

4463a

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

C. & G. SURVEY

L. & A.

AUG 5 1930

Acc. No.

State: Florida

REPORT

Sheet No. 4463A

LOCALITY

Florida East Coast

Lake Worth To Lake Wyman

CHIEF OF PARTY

Boeing

NOV 1930

4463a

DESCRIPTIVE REPORT TO ACCOMPANY

AIR PHOTO TOPOGRAPHIC SHEET

No. 4463A - LAKE WORTH TO LAKE WYMAN.

This is a compilation of a single strip of air photographs, consisting of two different overlapping flights. Photographs numbers 473 to 477 (third roll) direction of flight to northward, were taken about 4:30 P. M. on April 20, 1928, with Army Air Corps four lens camera, No. 26-1, about two hours before a minus low tide, numbers 1 to 26 direction of flight to southward, were taken between 3:30 and 3:42 P. M., on February 27, 1927, with Army Air Corps three lens camera No. 11. High water at Hillsboro as per predicted tide tables occurred at 4:32 P.M., height 2.2. feet.

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 1:18,600 to photographs 473 to 477. A similar plane was piloted by Lieutenant Guy Kirksey at a height of approximately 7,500 feet, giving an average scale of about 1:15000 to photographs 1 to 26.

LIMITS OF SHEET NO. 4463A.

This sheet includes the area from the coast to about three miles inland, at the western edge of the single photographic strip, and from the southern end of Lake Worth to the northern end of Lake Wyman.

CONTROL.

The photo topographic control sheet numbers 4462b and 4463b, were 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 the towns Boynton, Delray, and Boca Raton, the azimuths of which were obtained by theodolite solar observation 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. These road traverses were tied in to triangulation stations, Boynton W.T., Delray W.T., and Boca Raton W. T.

The limits of this sheet does not include Boca Raton traverse, so a strip of celluloid was added to the sheets in order to make use of this control and then later removed.

COMPILATION.

A projection was laid on the celluloid sheet to the average scale of the photographs number 1 to 26 as determined by a preliminary radial plot. (Factor 1.289 x 20,000). Photostats of topographic sheet

No. 1657 and photo topographic control sheets numbers 4462b and 4463b were made to this scale. The photographs 473 to 477 were also photostated to this scale and used, as the photographs of the three lens pictures covering this area were badly clouded and the detail obscured. The shoreline from the photo control sheets 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 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, the junction line of which is shown on the sheet in pencil.

CHANGES.

In general, there is very little difference in the coast line between the photo topographic sheet of 1929, (numbers 4462b and 4463b), and the topographic sheet of 1894, (number 1657).

A large difference was noted at Lake Wyman. This Lake as shown on sheet 1657 is about 230 meters too far to the westward. A hurricane swept this part of the country since the air photographs were taken which caused a few changes in the shoreline. A road was washed out near Lake Wyman. The 1929 shoreline as shown on the photo control sheet was used in the compilation of this sheet. The azimuths of roads and cross-roads at Gulf Stream, Delray and triangulation station Haulover as shown on photo control sheet 4462b and 4463b did not check in part with other control and photographs. These azimuths were corrected on the compilation sheet by the photographs.

An inside passage from Lake Worth to Lake Wyman has been dredged since the old topography was run in 1894, and numerous improvements have been made due to new settlements at Boynton, Gulf Stream and Delray.

NAMES.

The names appearing on this sheet were taken from the U. S. Coast and Geodetic Survey Chart 1248.

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 & Geodetic Survey.

APPROVED

K. T. Adams
FIELD RECORDS (C)

B. Borden
Chief, Section Field Work

L. O. Tolbert
Chief, Division of Charts

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington D. C.

July 23, 1930

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
O. S. Reading

T. 44632

Chief of Party.

DESCRIPTION	POSITION						METHOD OF DETER- MINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					DATUM
	°	'	D. M. METERS	°	'	D. P. METERS			
Tank (Boynton Water Tank, 1929)	26	31.8	1467.2	80	03.5	907.4	N. A.	Tri.	1248 - 3260
Tank (Gulf Stream Water Tank, 1929)	26	29.5	871.9	80	03.3	543.1	"	"	" "
Tank (Delray Water Tank, 1929)	26	27.7	1379.4	80	04.2	416.6	"	"	" "
Tank (Villa Mica Water Tank, 1929)	26	23.2	333.8	80	05.1	113.9	"	"	" "
Also submitted by H. L. Schoppe. Chart letters No's. 277 & 259.✓									
Checked by replotting on sheet <i>44632</i>									

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

44632

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. 4463 A

State FLORIDA

General locality EAST COAST

Locality LAKE WORTH TO LAKE WYMAN

Scale 1:20,000 Date of survey February 27, 1927

Vessel LOENING AMPHIBIAN PLANE

Chief of Party Lieut. O. S. Reading

Surveyed by Walter J. Chovan

Inked by Walter J. Chovan

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

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

Instructions dated June 6th., 1929

Remarks Compilation of four-lens photographs, No's 473 to 477
and three-lens photographs, No's 1 to 26, reduced to scale of
1:20,000 by photo-lithographic process in Printing Section.

