Engineering Statement in support of
FCC FORM 349
APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES IN AN FM TRANSLATOR OR FM BOOSTER STATION
(For a New FM Translator)

This is a minor change to an existing application by Circuitwerkes, Inc. (the Applicant) for a new FM Translator serving the community of Lake City, FL. The facility call sign is W238BW and the facility ID is 158581.

The proposed W238BW facility will be moved to an existing, grounded-base tower approximately 6km from the presently authorized site. The proposed site is within the predicted 60dBu service contour of the authorized W238BW facility.

The proposed facility is in compliance with 47 C.F.R. Section 1.1306 with regards to radio-frequency electromagnetic exposure in that the contribution to the rf environment is less than 5% of the maximum public exposure. The tower is located on a private island, in the middle of a large lake. There are no dwellings on the island. The only access to the island is via a 120 meter long boardwalk. Access to the boardwalk is secured by a gate. The public does not have access to the island.

This application was prepared using FCC 30-arc-second terrain data.

This translator will operate as a fill-in facility for WNFB, licensed to Lake City, Florida. The maximum ERP is therefore limited by interference and the WNFB 1mV contour. Attached as Exhibit 1 is a color coded map showing the protected contours and interfering contours of all relevant FM facilities.

The proposal is collocated with WDSR, an AM station. The WDSR tower is a folded unipole with a grounded base and multiple tenants, both broadcast and non-broadcast.

The proposal is sufficiently distant from all facilities mentioned in 73.1030(a), (b) & (c) so that notification under 73.1030 is not required.

Kyle Magrill, President/applicant
PG-7T-6155
09 July 2011

CircuitWerkes, Inc.
2805 NW 6th Street
Gainesville, FL 32609
352-335-6555

Section VII Engineering Data:
Tech Box Data:

1. Channel: **238**

2.Primary Station: **FID: 2877**
WNFB
Lake City, FL
Channel 232

3. Delivery Method: **Direct**

4. Antenna Location Coordinates: (NAD27):
30° 09' 20" N
82° 38' 14" W

5. Antenna Structure Registration: **1031340**

6. Antenna Location Site Elevation Above Mean Sea Level: **30 meters**

7. Overall Tower Height Above Ground Level: **122 meters**

8. Height of Radiation Center Above Ground Level: **10 meters (H) AGL**
10 meters (V) AGL

9. ERP:
0.010 kW (H)
0.010 kW (V)

10. Transmitting Antenna: **Nondirectional**

11. Fill-in Translator: **Yes** (see Exhibit 10)

12. Interference: **Yes**
a)Section 74.1204, **Checked**. See Exhibit 12, Stations and Authorizations requiring investigation.
b)Section 74.1205, **Not Checked**.

