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September 13, 2013

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Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

**Re: ET Docket No. 13-49, *Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*
*Ex Parte Communication***

Dear Ms. Dortch:

On behalf of the Fixed Wireless Communications Coalition (FWCC), pursuant to Section 1.1206(b)(2) of the Commission's Rules, I am electronically filing this notice of an oral *ex parte* communication in the above-referenced docket.

On Wednesday, September 11, 2013, Brett Kilbourne of the Utilities Telecom Council, Gregory Kunkle of Keller and Heckman LLP, representing the American Petroleum Institute, Ian Marshall of Aviat Networks, and Larrie Sutliff of AT&T—all members of the FWCC—accompanied by Cheng-yi Liu of this firm and the undersigned, as counsel for the FWCC, met with Navid Golshahi, Julius Knapp, Geraldine Matisse, Karen Rackley, Mark Settle, Bryant Wellman, and Aole Wilkins of the Commission staff.

We presented the points summarized in the attached handout. In addition, we offered specific examples of the need for high-gain unlicensed 5.8 GHz links for critical infrastructure and wireless backhaul.

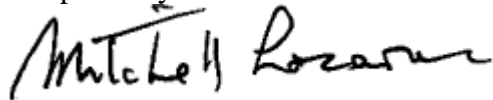
Ms. Marlene H. Dortch, Secretary

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Please contact me with any questions.

Respectfully submitted



Mitchell Lazarus
Counsel for the Fixed Wireless
Communications Coalition

cc: Meeting participants

Fletcher, Heald & Hildreth

The Law of Communications

Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band (ET Docket No. 13-49)

Fixed Wireless Communications Coalition

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September 11, 2013

About the FWCC

- * A coalition of companies, associations, and individuals interested in terrestrial fixed microwave communications
 - formed in 1998; speaks for the fixed service community
 - active in approx. 60 FCC proceedings plus NTIA, FAA, GAO, courts
- * Membership:
 - microwave equipment manufacturers
 - fixed microwave engineering / frequency coordinating firms
 - licensees of fixed microwave systems (and associations)
 - communications service providers (and associations)
 - major end users (railroads, public utilities, petroleum and pipeline, public safety agencies, cable TV providers) and/or their associations
 - backhaul providers, communications carriers
 - telecommunications attorneys and engineers.

Agenda

1. The FCC should retain unlimited antenna gain for fixed, point-to-point systems in the 5725-5850 MHz band.

Summary of Current Rules *

* Systems that qualify for fixed, point-to-point operation:

	§ 15.407(a)(3) (U-NII)	§ 15.247(c)(1)(ii) (digital modulation)
Freq. range (MHz)	5725-5825	5725-5850
TX Power (watts)	1 **	1
Power reduction	antenna gain > 23 dBi	none
Max EIRP (dBW)	23	no limit

* Adapted from table in NPRM FCC 13-22 Appendix C at 47.

** Power is limited to < 1W for emission bandwidths < 20 MHz.

Harmonization

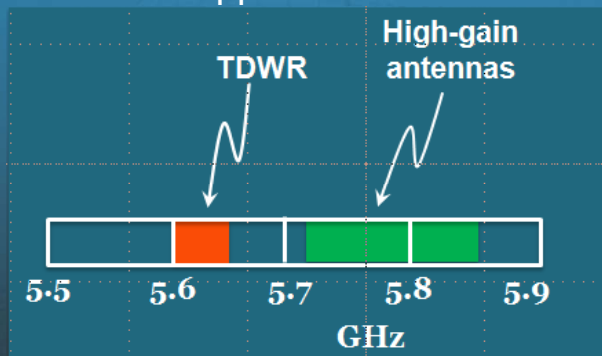
- * The FWCC supports harmonizing the U-NII and digital modulation rules at 5725-5850 MHz
- * Harmonized rules should preserve unlimited antenna gain for fixed, point-to-point systems.

Public Interest in High Antenna Gain

- * Licensed fixed service users sometimes need a link quickly
 - cannot always wait for Part 101 frequency coordination and license application
- * Common practice to install a temporary unlicensed 5.8 GHz link
 - needed power can exceed Section 15.407 maximum of 23 dBW
 - 6 GHz applicants can sometimes use the same antenna for temporary 5.8 GHz links
- * Long unlicensed links at 5.8 GHz support emergency and disaster relief, prompt restoration of service after hurricanes, tornadoes, flooding, fires, etc.
- * The 23 dBW limit would foreclose many of these applications.

Response to Opposition – 1

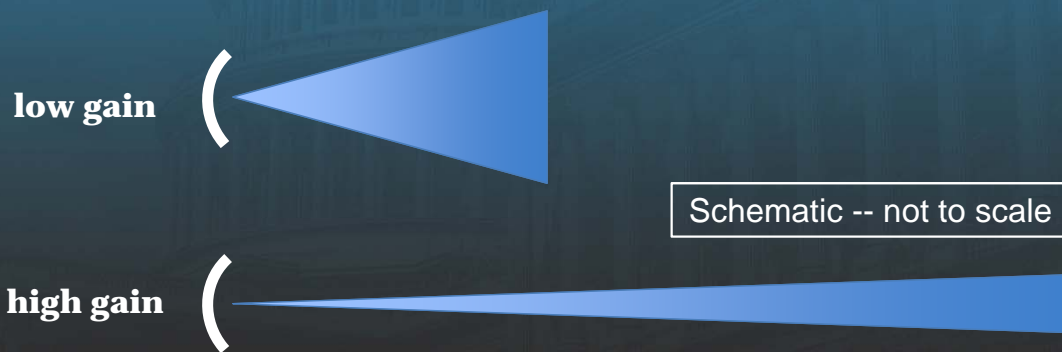
- * Cisco and IEEE 802 say: limiting EIRP will help prevent interference to Terminal Doppler Weather Radars (TDWRs)



- * Response: high-gain antennas operate on frequencies well separated from TDWR
- * No compliant 5725-5850 MHz radio, regardless of antenna gain, has caused TDWR interference.

Response to Opposition – 2

- * Wi-Fi Alliance says: restricting antenna gain will limit U-NII interference potential
- * Response: higher antenna gains redistribute the same energy
 - no additional energy to cause interference
 - result: longer range but narrower beam.



Conclusion

- * Continuing to permit unlimited gain for fixed, point-to-point antennas in the 5725-5850 MHz band offers important benefits with no disadvantages.



Thank you!

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