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Founder of REC/Director of J1 Radio  
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July 17, 2019

**NOTICE OF EX PARTE PRESENTATION**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> St SW  
Washington, DC 20554

**In the matter of**

**Amendment of Parts 73, 74 for LPFM technical changes**

**MB Dkt. 19-193-draft**

On July 17, 2019, on behalf of REC Networks, petitioner of most of the items in MB Docket 19-193 (draft) had a meeting by telephone with Michael Scurato, Media advisor in the Office of Commissioner Starks.

In the meeting I had discussed various issues that were included and those rejected or otherwise omitted from the draft NPRM.

I had discussed LPFM's past performance in the national EAS periodic tests and had advised that after each year's results, I would contact the Bureau Chief in the Public Safety and Homeland Security Bureau and offer suggestions. I am grateful that the PSHSB has increased their outreach to LPFM stations. I had also stated that the cost of equipment is a barrier to entry for LPFM stations and I continue to support the concept of an open-source EAS and feel that FEMA should provide better ability for open source users to have a read-only access to Open IPAWS where they can receive messages and not be able to originate them. A system like this is currently used in Canada. Any new application that accesses Open IPAWS including those that are "read only" require a memorandum of understanding with FEMA.

Expressed a major concern over the wording of the proposed rules regarding the codification of LPFM boosters. REC supports LPFM boosters, however the proposed language that requires LPFM stations to only be able to receive the input signal for the booster over the air and not through alternative delivery would completely harm the entire concept of using boosters and in some cases, could present public safety issues. REC points to the 1987 *Report and Order* where the issue of using alternative delivery for FM boosters was discussed in great detail. I advised Mr. Scurato of my previous conversation with the Audio Division on this and my hope is that they would be receptive to correcting this issue and permit LPFM boosters to operate in a manner consistent with all other FM boosters.

I advised Mr. Scurato that I would not be pursuing the concept of hybrid protection (using a combination of distance separation and contour overlap) in respect to full-service stations as

originally proposed. However, I still support the issue of dealing with translator overprotection by LPFM stations through the treatment of facilities as non-directional with up to a 20 km service contour. I had stated that the Local Community Radio Act of 2010 (LCRA) did amend Section 632 of the DC Appropriations Act and combined with the wording of Section 3 of the LCRA, changes the scope of the statutory distance separation requirement to only between LPFM stations and full-service stations.

I had explained the fact that a large number of LPFM applications have been filed using “hired help” and that LPFM-centric consultants can provide services at a much more reasonable rate compared to major consulting firms. I had also briefed Mr. Scurato on the fact that some entities including REC are using open source or self-developed tools for conducting contour studies.

I had explained the contour map on the last page of the handout that described how directional FM translators can create up to a 10-times overprotection requirement from LPFM and showed that when a translator is directional, it is possible that even a non-directional LPFM station may be able to come in a little closer. I further show how a translator operating directional away from an LPFM station can come in even much closer.

In light of the other proposed rule changes in which I had originally stated, I have asked for the ability for LPFM stations to be able to create new short-spacing or shorten existing short-spacing to the existing §73.807(c) distance separation rules. However, if they do so, they must include a contour study demonstrating a lack of contour overlap and in addition, they would be subject to an additional level of interference scrutiny from the incumbent translator thus putting LPFM and FM translators on the same interference handling criteria only relating to that specific short-spaced relationship.

With that, I have also asked for that same ability between two short-spaced LPFM stations. The relationship between two LPFM stations has never been within the scope of either the original Radio Broadcast Protection Act of 2000, nor the LCRA. I had asked for the contour overlap and interference rules to be exactly the same as those I am proposing for LPFM to translator.

On the proposal to allow some LPFM stations to increase to 250 watts ERP (LP-250), I have agreed that the issue be tabled for the instant NPRM. I have advised Mr. Scurato that REC does plan to bring LP-250 up in comments including revitalizing the case history and proposal for LP-250 from RM-11749, REC’s original LP-250 petition. I have told Mr. Scurato that while I am willing to table LP-250 at this time, I want it to be considered for a *Further Notice of Proposed Rulemaking* as not to delay the implementation of the other rules proposed in this proceeding and thus to be able to move forward to another LPFM filing window.

