

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 2 and 97 of the	)	
Commission’s Rules to Create a Low Frequency	)	ET Docket No. 02-98
Allocation for the Amateur Radio Service	)	RM-9404
	)	
Amendment of Parts 2 and 97 of the	)	
Commission’s Rules Regarding an Allocation of	)	RM-10209
A Band Near 5 MHz for the Amateur	)	
Radio Service	)	
	)	
Amendment of Parts 2 and 97 of the	)	
Commission’s Rules Regarding the Use of the	)	RM-9949
2400-2402 MHz Band by the Amateur and	)	
Amateur-Satellite Services	)	

**REPLY COMMENTS**

The License-Exempt Alliance (“LEA”), by its counsel, hereby submits its reply comments in response to the initial comments filed in the above-captioned proceeding by ARRL, The National Association for Amateur Radio (“ARRL”) and IEEE 802 (“IEEE”), as they relate to the Commission’s proposal to upgrade the amateur radio service allocation to primary status and add a primary allocation for the amateur-satellite service in the 2400-2402 MHz band

The LEA is a nationwide coalition of wireless Internet service providers (“WISPs”) and equipment vendors who provide or support the provision of broadband service via license-exempt spectrum in, *inter alia*, the 2.4 GHz band. As the Commission has already recognized at paragraph 50 of the *Notice of Proposed Rulemaking* (“NPRM”) for this proceeding, “this band is important to unlicensed applications, and there is widespread deployment, [and] the removal of such devices would not be feasible.” Indeed, Commissioner Abernathy recently observed that “the power of the unlicensed bands – and the corresponding boom in consumer utility – is one of

the grate success stories of US telecommunications policy,”<sup>1</sup> and similarly Commissioner Martin has noted that usage of license-exempt bands “illustrate[s] how industry is adapting to make more and better use of the spectrum currently available, and harness spectrum once considered unusable.”<sup>2</sup> Statistics on license-exempt deployment confirm as much: according to one internal industry study, there are now approximately 400,000 license-exempt broadband subscribers in nearly 3,000 communities (many of which are rural areas which have little or no cable modem or DSL service), with the number of subscribers expected to reach 2,000,000 by the year 2005.<sup>3</sup> Accordingly, it was both necessary and proper for the Commission to consider the unique consumer benefits of license-exempt service when evaluating whether the proposed designation of amateur operations as primary at 2400-2402 MHz would serve the public interest.<sup>4</sup>

As a general matter, the LEA does not object to the proposed designation of amateur radio and amateur-satellite service as primary at 2400-2402 MHz – as the ARRL itself observes, such designation would not change the fundamental regulatory relationship between licensed and license-exempt operations in that spectrum, and would not by itself result in any displacement of those operations.<sup>5</sup> The LEA does, however, disagree with ARRL’s suggestion that the Commission’s inquiry in the *NPRM* about license-exempt services is tantamount to a rewrite of

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<sup>1</sup> “Unlicensed Spectrum Success – Lessons for the Next Chapter in FCC Spectrum Management,” Remarks of Commissioner Kathleen Q. Abernathy to the San Diego Telecom Council, San Diego, CA (July 18, 2002).

<sup>2</sup> See, e.g., Ross, “Wireless LANs Look To Supplant Wireline Phones and 3G,” *Wireless Week* (May 9, 2002), available at [http://www.wirelessweek.com/index.asp?layout=story&doc\\_id=85722&vertical](http://www.wirelessweek.com/index.asp?layout=story&doc_id=85722&vertical).

<sup>3</sup> These statistics do not include users of license-exempt “freenets” and “hot spots.” Due to the difficulties associated with compiling statistics on services not licensed by the Commission, the LEA believes that the actual number of license-exempt broadband subscribers in the United States may in fact be much higher.

<sup>4</sup> See *NPRM* at ¶ 50 (“We request comment on whether the proposed primary amateur and amateur-satellite service allocations would conflict with unlicensed use of the band.”).

