

**MOTOROLA**

Date: September 01, 2000

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

Dear Mr. Coperich;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its application for Certification of transmitter AZ489FT5801, which is an adaptation of previously authorized transmitter AZ489FT5794. This variable power (0.00013 to 0.63 Watt ERP) transmitter is part of a handheld transceiver with an integral antenna used in a SMR or EA SMR trunking system operating in the 806-821/851-866 MHz frequency band.

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: ABZ89FC5763 and ABZ89FC5772). 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 packet 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 806-821/851-856 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 of 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 of 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.

This radio product is intended to be sold in the United States to provide itinerant "roaming" operation outside the United States via access to 935 - 960 MHz GSM compatible base stations. As a consequence, the scanning process of the receiver includes an oscillatory search for GSM systems as well. When operating in the iDEN state, search for a GSM system is suspended since that service is not available domestically. Similarly, when operating in the GSM state outside the United States, search for an iDEN system is suspended once it is locked onto a GSM system. To facilitate international distribution, it is kindly requested that a note be provided in the Grant of Authorization which states that this equipment includes an auxiliary receiver function operating in the frequency range 935 to 960 MHz.

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.

Enclosed is a complete Certification Application comprised of 12 Exhibits. Contact me at (954) 723-5793 if you require any additional information.

Regards,

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FCC Liaison  
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