I expressed support for the proposal for an across-the-board removal of the TV Channel 6 protection rules effective with the LPTV analog sunset. Pending the outcome of a filing window for new NCE stations, this action may open opportunities for new LPFM stations.

I have recommended that the Commission consider holding the NCE window first, preferably before the analog sunset date as NCE stations only have 9 full-service Channel 6 TV stations to protect. The LPFM window should be conducted after the analog sunset. I also pointed out that holding the LPFM window before the NCE window could result LPFM stations being displaced by subsequently filed new NCE stations in the reserved band. With NCE going first, we can avoid that.

A hand-out and a map of potential reserved band LPFM coverage that was provided is attached to this notice.

Respectfully submitted,

/S/  
Michelle Bradley  
Founder  
REC Networks

## LPFM BOOSTERS – ALTERNATIVE PROGRAM DELIVERY

### **2 FCC Rcd 4628 (1987)** at para. 19:

Many commenters support the proposal to authorize the use of alternative delivery technology. They claim that utilization of such technology would eliminate the problem of feedback and would permit wider use of booster facilities where terrain conditions obscure reception. In a representative statement, CBS comments that as long as the rules insure the primary needs of other broadcasters, deregulation of the mode of feeding such stations is appropriate and consistent with the Commission's policies of eliminating unnecessary technical regulations to "create an environment that encourages innovation and avoids unnecessary and costly rule making."

### **2 FCC Rcd 4630 (1987)** at para. 34:

Finally, we find that the over-the-air signal delivery rule, which is intended primarily to regulate translators that operate with different transmit and receive frequencies, **serves no useful purpose in the context of booster stations** that operate exclusively within the normal predicted service contour of their primary station. In fact, as discussed above, **it appears that this rule hinders the placement and operation of spectrum- efficient booster stations in a manner that is contrary to our purposes in authorizing such stations.** Accordingly, we will eliminate the restriction that FM boosters may retransmit only signals received off the air and will permit FM licensees full discretion to feed their primary stations' signals to boosters by whatever technical means the licensee deems suitable. We believe -that this change to our rules will facilitate a substantial increase in the use of such stations consistent with their intended purpose as a fill-in service.

*(emphasis added)*

### **Proposed rule edits to the draft:**

#### *§73.860 Cross-ownership.*

\* \* \* \* \*

(b) \* \* \* \* \*

(3) The FM translator ~~and/or booster~~ station(s) receives the signal of the commonly-owned LPFM station over-the-air and directly from the commonly-owned LPFM station itself;

\* \* \* \* \*

#### *§74.1231 Purpose and permissible service.*

\* \* \* \* \*

(i) FM broadcast booster and LPFM booster stations provide a means whereby the licensee of an FM broadcast station or LPFM station may provide service to areas in any region within the primary station's predicted, authorized service contours. An FM broadcast booster station **and LPFM boosters is are** authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. ~~An LPFM booster is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified.~~ The FM booster station or LPFM boosters shall not retransmit the signals of any other station nor make independent transmissions, except that locally generated signals may be used to excite the booster apparatus for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus.

**LPFM TO FM TRANSLATOR DISPARITY**

**FEDERAL COMMUNICATIONS COMMISSION  
445 TWELFTH STREET, SW  
WASHINGTON, DC 20554**

MEDIA BUREAU  
AUDIO DIVISION  
APPLICATION STATUS: (202) 418-2730  
HOME PAGE: [www.fcc.gov/media/radio/audio-division](http://www.fcc.gov/media/radio/audio-division)

ENGINEER: GARY A. LOEHR  
TELEPHONE: (202) 418-2700  
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MAIL STOP: 1800B3  
INTERNET ADDRESS: [Gary.Loehrs@fcc.gov](mailto:Gary.Loehrs@fcc.gov)

**JUL 19 2018**

NEOPA  
PO Box 8001  
Canton, OH 44711

Re: WNPA-LP, Canton, OH  
Facility ID No. 193507  
NEOPA  
File No. BPL-20180629ABR

Dear Applicant:

This letter refers to the above-captioned application for a minor change to a licensed facility. For the reasons stated below, we will dismiss the application.

