

## American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

June 27, 2003

RE: Icom Incorporated

FCC ID: AFJ262700

I have a few comments on the above referenced Application.

1) Below are proposed grant conditions. Note that according to our procedures, we must evaluate SAR for TX's if certain user to antenna distances exist during expected use and the conducted or EIRP power exceeds certain values. For instance for this particular device, if the conducted or EIRP values are > 128 mW (60/freq) with < 2.5 cm spacing in body worn configurations, SAR must be evaluated. For > 2.5 cm spacing, if the conducted or EIRP values are > 257 mW (120/freq), then SAR must be evaluated. For this radio the conducted power was highest. Assuming up to a 50% duty cycle for PTT radios, the conducted value becomes 50% of 488 mW = 244 mW. This value is just under the 257 mW threshold for devices that meet the 2.5 cm distance. From drawings in the manual, it appears that a 2.5 cm distance will exist between the user and antenna if a belt clip is used. Therefore please confirm if in a body worn confirmation the use of the belt clip provides 2.5 cm spacing from the body by providing a photograph or drawing as appropriate that shows this distance is met. Also, please note that even if the device does meet the 2.5 cm requirement, if the FCC has any concerns during an audit of this application they could still require review of the SAR results (full review of report, calibration information, verification information, photographs, measurement uncertainty, etc.).

If the belt clip does not provide the 2.5 cm spacing, SAR results are required to be submitted and reviewed. Please note that review of SAR results are subject to additional review costs.

## **Proposed Grant Conditions:**

Power Output listed is ERP. This device and its antenna must operate with a separation distance of at least 2.5 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. This device must transmit with an operational-based push-to-talk duty cycle not to exceed 50%. End-users must be provided with specific operating instructions for satisfying RF exposure compliance.

2) FYI. For future applications, please ensure that the occupied bandwidth test measures to the outside lobes of the waveform. Your plots reported 8.85 kHz occupied bandwidth which was measured using the automatic measurement feature of the spectrum analyzer. Carefully evaluation of your plots show that by measuring to the outside lobes yields about 10.2 - 10.4 kHz, which agrees with Carson's Rule of 11.0 kHz. For FCC submittals the occupied bandwidth measurements are typically compared to Carson's Rule to assure that they agree. Also, please note that the FCC has expressed concern for use of the automatic feature when it does not measure to the outside of the lobes.

Timothy R. Johnson Examining Engineer

mailto: tjohnson@AmericanTCB.com

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.

• Page 2 June 27, 2003

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.