W.O.

8414

1249-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

8414

Type of Survey Photogrammetric

Field No. Jupiter 8414 Office No.

LOCALITY

State Florida

General locality Palm Beach and Martin Counties

Locality Jupiter Inlet

R. A. Gilmore, Chief of Field Party
~~Lieut.-Comdr.~~ George E. Morris, Jr., " " Photogrammetric Office

194 7-48

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE January 19, 1949

B-1870-1 (1)

p 3 >

1947

Form T-1

DATA RECORD

T-8414

Quadrangle (II): "Jupiter" Project No. (II): CS-312-A

Field Office: Stuart, Fla. Chief of Party: R.A. Gilmore

Compilation Office: Tampa, Fla. Chief of Party: G.E. Morris, Jr.

Instructions dated (II III): ~~Aug. 3, 1944~~ 25 May 45 Copy filed in ~~Descriptive Report No. T-~~ Office files, Division of Photogrammetry (VI)
Supplemental instructions 21, October, 1946
" " 10 December, 1946
" " 16 Jan'46
Completed survey received in office: 24 May 48

Reported to Nautical Chart Section:

Reviewed: 17 Aug 48 Applied to chart No. Date:

Redrafting Completed:

Registered: B&W. PrinT - ~~29 Sept 1948~~ Jan 1949
Color PrinT - Published:

Compilation Scale: 1:20,000 Published Scale: 1/24,000

Scale Factor (III): 0.98522

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.S.L.

Reference Station (III): Bend, 1929

Lat.: 26° 55' 43."622 (1342.6m) Long.: 80° 04' 07".343 (202.6m) Adjusted

State Plane Coordinates (VI): Florida East Zone.

X = 803,451.80 Feet Y = 944,360.48 Feet

Military Grid Zone (VI)

PHOTOGRAPHS (III)

	Number	Date	Time	Scale	Stage of Tide
	11861	11-14-42	11:47	1:20,000	± 1.2 above MLW
	11862	"	"	"	+ 1.2 " "
	11918	"	1:21	"	+ 1.6 " "
	12115	11-25-42	10:42	"	+ 1.5 " "
Single lens	45C-1649-1655 inc.	3-11-45	9:30	"	+ 1.2 " "

Tide from (III): Jupiter Inlet Reference Station: Mayport, Fla.

Mean Range: 1.3 2.8 (ocean) Spring Range: 1.5

Camera: (Kind or source) U.S. C. & G.S. 9-lens, 8¼" focal length.

Field Inspection by: B.O. Bryant, H.A. Duffy, C.H. Bisha date: Aug. 1944 Jan. 1947

Field Edit by: J. D. Weiler date: Feb, 1948

Date of Mean High-Water Line Location (III): January 1947

Projection and Grids ruled by (III) Washington Office date: Sept, 1944

" " " checked by: " " date: Sept. 1944

Control plotted by: E. C. Andrews date: Dec., 1946

Control checked by: M.M. Slavney date: Dec., 1946

Radial Plot by: M.M. Slavney date: 2 Jan., 1947

Detailed by: R. Dossett date: May, 1947

Reviewed in compilation office by: J.A. Giles date: June, 1947

Elevations on Map Manuscript checked by: J.A. Giles date: June, 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 25

Shoreline (More than 200 meters to opposite shore): 21

Shoreline (Less than 200 meters to opposite shore): 9.2

Number of Recoverable Topographic Stations established: 19

Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles: 3.91

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

#1

MAP T-8414 PROJECT NO. CS-312 A SCALE OF MAP 1:20,300 SCALE FACTOR 0.9852216

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
Conch Bar Hill, 1883	Datum Diff. pp.-38	N.A. 1927	26° 59'17.780"			547.2 (1299.4)	539.1 (1280.2)
			80° 05'45.903"			1265.8 (388.7)	1247.1 (383.0)
~~WEINER 2, 1906~~	G.P. pp.746	"	26 58 58.466	Lost		1799.4 (47.2)	1772.8 (46.5)
			80 05 06.133			169.1 (1485.4)	166.6 (1463.4)
NORTH, 1934	G.Pp pp.160	"	26 58 55.117			1696.3 (150.3)	1671.2 (148.1)
		"	80 06 34.622			954.7 (699.8)	940.6 (689.4)
A H 1, 1934 (F.G.S.)	Fla. Geod. Survey	"	959,368.4			2855.5 (192.5)	2813.3 (189.7)
			794,962.4			1512.5 (1535.5)	1490.1 (1512.8)
SHELL 2, 1948 ✓ ~~SHELL, 1929~~	G.P. pp.745	"	~~26 57 43.776~~	Shell, 1929 is destroyed		~~1016.5 (1330.1)~~	~~1001.0 (1311.3)~~
			80 04 40.989			1430.5 (624.3)	1115.8 (516.6)
AH 3, 1934 (F.G.S.)	Fla. Geod. Survey	"	948,768.6			2672.7 (375.3)	2633.2 (369.8)
			793,622.6			1104.2 (1943.8)	1087.9 (1915.1)
JUPITER, ~~LIGHTHOUSE~~ INLET LIGHTHOUSE, CENTER, ~~1934~~	G.P. pp.192	"	26 56 53.733			1653.7 (192.9)	1629.3 (190.0)
			80 04 56.200			1550.2 (104.8)	1527.3 (103.3)
JUPITER, EAST ONE OF TWO RADIO MASTS, 1934	G.P. pp.182	"	26 55 31.295			963.2 (883.4)	949.0 (870.3)
			80 05 55.615			1534.4 (121.0)	1511.7 (119.2)
JUPITER, WEST ONE OF TWO RADIO MASTS, 1934	G.P. pp.182	"	26 55 30.955			952.7 (893.9)	938.6 (880.7)
			80 06 05.552			153.2 (1502.2)	150.9 (1480.0)
BEND, 1929	G.P. pp.133		26 55 43.622			1342.6 (504.1)	1322.8 (496.6)
			80 04 07.343			202.6 (1452.8)	199.6 (1431.3)
AH 5, 1934 (F.G.S.)	Fla. Geod. Survey	"	938,191.8			2496.9 (551.1)	2460.0 (543.0)
			794,901.4			1493.9 (1554.1)	1471.8 (1531.1)
ROAD 2, 1934	G.P. pp.161	"	26 53 46.747			1438.7 (407.9)	1417.4 (401.9)
			80 03 44.532			1228.9 (426.9)	1210.7 (420.6)

