

## Exhibit 13

### Radio Training Network Inc.

P O Box 7217

Lakeland, Fl 33807-7217

### W254AI

ComStudy 2.2 search of channel 254 (98.7 MHz Class D)  
at 28-00-50.9 N, 81-45-00.7 W. 250 Watts ERP

CALL	CITY	ST	CHN	CL	DIST	SEP	BRNG	CLEARANCE
W254AI	AUBURNDALE	FL	254	D	10.44	0.00	318.7	-63.33 dB*
W254AI	AUBURNDALE	FL	254	D	1.42	0.00	207.7	-25.92 dB**
WWRZ	FORT MEADE	FL	252	C2	21.27	0.00	212.7	-19.25 dB***
WWRZ	FORT MEADE	FL	252	C2	21.27	0.00	212.7	-18.84 dB***
WMMO	ORLANDO	FL	255	C2	68.17	0.00	24.3	1.36 dB
WHFS-FM	HOLMES BEACH	FL	254	C2	106.47	0.00	259.9	6.28 dB
WMMO	ORLANDO	FL	255	C2	68.17	0.00	24.3	8.18 dB
WHFS-FM	HOLMES BEACH	FL	254	C2	106.47	0.00	259.9	9.42 dB
WWOJ	AVON PARK	FL	256	C3	59.79	0.00	158.9	9.65 dB
WHFS-FM	HOLMES BEACH	FL	254	C2	106.47	0.00	259.9	19.67 dB
NEW	ORLANDO	FL	253	LP100	59.94	13.00	32.5	21.17 dB
WKGR	WELLINGTON	FL	254	C1	190.04	0.00	125.0	22.04 dB
NEW	ORLANDO	FL	253	LP100	62.91	13.00	26.0	22.14 dB
WLRQ-FM	COCOA	FL	257	C2	107.16	0.00	73.8	22.59 dB
WKGR	FORT PIERCE	FL	254	C1	190.04	0.00	125.0	23.79 dB
WMMO	ORLANDO	FL	255	C2	67.41	0.00	28.0	24.92 dB
WNUE-FM	DELTONA	FL	251	C2	114.48	0.00	35.4	24.92 dB

\*Licensed Facility for this application.

\*\*Current CP for W254AI.

\*\*\*See attached Waiver Request showing no predicted interference to WWRZ.

