

76-77 GHz radar sensors installed on board aircrafts while the aircraft is on the ground.

Both Petitions should be denied because of substantive and procedural reasons.

GENERAL REMARKS

MBUSA is a member of the Alliance of Automobile Manufacturers, Inc. (“the Alliance”), and supports their comments it has provided in this rulemaking proceeding. Furthermore, MBUSA strongly supports the technical comments and opinions the Strategic Automotive Radar Frequency Allocation Group (SARA) provided in this rulemaking proceeding.

We previously observed that there was almost unanimous agreement among the docket’s comments with respect to the FCC’s proposed modification of the vehicular radar rules and their supporting public safety benefit. Over the last twelve years, MBUSA has deployed over 100,000 vehicles equipped with 76-77 GHz radar-based safety and driver assistance systems. Given the recognized safety benefits to road safety offered by 76-77 GHz radar-based technologies², we respectfully urge the Commission to ensure that our existing and future customers can fully rely on 76-77 GHz radar-based safety and driver assistance systems. We appreciate the Commission’s consideration of our comments and the reasons for our opposition to the Petitions of Navtech and Honeywell as stated below.

² The Strategic Automotive Radar Frequency Allocation Group (SARA) cites a number of studies in *ex parte* Comments. According to these studies, up to 74% of all rear-end collisions can be prevented with the use of automatic emergency braking and 20% (*i.e.*, 1.2 million) of passenger car collisions can be avoided by the use of forward collision radars. See SARA *ex parte* filing dated January 2, 2012 at 3-4.

REASONS FOR THE OPPOSITION TO NAVTEC'S PETITION

The Petition for Partial Reconsideration filed by Navtech should be denied on the following grounds:

(1) Automotive radar systems can help to avoid or reduce the harm caused by collision accidents. The Commission recognized this in stating at paragraph 7 in the Report and Order that “Studies show that use of collision avoidance technology can prevent or lessen the severity of a significant number of traffic accidents”. The use of 76-77 GHz fixed radar installations near roads, however, is likely to cause substantial interference between these systems and automotive radar systems operating in the same frequency band. Such interference could potentially lead to a significant decrease in performance of the automotive radar systems and thus impede their collision avoidance functionality. We would never exclude anyone from legally operating under the Part 15 rules, but we have concerns with any ‘compatibility’ in allowing new fixed services in order to prevent critical interference issues since we have been deploying the 76-77 GHz technology as standard and/or optional equipment on over 50% of our model lines for twelve years now. In order to rule out this possibility, there should be conclusive evidence that fixed 76-77 GHz radar installations near roads are compatible with existing and future automotive radar systems. In its Petition, Navtech states that “there is evidence that there is no interference between fixed infrastructure scanning radar and automotive radar”, yet the evidence Navtech provides is only circumstantial. Moreover, Navtech fails to provide a study that shows compatibility between fixed infrastructure scanning radar and automotive radar. In fact, contrary to Navtech’s claims, there is initial evidence that fixed radar installations interfere with automotive radar systems. This

evidence was found during an EU-funded research project called MOSARIM³, which is led by a consortium of European automotive companies; which one participant was MBUSA's parent company, Daimler AG. The project started in 2010 and investigates interference avoidance and compatibility technologies for automotive radar systems. The project also examined the compatibility of automotive radar systems with fixed radar installations. Preliminary results indicate that fixed radar installations operating in the 76-77 GHz band cause significant interference with automotive radar sensors⁴. Hence, it cannot be assumed that fixed radar installations are compatible with automotive radar systems in general. Since to this day, there is no published study that establishes general compatibility between fixed radar automotive radar operating in the 76-77 GHz frequency band, the wider use of fixed radar installation in this frequency should not be permitted. This is even more impactful, since drivers of vehicles with 76-77 GHz radar systems already, should always be able to assume that these systems work at all times while the vehicle is being driven.

(2) Navtech's Petition for Reconsideration was filed untimely. Pursuant to Section 1.429(d) of the Commission's Rules, Petitions for Reconsideration have to be filed within thirty days the publication of a Report and Order in the Federal Register in order to be filed timely. Since the Report and Order was published in the Federal Register on August 13, 2012. Navtech filed its Petition on October 10, 2012. Therefore, Navtech filed its Petition far later than thirty day after the publication of the Report and Order in the Federal Register. We also noticed that Navtech had not participated at all in

³ MOSARIM stands for More Safety for All by Radar Interference Mitigation. Information about the project can be found at www.mosarim.eu

⁴ The final report of the MOSARIM project is scheduled to be released no sooner than the end of 2013.

the proceedings related to the Report and Order, before the untimely filing of its Petition for Reconsideration.

REASONS FOR THE OPPOSITION TO HONEYWELL'S PETITION

The Petition for Reconsideration filed by Honeywell should be denied on the following grounds:

(1) Although Honeywell claims in its Petition for Reconsideration that “the proposed Honeywell aircraft device will be able to co-exist with fixed radar systems like other vehicular radar systems subject to Section 15.253” it fails to provide conclusive evidence that this statement holds. Since Honeywell did not participate in the proceedings related to the Report and Order, the participating parties are not able to evaluate Honeywell’s claim on a technical basis.

(2) The Petition for Reconsideration does not specify in detail, which further modifications should be made to Sections 15.35 and 15.235 of the Commission’s Rules. Honeywell merely asks for the Commission’s affirmation that aircraft-mounted 76-77 GHz radar systems should be exempt from the provision stated in Section 15.235(c) that “Operation under the provisions of this section is not permitted on aircraft or satellites” provided that the aircraft is taxiing on ground. Section 1.429(c) of the Commission’s Rule requires that Honeywell must state with particularity the respects in which it believes the action taken by the Commission should be changed. Honeywell clearly failed to do so.

CONCLUSION

The Commission should deny the Petition for Partial Reconsideration filed by Navtech on October 10, 2012 because it was untimely filed and because it does not provide conclusive evidence that fixed radar installations operating in the 76-77 GHz frequency band are generally compatible with existing or future automotive radar systems. Such compatibility needs to be guaranteed in order to ensure that 76-77 GHz radar-based automotive safety systems can operate on all roads and thus enhance road safety.

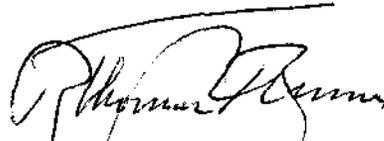
The Commission should also deny the Petition filed by Honeywell since it also fails to provide conclusive evidence for the compatibility of aircraft-mounted 76-77 GHz radar systems with existing and future automotive radar systems. The Petition also fails to comply with the Commission's Rules.

If you have any inquires or correspondence concerning this matter, please feel free to contact Dan Selke, of my staff, at (201) 573-2616, or Daniel.Selke@mbusa.com.

Sincerely yours,



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FILED: December 3, 2012