<sup>5</sup> See Comments of ARRL, ET Docket No. 02-98, at 16 (filed July 29, 2002).

the licensed versus license-exempt dichotomy in the Commission's Rules.<sup>6</sup> Rather, the Commission's inquiry is more correctly viewed as an attempt to determine whether the current technical rules for the 2400-2402 MHz band are adequate to optimize sharing of the band between licensed amateur and license-exempt operations, subject to the overriding requirement that license-exempt operations operate on a non-interference basis vis-à-vis licensed services in the 2.4 GHz band. As such, the Commission's inquiry merely reflects the spirit of Commissioner Abernathy's remarks: "The success of the unlicensed approach (just like its licensed sister) depends in large part on the Commission's willingness and ability to clearly define the rules that govern the common. This is important so that capital, and in turn, services, can flow to the American people."<sup>7</sup>

The LEA agrees entirely with Commissioner Abernathy's statement, and thus supports IEEE's call for the adoption of a "safe harbor" rule that would more precisely define what constitutes "harmful interference" from license-exempt operations vis-à-vis amateur services in the 2400-2402 MHz band.<sup>8</sup> Such a rule is already in place for the 902-928 MHz band (47 C.F.R. § 90.361), and has provided valuable clarity as to the appropriate technical parameters for license-exempt services in that spectrum *without* according them co-equal priority with licensed services:

To promote cooperative use of the 902-928 MHz band we are elaborating on [the harmful interference] standard to define what is *not* harmful interference from . . . unlicensed Part 15 devices to multilateration LMS systems. This "negative definition" will promote effective use of the 902-928 MHz band by the various services by clearly establishing the parameters under which . . . unlicensed users of Part 15 devices may operate *without* risk of being considered sources of harmful interference to services with a higher allocation status. Part 15 . . . operators who voluntarily operate within [the parameters of Section 90.361] will

<sup>6</sup> *Id.* at 17 ("ARRL continues to remind the Commission that *it cannot make allocation decisions involving incumbent services based on concerns about unlicensed services . . .*") (emphasis in original).

<sup>7</sup> See note 1, *supra*.

<sup>8</sup> Comments of IEEE 802, ET Docket No. 02-98, at 8-9 (filed July 29, 2002).

not be subject to harmful interference complaints from multilateration LMS systems at 902-928 MHz.<sup>9</sup>

ARRL should have no difficulty with this approach. By its own admission, the designation of amateur services as primary at 2400-2402 MHz will not displace license-exempt operations. Thus, if ARRL is truly concerned that license-exempt operations will seriously compromise amateur operations in the 2400-2402 MHz band (a claim which is undocumented in ARRL's filing), then the appropriate remedy is to further clarify the concept of harmful interference in that spectrum so that such interference is less likely to occur. A "safe harbor" rule, either adopted here or in a separate proceeding, would achieve that result.

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<sup>9</sup> *Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems (Report and Order)*, 10 FCC Rcd 4695, 4715 (1995); *see also id.* at 4714 ("We also conclude that effective sharing of the band between . . . Part 15 users and multilateration LMS systems does not require a change in the relative status between these two allocations and uses, as some parties have suggested. Rather, we have decided to balance the equities and value of each without undermining the established relationship between unlicensed operations and licensed services."). The Commission has already reconsidered its "safe harbor" rule on two separate occasions and in both cases reaffirmed its previous findings as to the legality and public interest benefits of the rule. *Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems (Order on Reconsideration)*, 11 FCC Rcd 16905, 16914-15 (1996); *Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems (Memorandum Opinion and Order and Further Notice of Proposed Rulemaking)*, 12 FCC Rcd 13942, 13956 (1997).

WHEREFORE, the License-Exempt Alliance requests that the Commission resolve the *Notice of Proposed Rulemaking* in accordance with the reply comments set forth above.

Respectfully submitted,

LICENSE-EXEMPT ALLIANCE

By: \_\_\_\_\_ /s/ \_\_\_\_\_  
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