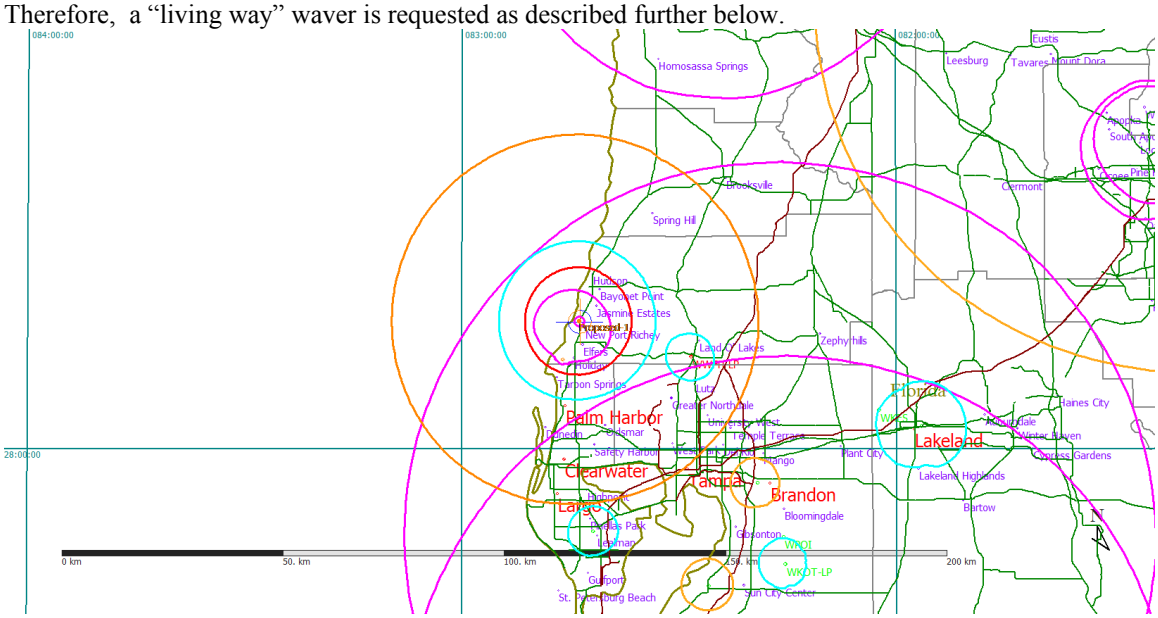
BARRY MAGRILL, PE WB4EZG@YAHOO.COM (352) 575-4499
2805 NW 6TH STREET, GNV, FL 32609 FL REG 45305

Engineering Report (EE-1): Engineering Statement in support of FCC FORM 349

APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES IN AN FM TRANSLATOR OR FM BOOSTER STATION

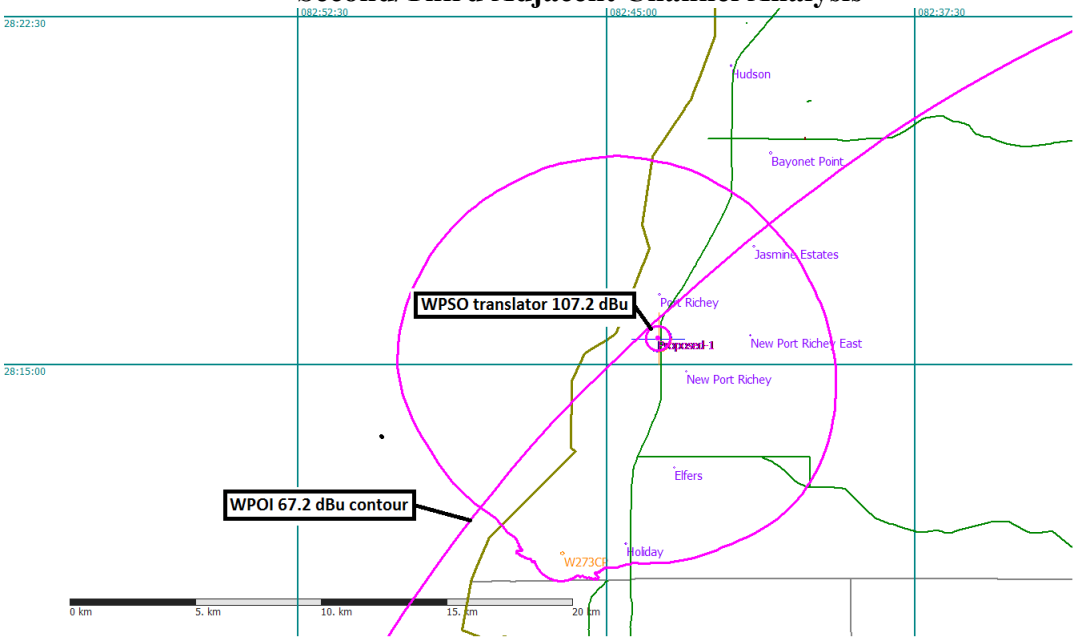
(For a New FM Translator)

The AKMA Broadcast network, Inc.,owner of WPSO (AM), New Port Richey, FL (FID 685) seeks a new auction 99 translator that will be located on their AM transmitter tower. Their proposed translator will operate on channel 270 and is shown below to produce no interference to other broadcasters. It will operate with a power of 250 Watts on ch 270. The site has an elevation of `1.5 meters AMSL based on its current ASRN and the antenna has a C/R of 89 meters AGL. Aside from the primary AM, there are no other AM stations within 2.0 miles. From the map below, one can see that the proposed ch270 translator clears the spacing requirements for 47CFR74.1204 with the exception of the 2nd and 3rd adjacencies. Therefore, a "living way" waver is requested as described further below.



