



**Reply Comments of the
Motor & Equipment Manufacturers Association (MEMA)
to the
Federal Communications Commission
RE: Notice of Proposed Rulemaking;
FCC Seeks to Enable State-of-the-Art Radar Sensors in 60 GHz Band;
Amendment of Section 15.255 of the Commission's Rules
ET Docket No. 21-264; FCC 21-83
October 18, 2021**

The Motor & Equipment Manufacturers Association (MEMA) submits these reply comments in support of the *Notice of Proposed Rulemaking* (NPRM) adopted by the Federal Communications Commission (FCC or Commission) to amend Section 15.255 of the Commission's Rules governing devices operating in the 60 GHz band.¹

As MEMA indicated in its initial comments, MEMA strongly supports the Commission's efforts to liberalize the operational and technical rules for field disturbance sensor devices in the 60 GHz band. As other commenters from across industries rightly noted, the current rules are inhibiting the introduction of life-saving applications, such as in-vehicle child safety systems² and other industrial radar devices that could greatly enhance worker safety.³ In fact, as Acting Chairwoman Rosenworcel indicated herself, the Commission's "technical rules for the 60 GHz band are holding some of this activity back. That's because our rules for this band confine radar manufacturers to **overly conservative power limits and other dated requirements.**"⁴

MEMA could not agree more. In fact, virtually every commenter supports liberalizing the Commission's technical rules for the 60 GHz band.⁵ The question is thus not *whether* to liberalize the Commission's 60 GHz rules, but by *how much*. Under these circumstances, MEMA urges the Commission to not let the perfect be the enemy of the good.

In more practical terms, no one disputes that the increased technical limits the Commission permitted in response to the numerous 60 GHz waivers recently granted by the Commission⁶ pose

¹ *In the Matter of Amendment of Section 15.255 of the Commission's Rules*, Notice of Proposed Rulemaking, ET Docket No. 21-264.

² See, e.g., ADC Automotive Distance Control Systems GMBH Comments at 2

³ See, e.g., Inxpect SpA Comments at 1.

⁴ Statement of Acting Chairwoman Jessica Rosenworcel at 1 (emphasis added).

⁵ It appears that only NTIA submitted comments "requesting further study" of the operation of FDS devices in a limited portion of the 60 GHz band "where NOAA's Passive Earth-Exploration Satellite Service (EESS) sensors and satellites operate on a primary basis." NTIA Comments at 1. NTIA did not, however, substantiate any interference concerns it may have, and otherwise praised the Commission's "laudable effort to enable advanced radar sensors in the 57-64 GHz band." *Id.*

⁶ *Vayyar Imaging Ltd. Request for Waiver of Section 15.255(c)(3) of the Commission's Rules for Radars used for Interactive Motion Sensing in the frequency band 57-64 GHz*, ET Docket Nos. 20-15, 20-121, 20-263, 20-264, 20-435, and 20-434, Order, DA 21-407 (OET 2021). See also, *Petition of Faurecia Clarion Electronics North America regarding 47 CFR § 15.255*, Letter Order, DA 21-811 (OET Jul. 9, 2021); *Request by Texas Instruments Incorporated for Waiver of 47 CFR § 15.255(c)(3)*, Letter Order, DA 21-812 (OET Jul. 9, 2021); *Request by Amazon.com Services*

little risk of causing harmful interference and allowing FDS devices to operate at these increased power limits is in the public interest. Accordingly, the Commission should, at a minimum, quickly issue an order of general applicability permitting unlicensed operation at the power limits permitted under the waiver orders. Immediate relief would permit vehicle suppliers and others to introduce critical and life-saving technologies without the added cost and delay of filing “me too” waivers and promote a competitively neutral playing field. Such an action would be supported by recent Commission precedent in much more contentious proceedings, including the Commission’s decision to grant WISPs special temporary authority to operate in the 5.9 GHz Band before reply comments were even filed in that proceeding.⁷ Simply put, there is no good reason to delay this baseline relief that all stakeholders appear to agree on.

As for the technical limits that the Commission ultimately decides upon in a final order issued in this proceeding, MEMA reiterates that international harmonization of spectrum rules is critically important, and any modernization of the FCC’s 60 GHz rules should be as consistent as possible with international standards now in effect or under consideration. To this end, MEMA fully agrees with the overwhelming majority of commenters that support making the 60 GHz Band available at 20 dBm EIRP for unlicensed radar use cases, while the Commission should measure mean conducted output power limit as a mean (average) limit – not a peak limit.⁸ However, MEMA agrees with the numerous other commenters who raise serious concerns with the proposal to adopt a 10 dBm transmitter conducted output power limit. Such a limit would be difficult, if not impossible, to measure, and is ultimately unnecessary if the 20 dBm EIRP limit is adopted. Further, MEMA also agrees that contention-based protocols, such as listen-before-talk (LBT), should be adopted, if at all, only for fixed outdoor infrastructure FDS devices that operate at or above 40 dBm EIRP across the 60 GHz band. Adopting such requirements for lower-powered FDS devices could in fact prevent safety-of-life FDS applications from operating at all in the presence of WiGig devices, and there is no justification for such a requirement on this record.

At bottom, MEMA fully supports the Commission’s objectives to modernize the 60 GHz band to unleash additional life-saving technological innovation and urges the Commission to update Rule 15.255 consistent with the principles detailed above.

Respectfully submitted,

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⁷ See [FCC Grants WISPs Temporary 5.9 GHz Spectrum Access for Rural Broadband | Federal Communications Commission](#).

⁸ If the Commission specifies the conducted output power and the EIRP power as an average limit, a conforming change to Section 15.255(c)(3) should be implemented.