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RADIO REVOLUTION: THE LOCAL COMMUNITY RADIO ACT’S EXPANSION OF POSSIBILITIES FOR LOW-POWER FM STATIONS

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ABSTRACT

This Article explores the struggle to establish low-power FM radio stations on airwaves already crowded with full-power stations. Historically, urban markets have provided few opportunities for low-power stations due to third-adjacent channel protections—there are only so many frequencies available in a given city. The Local Community Radio Act of 2010 gives new stations an advantage in the debate by eroding these protections. In October of 2013, the FCC opened the application window for new low-power stations—only the second window since the inception of low-power FM in 2001. During the window, the FCC received 2,800 applications, including eighty-one from Washington State. In an industry dominated by only a few voices, community stations now have the chance to raise their own voices above the din. This Article also explores the technical and practical feasibility of removing second-adjacent channel protections. While such removal faces

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The author of this Article would like it to be noted that he formerly volunteered for and has donated to KYRS in Spokane, Washington. KYRS is a low-power FM station whose general manager, Lupito Flores, lobbied in favor of the Local Community Radio Act.
resistance from traditional broadcasters, the FCC has shown through its decisions that the prevailing trend is in favor of community radio.

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INTRODUCTION

The radio industry is sharply defined by the scarcity of its very medium of expression—broadcast spectrum. Given this scarcity, community interests often take a backseat to commercial interests. But through the continued efforts of the Federal Communications Commission (“FCC”) and recent legislation, that imbalance is starting to change. Though locally-driven low-power FM stations (“LPFMs”) have yet to achieve parity with full-power stations, the balance is shifting in their favor.

In October of 2013, the FCC opened up applications for a new wave of LPFMs. This wave was made possible by the Local
Community Radio Act ("LCRA"), passed by Congress in 2010.\(^1\) The LCRA’s primary vehicle for new opportunities is the elimination of third-adjacent channel protections.\(^2\) The LCRA also allows the waiver of second-adjacent channel protections when a LPFM can demonstrate that no interference with another station will occur.\(^3\) Finally, the LCRA establishes parity between LPFMs and FM translators and boosters.\(^4\)

Adjacent channel protections have overprotected full-power stations, allowing them to maintain a virtual stranglehold on the radio market in urban areas—the LCRA will loosen that grip and allow for a more competitive, community-oriented radio market. Despite resistance from entities like the National Association of Broadcasters ("NAB"),\(^5\) the FCC has shown that it intends to fulfill its congressional mandate and support LPFMs. As hopeful stations apply for licenses over the next few years, American communities both urban and rural may see a local radio revolution as the FCC emphasizes the potential of locally-produced content and downplays the bugaboo of "interference."

I. A BRIEF TECHNICAL NOTE

This Article uses the terms “second-adjacent channel” and “third-adjacent channel” frequently. Each “channel” is equivalent to 200 kHz, or one “click” on the radio dial.\(^6\) Thus, 100.5 FM is one channel away from 100.3 and 100.7, two channels away from 100.1 and 100.9, and three channels away from 99.9 and 101.1. Full-power FM radio stations are required to be spaced four channels apart,\(^7\) primarily to keep broadcasters from concentrating

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2 Id.
3 Id. at 4073.
4 Id.
6 See 47 C.F.R. § 73.207(b) (2012).
7 Id. (requiring full-power FM stations to maintain first-, second-, and
their stations in city centers. The elimination of third-adjacent channel protection in the LCRA would allow a LPFM to operate on a frequency only three channels away from another station; in the Seattle radio market, the elimination of such protection could result in as many as eight new radio stations operating on newly-available frequencies.

