

## American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

April 2, 2007

RE: FCC ID: Q5EPT520002 ATCB004715

Attention:

I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

1. Please note that the FCC has recently given an interpretation that states while extended frequency bands may be used for part 90 devices, when an extended band does occur, the applicant must justify the band extension where the gap is greater than 1MHz. Please note that the device for which certification is being sought is a device that involves Part 90 band extensions greater than 1MHz and thus a justification letter is required. Please note that the frequency range between 454 and 456MHz is not a part 90 band. Typically a justification will consist of a statement giving the reason for inclusion of the non part 90 band. This can range from use outside the US to US government use. Please note that the letter must also state the non part 90 rule parts. In this case the band between 454-455MHz is used in parts 22 and 80 and the 455-456MHz band is used in the part 74 rule parts. Please remember when providing the reason for the band extension you must include all non-part 90 rule parts that are used in the band extension. The following drawing may help determine the non-part 90 rule parts involved. Please provide this extension request letter.

450-454	450-454 LAND MOBILE	Auxiliary Broadcasting (74)
5.286 US87	5.286 US87 NG112 NG124	Private Land Mobile (90)
454-456	454-455 FIXED LAND MOBILE NG12 NG112 NG148	Public Mobile (22) Maritime (80)
	455-456 LAND MOBILE	Auxiliary Broadcasting (74)
456-460	456-460 FIXED LAND MOBILE	Public Mobile (22) Maritime (80) Private Land Mobile (90)
5 007 5 000	5 007 5 000 NO140 NO404 NO40	İ
5.287 5.288 460-470 Meteorological-satellite (space-to-Earth)	5.287 5.288 NG112 NG124 NG148 460-462.5375 FIXED LAND MOBILE 5.289 US201 US209 NG124	Private Land Mobile (90)
	462.5375-462.7375 LAND MOBILE 5.289 US201	Personal Radio (95)
	462.7375-467.5375 FIXED LAND MOBILE	Private Land Mobile (90)
	5.287 5.289 US201 US209 US216 NG124	
	467.5375-467.7375 LAND MOBILE	Personal Radio (95)
	5.287 5.289 US201 467.7375-470 FIXED	Private Land Mobile (90)
5.287 5.288 5.289 US201 US209 US216	LAND MOBILE  5.288 5.289 US201 US216 NG124	 

2. Please note that under the same interpretation mentioned in item 1 above, the FCC has stated that testing must be done on actual Part 90 allowed frequencies. Please note that pages 6 and 7 of the

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- report states you use 420.165, 445.165 and 469.965 MHz as test frequencies. Please note that I do not find any of these frequencies in any of the part 90 allocation tables. Please either retest on actual part 90 allowed frequencies, or please point to the specific rule section in Part 90 that allows these specific channels and frequencies.
- 3. Please note that pages 6 and 7 states you used 420.165MHz as a test frequency. However, please also note that subsequent data shows 421.165MHz is the frequency used. Please explain and please be consistent in your references in the report. Please also use only allowed part 90 frequencies.
- 4. Please note that in light of the errors found on pages 6 and 7 in relation to plotted and other conflicting data, it is not possible to determine what actual frequency was used on page 9 of the report for power measurements. Please explain.
- 5. Please include the limit lines on the modulation and audio response plots.
- 6. Please note that you have not provided any radiated emissions data. Please remember that even if all signals are more than 20 dB below the limit, the minimum responsibility is to show either plotted data or tabular data of 6 frequencies showing the 20dB below the limit. This can be either ERP or radiated field measurements if all signals are 20dB below the limit. For all signals less than 20dB below the limit, antenna substitution ERP values are to be provided. Please provide some evidence in tabular or plot form that shows the EUT radiated spurious emissions are 20dB below the limit.
- 7. Please show the limit lines on the transient frequency response plots.
- 8. Please provide appropriate and adequate rf exposure information. What is the ERP of the fundamental frequencies? Please note that this is needed in order to determine if SAR is required. Please note that even though this is a push to talk with 50% duty cycle, the conducted power of this device is 3.9W. The power at which SAR is required for handheld devices in the 421-470MHz range for devices less than 2.5cm is 0.8W (1.6W at 50% duty cycle PTT). This device then appears to require SAR measurements if it can be worn on the body. Please provide adequate information to determine is SAR is required. Please note that it appears obvious that the intent of the external speaker and microphone capability is to allow the device to be worn on the body. While this may require a third party belt clip or holster, the capability does appear obvious. If the device cannot be worn on the body, please show how this is prevented.
- 9. Please note that based on the responses to the above, further comments may result.

Dennis Ward

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Dennis Ward

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.