The proposed transmitter site fails to meet the minimum spacing requirements of 47 C.F.R. § 73.807. Specifically, the site proposed is 33.6 kilometers from the licensed facility (BLFT-20130503ACF) of co-channel translator station W273BL, Akron, OH. The required spacing pursuant to § 73.807 is 39 kilometers. The applicant recognizes this violation and requests a waiver of the minimum spacing requirements. In support of the waiver request, the applicant has provided contour and signal strength propagation calculations of WNPA-LP in the service area of W273BL.

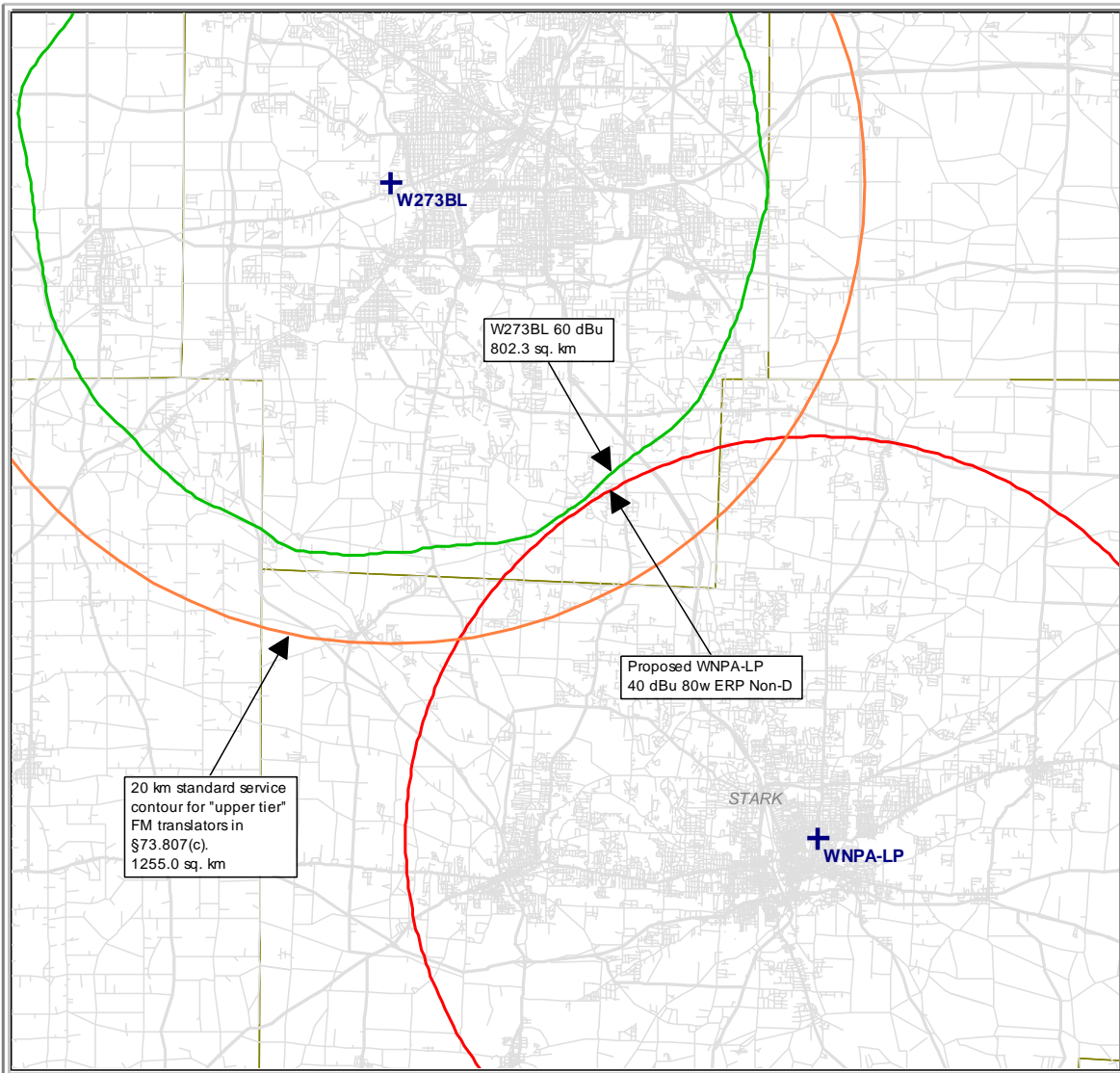
Please note that "Making Appropriations for the Government of the District of Columbia for FY 2001" ("the Act")<sup>1</sup>, was signed into law on December 21, 2000. Section 632(a) of the Act requires LPFM applicants to protect co-channel and adjacent-channel stations by way of spacing separations. There is a significant potential for interference from short-spaced co- and first-adjacent channel LPFM operations. The Act indicates that the Commission cannot eliminate this requirement without prior Congressional approval. Therefore, the FCC lacks authority to waive the co- and first adjacent channel spacing separation requirements. This prohibition was again re-affirmed in the Local Community Radio Act of 2010.<sup>2</sup>

