all unimproved but graded roads, and a single dashed line for trails.

The usual marsh symbol was used for ordinary marsh, but where there is a scattering of grass in the water, a broken marsh symbol was used and the area bounded by a fine full line.

The outer tip of the south jetty at Fort Pierce Inlet is shown as a broken line, which represents this portion of the jetty being awash at half tide (topographic sheet 4539).

The culture was noted on the photographs from the principal highways and roads traversed during a limited field inspection. At inaccessible places the culture was interpreted in the office from the similarity noted to that obtained from field inspection.

LANDMARKS.

In addition to the landmarks previously submitted (Div. of Charts, File No. 309), the following are thought to be of value.

Respectfully submitted,

Roswell C. Bolstad
Roswell C. Bolstad
Jr. H. & G. E.,
C. & G. Survey

APPROVED

Approved:

O. S. Reading
O. S. Reading,
Chief of Party, C. & G. Survey.

K. T. Adams
FIELD RECORDS (C)

F. S. Borden
Chief, Section Field Work

L. O. Lobnitz
Chief, Division of Charts

G. H. Hude
Chief, Div. of Hyd'y and Top'y

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D.C.

Sept. 15 _____, 19**30**.

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.

O.S. Reading

Chief of Party.

[illegible]

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, 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 of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstuffs and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4543

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. 4543

REGISTER NO. 4543

State Florida

General locality East Coast

Locality Garfield Point to Walton.

Scale 1:20,000 Date of survey April 29, 1928

Vessel Army Air Corps Loening Amphibian Airplane

Chief of Party O. S. Reading

Surveyed by R. C. Bolstad

Inked by R. C. Bolstad

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

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

Instructions dated June 6, 1929

Remarks: Compilation of four-lens air photographs Nos. 571 to 599.

Reduced to 1:20,000 and printed by photolithographic process

in Printing Section.

G P O