RESPONSE TO FCC CORROSEPONDENCE REFERENCE NO. 32032

Re: FCC ID LO6-DVRSUHF
Applicant: Futurecom Systems Group Inc Correspondence Reference Number: 32032
731 Confirmation Number: EA896423

LO6-DVRSUHF 380-512 1-20

1) Installation/operating-instructions exhibit entitled: "Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems (DVRS)" mentions UHF 403-512 MHz, which does not cover all frequencies under this FCCID - please revise where appropriate.

The “Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems (DVRS)” was revised to show 380 – 512MHz to reflect the FCC Grant.

2) In installation/operating-instructions exhibit entitled "Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems (DVRS)" we note "Future approval" entries in Table 4C and 4E - please confirm these are not applicable for this filing.

Any “Future approval” does not apply to this filing.

3) In installation/operating-instructions exhibit entitled "Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems (DVRS)"Table 4D lists FCCID AZ492FT5823 700/800 MHz; however, this filing does not contain combination evaluation with 700/800 MHz - please explain and/or revise.

Futurecom submitted another Class II Permissive Change to TCB for this FCC ID a day prior to this Permissive Change. The “Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems (DVRS)” was edited to reflect both Permissive Changes.

4) In installation/operating-instructions exhibit entitled "Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems (DVRS)"Table 4D appears to be unclear about whether or how 50% duty factor applies for "Mobile" power listed - please revise if appropriate.

A note specifying 50% duty factor for “Mobile” power was added to the “Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems (DVRS)”.

5) FYI - we note that RF exposure label symbol strictly-speaking is not as recommended by IEEE Std C95.2-1999.

The RF exposure symbol is the same as on approved Motorola radios.

6) We note that installers/system-integrators are instructed to install RF exposure label within operator's field-of-sight adjacent to control head. If not in filing already, please confirm whether RF exposure label is installed on repeater unit itself as well.

Futurecom installs a second RF exposure label on the repeater unit.

7) If not in filing already, please explain and/or revise for Discrepancy between power & freq. of previous LO6-DVRSUHF grants (380-512 MHz, 20 W) vs as stated in MPE reports in this filing (450-470 MHz, 10 W).

Power reduction and frequency selection were optimized to satisfy customer requirements for co-located DVR and Mobile while maintaining MPE/SAR requirements.

8) Similar to preceding question, if not in filing already, please explain why repeater MPE was evaluated only for the 450-470 MHz part of the 380-512 MHz rated operating freq. range.

Frequency selection was optimized to satisfy customer requirements for co-located DVR and Mobile while maintaining MPE/SAR requirements.

9) If not in filing already, please explain how 83.5 cm distance from trunk antenna roof edge in Appendix A is same as or different from 85 cm distance for antenna to head in SAR model.

The illustration in Appendix A is a top view of by-stander positions (1-5) which includes lateral distances from the car body along with roof and trunk mount antenna locations. The front and rear windshields are not included in the illustration and therefore the roof edge to the trunk is not practical. The sole purpose of the 83.5cm was to demonstrate that by-stander 2 is positioned at an equal distance between the roof and trunk mounted antennas (refer to note 2 in

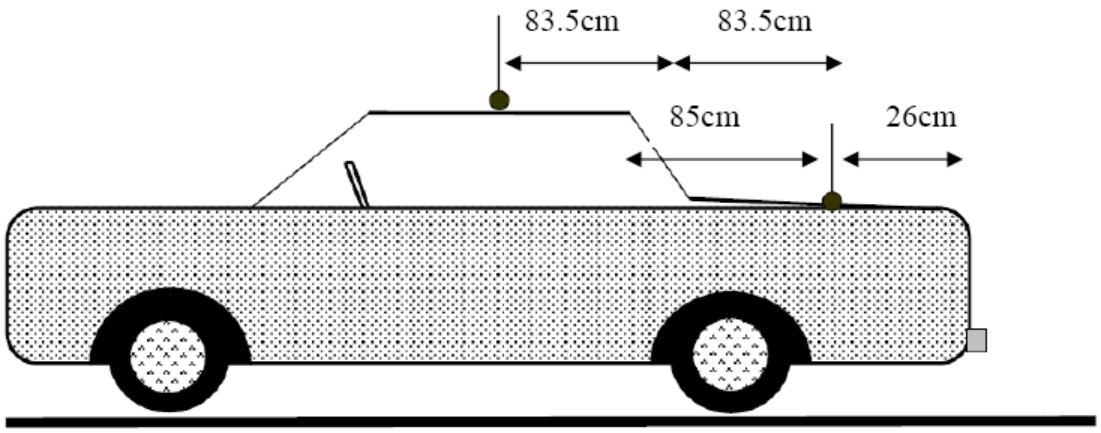
Appendix A). Appendix A does not include passenger (inside the automobile) positioning or distances.
The 85cm refers to the minimum distance between the back of the rear seat and the trunk mount antenna. The 85cm is explained in the Product Safety and RF Energy Exposure Booklet for Digital Vehicular Repeater Systems under antenna installation instruction. The antenna installation section states the following;

> "Ensure that the distance from the antenna location on the trunk lid will be at least 85 cm (33 inches) from the front surface of the rear seat-back to assure compliance with RF Energy Safety standards."

Additionally, response 10 below includes a side view illustration of an automobile with 83.5cm and 85cm distances.

10) Figure in Appendix A shows 83.5 cm from roof edge to trunk antenna; SAR part says trunk antenna is 26 cm from end of trunk - please explain how antenna to trunk edge distance is same as in MPE test, or explain Why if different.

The illustration in Appendix A is a top view of by-stander positions (1-5) which includes lateral distances from the car body along with roof and trunk mount antenna locations. The front and rear windshields are not included in the illustration and therefore the roof edge to the trunk is not practical. The sole purpose of the 83.5cm was to demonstrate that by-stander 2 is positioned at an equal distance between the roof and trunk mounted antennas (refer to note 2 in Appendix A). The rear window is partially included in the 83.5cm distance. The 26cm distance is from the trunk mount antenna to the trunk edge towards the rear of the automobile. Refer to figure below.



11) Please submit EMC test report for this filing.

EMC data was reported for each FCC ID during initial approval submission. The following FCC ID's contain EMC data; AZ492FT3806, AZ492FT3808, AZ492FT4870, AZ492FT4862, AZ492FT4867 and LO6-DVRSUHF