<sup>1</sup> Pub. L. No.106-553, 114 Stat. 2762A-111(2001).

<sup>2</sup> Pub. L. No.111-371, 124 Stat. 4072 (2011).

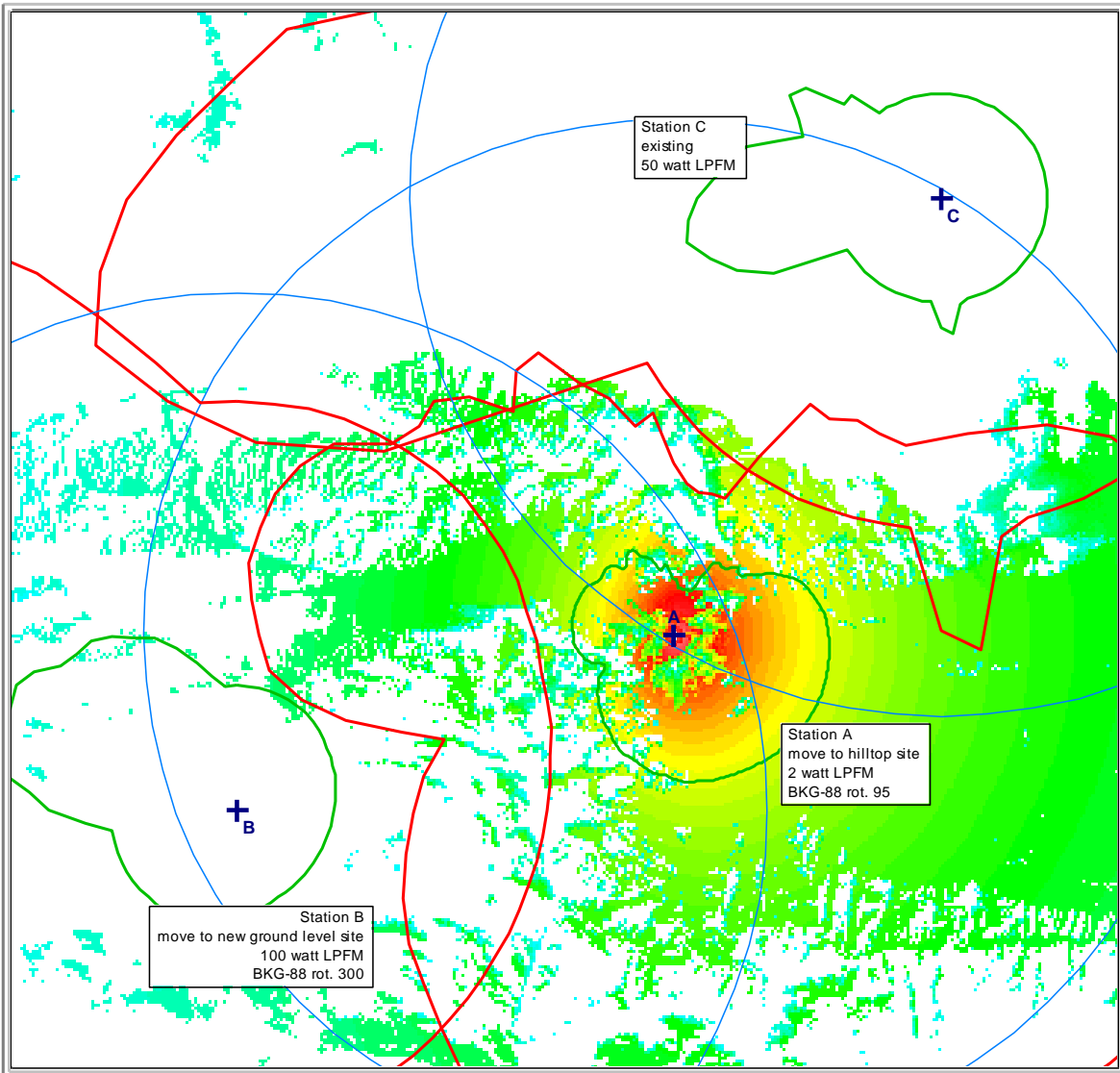
Petition for Reconsideration filed August 13, 2018, *denied* November 8, 2018.  
AFR never filed.

