

May 13, 2015

To: Elite Electronic Engineering
Re: Class II Permissive Change for **ABZ89FC5817**, 800 MHz MTR3000 Base Radio Transmitter
Added Emission Designator for DMR Dual Carrier Applications

This memo is in regards to a Motorola Solutions type approved transmitter, equipment type ABZ89FC5817. ABZ89FC5817 was originally granted FCC type approval on August 27, 2010. It was most recently updated on October 30, 2013 to include additional digital emission designators.

A copy of the current grant is included on the following page.

Per this action, the change requested herein adds an additional emission designator that encompasses additional channel use-cases now allowed under 47CFR90.221. Specifically, up to 22 kHz may now be utilized in the 809-824/854-869 MHz band; the appropriate mask for compliance purposes is the "ACP" mask explicitly referenced to and described in **47CFR90.221**.

The FCC OET has been consulted about this change and has ruled that this change is to be filed as a Permit-But-Ask (PBA) and a Class II permissive change to the original grant.

Occupied bandwidth and adjacent channel power data is included in this package to illustrate and show 90.221 "ACP mask" compliance for dual carrier emission designators, as follows:

- **21K7D7E, 21K7D7D and 21K7D7W**: Dual carrier two slot, DMR TDMA Digital Modulation (4 Level FSK)

No schematics or photos are included in this package. This proposed change maintains the existing specifications of the equipment. The equipment will be completely compatible and interchangeable with the existing equipment currently shipped under our equipment type **ABZ89FC5817**, and the form, fit, and function of the base radio is identical to the equipment that is currently in production.

For the filing package currently on record with the FCC, all exhibits are considered current and valid. The exhibits shown in the "List of Exhibits" herein are supplemental to the information currently on record.

Please feel free to contact me if you need further information or have any questions and / or issues.

Sincerely,



Vincent Spena

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E-mail: v.spena@motorolasolutions.com

TCB
**GRANT OF EQUIPMENT
AUTHORIZATION**
TCB

Certification
Issued Under the Authority of the
Federal Communications Commission
By:

Elite Electronic Engineering, Inc.
1516 Centre Circle
Downers Grove, IL 60515

Date of Grant: 10/30/2013
Application Dated: 10/30/2013

Motorola Solutions, Inc.
1301 East Algonquin Road
Schaumburg, IL 60196

Attention: Vincent Spena

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER: **ABZ89FC5817**
Name of Grantee: **Motorola Solutions, Inc.**
Equipment Class: **PCS Licensed Transmitter**
Notes: **Non Broadcast Transmitter**

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHz)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
BC EF	90	851.0 - 870.0	100.0	0.1 PM	16K0F3E
BC EF	90	851.0 - 870.0	100.0	0.1 PM	11K0F3E
BC EF	90	851.0 - 870.0	100.0	0.1 PM	7K60FXE
BC EF	90	851.0 - 870.0	100.0	0.1 PM	7F60FXD
BC EF	90	851.0 - 870.0	100.0	0.1 PM	7K60F7E
BC EF	90	851.0 - 870.0	100.0	0.1 PM	7K60F7D
BC EF	90	851.0 - 870.0	100.0	0.1 PM	7K60F7W
BC	90	851.0 - 854.0	100.0	0.1 PM	7K60FXE
BC	90	851.0 - 854.0	100.0	0.1 PM	7K60FXD
BC	90	851.0 - 854.0	100.0	0.1 PM	7K60F7E
BC	90	851.0 - 854.0	100.0	0.1 PM	7K60F7D
BC	90	851.0 - 854.0	100.0	0.1 PM	7K60F7W
BC	90	935.0 - 940.0	100.0	0.1 PM	11K0F3E
BC	90	935.0 - 940.0	100.0	0.1 PM	7K60FXE
BC	90	935.0 - 940.0	100.0	0.1 PM	7K60FXD
BC	90	935.0 - 940.0	100.0	0.1 PM	7K60F7E
BC	90	935.0 - 940.0	100.0	0.1 PM	7K60F7D
BC	90	935.0 - 940.0	100.0	0.1 PM	7K60F7W
BC EF	90, 24D	940.0 - 941.0	100.0	0.1 PM	16K0F3E
BC EF	90, 24D	940.0 - 941.0	100.0	0.1 PM	11K0F3E
BC EF	90, 24D	940.0 - 941.0	100.0	0.1 PM	7K60FXE
BC EF	90, 24D	940.0 - 941.0	100.0	0.1 PM	7K60FXD
BC EF	90, 24D	940.0 - 941.0	100.0	0.1 PM	7K60F7E
BC EF	90, 24D	940.0 - 941.0	100.0	0.1 PM	7K60F7D
BC EF	90, 24D	940.0 - 941.0	100.0	0.1 PM	7K60F7W

Power out is conducted. The antenna(s) used for this transmitter must be fixed-mounted on outdoor permanent structures. RF exposure compliance is addressed at the time of licensing, as required by the responsible FCC Bureau(s), including antenna co-location requirements of Section 1.1307(b) (3). Permissive change to add "H-Mask" for NFSPAC applications.

BC: The output power is continuously variable from the value listed in this entry to 5%-10% of the value listed.

EF: This device may contain functions that are not operational in U.S. Territories except as noted in the filing. This grant has extended frequencies as noted in the filing and Section 2.927(b) applies to this authorization.