1 FT. = .3048006 METER

M-2388-12

COMPUTED BY: M.M. Slavney DATE 11/19/46 CHECKED BY: R.J. Pate DATE 11/19/46

MAP T-8414 PROJECT NO. CS-312 A SCALE OF MAP 1:20,300 SCALE FACTOR 0.9852216

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
ROAD, 1929	G.P. pp.161	N.A. 1927	26° 53' 53.549			1648.1 (198.5)	1623.7 (195.6)
			80 03 32.053			884.5 (771.2)	871.4 (759.8)
JUPITER, 1907	G.P. *	N.A.	26 56 16.776	516.3 (1330.3)	-23.7	492.6 (1354.0)	485.3 (1334.0)
			80 04 14.196	391.6 (1263.6)	± 1.5	393.1 (1262.1)	387.3 (1243.4)
ROCK, 1929	G.P. pp. 159	N.A. 1927	26 58 27.171			836.2 (1010.4)	823.8 (995.5)
			80 04 53.458			1474.2 (180.5)	1452.4 (177.8)
AH-7, 1934 (F.G.S.)	Fla. Geod. Survey	"	935,421.5			1652.5 (1395.5)	1628.1 (1374.9)
			795,012.9			1527.9 (1520.1)	1505.3 (1497.6)
Jupiter, west radio tower, 1929			26 56 53.06			1633.0	
			80 05 01.78			49.1	
Jupiter Inlet Lighthouse, eccentric, 1934			26 - 56 53.798				
			80 04 56.260				
Wilner 3, 1944							
~~Jupiter water tank, 1929~~			~~26 56 53.79~~	Destroyed		1655.5 (191.1)	(188.7)
			~~80 04 54.90~~			1514.4 (140.6)	(138.5)
~~Stuart tower, 1929~~			~~27 53 49.78~~	Destroyed		1501.3 (345.3)	(340.2)
			~~80 05 40.57~~			1119.6 (536.1)	(528.0)
AH 1A, 1934 (F.G.S.)			953,887.2				3830
			797,258.8				7151
AH 1 Az. Mk., 1934 (F.G.S.)							
AH 1B, 1934 (F.G.S.)	* Appendix No. 6 Report for 1911						

1 FT. = .3048006 METER

COMPUTED BY: M.M. Slavney DATE 12/3/46 CHECKED BY: E. C. Andrews DATE 12/5/46

M-2388-12

MAP T-8414 PROJECT NO. CS-3124 SCALE OF MAP SCALE FACTOR

STATION ~~ED 28, 1934 (U.S.E.)~~	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
AH 1D, 1934 (F.G.S.)							
AH 2, 1934 (F.G.S.)							
AH 4, 1934 (F.G.S.)							
AH 4A, 1934 (F.G.S.)							
AH 4C, 1934 (F.G.S.)							
AH 6, 1934 (F.G.S.)							
AH 18, 1934 (F.G.S.)			937,976.1 805,228.1				7,857 5150
AH 19, 1934 (F.G.S.)			936,121.9 802,531.2				6,031 2,493
AH 20, 1934 (F.G.S.)							
Juben, 1934 (F.G.S.)							
N 34, 1934 (F.G.S.)			Station is also a bench mark of the USC&GS				
U.S.E.D. (U.S.E.) 1934 (F.G.S.)							

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

FIELD INSPECTION REPORT
TO ACCOMPANY

QUADRANGLE 8414
JUPITER

PROJECT CS-312-A
26 Feb. 1947

1-DESCRIPTION OF AREA:

This 7½ minute quadrangle lies within Martin and Palm Beach Counties on the East Coast of Florida. It is bounded on the north by Lat. 27°00, on the south, by Lat. 26°52'30", on the west by Long. 80°07'30", and on the east by the Atlantic Ocean. The area contains 25 square statute miles of land. Elevations range from sea level to 68 ft. on the highest sand dune near the north east corner of the quadrangle.

The principal cultural features in this area are the Florida East Coast Railroad, Old Dixie Highway, U.S. Highway No. 1, the Intracoastal Waterway, and Florida State Highway A1A which features run north and south throughout the entire quadrangle length and roughly parallel to the coast.

The Loxahatchee River, in the central part of the quadrangle, made up of the North Fork, West Fork and the Southwest Fork, is the only natural drainage in the area.

The incorporated town of Jupiter falls within the limits of this quadrangle.(see par. 17, Boundary, Monuments and Lines).

The only cultivation of commercial value in this area is a few scattered nurseries along the shore of Loxahatchee River, which grow fern.

The vegetation is composed mostly of pine, palmetto, scattered palms, grass, and mangrove along the edges of the inland tidal waters.

The ridges are covered mostly with spruce pine or slash pine which has no commercial value. The low areas are mostly covered with palmetto, scattered yellow pine, grass and some cypress.

There are many ponds and intermittent ponds in this area. Classification of these should not be difficult with the number of labelled examples given on the photographs.

2-COMPLETENESS OF FIELD INSPECTION:

The field inspection was done in accordance with instructions dated 21 October 1946, and 10 December 1946. A large portion of the inspection was done during planimetric inspection in 1944. The shoreline was re-inspected by C. H. Bishop, Photo Aid, showing his notes in blue ink. The balance was done by Leo F. Beugnet, Eng. Aid. Roads and vegetation were classified on new prints. New houses and buildings were located either on new nine-lens prints, contour prints, or single-lens prints.

