

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of)	
)	
Amendment of Part 101 of the Commission's)	
Rules to Facilitate the Use of Microwave for)	
Wireless Backhaul and Other Uses and to)	WT Docket No. 10-153
Provide Additional Flexibility to Broadcast)	
Auxiliary Service and Operational Fixed)	
Microwave Licensees)	
)	
Petition for Rulemaking filed by Fixed)	
Wireless Communications Coalition to)	
Amend Part 101 of the Commission's Rules to)	RM-11602
Authorize 60 and 80 MHz Channels in)	
Certain Bands for Broadband)	
Communications)	

**COMMENTS OF THE
FIXED WIRELESS COMMUNICATIONS COALITION
IN RESPONSE TO THE COMMISSION'S
SECOND FURTHER NOTICE OF PROPOSED RULEMAKING**

The Fixed Wireless Communications Coalition (FWCC)¹ files these comments in response to the Second Further Notice of Proposed Rulemaking in the above-referenced docket.²

¹ The FWCC is a coalition of companies, associations, and individuals interested in the fixed service—i.e., in terrestrial fixed microwave communications. Our membership includes manufacturers of microwave equipment, fixed microwave engineering firms, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. The membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV providers, backhaul providers, and/or their respective associations, communications carriers, and telecommunications attorneys and engineers. Our members build, install, and use both licensed and unlicensed point-to-point, point-to-multipoint, and other fixed wireless systems, in frequency bands from 900 MHz to 95 GHz. For more information, see www.fwcc.us.

² *Amendment of Part 101 of the Commission's Rules to Facilitate the Use of Microwave for Wireless Backhaul*, Second Report and Order, Second Further Notice of Proposed Rulemaking, Second Notice of Inquiry, Order on Reconsideration, and Memorandum Opinion And Order, WT Docket No. 10-153, FCC 12-87 at ¶¶ 62-75 (released Aug. 3, 2012) (*Second Further Notice*).

The FWCC is also filing a separate submission today in response to the Notice of Inquiry in this same docket.

A. THE COMMISSION SHOULD ADOPT COMSEARCH’S PROPOSED ANTENNA STANDARDS FOR 13 GHz.

Comsearch has requested Category B antenna specifications for the 13 GHz band that allow the use of 2-foot antennas.³ The FWCC supports this proposal.

Adoption of the Comsearch request will further a productive trend toward smaller fixed microwave antennas. The Commission initiated this development five years ago with a relaxation of antenna standards at 11 GHz.⁴ Finding no adverse consequences, and after careful study, the Commission recently took similar measures in the in the 6, 18, and 23 GHz bands.⁵

The Comsearch proposal would relax suppression requirements over the 5-15 degree range but tighten them at 20-180 degrees. This is a workable compromise that allows smaller antennas where congestion is not a problem, while still maintaining an efficient density of spectrum use. Moreover, the limitation on Fixed Service operations in this band to mostly rural areas—those not used by Broadcast Auxiliary Service television pickup stations⁶—means that smaller antennas are very unlikely to cause disruptive interference to other users.

³ *Second Further Notice* at ¶ 64.

⁴ *Amendment of Part 101 of the Commission’s Rules to Modify Antenna Requirements for the 10.7-11.7 GHz Band*, Report and Order, 22 FCC Rcd 17153 (2007).

⁵ *Second Further Notice* at ¶¶ 9-21. In a separate filing today, responding to the Notice of Inquiry in this docket, the FWCC requests comparable treatment for the 71-76 and 81-86 GHz bands.

⁶ 47 C.F.R. § 101.147(a) n. 34.

B. THE COMMISSION SHOULD ADOPT THE PROPOSED AMENDMENT TO THE 11 GHz RULES, WITH AN ADJUSTMENT.

The FWCC, together with Comsearch, has advocated a rule change at 11 GHz to ensure that Category B antenna users must upgrade to Category A or reduce EIRP when necessary to accommodate a new applicant.⁷ The FWCC supports the Commission's proposal to implement this change by amending Sections 101.113 and 101.115(f).

The Commission's proposal for Section 101.113(b), however, departs from the FWCC's original language in what appears to be a clerical error.⁸ We ask the Commission to restore the FWCC's version as shown (marked to show corrections from the proposed rule in Appendix C):

(b) The maximum power of transmitters that use Automatic Transmitter Power Control (ATPC) and the power of non-ATPC transmitters shall not exceed, and ~~the power input or output specified in the instrument of station authorization. The power of non-ATPC transmitters shall be~~ maintained as near as practicable to, the power input or output specified in the instrument of station authorization. A licensee that reduces power in order to resolve interference pursuant to Section 101.115(f) must update its license to reflect the reduced power level.

A similar error occurs in the body of the *Second Further Notice*.⁹

C. THE COMMISSION SHOULD REJECT THE PROPOSAL OF WIRELESS STRATEGIES, INC. ON INTERMEDIATE ANTENNA UPGRADES.

The present rules require an incumbent operating a Category B antenna to upgrade to Category A if a new applicant would receive predicted interference from the Category B antenna

⁷ See also Part C, below.