Example: BPL-20180629ABR (dismissed 7/19/18, recon. 8/13/18, recon. denied 11/8/18)



Current rule overprotected the FX service contour by 56.4%

## Short-spaced LPFM example using directional antennas and terrain shielding



Longley/Rice for Station A at least 40 dB field strength.





## **LPFM TO FM TRANSLATOR DISPARITY**

### **Radio Broadcast Protection Act (Pub. L. 106-553; 114 Stat. 2762A-111)**

*added Department of Commerce, Justice, the State, the Judiciary and Related Agencies Appropriations Act, 2001: §632(a)(1)*

The Federal Communications Commission shall modify the rules authorizing the operation of low-power FM radio stations, as proposed in MM Docket No. 99-25, to--

- (A) prescribe minimum distance separations for third-adjacent channels (as well as for co-channels and first- and second-adjacent channels); and
- (B) prohibit any applicant from obtaining a low-power FM license if the applicant has engaged in any manner in the unlicensed operation of any station in violation of section 301 of the Communications Act of 1934 (47 U.S.C. 301).

\* \* \* \* \*

### **Local Community Radio Act (Pub. L. 111-371, 124 Stat. 4072):**

#### **Section 2 – Amendment:**

Section 632 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 2001 (Public Law 106-553; 114 Stat. 2762A-111), is amended to read as follows:

“Sec. 632. (a) The Federal Communications Commission shall modify the rules authorizing the operation of low-power FM radio stations, as proposed in MM Docket No. 99-25, to--

- (1) prescribe protection for co-channels and first- and second-adjacent channels; and
- (2) prohibit any applicant from obtaining a low-power FM license if the applicant has engaged in any manner in the unlicensed operation of any station in violation of section 301 of the Communications Act of 1934 (47 U.S.C. 301).

“(b) Any license that was issued by the Federal Communications Commission to a low-power FM station prior to April 2, 2001, and that does not comply with the modifications adopted by the Commission in MM Docket No. 99-25 on April 2, 2001, shall remain invalid.”

#### **Section 3 – Minimum distance separation requirements:**

(a) In General- The Federal Communications Commission shall modify its rules to eliminate third-adjacent minimum distance separation requirements between--

- (1) low-power FM stations; and
- (2) full-service FM stations, FM translator stations, and FM booster stations.

(b) Restriction-

(1) IN GENERAL- The Federal Communications Commission shall not amend its rules to reduce the minimum co-channel and first- and second-adjacent channel distance separation requirements in effect on the date of enactment of this Act between--

- (A) low-power FM stations; and
- (B) full-service FM stations.