A small portion of Camp Murphyextends into this quadrangle on the northern boundary. This was not field inspected as most of the buildings are now being removed, and it is doubtful as to which ones, if any, will remain.

It is recommended that only the road layout be delineated in this particular area until it can be inspected by the field edit party by which time the final disposition of the camp area and its building will have possibly been settled. See paragraph 17, BOUNDARY MONUMENTS AND LINE.

3-INTERPRETATION OF PHOTOGRAPHS:

In most cases, interpretation of the photographs was clear. The color tone varies from black in the deep water and ponds of muck bottoms to white in the sandy spots. Heavy pine areas appear to have a dark steel tone; grass a light gray tone; brush and palmetto a dark or gray tone with mottled texture. Intemittent ponds vary from almost black in the ones with muck botton to a light gray in ones with grass or sandy bottoms. In most cases, ponds have a much more definite outline than do the intermittent ponds.

4-HORIZONTAL CONTROL:

All horizontal control was recovered during the planimetric inspection in 1944, except that noted in paragraph 12, HYDROGRAPHIC CONTROL.

5-VERTICAL CONTROL:

All of the U.S.C. & G.S. bench marks were searched for or recovered during planimetric inspection in 1944. Only those bench marks necessary for vertical control for contouring were recovered during 1947 field work. Nine Bench marks were recovered and used to establish additional vertical control in this quadrangle. Fly level lines were run with a Wye level along the principal roads to give a distributed base for plane table contouring. Temporary bench marks were established at identifiable picture points at about ½ mile intervals and marked either with bottle caps or stakes. All level lines were closed well within the required accuracy and the records carefully checked. All level points are shown on the contour prints with a cross, labelled with the quadrangles designation letter JU and numbered consecutively in blue ink with elevations shown to the nearest tenth.

6-CONTOURS AND DRAINAGE:

The contouring was done in accordance with instructions for this project, on nine-lens photographs 11860, 11861, 11862, and 12143B using standard planetable methods, aided in many cases, for short distances, by pacing and hand leveling. From the northern limits of the quadrangle, between the old Dixie Highway and U.S. Highway No. 1, and extending about one mile south, only 10 ft. contour intervals are shown. This is due to the extreme relief in the dune type terrain, and that the 5 foot interval could not be clearly shown. With the field elevations shown and the use of a good stereoscope, the compiler can accurately delineate the 5 ft. contours.

Attention is called to the southern junction with quadrangle T-8417 at a point on the junction and 3500 feet east of the old Dixie Highway, a 10 ft. depression was over-looked; and at a distance of 7000 feet, a 15 foot contour was overlooked when contouring was done in quadrangle T-8417.

At the southeast corner of the quadrangle, just west of U.S. Highway No. 1, it is to be noted that the contours do not junction perfectly with those of quadrangle T-8417. With the aid of a sterescope it can be seen that the 35 ft. contour, as shown on photograph 11860, is definitely astride the top of the ridge. It is believed that during the compilation of quadrangle T-8417 ~~[illegible]~~ the contours were slightly displaced. — Not during Compilation (See Com. report R.D Tampa

All planetable traverses of three set ups or more were tied back to level points with a closure of 0.5 foot or less.

7-MEAN HIGH-WATER LINE:

The 1944 field inspection of the mean high water line was checked from a boat run close to the shore or by walking along sections of the beach. Additions and corrections were made with blue ink in order to differentiate between the 1944 and 1947 shoreline inspection.

A section of the beach at Jupiter Inlet was located on single lens Photo C 1652 by stadia.

An earth jetty on the west side of the Intracoastal Waterway, 230 meters south of the southwest end of the Florida A1A bridge over the Jupiter River, was located by stadia on single lens Photo C 1652.

8-LOW-WATER LINE:

The 1944 inspection of the low water line on the Atlantic Ocean shore was checked and found to be correct. The low water line in the Intracoastal Waterway is, in general, not more than two meters from the mean high water line. Exceptions were outlined with green ink on the field prints.

9-WHARVES AND SHORELINE STRUCTURES:

There are no shoreline structures on the ocean beach in this quadrangle. Small piers and boat houses along the Intracoastal Waterway and the Loxahatchee and Jupiter Rivers have been delineated on the photographs.

10-DETAILS OFFSHORE FROM HIGH-WATER LINE:

No details requiring further investigation by a hydrographic party were observed.

11-LANDMARKS AND AIDS TO NAVIGATION:

Landmarks and Aids to Navigation were field inspected by Charles H. Bishop, Photogrammetric Aid, and made the subject of a special report, dated February 1947, Project CS-312-A. Filed as Chart Letter # 372(1948) in Div. of Nautical Charts.

12-HYDROGRAPHIC CONTROL:

In the Intracoastal Waterway, Jupiter River and along the Atlantic Ocean beach, enough topographic stations were established along with permanent natural objects, triangulation stations, and U.S.E.D. control, to give a spacing of approximately one mile between recoverable stations. All established topographic stations were submitted on Form 524. Since the accuracy of the U.S.E.D. control is considered less than 3rd order accuracy in this area, these stations have been classified as topographic stations. The U.S.E.D. control in this area is to be re-run by the U.S.E.D. with the intention of raising its order, but it is unkown at this time when this is to be done. Form 524's filed in Division of Photogrammetry General Files.

13-LANDING FIELDS AND AERONAUTICAL AIDS:

No landing fields or aeronautical aids fall within the limits of this quadrangle.

14-ROAD CLASSIFICATION:

All roads were reclassified in accordance with instructions for this project. See review report.

15-BRIDGES:

Bridge clearances were checked and shown on the field print with classification as to type in 1944. These were verified in 1947. See attached bridge data.

16-BUILDING AND STRUCTURES:

The field inspection of 1944 was verified in 1947. All new structures were shown on the new prints of the 9 lens photographs or on the single lens photographs.

