

10/9/2017

Chairman Ajit Pai  
Commissioner Mignon Clyburn  
Commissioner Michael O’Rielly  
Commissioner Brendan Carr  
Commissioner Jessica Rosenworcel  
c/o Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

Re: ET Docket No. 14-165 and GN Docket Nos. 12-268 and 14-166 Via Electronic Filing

Dear Chairman Pai, Commissioner Clyburn, Commissioner O’Rielly, Commissioner Carr, Commissioner Rosenworcel, and Ms. Dortch,

On behalf of Milwaukee Repertory Theater, located in Milwaukee, Wisconsin; which provides approximately 600 performances per year to 200,000 audience members and education programs to 20,000 students; I write with concern about available spectrum and protection for our wireless microphones and backstage communications devices. Milwaukee Repertory Theater ignites positive change in the cultural, social, and economic vitality of its community by creating world-class theater experiences that entertain, provoke, and inspire meaningful dialogue among an audience representative of Milwaukee’s rich diversity.

We strongly support the Commission’s proposal to expand Part 74 license eligibility to include persons and organizations that can demonstrate the need for professional, high-quality audio and have the capability of providing it through conscientious use of wireless microphones. We support and endorse the Comments filed in these dockets by The Performing Arts Wireless Microphone Working Group.

Professional performing arts organizations hold thousands of performances each year, and wireless microphones are essential to producing high-quality performances while mitigating significant public safety concerns. Professional wireless capability, with successful interference protection, is essential to our sector.

The Milwaukee Repertory Theatre use 35 UHF band transmitters, 1 UHF band IFB, 4 UHF band wireless headsets, and 4 2.4 GHz headset devices. At a typical point in the season (running six nights a week from September through May), all 8 headsets and at least 8 microphone channels are in use. For a musical (usually one 8 week run per season, sometimes two) or during our annual production of A Christmas Carol (6 weeks November through December), all available inventory is in use and transmitting. This equipment is from TV bands 14 – 31 and 46 – 50, as well as the 900 MHz and 2400 – 2480 MHz ranges. All of our gear is tunable within 60 MHz. We own all of our

**MILWAUKEE REPERTORY THEATER**

Patty & Jay Baker Theater Complex | 108 E. Wells Street | Milwaukee, WI 53202  
Administration: 414-224-1761 | Fax: 414-224-9097 | Ticket Office: 414-224-9490  
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equipment and are nearing the end of its 8 – 10 year life expectancy. We are very fortunate to have a lot of options in the frequency range of our equipment, but even with these capabilities (and three different frequency coordination software platforms) we are often tapped out of clear frequencies in our area.

The move out of the 700 MHz band was rough for us at The Rep, as it was for most non-profit theaters. The decision came around the same time as we changed artistic management – who wanted to produce large scale musicals, making more equipment purchase necessary, compounded by the fact that our existing inventory was now no longer usable. I was not with the company at the time, but from our records it seems the theater dipped into our emergency trust money to pay the \$40,000 – 50,000 necessary to replace all the existing gear over the course of the 2010 and 2011 fiscal years. This is no small amount of money for us; it is nearly equivalent to the sound budget for an entire season of 13 shows in 4 venues.

Both my primary audio engineer and myself have four year degrees specifically in the field of sound design for theater. All of my in house engineers are with the local IATSE and have extensive (10+ years) real world experience with operating and tuning wireless UHF devices.

I would urge the Commission to grant a Part 74 license if an applicant can provide certification of:

- A mission statement of providing performing arts to the public;
- A history of professional-quality wireless audio presentations to audiences without interference;
- Technical guidance and frequency coordination by qualified professionals (active in audio engineering who have academic degrees or equivalent professional experience and who are familiar with radio-frequency coordination);
- A commitment to register for protection only the frequencies, times, and locations needed; and
- A practice of keeping logs of all wireless microphone uses, including frequencies, for all performances.

I appreciate that the Commission has sought Public Comment on this very important issue. Professional performing arts organizations and educational institutions need access to reliably available spectrum with interference protection to ensure that we can continue to produce quality product for our audiences. I would request that the Commission consider the burden already borne by the performing arts community in vacating the 700 MHz band. I am concerned about the cost of once again replacing my organization's sound equipment. Once that investment has been made, I would like some assurance that the system will work properly and without interference.

Performing arts organizations such as mine contribute significantly to both the economy and the cultural firmament of our regions. I respectfully endorse the Commission's

**Mark Clements**  
*Artistic Director*



**Chad Bauman**  
*Managing Director*

proposal to expand Part 74 LPAS rules to accommodate performing arts organizations and educational institutions that use fewer than 50 wireless microphones. The proposal is a much-needed solution that benefits the arts community and the public as well as the many new and emerging unlicensed white space technologies.

Sincerely,

Erin Paige  
Sound Director  
Milwaukee Repertory Theater  
108 E. Wells Street  
Milwaukee, WI 53202

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