



25<sup>th</sup> September 2001

Authorization & Evaluation Division  
Federal Communications Commission Laboratory  
7435 Oakland Mills Road  
Columbia, MD 21046

Gentlemen;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its application for Certification of the transmitter with FCC ID: AZ489FT5815. This variable power (0.24 to 700 milliwatt ERP) transmitter is part of a handheld transceiver used in a SMR and EA SMR trunking system operating in the United States 806-821/851-866MHz and 896-902/935-941 MHz frequency band. Certification is sought for, and performance data is provided.

This transceiver is of the receive-first type described in International Telecommunications Union Recommendation ITU-R M.1221 entitled *Technical And Operational Requirements For Cellular Multimode Mobile Radio Stations*. It must first find, acquire and lock onto a control channel from a predefined set of control channel frequencies assigned to a companion Authorized base station (e.g. – FCC ID: ABZ89FC5792). Transmission is not possible until lock to a base station control channel has been achieved, then transmission is limited to digitally modulated service request bursts on the reverse control channel. Upon recognition of a proper request, the control channel base station transmitter will then assign the transceiver a traffic channel for transmission of digital voice or circuit-switched data from the set of frequencies for which the trunking system is licensed. Attached Exhibit 12.1 provides additional descriptive details.

It is expected that this handheld time division multiplexed transceiver marketed in the United States will also be used for itinerant operation with companion Authorized Base Stations by users requesting trunked radio and telephone interconnect service while roaming outside the United States. In some countries the companion base stations are licensed to operate at frequencies in the 821-825/866-870 MHz band in addition to some of those in the 806-821/851-866 MHz band normally used in United States SMR systems. Consequently, this transmitter has been designed to meet FCC requirements for operation in the 806-821 MHz band over the more global band of 806 - 825 MHz when used with a companion Authorized Base Station. Thus, performance data is provided to substantiate FCC compliant operation with a Companion Base Station over the broader 806 to 825 MHz band expected for global use of this handheld transceiver.

To facilitate global roaming it is kindly requested that a note be provided in the Grant for Equipment Authorization, which states that this 'receive first' type of equipment is compliant for transmitter operation over the broader range 806-825 MHz when used with a compatible Authorized Base Station. This will aid equipment authorization in foreign countries, which accept a United States

FCC Grant for Equipment Authorization, yet not jeopardize United States public safety or cellular systems licensed to operate in the 821-825 MHz frequency band since no compatible base station may be authorized on those frequencies in the United States.

It is also expected that this transceiver type will be marketed outside the United States and brought into the United States for itinerant "roaming" operation on compatible 806 - 821 MHz base stations located within the United States. Consequently, upon receipt of Authorization, only those units of this equipment type authorized for marketing in countries outside the United States will also bear a label with the specified FCC identifier.

In accordance with 47 CFR 2.1093(c) this transmitter may be used in "covered" SMR service so it has been subjected to routine environmental evaluation for RF exposure and found to be compliant with the limits specified in 47 CFR 2.1093(d)(2).

The subject transmitter complies with 47 CFR 90.203 of the rules in that the operator cannot directly program transmit frequencies using only the unit's normally accessible external controls.

This transceiver can function as a Part 15.3(r) computer peripheral device when functioning as an RF modem when connected to a computer via a data cable (ref: Exhibit 12.1).

In addition, this transceiver can function as a hand-held Part 15.3(k) computer executing application programs even when not connected to a companion trunked system base station control channel.

Enclosed is a complete Certification application. Contact me at (954) 723-5793 if you require any additional information.

Sincerely,

**/s/ Mike Ramnath**

FCC Liaison

Email: [mike.Ramnath@motorola.com](mailto:mike.Ramnath@motorola.com)