17-BOUNDARY MONUMENTS AND LINES:

A very thorough search was made for all section corners in this quadrangle. In cases where section corners were not found, ¼ section corners were searched for. For a description of the boundaries of the incorporated town of Jupiter and the Jupiter Light House Reservation see Special Report on Boundaries. Only two(2) boundary marks were found on the Jupiter Light House Reservation. With these marks and the accompaning blue print it is believed the Reservation can be correctly delineated. To supplement public land markers, there are U.S.E.D. stations set on section lines. Two of these are PRM 300+38.86 USE and PRM 3061+60.85 USE, which were picked on field photographs and form 524 written for each. Also there are 5 U.S.E.D. stations for which the coordinates are known. These are ED14(recovered, not picked); ED18, ED22, ED24, and ED26(not recovered or picked). These stations fall on section lines and should aid materially in tying down section lines on the compilation.

A small portion of Camp Murphy falls within the north central part of the quadrangle and is being dismantled. The land has been turned over to the War Assets Administration, who has turned it over to the Federal Land Bank of Columbia, South Carolina, for disposal, since it has been classified as farm land. Due to these findings, nothing was done to recover the boundary of Camp Murphy Reservation, but this matter should be investigated further by the field edit party by wich time final disposition of the land shall have possibly been settled. This situation was brought to the attention of the Washington office and approval of this proceedure was sanctioned.

The U.S. Coast Guard Loran Station just south of Jupiter is to be dismantled, on or about June 1, 1947. The land is only on a short term lease and therefore, no boundary lines were located. To be certain of the final disposition of this Reservation, it is recommended that the field edit party inspect this site during the field edit of this quadrangle.

17-BOUNDARY MONUMENTS AND LINE:(cont'd)

A thorough investigation and search has been made in this quadrangle to recover section corners. This fact should be kept in mind later when requesting further field work by the field edit party as it is believed that further expenditures towards possible recovery of more corners is unwarranted.

18-GEOGRAPHIC NAMES: 814

See Special Report on Geographic Names, Project CS-312A, by Lowell I. Bass, Eng. Aid, dated July-August 1944. (Filed in Geographic Names Section, Division of Charts)

Leo F. Beugnet

Leo F. Beugnet, Eng. Aid

Charles H. Bishop

Charles H. Bishop, Photo Aid

Approved and Forwarded:

Ross A. Gilmore

Ross A. Gilmore
Chief of Party

* BRIDGE DATA *

QUADRANGLE

NO. T-8414

DATE 11 April 1947

BRIDGE NAME	BRIDGE BOOK PAGE	LAT. LONG	TYPE	SPANS	HOR. CLEARANCE MAXIMUM	NORMAL TO Meas.	NORMAL TO Bridge Book.
Jupiter Sound Bridge	216	26° 57.1 80° 04.6	Swing West	43	53	53	55
Jupiter Bridge on U.S. Highway No. 1	218 & 228	26° 56.9 80° 05.1	B	22	59	58	58
Jupiter Old Highway Bridge	228	27° 00 80° 05.5	B	16	44.5	44.5	45
Jupiter FEC Railroad Bridge	228	27° 00 80° 05.5	B	9	41.5	41.5	40
Jupiter N. Prong Bridge	228	26° 57.4 80° 06.2	Fixed	28	28.5	28.5	30
Overhead Power Line at FEC RR Bridge	not listed	27° 00 80° 05.5	F	1	----	----	----------
Overhead Power Line	not listed	26° 53.5 80 04.5	F	1	------	-----	----------
Overhead Power Line	not listed	26° 57.4 80° 06.2	F	1	------	-----	----------

All measurements in feet
R-right, L-left, C-center, EST,-estimated MHW, T-predicted tide.

VERTICAL CLEARANCE

Measured at center EST, MHW or predicted tide.	High Water Bridge Book	
8.5	8.7	Horizontal clearance difference probably due to new fenders This bridge is known to some extent as Woods Bridge
8.7	6.6	Vertical clearance difference probably due to unknown formula used by U.S.E.D. in measuring arched bridges
6.5	5.3	Vertical clearance difference probably due to unknown formula used by U.S.E.D. in measuring arched bridges
7.4	4.5	Difference in Vertical clearance probably due to inaccurate published information, since the lower surface of this draw is flat and straight across.
9.2	7.4	Difference in Vertical clearance probably due to inaccurate published information, since the lower surface of this draw is flat and straight across.
Est. 51		
Est. 91		
Est. 31		

Jupiter Inlet is closed and has been for about five years, therefore the only fluxuation in water level comes from (1) rain fall, (2) controlled drainage from Lake Okeechobee, (3) prevailing winds.

Inlet open but not navigable in Feb 1948.
See Field Edit sheet.