## **Exhibit 13**

### **Radio Training Network Inc.**

P O Box 7217  
Lakeland, FL 33807-7217

### **WAIVER REQUEST, SECTION 74.1204**

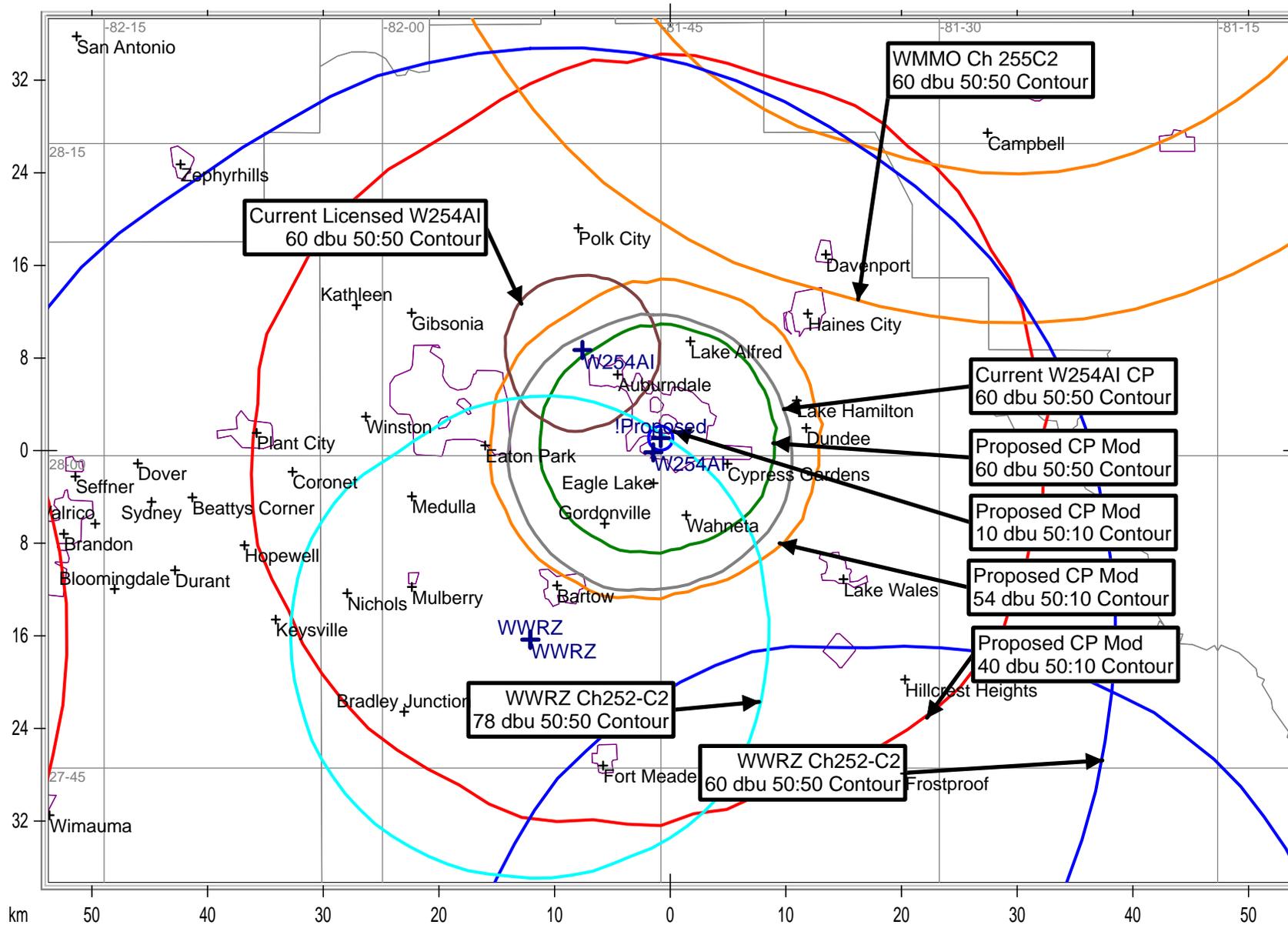
The proposed FM translator is located within the protected 60dbu contour of station, WWRZ on Second adjacent channel 252C2, Fort Meade, FL. The predicted F (50-50) field strength of WWRZ at the proposed translator site is 78 dbu or greater. Therefore, the respective interfering contour generated by the proposed FM Translator site is 118 dbu and extends 140 meters from the transmit antenna in the horizontal plane. Radio Training Network Inc. proposes to use a 2 bay  $\frac{3}{4}$  wave spaced transmit antenna 59 Meters above ground level to reduce signal level below the horizon. Due to the downward radiation pattern of the antenna, the 118 dbu interfering contour does not reach the ground or any likely receiver locations. Attached is a spreadsheet showing the predicted signal level of 113.8 dbu on the ground and less than 114 dbu at a safety plane 6 meters above ground level.

The area surrounding the proposed translator site is residential and industrial in nature with the tallest buildings 2 stories tall or about 6 meters. See the attached aerial photo provided by the U.S. Geological Survey's National Aerial Photography Program and Topo Map included to show the nature of the buildings in the area.

Therefore, Radio Training Network Inc. Respectfully requests a waiver of C.F.R 74.1204 based on no population within the area of predicted interference.

Should any actual interference occur, then Radio Training Network, Inc. will promptly suspend operation of this translator in accordance with 47 C.F.R. 74.1203.

# W254AI CP Mod



# RADIO TRAINING NETWORK

W254AI

Radio Training Network, Inc proposes to use a SWR FMEC/2 0.75 wave space antenna to reduce signal levels at the ground near the tower. This work sheet shows expected signal levels on the ground and at a safety plane 6 meters AGL. Distances and signal levels are computed for every 5 degrees below horizontal at antenna center of radiation. This safety plane is based on the highest likely receiver elevation AGL. Distance from Antenna is also computed to the intercept of the safety plane or ground level and a line from the antenna center of radiation.

