January 5, 2001

Mr. Andy Leimer
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

FCC ID: 07KSM3450U2

731 Confirmation Number: EA98548

Correspondence Reference Number: 17516

Quote Reference Number: n/a

RE: FCC RF Exposures

Applicant Name: Topaz3, L.L.C.

1. The latest reply indicated this device is intended to meet the occupational exposure limit provided it operates at 50% duty factor. In order for this device to qualify for occupational exposure limit, users must have the appropriate training so that they will have the knowledge to control their exposure conditions and duration to satisfy the higher occupational exposure limit. Please submit the specific training info for satisfying occupational exposure requirements. For training info to be placed in the manual, a caution/warning label should be placed on the device, visible to the users, directing them to the specific training info in the manual. Please upload relevant pages of this training information.

A revised Warning Label and Operator's Manual RF safety information is provided on the following pages.

RF exhibits: file names

sm3000 Warning label.pdf and sm3000 Warning label location.PDF

sm3000 manual.PDF

The application for certification of this device is made for (1) Occupational Use, by providing awareness and control of RF exposure requirements, (2) while demonstrating compliance with the more stringent limit of the General population Environment for bystanders. The calculation, provided in the RF exposure exhibit (sm3000 RF Exposures MPE.PDF correspondence 17293), justifies the limit used, and listed on label and Manual, to satisfy FCC RF exposure compliance. The minimum separation distance of 53-54"(extended to 1.6m by the applicant) is calculated based on the general population limit (bystander). It is understood that reference to the general population limit is not included in the Manual to avoid misleading end-user.

CTCSS/DCS Scanning
Normal Scan TX
Priority Scan TX
Priority Only TX
Receive Only Scan
Scan List Edit
Licensing and Service Information
Software Copyrights
Maintenance
Warranty Statement

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Safety / Warning Information

The Federal Communications Commission (FCC), with its action in General Docket 93-62, November 7, 1997, has adopted a safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated equipment. Maxon subscribes to the same safety standard for the use of its products. Proper operation of this radio will result in user exposure far below the Occupational Safety and Health Act and Federal Communications Commission limits.

Warning - It is mandatory that radio installations in vehicles fueled by liquefied petroleum gas conform to the following standard: National Fire Protection Association standard NFPA 58 applies to radio installations in vehicles fueled by liquefied petroleum (LP) gas with LP gas container in the trunk or other sealed-off space within the interior of the vehicle. This standard requires that:

- 1. Any space containing radio equipment shall be isolated by a seal from the space in which the LP gas container and its fittings are located.
- 2. Remote (outside) filling connections shall be vented to the outside.

Safety Training Information:

Antennas used for this transmitter must not exceed an antenna gain of **3 dBd**. The radio must be used in vehicle-mount configurations with a maximum operating duty factor not exceeding **50%**, in typical Push-To-Talk configurations. This radio is **NOT** approved for use by the general population in an uncontrolled environment. This radio is restricted to occupational use, work related operations only where radio operator must have the knowledge to control the exposure conditions of its passengers and bystanders by maintaining the minimum separation distance of 53 inches (135 cm). Failure to observe these restrictions will result in exceeding the FCC RF exposure limits.

Caution - DO NOT transmit for more than 50% of total radio use time (50% duty cycle). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the "RED" LED on the front of the radio is illuminated. **You can cause the radio to transmit by pressing the "PTT" button on the radio's microphone.**

Caution - DO NOT operate the transmitter of SM -3000 mobile radio when someone (bystanders) outside the vehicle is within 5 feet (1.6 meter) of the antenna.

Antenna Installation:

For rear deck trunk installation, the antenna must be located at least **53 inches** away from rear seat passengers in order to comply with the FCC RF exposure requirements. For roof top installation, the antenna must be placed in the center of the roof.

Warning - DO NOT allow children to operate transmitter - equipped radio equipment.

Caution - DO NOT operate the radio near electrical blasting caps or in an explosive atmosphere.

Caution - DO NOT operate the transmitter of any radio unless all RF connectors are secure and any open connectors are properly terminated.

All equipment must be properly grounded for safe operation.

All equipment should be serviced by a qualified technician.

Note: This radio operates in FCC regulated frequency bands. All radios must be licensed by the FCC before use. Because this radio contains a transmitter, Federal law prohibits unauthorized use or adjustments of this radio.

This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

Warning – Frequency band 406 – 406.1 MHz is reserved for use ONLY as a distress beacon by the US Coast Gaurd and NOAA. Under no circumstance should this frequency band be part of the preprogrammed operating frequencies of this radio.

Unpacking Information

Remove and carefully inspect the contents of your package (s) for the following items:

Radio
Microphone
DC Power Supply Cord
Radio Mounting Bracket and Hardware
Microphone Bracket and Hardware
Operating Instructions

If any items are missing, please contact your Dealer or Maxon.

SM-3000 Enduro Series Features

Wideband frequency separation

 $10 \ \mathrm{or} \ 40 \ \mathrm{W} \ \ \mathrm{programmable}$ output power

Programmable 12.5/25 kHz channel spacing

Channel scan

Priority channel scan

Look back channel

CTCSS/DCS tone signaling

Busy channel lockout

Time-out timer

Scan List Edit

Priority Channel Edit

Label artwork for SM-3000 Series Mobile "Bystander Label" prints white letters on black adhesive stock. "Caution" Typefont is Universe Condensed, 10 pt.; Rest of text is CG Omega, 8 pt.
Black line is cutting line, does not print.
Final cut label is 85 mm wide x 14.5mm tall

CAUTION: DO NOT transmit radio when someone (bystanders) outside vehicle is within 5 feet (1.6 meters) of antenna. See owner's manual for specific operating requirements.

SM-3000 Series bystander Warning label placement - Top front edge of mobile escutcheon.



2. The RF exposure info on the label should be in the form of a CAUTION statement, indicating that this device must be limited to occupational use and users must follow the training information specified in the manual for meeting FCC RF exposure compliance requirements. The RF exposure label can be a separate label but it should be visible to all persons operating with this device. Please specify the font size and label size. (See #4 below). Submit a new RE exposure label.

A revised Warning Label.

RF exhibits: file name sm3000 Warning label.pdf

3. The training information in the manual should include warning/cautions statements to alert users that this device is not approved for use by the general population as it only meets the higher exposure limit for occupational use provided it operates with at 50% or less duty factor. It should also clearly state that users are required to have appropriate training to control their exposure condition and duration to satisfy the higher occupational exposure limit before using this device. (See #4 below)

RF exhibits: file names sm3000 Warning label.pdf sm3000 manual.PDF

The application for certification of this device is made for (1) Occupational Use, by providing awareness and control of RF exposure requirements, (2) while demonstrating compliance with the more stringent limit of the General population Environment for bystanders. The calculation, provided in the RF exposure exhibit (sm3000 RF Exposures MPE.PDF correspondence 17293), justifies the limit used, and listed on label and Manual, to satisfy FCC RF exposure compliance. The minimum separation distance of 53-54"(extended to 1.6m by the applicant) is calculated based on the general population limit (bystander). It is understood that reference to the general population limit is not included in the Manual to avoid misleading end-user.

4. As an example of RF exposure label and training info requirements, please review a recently approved filing of a similar transmitter under FCC ID: OWDTR-0006-E, on how to revise the info. required for this filing.