Note-

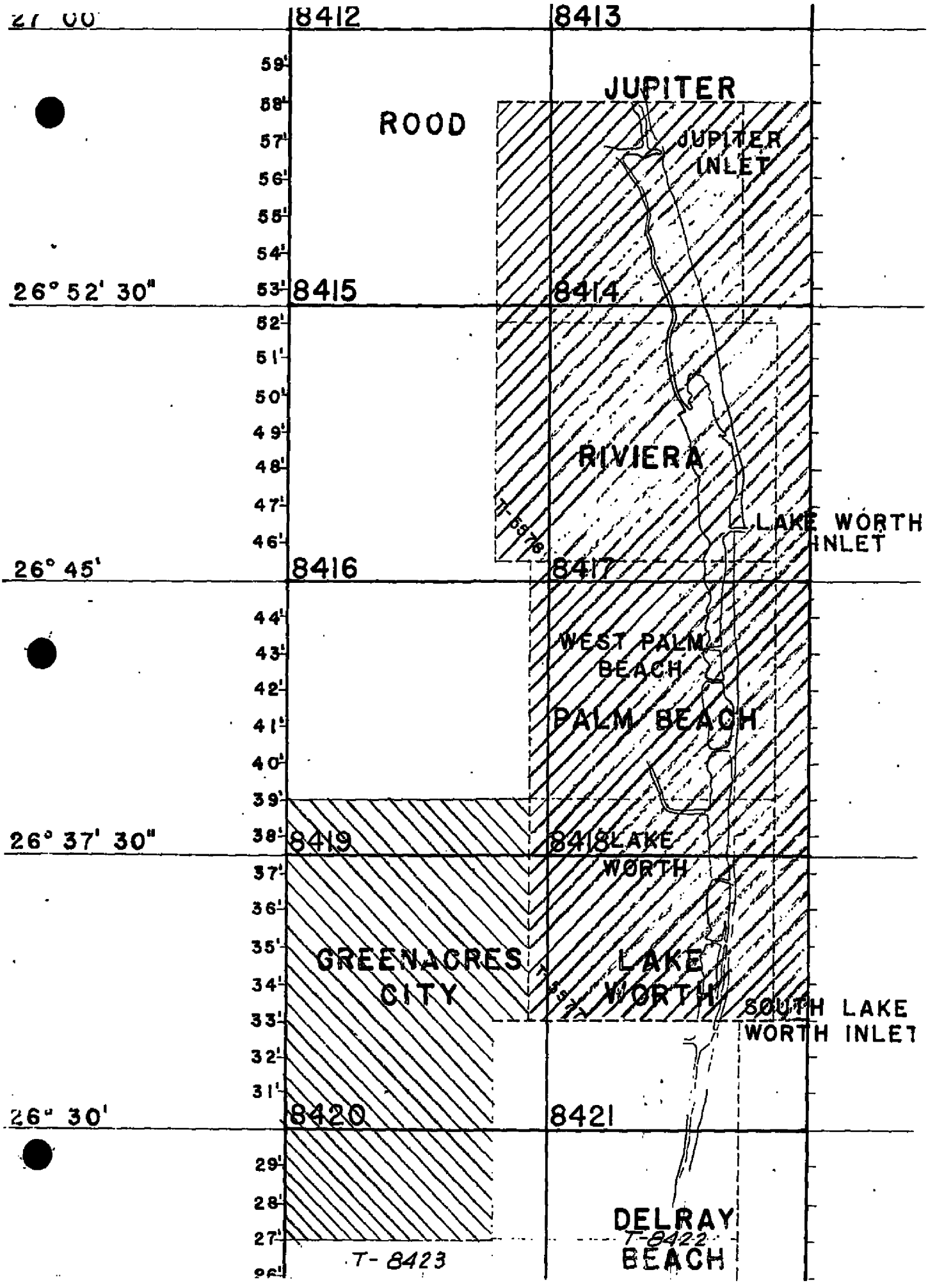
The accompanying report is only for that part of Project CS 312 which has been covered by a Radial Plot of Sheets T-5577 and T-5578 in the old Planimetric Proj. CS 308. The area covered by this report is shown on the accompanying ozalid print by green cross hatching. This plot has been run on the North American 1927 Datum.

The area which has been cross hatched in blue on the accompanying ozalid print has already been radially plotted, and the report will be submitted as a supplement to this report at a later date. For future reference, the area with the blue cross hatching has been radially plotted on the North American Datum as a matter of convenience in effecting a junction with that part of this project which has been done entirely on the North American Datum. However, all of the blue cross hatched area which falls within Quadrangles No. T-8419 and T-8420 has been converted to the North American 1927.

That portion of the blue cross hatching which falls South of Lat. 26°30' will remain on the NA Datum for the sake of uniformity within Sheet No. T-8423.

Bennie H. Lyon

Bennie H. Lyon


27° 00'
8412
8413
59'
58'
57'
56'
55'
54'
53'
ROOD
JUPITER
JUPITER INLET
26° 52' 30"
8415
8414
52'
51'
50'
49'
48'
47'
46'
RIVIERA
T-8426
LAKE WORTH INLET
26° 45'
8416
8417
44'
43'
42'
41'
40'
39'
38'
WEST PALM BEACH
PALM BEACH
26° 37' 30"
8419
8418
LAKE WORTH
37'
36'
35'
34'
33'
32'
31'
GREENACRES CITY
T-8425
LAKE WORTH
SOUTH LAKE WORTH INLET
26° 30'
8420
8421
29'
28'
27'
T-8423
T-8422
DELRAY BEACH

MAIN RADIAL PLOT

Project 308 A (T-5577 and T-5578)

After completing the plot immediately south of this area, comparisons were made with the existing planimetric maps. Considerable discrepancy was noted in the interior areas with respect to the azimuths of roads, ditches, etc., with consequent errors in the geographic position of other detail in these areas. Many man made changes in the terrain had occured which made revision of the old sheets impractical.

For these reasons it was decided that the entire project was to be completely re-mapped. The previous plot (T-5575 and T-5576) had been run on the North American Datum for the sake of convenience in making comparisons with the old planimetric sheets. It was not contemplated that any other sheets should be completed on the North American Datum, therefore the plot for T-5577 and T-5578 has been completed on the North American 1927 Datum.

Scale plots were run for the photographs in this area which proved the average scale to be approximately 1:20,300, therefore projections on this scale were requested.

Upon receipt of these projections, control was carefully plotted and checked by members of the plotting section by use of the beam compass and meter bar method.

Secondary control was picked in a system of quadrilaterals 5 inches on a side. All azimuths were put on the photographs by means of the stereoscope and radial linermethod.

The photographs used for this plot were printed on unmounted positive paper therefore it was necessary to eliminate the effect of paper distortion. This was accomplished by use of the metal distortion template furnished for that purpose.

A regular discussion for the radial plot follows.

(A) DENSITY

There were 67 control stations within the limits of the plot. These points were well distributed and it is believed that the result has been a very strong plot.

IDENTIFICATION

Twenty-eight field inspection points were used and very good ties were obtained for the remainder of the control. Some natural objects were used, therefore, identification has been excellent.

(B) PHOTOGRAPHS

Twenty Five nine lens photographs were used for the plot and the coverage was adequate, both from a standpoint of radial plotting and for detailing.

Close examination was made of each photograph for possible discrepancies along chamber junctions, very few cases were encountered and those which were found were indicated for the use of the compiler.

