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Date: November 14, 2001

To: Harry Hodes
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For: Diane Poole
FCC Application Processing Branch

From: Dave Beliveau, Itron Hardware Engineering
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| Subject: | Correspondence Reference Number: | 21118 |
| | 731 Confirmation Number: | EA102186 |
| | FCC ID: | EO9G5RL Low Power version of EO9G5R |
| | Applicant: | Itron Inc., 2818 N. Sullivan Rd. Spokane Washington, 99216 |

Please find answers to email questions of correspondence of November 1, 2001 (21118).

Question 1: The User Manual is not legible. Please resubmit a better version.
Answer 1: I assume that the file was corrupted in transmission. It is enclosed as the PDF file: G5_User.PDF. Using the PDF viewers zoom mode and a valid file it should be legible.

Question 2: Please submit external EUT photographs.
Answer 2: epsn0001.jpg file illustrates G5RL external front view with users typical hand position with scale.
epsn0002.jpg file illustrates G5RL external rear view with users typical hand position with scale.
epsn0003.jpg file illustrates G5RL external rear view with users typical hand position with scale.
epsn0004.jpg file illustrates G5RL view with users typical hand v.s. body position
rx_640_1.jpg file illustrates the Receiver PCB mounted inside the Raptor radio housing.
tx_640_1.jpg file illustrates the Transmitter PCB mounted inside the Raptor radio housing.
rear_640_1.jpg file illustrates both TX and RX boards rear view.
mod_1.jpg file illustrates a side view of the raptor enclosure.
fcc_label.jpg file illustrates the new FCC label for EO9G5RL.

Question 3: Section 4.2 of the test report indicates that the antenna connector is a standard SMA type. This does not comply with FCC Rules Part 15.203. Please clarify.
Answer 3: This product, in the past, has been sold to utilities that have been assigned an FCC license in the 952-957 MHz MAS band. This is the first radio (in over 10 years) we have offered to utilities using a low power transmitter. We have decided to utilize a reverse SMA antenna and bulkhead on the Raptor radio. The antenna will be identical to the one used for the test but will have a reverse SMA connection scheme. . This should satisfy the antenna requirements of section 15.203. File name: (connector.jpg) shows the new antenna connection scheme.

Question 4: The Block Diagram/Operational Description states that the device is rated for 250 mW RF output power. This is not typical of a Part 15 low power transmitter operating under 15.231. Please clarify.
Answer 4: Enclosed is a modified theory of operations document (File name: Theory of operations2), that indicates a high power licensed mode (250mW EO9G5R) and now a low power unlicensed mode

(.01mW EO9G5RL) for the raptor radio mounted in the G5 hand held computer. High power transmission mode will be disabled for unlicensed users allowing only low power mode. Please review the theory for further clarification.

Question 5: Describe the antenna type and give the antenna dBi power gain.

Answer 5: Enclosed is a word doc of the antenna spec from Centurion, it shows a half wave center fed dipole, 0 dBd which equals 2.15 dBi. File name: Antenna.pdf (click on Yellow Marker).

Question 6: Section 7.2 of the test report admits that the device does not meet the transmission timing characteristics and requirements of Part 15.231(e). Please clarify. Do you have a waiver pending for this application?

Answer 6: We tried to file a waiver for section 15.231(e), but we were told by the FCC that until we filed a part 15 intentional radiator report on this radio we couldn't file the waiver. Now that the part 15 filing has taken place we will be filing the request for waiver with the FCC. We expect that additional documentation and verbal communications will have to take place between Itron and the FCC directly to file and resolve the waiver issue. This waiver, for the G5RL, is in response to an older product, which was granted a waiver in Nov of 1990. This product, the READ ONE PRO (ROP), because of parts issues is no longer manufacturable and will be replaced with the raptor radio within the G5 Hand Held Computer (G5RL).

Also enclosed is an electronic copy of the original FCC to ENSCAN (ITRON) issued waiver for Section 15.231(e) for the Read One Pro device (file name: waiver_1990.pdf). The Read One Pro's FCC Identifier is: EWQ90F2482517-410. The waiver request for the EO9G5RL is to replace the obsolete Read One Pro (ROP). Components for this product is no longer available and we are forced to replace it with the low power version of the G5R handheld computer using Itron's Raptor radio ie G5RL.

Thank you for your assistance in this matter.

David M. Beliveau, Itron Engineering