⁸ *Second Further Notice* at Appendix C, proposed rules. Compare to Letter from Mitchell Lazarus, Counsel for FWCC, to Marlene H. Dortch, Secretary, FCC in WT Docket No. 10-153 at 4 (filed March 9, 2012).

⁹ *Second Further Notice* at ¶ 68 n.179.

but not the Category A.¹⁰ Wireless Strategies, Inc. (WSI) suggests that a Category B user predicted to cause interference should be allowed to upgrade to an improved Category B, adequate to resolve the interference case, but not necessarily to Category A.¹¹

The FWCC opposes this proposal. We have stated our objections in detail elsewhere in the docket.¹² A copy of that *ex parte* submission is attached; we ask the Commission to consider it as part of the present pleading. A brief summary follows.

No Category B incumbent is eager to upgrade. Not only is the improved antenna a cost element in itself, but the larger size typically incurs higher tower rental costs. Worse, if the tower cannot accommodate the upgraded antenna, the incumbent may have to engineer and install a completely new path. The prospect of this expense and disruption often motivates the incumbent to delay, while the applicant entitled to interference protection can only wait. The current rules at least ensure this dispute occurs only once for a given installation: an incumbent required to upgrade must install a Category A antenna, after which it is free of further upgrade obligations. Under the WSI proposal, in contrast, the same dispute may have to play out repeatedly. An incumbent required to upgrade can minimize both its antenna purchase and tower lease costs (and improve its chances of staying on the same tower) by choosing an antenna just barely adequate to protect the newcomer. In consequence, another applicant seeking to operate

¹⁰ 47 C.F.R. § 101.115(c).

¹¹ *Second Further Notice* at ¶ 71. WSI also proposes allowing antennas inferior to Category B. *Id.* The FWCC strongly opposes this idea. Inasmuch as the Commission has rejected it, *id.* at ¶ 75, we need not address it further here.

¹² Letter from Mitchell Lazarus, Counsel for FWCC, to Marlene H. Dortch, Secretary, FCC in WT Docket No. 10-153 (filed Dec. 30, 2011).

in the same area may trigger the same process all over again, but with potentially more than one recalcitrant incumbent.

The Commission responds to this objection by noting that its rules impose a duty to upgrade a sub-Category A antenna when needed to resolve predicted interference.¹³ We agree. But the rules do not put a time limit on compliance. An incumbent can thus stall indefinitely without triggering a violation.¹⁴

The current rules have the further advantage of giving frequency coordinators a rational basis for planning. A coordinator studying a new application can choose a frequency that both minimizes disruption to existing users and also leaves the maximum possible room for later entrants. These calculations rely, in part, on knowing in advance the minimum antenna characteristics of both the present applicant and the later entrants. WSI's proposal would eliminate these certainties, and hamper coordinators in looking ahead to maximize use of the spectrum, both now and in the future.

For each of these reasons, and as stated in the attached *ex parte* letter, WSI's proposal would result in far less efficient use of the spectrum. The Commission should reject it.

¹³ *Second Further Notice* at ¶ 73.

¹⁴ The FWCC has previously asked the Commission to require that antenna upgrades be completed within a specified time. *See* Reply Comments of the Fixed Wireless Communications Coalition in WT Docket No. 10-153 at 3 (filed Oct. 25, 2011); Comments of the Fixed Wireless Communications Coalition in WT Docket No. 10-153 at 4 (filed Oct. 4, 2011); Comments of the Fixed Wireless Communications Coalition in WT Docket No. 10-153 at 15, n.31 (filed Oct. 25, 2010).

CONCLUSION

The Commission has made great strides in improving the regulatory environment for Fixed Service broadband backhaul. We urge it to further modify its rules as detailed above.

Respectfully submitted,

A handwritten signature in black ink that reads "Mitchell Lazarus". The signature is written in a cursive style with a large, prominent "M" and "L".

Mitchell Lazarus
FLETCHER, HEALD & HILDRETH, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, VA 22209
703-812-0400
Counsel for the Fixed Wireless
Communications Coalition

October 5, 2012

(attach *ex parte* letter of December 30, 201)

COURTESY SERVICE LIST

Chairman Julius Genachowski
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Robert McDowell
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Mignon Clyburn
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Jessica Rosenworcel
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Ajit V. Pai
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Ruth Milkman, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

James Schlichting, Senior Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

John S. Leibovitz, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Tom Peters, Chief Engineer
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Melissa Glidden Tye, Legal Advisor
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Blaise Scinto, Chief
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

John Schauble, Deputy Chief
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Charles Oliver, Attorney Advisor
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Brian Wondrack, Attorney Advisor
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Stephen Buenzow, Deputy Chief
Broadband Division
Wireless Telecommunications Bureau
Federal Communications Commission
1280 Fairfield Road
Gettysburg, PA 17325