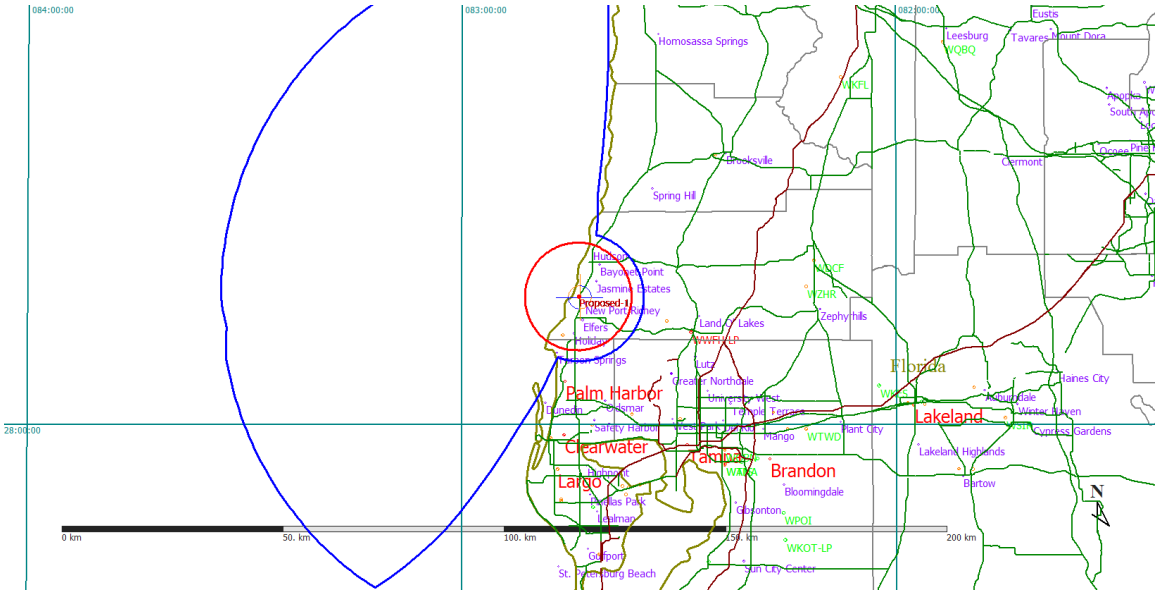
The above map's color coding means:
Gold = co-chnl 40 dBu interfering,
Cyan = 1st Adj 54 dBu interfering,
Violet =2nd or 3rd Adj 100dBu interfering contour.
Similar colors of the affected stations must not cross those of the proposed station.
None cross the interference curves of the proposed translator except the 2nd and 3rd Adj signals. This proposed translator is clear of 74.1204 interference with a waiver as depicted in the map below. The protected contours of WPOI (2nd Adj) and W273CL(3rd Adj) both encompass the Interfering contour of the WPSO proposed translator. The weakest signal is the WPOI 67.2 dBu contour, therefore that one is examined for clearance.

Second/Third Adjacent Channel Analysis



The above map shows the relationship of the proposed interfering 107.2dBu contour with the protected contour 67.2 dBu contour of WPOI. The antenna will be 0.8 wave spaced Shively 6812 B 3-bay or equivalent antenna. The tower is in the middle of a single story commercial area with roads nearby. Therefore, the interfering contour must not reach the ground. A D/U analysis is submitted as a spreadsheet titled Appendix A showing that interference does not reach the ground, nor any elevated roadway or multi-story building.

The proposed translator's service grade signal is completely within the WPSO 2 mV/m daylight contour. The blue polygon is the daylight AM service contour and the red is the 60 dBu contour of the proposed translator.



NEPA The rf exposure from the proposed translator is 0.35 uV/cm^2 based on "FM Model". This is less than 1% of the public exposure limits set forth in the OET Bulletin 65. Exposure levels less than 5% are categorically excluded. No changes are proposed for the tower which is an existing structure, nor are changes proposed to the surrounding landscape.

The antenna is a three bay, Shivey 6812 B or similar antenna whose C/R is 87 meters above a 2 meter person.

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

This translator will operate as a fill-in facility for WPSO AM, a standard broadcast station licensed to New Port Richey, FL .

The maximum ERP is limited by the 250W class limit.

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

Respectfully submitted,

Barry Magrill, PE
FL Reg 45305
26 JUL 2017