In these comments, the Wireless Microphone Alliance of America (“WMAA”), responds to matters raised in the Notice of Proposed Rulemaking (“NPRM”) captioned above.²

¹ The WMAA is an organization comprised of many thousands of wireless microphone users and owners and operators of wireless microphones and related low power equipment; licensed and unlicensed. WMAA is a national umbrella organization that has multiple industry vertical groups, including broadcast, concert, Broadway, educational, industrial, manufacturers and many other verticals and allied industry organizations and companies. For efficiency, unless otherwise stated or implied by context, references to “Wireless Microphones” in this filing include all related low power devices that operate similarly to wireless microphones but are not limited to those devices.

² Amendment of Part 15 of the Commission’s Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 60 MHz Guard Bands and Duplex Gap, and Channel 37, and Amendment of Part 74 of the Commission’s Rules for Low Power Auxiliary Stations in the
At the outset, we observe that owners and operators of many millions of wireless microphones in the United States have little information on which to adequately formulate comments since the details of these proceedings are complicated and not well understood to most owners and operators. We therefore respectfully request that the Commission fully consider the entirety of the record developed in this proceeding, giving each submission the full weight that is accorded to comments and reply comments as is required under the Administrative Procedure Act. In other words, the Commission should continue to foster its longstanding mandate to enable policies, procedures, and rules that will preserve and enhance wireless microphone operations, including those that operate today and serve many users and the public, even if considered secondary.

DISCUSSION

1) It is well known that wireless microphones are the beginning of a long chain of contribution circuits that in many cases transmit program content across the U.S. and the world. Interference cannot be tolerated and any interferences are unrecoverable. Certain wireless microphone applications require completely clean reliable UHF spectrum free from competing services, such as white space devices or out of band emissions from other adjacent sources such as LTE.

2) Wireless microphones are most often, but not always, used indoors. This should preclude control by a database because there is no GPS reception indoors, particularly in large facilities such as studios, arenas, houses-of-worship, etc. This related to the use of both unlicensed and licensed wireless microphones. Furthermore, unlicensed microphone operators

should not be forced to pay fees to white space database administrators. Major users of wireless microphones are houses-of-worship, schools, government agencies and many other related industries that do not derive any revenue from their microphone use. This would be an unwarranted burden, and a new “tax” on wireless microphones, without any benefit.

3) The FCC must identify, allocate and assign a new alternate band or bands well before the cessation of wireless microphone usage in the 600 MHz band following the Incentive Auction. The impact would otherwise be disruptive and traumatic to all the various industries that routinely use these wireless microphones for their main activities.

4) To the greatest extent possible, duplex gap and guard band spectrum adjacent to auctioned spectrum must remain available for wireless microphone operations, and existing 600 MHz band wireless microphones must be allowed to continue to operate so long as they are frequency agile and able to tune to lawful frequencies.

5) Auction winners must compensate wireless microphone owners for equipment purchased during the 700 MHz transition that will be rendered obsolete or require modification by this second UHF reallocation.

BACKGROUND

Wireless microphones are ubiquitous in our society with proven benefits – they are vital tools used in entertainment, sports, and news industries, for example, which are major contributors to the U.S. economy. American-made content is one of our nation’s highest exports. Wireless microphones are also used in civic and religious life by tens of thousands of schools, community theaters, government agencies, corporate meeting halls and houses-of-worship.
The U.S. public expects the very highest standards of production quality in all these forms of media, sports and live entertainment. Wireless microphones must be high fidelity with negligible latency (sound delay), and are fault intolerant during performances and recordings.

The wireless microphone community has faced significant changes in recent years that have made operations more difficult. In 2010, the Commission required that wireless microphones transition out of 700 MHz, approximately a third of the UHF spectrum available to mics. With the pending incentive auction, the wireless microphone community must prepare to lose access to approximately half the remaining UHF spectrum, a second reallocation in a few years. The industry faces complete uncertainty regarding the amount and location of available spectrum after the auction and transition. Final development and manufacturing of replacement products, cannot occur until regulatory details are finalized.

To make decisions now in response to the elimination of portions of the 600 MHz band from wireless microphone use, owners as well as manufacturers of these devices need to know definitively that they will have a new spectrum to operate in, as well as the actual, final parameters of that spectrum, including other services that must be protected and what interference must be accepted. The wireless microphone manufacturers must have this information to determine what to build in order to support the demands of the country’s daily audio operations, and this information cannot possibly be known until the FCC makes a secure commitment of spectrum allotment to the industry. Any policy decision suggesting otherwise

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simply makes no sense.

Assuming available and useful spectrum is identified and a transition path is clear, the wireless microphone industry must then deploy significant human and financial resources to design, test and build new products. This process takes several years. Therefore, further delay in identification of new spectrum for wireless microphones increases the risk of severe disruption to operations as the Incentive Auction and TV band repacking approaches. The FCC should do everything in its power to provide a path forward for the wireless microphone community, and should not proceed with the Incentive Auction until additional spectrum is allocated.

By the time the auction has closed and TV stations have obtained final assignments, wireless microphones operators will have endured many years of uncertainty. Most will be required to implement costly equipment changes. A permanent allocation and assignment of spectrum for wireless microphones must be made so that the many industries and users, such as broadcasting, entertainment, sports, business, education and worship, among others, can continue their activities with no further distractions.

Respectfully submitted,

/s/ ___________________
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