

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

In the Matter of

m-Wave Networks LLC	)	File No. 0557-EX-CR-2023
	)	
Application for Renewal of Experimental License	)	
	)	
	)	

To: The Office of Engineering and Technology

Reply to Opposition

Skywave Networks, LLC (“Skywave”), by counsel, and pursuant to Section 1.45 of the Commission’s rules, 47 C.F.R. § 1.45, hereby replies to the Opposition to Informal Objection filed by Tower Research Capital LLC (“TRC”), on behalf of its subsidiary, m-Wave Networks LLC (“m-Wave”) (“Opposition”).<sup>1</sup>

Skywave filed its Informal Objection to m-Wave’s application for renewal of Experimental License for Call Sign WL2XEE because m-Wave offered scant support its application to renew<sup>2</sup> and because m-Wave is using the experimental facilities in daily operation. Skywave concluded that TRC/m-Wave is not researching; it is using the experimental facilities on a daily basis for trading. Based on FCC precedent, once a facility is in daily operation, the experiment is over. For those reasons, Skywave argued, the application for renewal of WL2XEE should be denied.<sup>3</sup>

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<sup>1</sup> Skywave noted that the Opposition was filed out of time and should be stricken in its Motion to Strike filed September 20, 2023.

<sup>2</sup> Section 5.63 specifies the information to be provided with each application for a conventional experimental license. Specifically, the applicant is required to show how the “program of experimentation has a reasonable promise of contribution to the development, extension, or expansion, or use of the radio art, or is along lines not already investigated.” “Listen Before Transmit” technology has existed for decades. If that is the subject of m-Wave’s continued experimentation, it does not meet the requirements of Section 5.63 of the Commission’s rules, 47 C.F.R. §5.63.

<sup>3</sup> TRC, on behalf of m-Wave, argued that Skywave is somehow tying the SMC Petition for Rulemaking to m-Wave’s renewal application. Skywave’s Informal Objection focused solely on m-Wave’s operations. m-Wave argued that Skywave is using the FCC’s processes for improper purposes. Skywave absolutely denies that it is abusing the

The Commission’s Experimental Radio Station rules, set forth in Part 5 of the rules, 47 C.F.R. §5.1 *et. seq.*, regulate experimentation and development of new radio equipment and techniques. Section 5.601(c), 47 C.F.R. §5.601(c), specifically prohibits provision of services “for hire.”

In the Informal Objection, Skywave asserted that m-Wave had completed its experiment, as it was using the experimental facilities in daily operation. On behalf of m-Wave, TRC did not deny daily operations. Rather, in the Opposition, m-Wave confirmed that it uses the experimental facilities daily for commercial purposes.<sup>4</sup> TRC, on behalf of m-Wave, seems to think it has tacit OET approval for daily commercial operations.<sup>5</sup>

In the *Wilfredo G. Blanco-Pi*<sup>6</sup> matter, the Commission determined that when an experimental licensee turns to full time regular operation of experimental facilities, it is no longer experimenting<sup>7</sup>. TRC, on behalf of m-Wave, seems to admit that it operates daily

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Commission’s processes. Instead, Skywave is bringing to light m-Wave’s improper use of its experimental facilities. Under Section 5.95 of the Commission’s rules, Skywave is authorized to do so. As a responsible member of the high-frequency, fixed, long distance service community, Skywave is simply helping the Commission police its out-of-bounds licensees.

<sup>4</sup> Opposition at 4.

<sup>5</sup> Perhaps m-Wave reported its plans to commence daily commercial operations in its application. As the substantive information is subject to confidential treatment, Skywave cannot know what m-Wave proposed and the Commission approved. Skywave questions whether “commercial” operations are the same as services for hire. If so, m-Wave’s commercial operations violate Section 5.601(c) of the Commission’s rules. Skywave requested the “confidential information” under FOIA. Skywave’s FOIA request was denied by OET. The time allowed for filing an application for review of OET’s FOIA decision has not yet run.

<sup>6</sup> 32 FCC Rcd 3100 (2017).

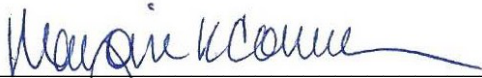
<sup>7</sup> TRC, on behalf of m-Wave, argues that *Blanco-Pi* involves a broadcast experimental license and so is inapplicable to consideration of renewal of m-Wave’s conventional experimental license. Of course, the Broadcast Experimental License rules were consolidated with all other Experimental Radio Service rules in Part 5. Promoting Expanded Opportunities for Radio Experimentation and Market Trials under Part 5 of the Commission’s Rules and Streamlining Other Related Rules, ER Docket No. 10-235; 2006 Biennial Review of Telecommunications Regulations – Part 2 Administered by the Office of Engineering and Technology (OET), ET Docket No. 06-155; *Report and Order*, 28 FCC Rcd 758 (2013), *Erratum*, 28 FCC Rcd 3096 (2013). *Blanco-Pi* was decided well after the consolidation.

providing commercial service. Clearly, the experiment is over. Renewal of the experimental license is not warranted.<sup>8</sup>

TRC, on behalf of m-Wave, challenges Skywave's standing to object to grant of its experimental license. Section 5.95 of the Commission's rules, 47 C.F.R. §5.95, allows any person or entity desiring to object to or oppose an Experimental Radio application to file an informal objection. Skywave is concerned about the integrity of the Experimental Radio Service and the process by which equipment and services mature into fully authorized services. In particular, as a service matures, rather than continue in an unregulated and unchecked "wild west" manner, if the Commission finds it to be a service that serves the public interest, rules should be adopted and the service regularized so that all may participate and comply with the rules.

There seems to be little dispute about m-Wave's daily trading operations using the experimental facilities. It is up to the Commission to decide whether its experimental facilities are to be used for daily trading or for actual development of new and novel equipment and services.

Respectfully submitted,  
SKYWAVE NETWORKS LLC

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<sup>8</sup> TRC, on behalf of m-Wave, misreads Section 5.71 of the Commission's rules to argue that it is entitled to a 10-year experiment. Section 5.71(a) provides that (1) a regular license term is two (2) years but may be up to five (5) years upon justification; and (2) a license may be renewed for an additional term *not exceeding* five (5) years, upon an adequate showing of need. 47 C.F.R §5.71(a). One renewal period of whatever term the Commission determines is authorized by the rule.

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of September 2023, I transmitted a true, correct, and complete copy of the foregoing Reply to Opposition to Informal Objection by electronic mail to:

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