**0.250 Kilowatts ERP**

**Antenna Make: SWR**

**59 Meters AGL to Radiation Center**

**Antenna Model: FMEC2-75**

**6 Meters AGL of Highest Receiver ( Safety Plane)**

**118 dbu Interfering contour**

Angle Below Horizontal	Antenna Rel. Field	ERP Kwatts	ERP DbK	Distance from Antenna to Interfering	Dist.From Ant. to Safety Plane	Field Strength In dbu at Safety Plane	Dist.From Ant. to Ground Level	Field Strength In Dbu at Ground Level
0	1.000	0.2500	-6.02	140 m	INF m		INF	
5	0.976	0.2381	-6.23	136 m	608.1 m	<b>105.0 dbu</b>	676.9 m	104.1 dbu
10	0.905	0.2048	-6.89	126 m	305.2 m	<b>110.3 dbu</b>	339.8 m	109.4 dbu
15	0.795	0.1580	-8.01	111 m	204.8 m	<b>112.7 dbu</b>	228.0 m	111.7 dbu
20	0.655	0.1073	-9.70	91 m	155.0 m	<b>113.4 dbu</b>	172.5 m	112.5 dbu
25	0.498	0.0620	-12.08	70 m	125.4 m	<b>112.9 dbu</b>	139.6 m	111.9 dbu
30	0.337	0.0284	-15.47	47 m	106.0 m	<b>110.9 dbu</b>	118.0 m	110.0 dbu
35	0.174	0.0076	-21.21	24 m	92.4 m	<b>106.4 dbu</b>	102.9 m	105.5 dbu
40	0.044	0.0005	-33.15	6 m	82.5 m	<b>95.4 dbu</b>	91.8 m	94.5 dbu
45	0.070	0.0012	-29.12	10 m	75.0 m	<b>100.3 dbu</b>	83.4 m	99.4 dbu
50	0.157	0.0062	-22.10	22 m	69.2 m	<b>108.0 dbu</b>	77.0 m	107.1 dbu
55	0.217	0.0118	-19.29	30 m	64.7 m	<b>111.4 dbu</b>	72.0 m	110.5 dbu
60	0.249	0.0155	-18.10	35 m	61.2 m	<b>113.1 dbu</b>	68.1 m	112.2 dbu
65	0.257	0.0165	-17.82	36 m	58.5 m	<b>113.8 dbu</b>	65.1 m	112.8 dbu
70	0.245	0.0150	-18.24	34 m	56.4 m	<b>113.7 dbu</b>	62.8 m	112.7 dbu
75	0.216	0.0117	-19.33	30 m	54.9 m	<b>112.8 dbu</b>	61.1 m	111.9 dbu
80	0.175	0.0077	-21.16	24 m	53.8 m	<b>111.1 dbu</b>	59.9 m	110.2 dbu
85	0.125	0.0039	-24.08	17 m	53.2 m	<b>108.3 dbu</b>	59.2 m	107.4 dbu
90	0.071	0.0013	-29.00	10 m	53.0 m	<b>103.4 dbu</b>	59.0 m	102.5 dbu