II. LEGAL BACKGROUND BEFORE AND AFTER THE LCRA

A. LPFMs Before the LCRA Were Bound by an Inconsistent Protection Regime

Before the LCRA, LPFMs progressed by incremental steps—specifically one forward, two back. In 2000, the FCC authorized the creation of a new, low-power radio service. The intent was twofold: to create a class of community stations not controlled by existing media concern—i.e., commercial entities—and to preserve the integrity of existing FM radio service. At the time of the authorization, the FCC did not impose third-adjacent channel requirements of the new LPFMs, reasoning that it would unduly impede the operation of new stations. However, Congress later imposed third-adjacent channel protection requirements in a general appropriations bill. The Radio Broadcast Preservation Act of 2000, which had nearly the exact same provisions as the relevant section of the appropriations bill, died in committee that same year; nevertheless, the two bills have been referred to

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8 See Commc’n s Inv. Corp. v. FCC, 641 F.2d 954, 963–64 (D.C. Cir. 1981) (finding that the relevant portion of the Communications Act of 1934 was intended to “ensure adequate service to smaller communities and ‘sparsely populated’ regions”).


11 Id.

12 Id. at 2207.

interchangeably.\textsuperscript{14} In 2003, the FCC commissioned a study on the impact of third-adjacent channel interference, which ultimately concluded that third-adjacent channel interference is minimal at best and is unlikely to cause issues with full-power FM stations except at or near the transmitter station site.\textsuperscript{15} Despite the conclusions of the study, however, the FCC’s hands remained tied.

Though mandated by the Radio Broadcast Preservation Act to maintain third-adjacent channel protections, the FCC authorized a limited waiver of second-adjacent channel protections in 2007 to avoid the loss of a “small but not insignificant” number of LPFMss.\textsuperscript{16} The NAB challenged the ruling, claiming that it was arbitrary and capricious to protect third-adjacent channels while allowing second-adjacent channel protection to lapse.\textsuperscript{17} The D.C. Circuit ultimately disagreed, deferring to the FCC’s judgment and dismissing the suit.\textsuperscript{18}

Accordingly, before the passing of the LCRA the channel protection regime was inconsistent. The FCC could not waive third-adjacent channel protections because of the Radio Broadcast Preservation Act, but could waive second-adjacent channel protections (albeit only in very limited circumstances). Low-power radio was in dire need of some consistency, which it would receive in 2010 in the form of the LCRA.


\textsuperscript{15} The MITRE Corp., Experimental Measurements of the Third-Adjacent Channel Impacts of Low-Power FM Stations 146–50 (2003) (“[N]o significant LPFM-related degradation of a non-translator receiver was ever identified more than 333 meters from the test LPFM transmitter . . . .”).


\textsuperscript{17} Nat’l Ass’n of Broadcasters v. FCC, 569 F.3d 416, 422 (D.C. Cir. 2009).

\textsuperscript{18} Id. at 421 (stating that while complete elimination of second-adjacent channel protection might be arbitrary and capricious, announcing limited circumstances in which second-adjacent channel protection waiver might be granted is not).
B. Third-Adjacent Channel Protection is All but Eliminated, Subject to Interference Broadcast Requirements

The LCRA’s first major change to LPFMs was the near-elimination of the third-adjacent channel protection requirement, overruling the Radio Broadcast Preservation Act of 2000.\textsuperscript{19} However, some restrictions remain: stations on third-adjacent channels are required to broadcast notices of interference, warning listeners that any issues they are having might be due to the LPFM signal.\textsuperscript{20} The station must also provide contact information if anyone wishes to complain and must notify the FCC within forty-eight hours of receiving a complaint.\textsuperscript{21} These restrictions apply to what the FCC terms “Section 7(3) stations”—that is, new LPFMs that broadcast on third-adjacent channels.\textsuperscript{22} Section 7(1) stations, i.e., those that did not satisfy the minimum third-adjacent spacing requirements before the LCRA was enacted, must instead eliminate all interference.\textsuperscript{23} Section 7(1) stations, being short-spaced under pre-LCRA regulations, are not required to broadcast interference notices but are subject to the more rigorous requirements contained in the FCC’s regulations.\textsuperscript{24} LPFMs who obtain licenses post-LCRA are subject to the Section 7(3) requirements, which is a less stringent regime. The FCC has set forth guidelines as to when notices should be broadcast and what language they must contain.\textsuperscript{25}