4463b

Smooth C.

4463b

Form 504 Ed. June, 1928	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY R. S. Patton, Director	
<div style="border: 1px solid black; padding: 5px; float: right;">C. & G. SURVEY L. & A. NOV 29 1929 Acc. No.</div>	
State: <u>Florida</u>	
DESCRIPTIVE REPORT	
Topographic Hydrographic	Photo Control Sheet No. 2 4463b
LOCALITY	
Town of <u>Gulf Stream to Hillsboro Inlet</u>	
19 <u>29</u>	
CHIEF OF PARTY	
<u>R. L. Schorpe - Charles Shaw</u>	

DESCRIPTIVE REPORT

to accompany

Photo Control Sheet No. 2

Florida 1929

Instructions:

This work was executed under instructions dated December 27, 1928, Par. 10 to 14 inclusive. These instructions were modified by additional instructions given by Commander Parker while on an inspection trip in Florida, February 23, 1929.

Limits:

The work on this sheet extends from the town of Gulf Stream Latitude $26^{\circ} 29'$, Longitude $80^{\circ} 03'$, south to Hillsboro Inlet Latitude $26^{\circ} 15'$, Longitude $80^{\circ} 05'$, and includes two inserts, one at Boca Raton Inlet and the other at Hillsboro Inlet.

General description of coast:

In the stretch of beach from Gulf Stream to Hillsboro there are but two prominent buildings along the beach. The Gulf Stream Hotel at Delray Beach and Deerfield Casino at Deerfield Beach. Numerous water tanks from one to two miles back of the beach show prominently from seaward. The beach is sandy and flat, the storm high water mark is a bank covered with grass and bushes. From Gulf Stream to Delray the bank ranges from one to three meters high but from Delray Beach south the bank becomes much higher and steeper. At Cloister, apparently the highest point, the bank is fifteen meters high; from Cloister south the height gets less until at Hillsboro it finally disappears. From Seaward all of this stretch looks practically the same. A short sandy beach with a slightly rolling country in back over grown with bushes. The water tanks and prominent buildings will help materially on the chart for ships to check their positions.

Photo Control:

The photo control points on this sheet were selected as the most easily distinguished and were marked and numbered on the photographs. These points selected with their descriptions were looked over by Mr. Reading while in West Palm Beach and he expressed himself as satisfied with the work. As an additional safe guard points located by triangulation were added later. These points marked, a, b, c, etc., are not marked on the photographs because the photographs were turned over to Mr. Reading while in Florida.

Control and Method:

This survey was made directly after the traverse had been run and the traverse stakes were still in place. All triangulation stations, traverse stations, (Main sheme and A stations) were plotted on the sheet before the work began. As the distance between traverse stakes were all known, rod readings between staks served as check. The plane table was set up over traverse stakes in most cases and additional information on the photo control rodded in. The traverse stakes found in place served to check the topographic traverse as it was being run.. No closing errors were attained. Azimuths of roads were determined whenever possible and careful checks made of each determination. Signals for hydrography were built over traverse stakes whenever possible, where the stakes for any reason were not suitably located a signal would be located by a rod reading. Whenever possible natural objects, houses, towers, etc., were used for hydrographic signals.

Point No.	Marked on photo No.	Description of point located.
25	11-C-51	S.E. corner of a large white house.
26	11-C-51	Tallest chymney of grey house.
27	11-C-52	N. E. corner of W. house.
29	11-C-53	Front and sides of Seacrest hotel rodded. Flag pole shown as dot in front part of hotel located by traverse.
28	11-C-53	Roads located by plane table.
32	11-A-29	Flag pole on brown house center of E. gable.
31	11-A-29	S.E. end of concrete pier.
30	11-B-31	End of bridge at Boca Raton Inlet.
33	11-B-33	N. E. gable of grey house (Deerfield Casino). Building is right on high water mark and has square cupolas on N. and S. ends. Roads may help some in locating point.
34	11-B-39	Section of road located by plane table.
35	11-B-37	Deerfield W. T. located by triangulation. High black water tank.
36	11-B-29	Boca Raton W. T. located by triangulation. Silver water tank.
37	11-B-25	Villa Rica W. T. located by triangulation. Dull black water tank conical top. A short distance W. of road.
38	11-B-53	Delray W. T. located by triangulation. Black water tank conspicuous on account of flat top.

