



**Mountain Vista High School**  
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January 15, 2015

Dear FCC,

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

**Re: Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268 and 14-166 via Electronic Filing**

Dear Chairman Wheeler, Commissioners Clyburn, Rosenworcel, Pai, O'Rielly and Ms. Dortch,

On behalf of the students at Mountain Vista High School in Highlands Ranch, Colorado, I am writing because of my concern about protection for our wireless microphones and backstage communications devices. We are a member of the Educational Theatre Association (EdTA), the national voice of theatre education that includes more than 5,000 educators and 90,000 student members. The mission of EdTA is to provide theatre education opportunities for all students.

Mountain Vista High School presents over 20 public performances a year, with more than 3000 attendees annually. Our school theatre program relies on the revenue generated in these performances to sustain and grow our in- and after-school theatre education opportunities for all of our students. Wireless microphones are a fundamental aspect of our program, and understanding how to use them a critical component of our educational pedagogy, both for student performers and technicians.

I understand the Commission has ruled that performing arts entities that regularly use 50 or more wireless devices will be eligible to apply for a Part 74 license. I've also learned that the FCC is seeking Comment on a proposed rule that would prevent performing arts entities using fewer than 50 wireless devices from participating in the database. This would leave my school and thousands of others without any interference protection mechanism from the many TV Band Devices that may soon flood the market. Frequency coordination with other known wireless microphone users has become common practice, but there is no way to coordinate with TVBD's if you are unaware of them.

Thousands of performances are held by both educational and professional performing arts organizations each year and the use of wireless microphones is essential to producing high-quality performances and also mitigates against significant public safety concerns.

Per the FCC's request for Public Comment, here are the details about our school's use of wireless devices:

- We use the following wireless devices?
  - Sennheiser ew100 wireless microphones
  - Shure SLX wireless microphones
  - Behringer X32 sound board with wireless modem

- We use between 0-16 units per performance, depending on musical vs. straight theatre.
- We produce about 10 performances a year that depend on wireless microphones.
- What bands and channels do you use?
  - VHF (channels 2-13, 54 MHz to 216 MHz)
  - Low UHF (channels 14-36, 470 to 608 MHz)
  - High UHF (channels 38-51, the 600 MHz band, 614 MHz to 698 MHz)
- Are your microphones able to tune to more than one frequency?
  - How wide is their tuning ability? On the Sennheisers, it's about 150 MHz, depending on the band and receiver.
  - The tuning range on the Shures is 24 MHz
- Which of your wireless devices are analog and which are digital? Analog.
- Do you own or rent your wireless equipment? Own
- For equipment that you own, what is its reasonable life expectancy?
- How did you handle the move out of the 700 MHz band?
  - How much did it cost? \$2500
  - How long did it take for you to retune or replace all of your devices? Less than six months.
- What can the FCC do to ensure that wireless microphone users transition to new, more efficient devices to the full extent possible? The FCC absolutely has to cover the costs of moving the channels, especially for educational institutions. If they are going to mandate changes, and there is little ability for non-profit organizations to recoup the costs, they have to assist in the changes. We just purchased new equipment in 2012, and to replace everything now would cost about \$10,000. We do not have that money.
- What would persuade you to move out of the TV band? [Same as above.]

I appreciate that the Commission has sought comment on these very important issues. I realize that the FCC is seeking a fair and reasonable solution to the TV band issues we are now facing, but that solution should allow *all* organizations—big and small, professional and educational—that some sort of interference protection. The currently proposed plan offers no such protection for many of us. Further, I would request that the Commission consider the burden already borne by the educational and performing arts community in vacating the 700 MHz band. I am concerned about the cost of once again replacing my school's sound equipment.

Theatre education programs are cornerstones of many schools cultural identity, nurturing 21<sup>st</sup>-century skills and knowledge for students and providing pride, entertainment, and dialogue in the communities, and contribute to the local economies. I respectfully request that the Commission maintain access to interference protection and establish a mechanism to reimburse educational and performing arts organizations for the cost of new equipment prompted by any proposed spectrum move.

Sincerely,



Jeremy Goldson  
 Theatre Director, Stage Flight Theatre  
 Chapter Director, Colorado Thespians