\textsuperscript{20} Id. § 7.
\textsuperscript{21} Id.
\textsuperscript{23} Id.
\textsuperscript{24} See 47 C.F.R. § 74.1203 (2012) (requiring the cessation of broadcast within three minutes of interference being reported and barring any further transmissions until it can be shown that the interference is eliminated).
\textsuperscript{25} Radio Service Creation 2012, supra note 22, at 15434 (stating that broadcast notices must be made twice daily within the first thirty days of station operation and twice weekly for the remainder of the year; they must also contain language that, “at a minimum, alert[s] listeners of the potentially affected third-adjacent channel station of the potential for interference, instruct[s] listeners to contact the LPFM station to report any interference, and provide[s] contact
C. Second-Adjacent Channel Protection Remains Mostly in Place

The second major change prospective LPFMs should be aware of is the waiver provision for second-adjacent channel protection. Under certain circumstances, the FCC can allow LPFMs to broadcast on second-adjacent channels. Specifically, the applicant must show that no interference will occur to any authorized radio service. The FCC permits stations to proceed in the same manner as FM translator stations, such as by showing that interference will not occur due to intervening terrain or a “lack of population” in the overlapping interference area. Applicants have the burden of proof to show that no interference will occur.

LPFMs have tools at their disposal to show the unlikelihood of interference and improve their chances of waiver. These include raising the height of the transmitter and relocating the transmitter away from populated areas. Stations will not, however, be permitted to operate below a certain power level in order to avoid interference, and they cannot use directional antennas. The FCC has provided a few guidelines but as of yet there are no practical examples of accepted measures.

Applicants should also be aware that, although second-adjacent channel waiver is possible, it is subject to more stringent requirements akin to the Section 7(1) stations mentioned above. Upon the receipt of a bona fide complaint (i.e., from someone

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27 Radio Service Creation 2012, supra note 22, at 15425.
28 Id. at 15429.
30 These tools are, however, highly technical and largely beyond the scope of this Article.
32 Radio Service Creation 2012, supra note 22, at 15430.
33 Creation of a Low Power Radio Serv., 28 F.C.C. Red. 14489, 14501 (2013) [hereinafter Radio Service Creation 2013] (explaining that directional antennas, which are used mainly to focus the direction of a broadcast signal, will have little or no effect on the interference near the transmitter site).
without a legal stake in the proceedings\textsuperscript{34}, the station must cease operation immediately until it can show that the interference either was not due to its operation or has been eliminated.\textsuperscript{35} Applicants should proceed carefully when applying for a second-adjacent channel waiver and should be mindful that their station can be required to shut down if interference occurs.

\subsection*{D. The LCRA Establishes LPFM Parity with Translators and Boosters, Creating a Level Playing Field}

The LCRA’s final minor change is to put LPFMs on equal footing with FM translators and boosters\textsuperscript{36} (though all three remain secondary to full-power stations\textsuperscript{37}). LPFMs have been challenged by translators before—in 2003, for example, a rash of translator applicants (the “Great Translator Invasion”) bogged down the FCC application process for years, resulting in (according to one study) a reduction of 15.9\% in available airwave space.\textsuperscript{38} By putting them on the same level, the LCRA ensures that translator and booster applicants will not receive priority over LPFMs. While this does not immediately open up new opportunities for LPFMs, it does at least allow them to compete on the same terms in the future.

