## FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

NOV 18 1994

IN REPLY REFER TO: 31030/EQU/4-2-3 1300B4

Mr. Christopher D. Imlay Booth, Freret & Imlay Suite 204 1233 20th Street, NW Washington, DC 20036

Dear Mr. Imlay:

This is in reply to your letters of May 11, 1994, June 21, 1994, and August 10, 1994, filed on behalf of Tektron Micro Electronics, Inc., requesting a waiver of Section 15.249 of our rules. Specifically, Tektron requests a waiver of the field strength limitations in Section 15.249 to allow it to receive certification for a digital wireless microphone that would be used by law enforcement personnel and operate in the bands 902-928 MHz and 2400-2483.5 MHz.

You state that Tektron presently manufactures and sells its digital wireless microphone to the Federal Government for law enforcement activities. Tektron wants to make the same device available to state and local government law enforcement agencies as well. You indicate that:

- \* the device could operate under Section 15.249 except that the permitted field strength limits are too low to provide adequate and reliable service
- \* the signal is spread over 2 MHz and, as such, is comparable to spread spectrum systems that are authorized under Section 15.247 of our rules; however, the device does not meet the specific requirements for a spread spectrum device
- \* the device cannot be redesigned to comply with the spread spectrum rules without dramatically increasing the cost of the device
- \* the device is unlikely to cause harmful interference to other co-channel users because:
  - it will be used by trained law enforcement officers in highly attenuating environments such as the interior of automobiles, shirt pockets, etc.
  - it will be used on a highly intermittent basis
  - security considerations dictate that the device will be sold only to law enforcement agencies
  - the number of devices sold each year will likely be less than 200 and the total number of operational systems is expected to be less than 1000.

In considering your request, I recognize the life-saving potential of this device for those involved in law enforcement work. I also recognize that the potential for harmful interference from your device is minimal. Accordingly, pursuant to Sections 0.31(i) and 0.241(a) of our rules, I am hereby waiving Section 15.249 to permit Tektron Micro Electronics, Inc. to obtain certification for its digital wireless

microphone, subject to the following conditions: 1) the maximum peak output power of the transmitter shall not exceed 1 watt; 2) the transmitted power density averaged over any 1 second interval shall not be greater than 8 dBm in any 3 kHz bandwidth within the 902-928 MHz or 2400-2483.5 MHz bands; 3) except as mentioned in 1) and 2), the devices must comply with all other technical requirements in Section 15.249 and all other applicable provisions in Part 2 and 15; 4) the marketing of these devices must be restricted to state and local law enforcement agencies; and 5) no more than 200 units may be sold per year.

I trust that the above responds to your inquiry. Additional questions should be directed to Errol Chang, at the address on the letterhead or at 202-632-7316.

Sincerely,

Richard M. Smith

Chief

Office of Engineering and Technology