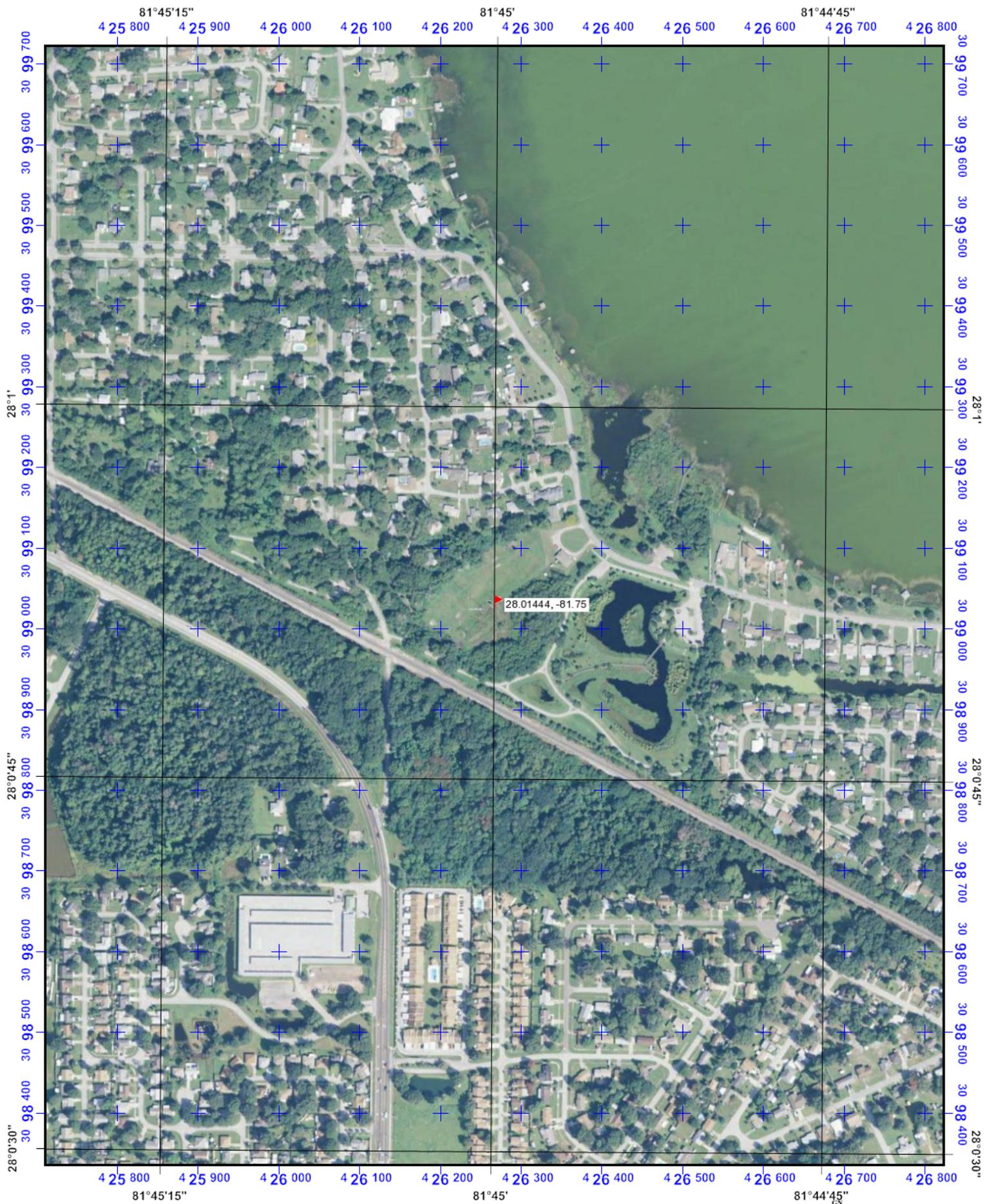
Formulas used

Distance to Contour =

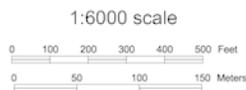
Field Strength=

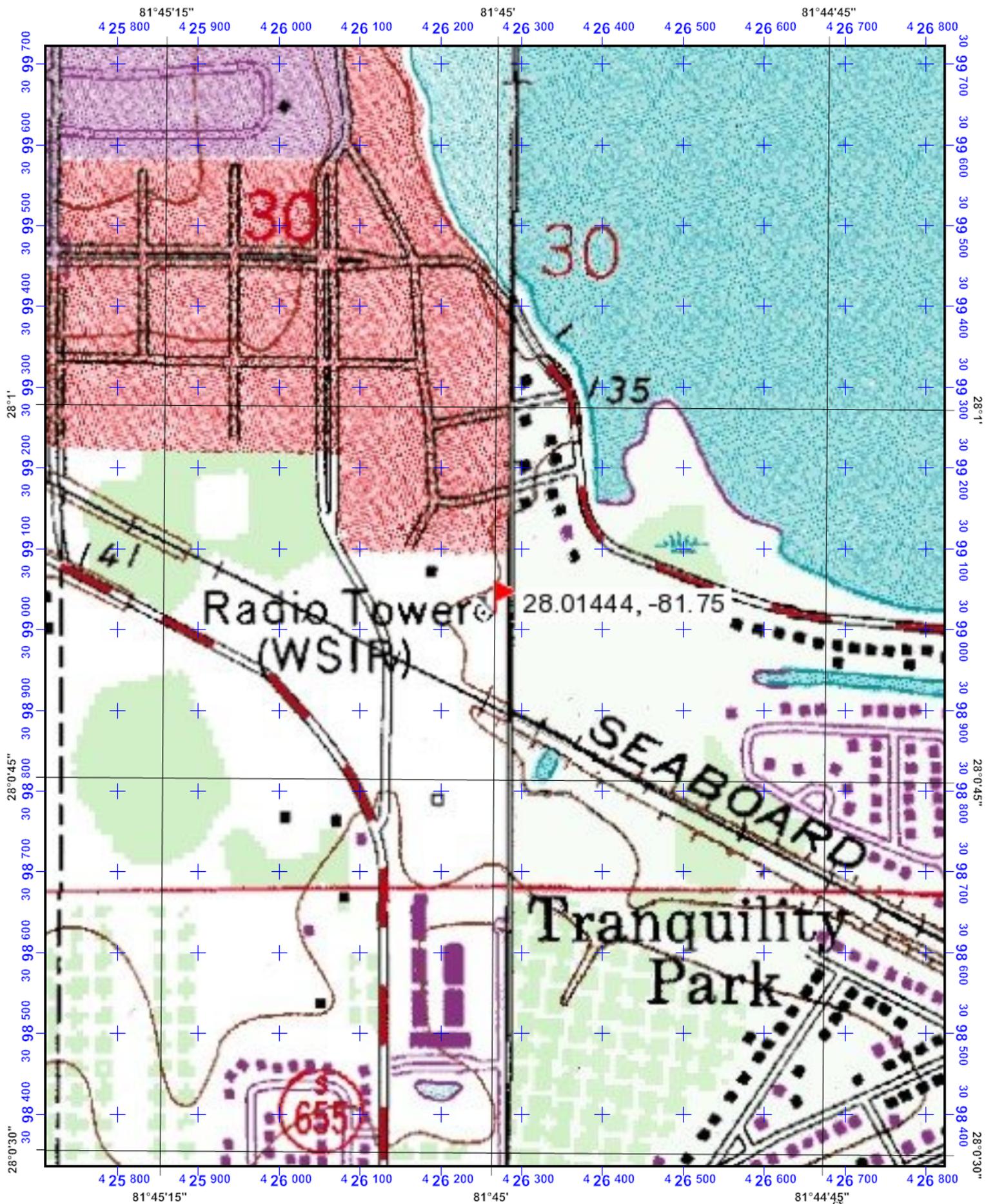
$(10^{((106.92 - [\text{desiredDbu}] + [\text{ERPInDbK}]) / 20)) * 1000}$

$106.92 - (20 * (\text{LOG}([\text{DistKm} / 1000])) + ([\text{ERPInDbK}]))$

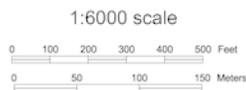


Universal Transverse Mercator (UTM) Projection Zone 17  
 North American Datum of 1983  
 100 meter UTM / USNG / MGRS  
 Grid Zone Designation: 17R  
 100,000-m Squares:ML





Universal Transverse Mercator (UTM) Projection Zone 17  
 North American Datum of 1983  
 100 meter UTM / USNG / MGRS  
 Grid Zone Designation: 17R  
 100,000-m Squares: ML



Magnetic declination of 5W at center of map  
 on March 17, 2011