During the process of drawing azimuths on the photographs by use of stereoscope and radial liners, close inspection revealed that no tilt sufficient to cause discernable errors in radial displacement was present.

When the plot was in the process of completion, particular note was made of the fact that, although some tilt was indicated by the location of tick marks in relation to intersections, no difficulty was encountered in achieving excellent intersections.

(C) Closures and Adjustments

The usual procedure was followed in laying templates. Those with the strongest fixes were laid first, then followed by progressively laying templates with weaker fixes.

All azimuths to adjacent centers were held, and excellent intersections were obtained throughout.

(D) AREAS OF QUESTIONABLE ACCURACY

It is believed that all parts of this plot fall within the allowable limits of accuracy.

(E) GENERAL

Secondary control was shown with double blue circles of 2.8 and 1.5 millimeters radius. Centers were shown with double blue circles of 4.0 and 2.8 millimeter radius, while additional or detailing control points were indicated by 2.0 millimeter blue circles. Approximately 80% of the additional control was cut in by members of the plotting section. The sheets were then released to the draftsman with the instructions that any additional control should be shown with a 2.0 millimeter circle of purple ink.

Respectfully submitted,

Bennie H. Lyon

Bennie H. Lyon,
Asst. Photogrammetric Engr.

Approved by:

J. C. Bose

J. C. Bose,
Chief of Party.

COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE "JUPITER" NO. T-8414

26 AND 27. CONTROL AND RADIAL PLOT:

A special report for northern piece of T-8414 prepared by M. M. Slavney, Photogrammetric Engineer, has been submitted with the compilation report for T-8413. A special report on the radial plot for the southern piece of T-8414 is in the File Section, Div. of Photogrammetry.

28. DELINEATION:

Both nine lens and single lens photographs were available for the delineation of this Map Manuscript. The single lens photographs were used only where new details appeared which were not on the earlier dated 9-lens photographs. Very little change of shoreline was noted since the field inspection of August 1944. The greatest change of shoreline was at Jupiter Inlet. This was noted by the field inspector on the 1945 single lens photographs and the compiler has delineated it accordingly.

The north two minutes of this Map Manuscript have been compiled on a new cellulose acetate projection covering the entire quadrangle while the south 5½ minutes are a part of the old planimetric sheet No. T-5578, compiled in 1944 and held in abeyance for revision according to instructions for this project.

In revising the old planimetric part of this Map Manuscript the compiler found the delineation of shoreline and cultural features sufficiently correct (except for minor changes noted by the latest field inspection) for submission as a part of the quadrangle. The woodland areas in black dashed lines were generally correct and the compiler has not reoutlined these areas in green scalloped lines; but, has labeled them in green acetate ink according to the latest field inspection notes. Further attention is called to the labeling of woodland areas. These areas have been labeled as shown by the field inspector who combined the symbols in the form of "S & B" or "W & B". The compiler has left the final interpretation of this type of field notes to the discretion of the Washington Office. In areas where the double label occurred an examination of the photographs gave the compiler no substantial or conclusive information as to which form of vegetation was predominant.

29. SUPPLEMENTAL DATA:

No supplemental data was used.

30. MEAN HIGH WATER LINE:

The mean high water line has been shown according to field inspection notes.

31. LOW WATER AND SHOAL LINES:

Shown according to field inspection notes.

32. DETAILS OFFSHORE FROM THE HIGH WATER LINES:

None recovered (Rocks along the high water line have been delineated approximately.)

33. WHARVES AND SHORELINE STRUCTURES:

There are no outstanding shoreline structures. Small docks, piers or boat slips indicated by the field inspections have been delineated.

34. LANDMARKS AND AIDS TO NAVIGATION:

A special report on landmarks is being submitted by the field party but has not been received by this office. See paragraph No. 11, Field Inspection Report. Any landmarks recovered in this quadrangle will be reported at the time of the Field Edit. ✓

The non-floating aids to navigation have been located on the Map Manuscript by radial plot and are being submitted on forms No. 524.

35. HYDROGRAPHIC CONTROL:

All hydrographic control recovered by the field inspection has been shown.

Three U.S.E.D. Stations, ED-14, ED-17, ED-28 were plotted on the sheet from X and Y coordinates. They have been shown with a black 2mm circle and a scaled position submitted. See paragraph No. 12 of Field Inspection Report.

The field editor has been requested to check the accuracy of the geographic positions of the foregoing stations. *See field edit report.*

36. LANDING FIELDS AND AERONAUTICAL AIDS:

No landing fields or aeronautical aids fall within the limits of this quadrangle.

37. BRIDGES:

The bridges falling within the limits of this quadrangle have been shown according to the field inspection. See Bridge Data submitted with the Field Inspection Report. Attached to this report.

38. OVERHEAD WIRES:

The overhead wires are listed with the Bridge Data submitted by the Field Party. Attention is called to the geographic positions as listed which do not conform to the actual positions as shown on the Map Manuscript.

One overhead power line crossing the second waterway opposite triangulation station Jupiter, 1907 was not listed.

39. SECTION LINES:

Section lines have been shown on the front of the manuscript in red pencil. They will be inked after field edit.

A combination of General Land Office Plats of the State of Florida were used in constructing the section lines for this quadrangle.

A sufficient number of section corners were recovered in the northern and western part of the quadrangle to insure control for the plotting in these areas. In the southwestern portion of the quadrangle, however, some difficulty was encountered in making the recovered section corners agree with the Land Office Plats. An ozalid print with section lines inked in red is being furnished with discrepancies or points that should be checked noted thereon. It is requested that the field edit party check these.

40. CONTOURING:

Attention is called to the contouring at the junction of this Map Manuscript with that of T-8417. See Field Edit report and Review report.

When T-8417 was being compiled in this office certain obvious errors in the contouring were noted by the compiler. A close examination indicated that these errors were of an extensive nature, covering a large area of the Map Manuscript. As a consequence of this the field photographs were returned to the field party for corrective survey. Subsequent re-contouring by Mr. J. K. Wilson corroborated this conclusion.