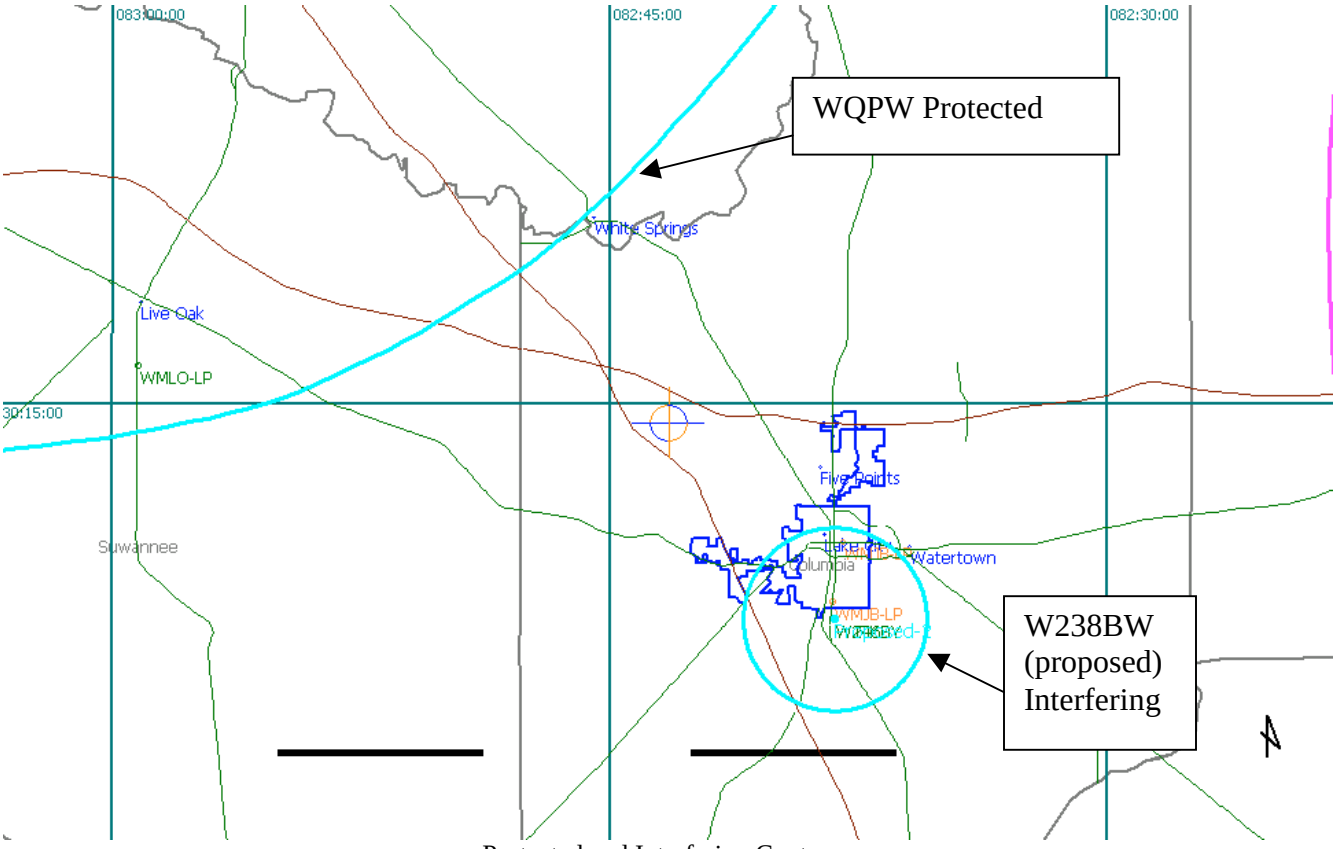
13. Unattended operation: **Yes**

14. Multiple Translators: **Yes**

15. NEPA: **Yes**. This proposal is excluded from environmental processing: The modeled rf at the base of the tower is 2.5uW/cm2 which is less than 0.5% of the maximum public exposure level.

Exhibit 12a

Stations and Authorizations Requiring Investigation



Protected and Interfering Contours

Contours are color-coded so that prohibited overlap is indicated by LIKE color contours overlapping.

Exhibit 1

1mV Service Contour overlap with authorized W238BW site

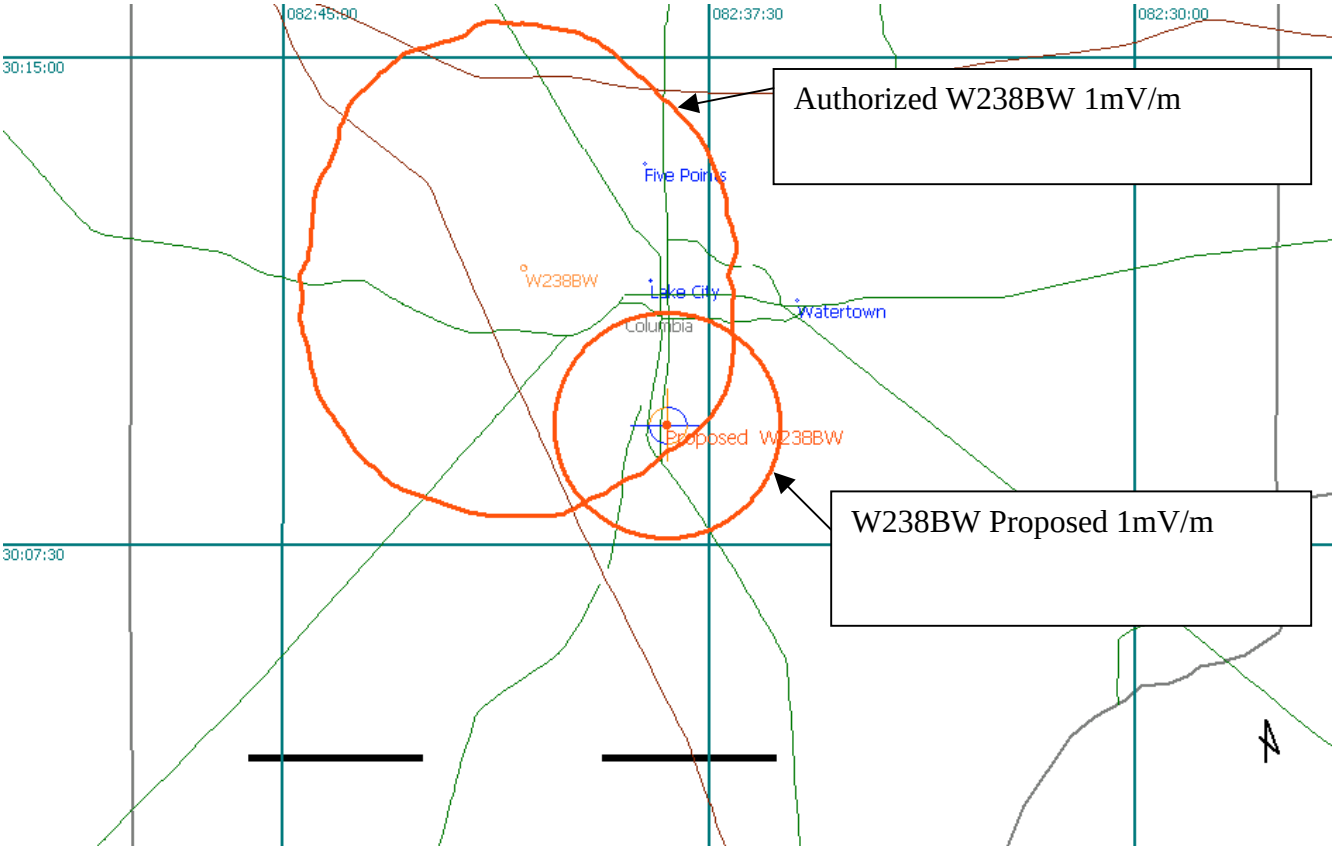


Exhibit 10

WNFB 1mV Service Contour overlap with W238BW 1mV Service Contour