Sheet No. 2

Photo Control

Name.	Latitude	Meters	Longitude	Meters
Able	26° 29'	181	80° 03'	436
Boy	28	1717		516
Cat		1543		534
Dog		1081		580
Easy		639		664
Pole		131		749
Fox	27	1407		853
Crest		1054		867
Item		709		906
Joy	27	259		960
Kick	26	1658		1012
Hill		1202		1099
Jack		718		1123
Jill	26	223		1186
Pat	25	1620		1235
Mike		1128		1292
Herb		777		1324
Cal	25	352		1366
Lot	24	1776		1397
Pol		1282		1438
Joe		936		1469
Mut		564		1502
Trip	24	124		1532
Fig	23	1482		1593
Shack		1229		1613
Hat		881		1640
Bit		581	04	60
Cane		82		75
Rat	22	1321		77
Jig		883		115
Bill		369		159
Her	21	1333		224
Mag		802		301
Mast		248		338
Con	21	49		320
Cup	20	1619		358
Palm		1314		394
Cross		778		456
Bull		300		460
Cow	19	1613		649
Gob		1172		782
Line		722		794
Fel		181		880
Lad	18	1670		876
Raw		1223		922
Sad		779		966
Wave		700		1145

Sheet No. 2

Photo Control

Name	Latitude	Meters	Longitude	Meters
Mix	26° 18'	335	80° 04'	1018
Rose	17	1732		1073
Rip		1281		1117
Tom		830		1154
May		705		1165
Mega		382		1189
Sal	16	1774		1224
Sew		1328		1261
Fly		881		1291
Boyd		430		1320
Rad	15	1828		1351
Nig		1327		1383
Blue		1201		1413

for whole sheet
 These signals have not been checked. (D.M.s + D.P.s)
 Many of the above are computed in the traverse, see traverse
 computations.

Insert Hillsboro Inlet:

A plane table survey of Hillsboro Inlet was made on a 1:5,000 scale using traverse stakes for control points. Additional signals were located for a hydrographic survey of the inlet.

The hurricanes of the past seasons have changed the entrance considerable and washed part of the beach away in front of the light house. This winter the light house service plan a long bulk head built to protect the light from future storms.

Control:

Traverse stakes were used for control.

Name	Latitude	Longitude	D.M.	D.P.
Cloister M / 35	26° 15'	80° 04'	1329	1378
Boy	26 15	80 04	512	1653

△Light traverse 1929

HILLSBORO INLET

Name	Latitude	Meters	Longitude	Meters	Remarks
Rock	26° 15'	446	80° 04'	1438	
Boy	15	512	04	1653	Transferred from Boat Sheet #4, 1928
But	15	1225	05	5	
Get	15	1009	04	1529	
Ile	15	1067	05	31	
In	15	939	04	1482	
Let	15	854	04	1443	
Nig	15	1329	04	1378	M / 35
No	15	1256	05	1	
Out	15	916	04	1554	
Pil	15	1123	04	1562	
So	15	1234	05	34	

Insert Boca Raton Inlet:

A plane table survey was made of this inlet on a 1:5,000 scale using the traverse stakes as control points. Additional signals were erected for a hydrographic survey of the inlet.

The bulk head shown on the north side of the inlet is built of steel sheet piling. The center area is filled with rock and a concrete surfacing put on the top. The bulk head is quite conspicuous from seaward.

The present development interest at Boca Raton plan an extension to this north breakwater and a new one on the south side of the entrance, in the hope the channel may be kept from filling up. At present there is a long sandy arm sweeping out from the north side making entrance difficult. Each successive storm shifts this bar so that the entrance is always uncertain. At the time of this writing only small motor boats drawing about 2 feet may use the inlet and they only at high tide. Practically no one uses it and I know of only two small boats that ever go in or out here.

No plans could be obtained of the proposed new development.

Control points for the plane table survey of Boca Raton Inlet.

Traverse Station 1929 - Cloister E
" " 1929 - " G

Miles of Shoreline surveyed - 3/4 mile

BOCA RATON INLET

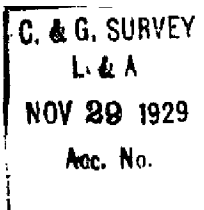
Name	Latitude	meters	Longitude	meters	Remarks
Bo	26° 20'	322	80° 04'	659	
Bull	20	294	04	473	
Bus	20	306	04	556	
(Cloister E)	20	321	04	496	
(Cloister G)	19	1610	04	647	Cow
End	20	367	04	670	
In	20	85	04	600	
Lim	20	323	04	584	
Lit	20	374	04	612	
Ra	20	245	04	639	
Ta	20	124	04	628	

Respectfully submitted,

Benjamin H. Rigg
Benjamin H. Rigg,
Jr. Hydrographic & Geodetic Engineer,
U. S. Coast and Geodetic Survey.

Approved and forwarded
Charles Shaw
Chief of Party
Nov 25, 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY



REG. NO.

4463b

TOPOGRAPHIC TITLE SHEET

PHOTO CONTROL SHEET No. 2

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter 2REGISTER NO. **4463b**State FloridaGeneral locality East Coast of FloridaLocality Town of Gulf Stream to Hillsboro InletScale 1:20,000 Date of survey May 1929, 19Vessel RANGERChief of Party R. L. SchoppeSurveyed by M. E. Wennermark

Inked by _____

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated December 27, 1928, February 23, 1929Remarks: Two inserts - Boca Raton Inlet and Hillsboro Inlet.