This re-surveying of contouring, however, did not cover the northeast corner of the quadrangle and a comparison of the contouring in that area with the contouring of this quadrangle (T-8414) indicates that there was some error in position there.

It has been requested, on the discrepancy overlay, that the Washington Office correct the contours on T-8417 to conform to those of T-8414 if possible; otherwise, send ozalid print of T-8417 to field editor.

See paragraph No. 6 of the Field Inspection Report for further information.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

No topographic quadrangle of this area was available for a comparison.

45. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with U. S. Coast and Geodetic Survey Nautical Chart number 846 bearing print date 1 December, 1945. No changes were noted.

Respectfully submitted,

Rudolph Dossett
Photogrammetric Aid.

Approved and Forwarded:

George E. Morris, Jr.
Chief of Party.

FIELD EDIT REPORT

QUADRANGLE T-8414

"JUPITER"

PROJECT CS-312-A

The field edit of this quadrangle was completed during February 1948 by John D. Weiler, Photogrammetrist.

46. METHODS

In field editing the map manuscript, all roads were traversed by truck. The shoreline and aids to navigation along the Intracoastal Waterway were checked by small boat. The shoreline along the Atlantic Ocean, and Loxahatchee River was checked by truck.

All data added to the map manuscript were either plotted from topographic features, or cut in by planetable methods.

47. ADEQUACY OF THE MAP MANUSCRIPT

In general, the map manuscript was well compiled. Most of the details added to the map manuscript were either construction since the date of the original field inspection or corrections to the original field work.

Attention is called to the following items that might not be easily interpreted from notes on the field edit sheet:

All roads were reclassified according to Photogrammetry Instructions No.10 and amendment dated 24 October 1947.

"Camp Murphy" has been acquired by the State of Florida as a Park and Game Refuge, and the boundary slightly altered. The Park boundary has been added to the field edit sheet. See report for quadrangle T-8412 relative to the Park name.

The U. S. Navy Marine Base on the north side of the Jupiter River is not in operation, but still in its original status. Since immediate disposal does not seem likely, it should be shown as designated. The aero light on the north radio beacon is not operating. } destroyed. See Chart Letter #16 (1948).

The U. S. Navy Marine Radio Station has been turned back to the original owner and the towers dismantled. It should be deleted from the map manuscript. Form 567 relative to the radio towers is included with this report.

The location of a new underground telephone cable has been shown, where it does not parallel a road.

* The contouring in the Camp Murphy area was checked and is not, in all cases, within the limits of accuracy. Topographic sheets of this area, prepared for the Army Engineers, were submitted to the Tampa Photogrammetric Office on 10 March 1948 for pantographing to the scale of the map manuscript. These pantographed sheets should be projected onto the map manuscript, and areas of greatest discrepancy changed to conform with the U.S.E.D. sheets.

Has been corrected - within limits of accuracy See Supplementary Compilation Report.

The discrepancy overlay asked for the correction of the contour match to T-8417 along the coastal ridge. During the course of this check it was discovered that contouring on T-8417 and T-8414 at this point was very poorly done and outside of accuracy standards. This contouring has been done on contact photographs Nos. 45 C 1650 and 45 C 1649 and the map manuscripts of both quadrangles should be corrected accordingly.

See Review Report

During the course of edit, triangulation station SHELL, 1929 was found destroyed, but the sub-surface mark intact. Since it was not practical to reset the surface mark in its original location, a new sub-surface and surface mark were reset aline with Jupiter Light and stamped SHELL 2, 1948. Field records have been transmitted directly to the Washington Office.

The call letters of Radio Station "WRM", just south of Jupiter, have been added to the field edit sheet.

The three U.S.E.D. stations mentioned in item 35 of the compilation report were checked and found to be geographically correct, within the limits of photogrammetric identification.

* see next sheet

48. VERTICAL ACCURACY TEST

No vertical accuracy test was specified for this quadrangle; however, the re-contouring noted under item 47 serves as a check. See Report for T-8413 for results of test of U.S. Engineers Survey in "Camp Murphy area.

49. PUBLIC LAND LINES

Notations relative to section lines have been made directly on the section line discrepancy print, from information obtained from the Palm Beach County Engineers Office. These notes are self explanatory.

The map manuscript was reviewed by D. W. Van Vleck, engineer and surveyor residing at Jupiter, for 35 years. He could find no errors.

Submitted by:

John D. Weiler

John D. Weiler
Photogrammetrist

SUPERVISED:

William A. Rasure

William A. Rasure
Photogrammetric Engineer

APPROVED AND FORWARDED:

Ross A. Gilmore

Ross A. Gilmore
Chief of Party

* Para. 47 – It is believed the topographer may have placed too much emphasis and confidence in stereoscopic interpretation and not enough time on original field contouring. This is a particularly uneven dune-like area and difficult to contour without spending a great deal of field time. RAG

Form 567
April 1945

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

~~NONFLOATING AIDS OR~~ LANDMARKS FOR CHARTS

~~TO BE CHARTED~~
TO BE DELETED
STRIKE OUT ONE

Vero Beach, Florida   10 February, 1948

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be ~~(charted)~~ on (deleted from) the charts indicated.
The positions given have been checked after listing by Joseph K. Wilson

Ross A. Gilmore
Chief of Party

STATE FLORIDA

CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE ° '	LATITUDE D.M. METERS	LONGITUDE ° '	LONGITUDE D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
Radio Mast (SE of Four)	Coast Guard, red and white, 112 feet high		26 55.6		80 04.5		NA 1927	T-8414 Visual	Feb. 1948		x	x	846 1247

This form shall be prepared in accordance with Hydrographic Manual pages 800 to 804. Positions of charted landmarks and ...