\section*{III. THE LCRA IS A STEP IN THE RIGHT DIRECTION, BUT NOT WITHOUT OBSTACLES}

The LCRA eliminates some inconsistency and uncertainty

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\textsuperscript{34} Radio Service Creation 2012, \textit{supra} note 22, at 15432.
\textsuperscript{35} \textit{Id.} at 15431.
\textsuperscript{36} Translators and boosters are stations that simultaneously broadcast a full-power station on another channel or strengthen a full-power station’s signal by broadcasting on the same channel, respectively, in order to expand coverage. \textit{See FM Translators and Boosters - General Information}, FCC.gov, http://www.fcc.gov/encyclopedia/fm-translators-and-boosters-general-information (last visited Apr. 12, 2015).
\end{footnotes}}
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surrounding LPFMs, but introduces new wrinkles. Though third-adjacent channel protection is nearly a thing of the past, interference broadcast requirements and complaint proceedings remain as holdovers from those worried about the old saw of “spectrum integrity.” And while second-adjacent channel waiver might be cause for celebration, the technical requirements and limitations make it a rare exception.

A. Interference Broadcasts Will Have Little Practical Effect and the Complaint Resolution Process is Unclear

The interference broadcast requirements for third-adjacent channel LPFMs are clear, though marked by two major problems. The first is that the FCC’s requirements for “addressing” complaints remain vague.\(^{39}\) Unless the FCC clarifies its responsibilities through further rulemaking, this issue must be resolved through agency adjudications on the subject, which do not exist at the time of this Article’s publication. The second problem is that the interference notice requirement will have little effect if the interference on third-adjacent channels is de minimis.\(^{40}\) If there is no interference, listeners on the other station will be unable to hear the notice. The likely result is that stations will broadcast the notices for a year, as per the requirement, but will eventually expire with no effect.

B. Second-Adjacent Channel Waiver Will Be Limited

The second-adjacent channel waiver may not create a wealth of new opportunities for hopeful LPFMs in urban markets, as the “lack of population” requirement will be difficult to fulfill. In all likelihood, this portion of the LCRA will be most helpful to

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\(^{39}\) Radio Service Creation 2012, \textit{supra} note 22, at 15500–01 (giving stations a “reasonable opportunity to resolve all complaints of third-adjacent channel interference” and stating that “complaint[s] will be considered resolved where the complainant does not reasonably cooperate with an LPFM station’s remedial efforts,” but giving no definition of what constitutes reasonable resolution).

\(^{40}\) Radio Service Creation 2013, \textit{supra} note 33, at 14503 (stating that third-adjacent channel interference is unlikely except near the transmitter site).
stations in rural areas where populations are thinly spread and transmitter site placing is more flexible. Still, the FCC acknowledges that second-adjacent channel interference, like third-adjacent, is unlikely in many situations.\textsuperscript{41} This demonstrates an awareness of the struggles LPFMs will face and possibly an inclination towards future deregulation.

CONCLUSION

The LCRA doesn’t swing the door wide open to LPFMs, but it does allow them to firmly wedge their collective foot in the crack. The elimination of third-adjacent channel protections is a major step in the right direction, and the last vestigial protections are minimal—the interference broadcast requirement is a fail-safe that will fail to do anything at all. But LPFMs should temper their expectations when it comes to second-adjacent channel waiver. Under current standards, a drastic expansion of LPFM service is simply not going to happen. But any headway, however small, towards the removal of second-adjacent channel protections should be celebrated. Most importantly, the FCC decisions have consistently shown a predilection towards progress and support for LPFMs.

However, the coup will not be bloodless—stations will be faced with problems nonetheless. The new adjacent channel protection regime is complicated and applicants may be confused by the lack of direction that has been given. Where once there was a bright-line rule (“no third-adjacent channel spacing”), there is now a host of varying requirements. Ultimately, the LCRA will help cast off the chains of the old radio regime. While it may not be a revolution unto itself, it is a declaration of LPFM independence, a statement of intent to pave the way for future renaissance.

\textsuperscript{41} Radio Service Creation 2012, \textit{supra} note 22, at 15429.
LPFM applicants should be aware of the changes to the third- and second-adjacent channel protection regime and know what procedures and showings are required to operate on such channels. Updates can be found on the FCC website’s LPFM subsection.\(^4^2\)

In the long-term, applicants should keep an eye on FCC decisions regarding second-adjacent channel waiver since it is likely to become less stringent as the threat of interference is shown to be, more or less, an empty one.