(2) WAIVER-

*[addresses second adjacent waivers – not relevant to this discussion.]*

<b>RBPA (2001~2011):</b> Prescribes minimum distance separation for co-, first-, second- and third adjacent channels without specifying which station classes it applies to.
--

<b>LCRA (2011~): §2</b> (§632(a)(1)) Prescribes protection to co-, first- and second-adjacent channels without specifying which station classes it applies to nor does it specify the specific type of prescribed protection. <b>§3(a)</b> acknowledges that Full-service FM stations, low-power FM and FM translators are distinctive station classes. <b>§3(b)(1)</b> specifies that distance separation must not be reduced (and therefore maintained) between low-power FM and full-service stations. The separate class of FM translators was not called out.
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## **LPFM TO FM TRANSLATOR DISPARITY**

Proposed rule changes:

*§73.807 Minimum distance separation between stations*

\* \* \* \* \*

(d)(1) Existing LPFM stations which do not meet the separations in paragraphs section (a) to (c) of this section may be relocated provided that the separation to any short-spaced station is not reduced.

**(2) Applications for new or modified LPFM stations which do not meet the separations in paragraph (a) in respect to other LPFM stations and/or paragraph (c) in respect to FM translator stations on co- or first-adjacent channels, which create either a new short-spacing or lessen an existing short-spacing is subject to the following provisions:**

**(i) The application must include a technical showing that demonstrates that there will be no prohibited overlap with the protected short-spaced facility as follows:**

Frequency separation	Contour of proposed station	Contour of other station
Co-channel	40 dBu (0.1 mV/m)	60 dBu (1 mV/m)
200 kHz	54 dBu (0.5 mV/m)	60 dBu (1 mV/m)

**(ii) Such an LPFM station will not be permitted to continue to operate if it causes any actual interference to:**

**(A) The transmission of the protected short-spaced facility; or**

**(B) The direct reception by the public of the protected short-spaced facility. Interference will be considered to occur when reception of the protected short-spaced facility is impaired by the signals radiated by the LPFM station, regardless of the quality of such reception so used, or the channel on which the protected signal is transmitted.**

**(iii) If interference to a protected short-spaced facility cannot be properly eliminated by the application of suitable techniques, operation of the offending LPFM station shall be suspended and shall not be resumed until the interference has been eliminated. Short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures. If complainant refuses to permit the licensee of the offending LPFM station to apply remedial techniques which demonstrably will eliminate the interference without impairment to the original reception, the licensee is absolved of further responsibility for the complaint.**

**(iv) Upon notice by the Commission to the licensee that such interference to a protected short-spaced facility is being caused, the operation of the LPFM station shall be suspended within three minutes and shall not be resumed until the interference is eliminated or it can be demonstrated that the interference is not due to spurious emissions by the LPFM station; *provided, however*, that short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures.**

\* \* \* \* \*

*Editor's note: The use of contour protection to short-spaced FM translators on second-adjacent channels is already addressed in §73.807(e)(1).*

## **LPFM TO FM TRANSLATOR DISPARITY**

Proposed rule changes (from the draft NPRM):

### *§73.816 Antennas*

\* \* \* \* \*

(c) The following may use directional antennas in the LPFM service:

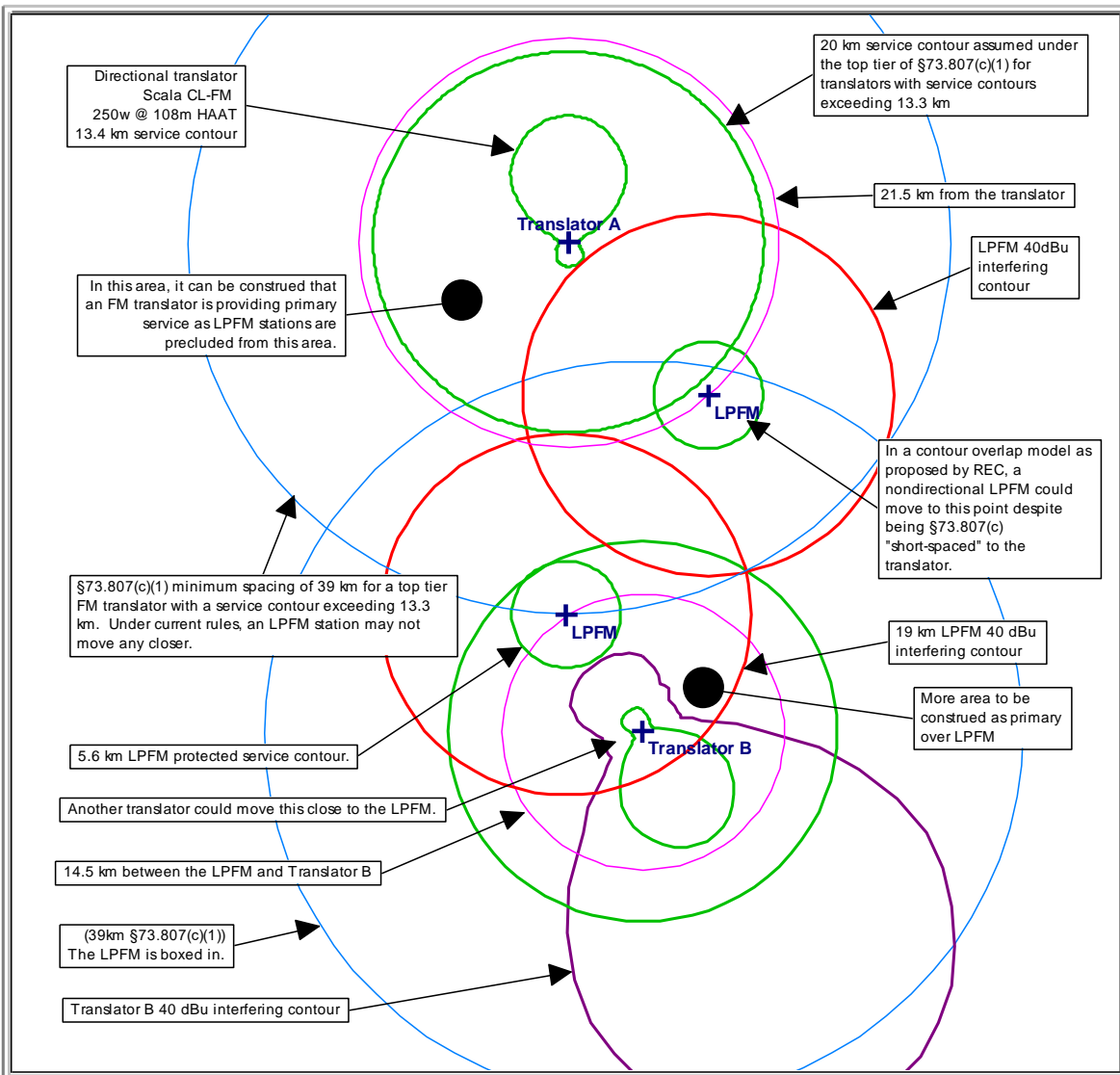
(1) Public safety and transportation permittees and licensees, eligible pursuant to §73.853(a)(ii) in connection with the operation of a Traveler's Information Service (TIS),

(2) LPFM permittees and licensees proposing a waiver of the second-adjacent channel spacing requirements of Section 73.807 may utilize a directional antenna for the sole purpose of justifying such a waiver, ~~or~~

(3) LPFM permittees and licensees proposing operation within 320 kilometers of the Mexican or Canadian border in accordance with §73.807(g)(5) of this subpart, **or**

**(4) LPFM permittees and licensees proposing operation involving protected short-spaced FM translator and/or LPFM facilities in accordance with §73.807(d)(2) of this subpart for the sole purpose of protecting such facilities.**

## LPFM to FM translator protection demo



Demonstrates how a translator can "box in" an LPFM station