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October 12, 2017

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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 Hartford Stage Company, located in Hartford, CT, that provides approximately 250 performances per year to over 100,000 audience members and education programs to over 21,000 students, I write with concern about available spectrum and protection for our wireless microphones and backstage communications devices. Our mission at Hartford Stage is to enlighten, entertain, and educate by creating theatrical works of the highest caliber that have a transformative impact on our audiences, our community, and our field. We also aim to actively engage in partnerships with local artists, community leaders, organizations, schools, libraries and other groups to enrich and strengthen the connection that our community has with the work we produce on stage. These partnerships have resulted in collaborative programming, both on-site and off, including special community events, lectures, book signings, cross promotions, and exhibitions – most of which are free to the public. The art we produce goes well beyond the stage, extending directly into the heart of our community, and this wouldn't be possible without the wireless equipment that we use in our productions.

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.

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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.

At Hartford Stage, we use a variety of wireless devices including body microphones, handheld microphones, instrument direct inputs, interruptible foldback and in-ear monitor systems, intercom systems, and also relay switches. In a typical performance we use between 8 and 45 varying types of wireless transmitters and receivers. These performances are offered 6 to 7 days each week. The VHF bands shared use frequencies 72 MHz-76 MHz between channels 4-5. Our low UHF bands use frequencies 560 MHz-590 MHz between channels 29-33. The high UHF bands use frequencies 620 MHz-664 MHz between channels 39-42. Our wireless intercom systems use the 2.4 GHz band. The microphones that we use at Hartford Stage have the ability to tune to more than one frequency and their tuning ability is 25.6 MHz wide. The handheld microphones, body microphones, in-ear monitor systems, and assisted listening systems are analog, and the intercom systems that we use are digital. At Hartford Stage we own and rent the wireless equipment that we use. Of the wireless equipment that we do own, the reasonable life expectancy is between 5 to 10 years. During the move out of the 700 MHz band, it cost us \$30,000 and it took 3 months to retune or replace all of our devices. Working with our wireless equipment we employ an Audio/Video Supervisor who has a BFA in sound design & engineering and 12 years of professional experience. They are also an Audio Engineering Society member and an Avid Customer Association member. We also employ an Assistant Audio/Video Supervisor with 6 years of professional experience.

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 actually 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 essential issue. Hartford Stage and other performing arts organizations should have access to reliably available spectrum with interference protection. Vacating the 600 MHz band, after previously vacating the 700MHz band, would cause this organization, as well as many other performing arts organizations, additional undue hardship and financial burden. Our investment in equipment, labor, and skill should have assurance that the system with which they are operated is sure, regardless of the organization's size and number of wireless microphones used.

Hartford Stage, as a 501(c)3 non-profit, provides service to Hartford and surrounding communities by offering educational programs and enlightening productions. As a vital resource, we contribute to the quality of life of local citizens and the local economy in the Hartford area. In order to continue our mission we need to be able to use wireless equipment with successful capability without interference. I respectfully endorse the Commission's 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,



Mike Stotts  
Managing Director

cc: Laurie Baskin  
Theatre Communications Group