

4458a

SUPPLEMENTAL T 4458A

Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. PATTON, Director	
State: FLORIDA	
DESCRIPTIVE REPORT	
AIR PHOTO Topographic Hydrographic	Sheet No. 4458A
LOCALITY	
EAST COAST OF FLORIDA	
INDIAN RIVER,	
NORTH JUPITER NARROWS TO	
JUPITER SOUND.	
1928	
CHIEF OF PARTY	
O. S. READING.	

4458a

SUPPLEMENTAL T 4458A

DESCRIPTIVE REPORT TO ACCOMPANY

AIR PHOTO TOPOGRAPHIC SHEET

No. 4458A - NORTH JUPITER NARROWS TO JUPITER SOUND.

This is a compilation of a single strip of air photographs, consisting of two different overlapping flights. Photographs Nos. 522 to 538 (third roll), direction of flight to northward, were taken about 5:10 P.M. on April 20, 1928, about two hours before a minus low tide. Nos. 539 to 545 (fourth roll), direction of flight to northward, were taken about 9:15 A.M. on April 29, 1928, about three-quarters of an hour before low tide as obtained for predicted tide tables. Both rolls of photographs were taken with Army Air Corps four-lens camera No. 26-1.

A Loening Amphibian plane was piloted by Lieutenant J. A. Dexter at a height of approximately 10,000 feet, giving an average scale of about 1:19,000 to the photographs.

LIMITS OF SHEET NO. 4458A.

This sheet includes the area from the coast to about four miles inland, at the western edge of a single photographic strip, and from North Jupiter Narrows to the southern edge of Jupiter Sound.

CONTROL.

The photo topographic control sheet number 4458B was used to control the shoreline. The railroad traverse as obtained from the Florida East Coast Railroad was also plotted. The three steel tape road traverses measured by the air photo control party in 1929 at towns Jupiter, Olympia and at St. Lucie Inlet, the azimuths of which were obtained by theodolite solar observations, were used to control the sheet in an easterly and westerly direction. All turning points, azimuth stations, plusses to cross-roads, etc., are shown by small red circles on the sheet.

The limits of this sheet do not include Jupiter and St. Lucie Inlet traverse, so a strip of celluloid was added on the northern and southern ends of the sheet in order to make use of this control and was then later removed.

COMPILATION.

A projection was laid on the celluloid sheets to the average scale of the photographs as determined by a preliminary radial plot. (Factor 1.065 x 20,000). Photostats of topographic sheet No. 1640 and photo topographic control sheet 4458B were made to this scale. The shoreline

from the photo control sheet was traced in black ink from the other photostats in blue ink on the celluloid sheet. A radial line graphic traverse was then plotted holding to this control.

The easterly and westerly control on the southern half of this sheet was seven miles apart and in this area the two flight lines overlapped. A slight change in scale was noted between these two flight lines. This made plotting radials rather difficult between this area. The shoreline of the northwest fork of Jupiter River on the photographs was held to that of the shoreline as obtained from the photostat of topographic sheet 1640 in making the radial plot.

The remaining features of the photo topographic map were obtained by adjustment between the points determined by the radial plot.

This sheet was prepared from two photographic negatives.

CHANGES.

In general, there is very little difference in the coast line between the photo topographic sheet of 1929 (No. 4458B) and the topographic sheet of 1883 (No. 1640).

The shore line from triangulation station Sand to North Jupiter Narrows has receded a great deal. The maximum recession occurred at the entrance to North Jupiter Narrows, which is approximately 330 meters.

NAMES.

The names appearing on this sheet were taken from the U. S. Coast and Geodetic Survey chart No. 163.

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 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; a single short dashed line for trails and a single long dashed line for boundaries of cultivated fields and cleared fields.

The culture was noted on the photographs from the principal highways and the 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 the field inspection.

Respectfully submitted,

Walter J. Chovan

Walter J. Chovan,
Jr. H. & G. Engineer.

Approved.

O. S. Reading
O. S. Reading,
Chief of Party.
Coast and Geodetic Survey.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 44582

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. _____

REGISTER NO. 4458 A

State FLORIDA

General locality EAST COAST

Locality NORTH JUPITER NARROWS TO JUPITER SOUND

APRIL 20 1928

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 W. J. CHO VAN

Inked by W. J. CHO VAN

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

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

Instructions dated JU NE 6, 1929

Remarks: Compilation of four-lens air photographs No's. 522-545

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

in Printing Section.

G P O

APPROVED

K-T. Adams
FIELD RECORDS (C)

J. B. Borden
Chief, Section Field Work

L. O. Robert
Chief, Division of Charts

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4458b

TOPOGRAPHIC TITLE SHEET
~~Photo Control Sheet~~
(in pencil)

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. #8

REGISTER NO. 4458b

State Florida

General locality East Coast

Locality Jupiter Inlet to ^{Vicinity} ~~two miles S.~~ of St. Lucia Inlet.

Scale 1:20,000 Date of survey March - April, 1929

Vessel NATOMA

Chief of Party Jack Senior

Surveyed by Walter J. Chovan

Inked by - -

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

Contour, Approximate contour, Form line interval - - feet

Instructions dated January 7th, 1929

Remarks: Insert of Jupiter Inlet

Scale 1:10,000