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Federal Communications Commission
Authorization & Evaluation Division
7435 Oakland Mills Road
Columbia Maryland 21046

Attention: Equipment Authorization Branch

Subject: FCC ID: BV8P800 Correspondence Reference # 24608, Confirmation #'s EA 244045

Stan Lyles,

M/A-COM, Inc. is answering the questions regarding the EA 244045:

Question 1 is answered by additional plots of the emissions including mask, mask H was used for all plots, as it is the most stringent. The plots were taken at an earlier date of an electrically identical model.

Questions 2 and 3 are concerning talk-around mode, at this time, with this product, we are not asking for a talk around option any other representation to the contrary is in error, the original 731 asks for an F1D and F1E designator in the 806-824 MHz band this is still the case. We will add the talk-around mode with an analog emission designator in the future.

Question 4:The details of the 50% duty cycle signal are as follows: The on and off times are 30 mS in each state. While transmitting in this mode the modulation is 4 level GFSK at 3 watts peak output power. The modulator is fed a pseudorandom string from the processor. This mode is not documented to the user as it is for test only. This signal simulates the radio's behavior in Open Sky Trunked mode where we TDMA the channel into two 30 mS time slices. The radio was measured in this mode for two reasons, first it accurately represents the Open Sky Protocol behavior, Second if the portable is allowed to transmit at full power for extended periods of time i.e. 10 minutes or longer it gets hot enough that the thermal management circuitry backs off the transmit power. The SAR test required long periods of transmission at full power so the TDMA mode was judged best.

Question 5: There are only a couple of other details. The radio, in data mode, always uses 4 level GFSK modulation. The standard modes for the radio are either 2 slot or 4 slot TDMA. The radio also has a mode where it transmits at 17% duty cycle; this is used for registration and channel access requests. The carrier ramp up and down times are 200 uS, < 1/100 of the total burst time.

Question 6, duty factor is not controllable by the end user and is at the most 50% for a push-to-talk radio, Sar measurements were taken with a 50% signal modulation duty cycle. Duty cycle is also limited due the reasons listed in question 4. This is also a controlled exposure radio. Control of SAR is covered in some detail on page 6 and 7 of the existing manual.

Questions 7,8, and 9 are answered in the SAR addendum from ITS which will be upload along with this cover letter.

Regards,

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