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Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

*Re: Revision of Part 15 of the Commission's Rules to Permit Unlicensed  
National Information Infrastructure (U-NII) Devices in the 5 GHz Band,  
ET Docket No. 13-49*

*Comments in Support of Petition for Reconsideration of WISPA, Cambium, Mimosa  
Networks and JAB*

Dear Ms. Dortch,

Our company, Magnum Wireless Midwest, LLC: DBA Surf Air Wireless provides Internet services in 5 counties in Northwest Indiana and Northeast Illinois serving approximately 2000 customers. While many of these folks live fairly close to wired areas they do not have access to Cable Television and, for the most part, DSL is far too slow. We offer packages that range from 1 Mbps for checking email and light web surfing to 15 Mbps service for streaming video and gaming.

As we understand the current rules and the proposed changes, we believe the landscape would be dramatically altered for our ability to provide this essential service to so many underserved and un-served areas, ultimately hurting people who rely on our service as their only economic means of gaining Internet access.

The FCC's own record shows that this is a blunt solution to a very small problem:

Most of these interference cases were determined to have been caused by devices not certified for operation in the U-NII-2C band, which includes the 5.6-5.65 GHz band used by the TDWRs; no cases have been attributed to certified equipment operating properly in accordance with their grant of equipment authorization. Instead, these devices had been certified for operation in the U- NII-3 band, either as U-NII devices under Section 15.407 of our rules, or as digitally modulated intentional radiators

under Section 15.247 of our rules, and had been illegally modified and operated at high power levels in elevated locations.<sup>1</sup>

Further, our engineering studies show that under the proposed rules seventy percent of our existing subscriber base would not be able to receive service due to the reduction in transmit power as a result of the new rules. Of those customers that would be able to maintain service, they would do so at a drastically reduced service level. Due to the changes proposed by the FCC, our communities, customers, employees and company will suffer greatly. Just to maintain existing service levels the company would be faced with substantial capital costs with zero new revenue to mitigate those expenditures.

Currently our standard Point to Multipoint cell size is fifteen miles and we have the ability to sell our 15Mbps package or higher anywhere in that area pending actual site conditions. Under the new rules we would need to reduce our maximum range to less than 1 mile and would no longer be able to offer our highest tier of service as a result of the lower transmit power limits and reduced channel sizes. It is also fair to say our Point-to-Point infrastructure would likewise be severely impacted.

We also utilize the unlicensed U-NII-3 band for our long-range point-to-point communications to bring service into rural areas due to its historically greater transmit power and the increased resistance to rain fade compared to higher, licensed, frequency bands. The proposed rule changes would in effect remove this band as an option for us to use in this manner due to the new out-of-band emissions requirements. As a result of this, nearly half of our long-range links bringing service into un-served or underserved areas would no longer be available to us going forward. Because of these rule changes, we would need to replace our existing unlicensed equipment with licensed equipment in the 6-11 GHz range. Some of the drawbacks of using licensed equipment in these bands are the greatly increased capital costs, as well as ongoing tower rental due to the larger antenna size requirements because of rain fade or FCC regulations. This is all pending the availability of licensed spectrum for the paths we would need, as well as site owner approval for the larger antennas as many sites have hard restrictions on antenna size, weight, and placement which may make utilizing other bands impossible for our current paths. With these new restrictions, each link affected will not only impact the availability of just one customer in an un-served or underserved area; it will affect whole communities.

Other parties expressing support for more restrictive emission limits don't use the band for provisioning critical last mile communication links in underserved rural areas; most other parties focus on emissions limits for short range indoor services and stand to gain if WISP's are barred from using the 5GHz band. All of this would in-turn put our industry in a position to no longer be able to provide the level of service our customers are accustomed to. Further, such action would severely limit, if not altogether stop, any further deployment into the rural areas where the traditional wire-line providers cannot or do not provide services

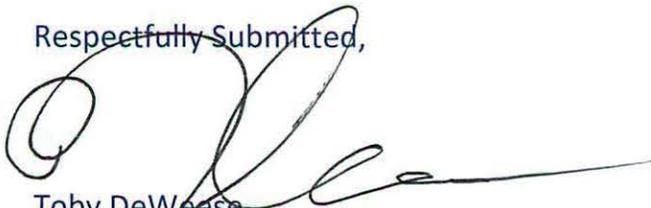
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<sup>1</sup> *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz, First Report and Order, ET Docket No. 13-49 (rel. April 1, 2014)*

due to their high deployment costs. Unless these rules are reconsidered, it will no longer be economical to deliver service to a vast majority of un-served or underserved rural America where WISPs, who rely on higher-power unlicensed 5GHz spectrum, are quite often the only viable option for high-speed, low latency, reliable connectivity.

In conclusion, we generally support the revision of U-NII rules that took effect on June 2; however, we also recognize that the specific out of band emission requirements found in 15.407 do not reflect the spirit of the most recent order. Therefore, it is really hard to understand current FCC logic. It is our understanding that the government is eager to level the digital playing field for broadband technology to rural America. Today WISP's are providing that critical service to millions of Americans, where other extremely well funded large corporations with government subsidies have chosen not to go for their own economic reasons. No example of interference exists except where equipment was illegally modified, and by the FCC's own words no other public interest is at stake. Yet these rules, if not reconsidered will have the effect of crippling a small yet important industry that has risked its own capital to provide the type of broadband service into areas that the government so desperately seeks.

Respectfully Submitted,



Toby DeWeese  
Chief Operating Officer