SUPPLEMENTARY COMPILATION REPORT
TO
ACCOMPANY T-6433 AND T-6434

CONTINUED:

This office was furnished (by the field editor) six topographic sheets of the Camp Murphy Area having a one-foot contour interval. (see Field Edit Report). A pantographic reduction of these sheets was made to a scale of 1: 20,000 with a 5-foot contour interval and then applied to the map manuscripts.

The map manuscripts were returned to the field editor for further edit and corrections in areas of new development. Such areas were corrected and applied directly to the map manuscript.

Respectfully submitted,

Rudolph Dorsett
Cartographer (Photo).

Approved and Forwarded,

Chas A. Gilmore

Chas A. Gilmore
Lieut. Comdr. USC&GS
Chief of Party.

T-8414

P. O. Box 1445
Vero Beach, Florida

8 March 1948

To: Officer In Charge
Tampa Photogrammetric Office
U. S. Coast and Geodetic Survey
P. O. Box 1689
Tampa, Florida

Subject: Contours, Camp Murphy Area, Quadrangles T-8413 and T-8414

During field edit of the subject area, the contouring was found, in many instances, to be outside of the allowable error. This condition is apparently due to the rough, broken nature of the terrain, and the scale employed; whereas, a small error in horizontal position would make a great difference in vertical accuracy. It was noted, under stereoscopic review, that a number of contours were horizontally displaced from their true position.

During the course of checking this topography, contour maps of a one foot interval were found, covering the entire Camp Murphy Area. A visual check in the field indicated that these contours were of a much greater accuracy than ours.

This work consists of 6 sheets on a scale of 1 to 2400. A vertical accuracy test was run on each sheet and gave very good results. Resultant profile elevations from these accuracy tests are shown in red ink on the sheets.

It is suggested that the Tampa Photogrammetric Office pantograph these sheets to the scale of the map manuscript and correct the areas of greatest discrepancy. Upon completion of this, an ozalid print of the corrected map manuscript should be furnished the field party for subsequent re-examination.

Areas in error, falling outside the coverage of these sheets, have been corrected on the photographs and will be covered in the field edit report.

George E. Morris, Jr.
Lt. Comdr. U.S.C.& G.S.
Chief of Party

JDW/c

cc: Chief, Division of Photogrammetry

C
O
P
Y/rb/3-12-48

GEOGRAPHIC NAMES

Survey No. T-8414

JUPITER, Fla., 7½' quad.

1 Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Florida									USGB	1
Palm Beach County										2
Martin County										3
Atlantic Ocean										4
Intracoastal Waterway									USGB	5
Florida East Coast										6
U.S. No. 1										7
State No. AlA										8
										9
Frenchmans Creek										10
Loxahatchee Slough	(name reported as OK, but deleted: position shown agrees with names report)									11
										12
Lake Worth Creek										13
Jupiter										14
West Jupiter School									?	15
Peoples Congregational Church										16
Jupiter Inlet										17
Jupiter River										18
U.S. Navy Marine Base										19
Jupiter Bridge		(US No. 1)								20
Jupiter Sound Bridge		(State AlA to Jupiter Island)								21
Loxahatchee River										22
North Fork Loxahatchee River										23
Northwest Fork Loxahatchee River										24
Southwest Fork Loxahatchee River										25
Jupiter Sound										26
Hell Gate										27

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GEOGRAPHIC NAMES

Survey No. T-8414

2

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Conch Bar										1
Blowing Rocks (apparently a new name)										2
Jupiter State Park										3
Jupiter Island										4
Gomez Grant										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
					Names underlined in red are approved. 7/27/48 L. Heck					15
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DIVISION OF PHOTOGRAMMETRY
Review Report of
Topographic Map Manuscript T-8414

Subject numbers not listed in this report have been adequately covered in other parts of the Descriptive Report.

26 Control

All horizontal control stations of third order accuracy or better have been listed on Form M-2388-12 included in this report. Some of the Florida Geodetic Stations have not been shown on the map manuscript because of their proximity to other stations.

28 Detailing

During review, the "Low Ground" classification has been removed from the map manuscript and such areas reclassified as brush or marsh. This will make T-8414 consistent with other quadrangles in this vicinity.

The roads on T-8414 were reclassified during field edit according to the latest instructions, dated 14 April 1947. These classifications will not agree with those on map manuscript T-8417 which joins it at the south.

The recontouring described in paragraph 4, page 2 of the Field Edit Report has been applied to the manuscript. The corrections to be applied to T-8417 were drawn on an acetate correction sheet and sent to the Geological Survey for application to the drawings since the manuscript already had been finished for drafting and publication.

34 Landmarks and Aids to Navigation

Form 567 was submitted by the Field Editor for deletion of a radio mast from the charts. The original is filed as Chart Letter # 293 (1948) in the Division of Charts. A photostatic copy follows the Field Edit Report.

43 Comparison with Previous Surveys

In common areas, this survey supersedes:

T-1640	(1883)	1:20,000	T-4457A	(1930)	1:20,000
T-1649	(1883)	1:40,000	T-4458A	(1930)	1:20,000

45 Comparison with Nautical Chart

No. 846 4/26/48 1:40,000 - Some submarine cable areas and overhead cables are not shown on the chart. This survey should be applied to the chart when it is reconstructed.

48 Accuracy

This map complies with National Map Accuracy Standards.

49 Overlay

An overlay has been prepared showing control, spot elevations, road classifications, etc., and the new format for quadrangles. This map will be edited and published by the Geological Survey.

50 Application to Nautical Charts

This survey has not been applied to nautical charts prior to review.

Reviewed by:

Jack L Rihn

Jack L. Rihn 17 Aug. 1948
Cartographer

Under the direction of:

L. V. Griffith

Chief, Review Section L.V.G. 12/24/48

Approved by:

B.J. Jones 1/47

Technical Asst. to the Chief,
Division of Photogrammetry

H.R. Edmonston

Chief, Nautical Chart Branch
Division of Charts

K.T. Adams

Chief, Div. of Photogrammetry

C. I. T. Allen

Chief, Div. of Coastal Surveys 1/4/49