

April 2nd, 2013

Office of Engineering and Technology
Laboratory Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Att: Tim Harrington

Subject: Response to Correspondence Number 43401 for Certification of Transmitter with
FCC ID: AZ489FT3829, EA449420, February 06, 2013

Dear Mr. Harrington,

Please see below for our responses:

Q1) User manual in original filing under AZ489FT3829 mentions radio "software version R05.00.00 or later." If not in this filing already, please identify applicable "radio" software version(s), "CPS" version(s), "FPP option" version(s).

R1) There will be no change to the FPP option; however the software version cannot be determined until the FCC grants Motorola Solutions the right to develop and implement such feature. It is estimated that this feature will require version R10.00.00 or later.

Q2) User manual in this filing includes "Front Panel Programming (FPP) covered in this manual, can only be programmed/ reprogrammed when the radio is ordered with the FPP option.". Please explain hardware, and/or firmware/software differences between the approach proposed in this filing relative to all contents of the original filing (parts list, schematics, op. desc., etc).

R2) The prime hardware difference lies in the elimination of the hardware dongle that is attached to the side connector of the radio. Further, there is the addition of a hardware USB dongle that must be attached to the side connector of the computer on which the authorized service personnel is enabling the FPP feature via the customer programming software. The firmware difference is that the subscriber will no longer look for a hardware dongle to be attached to the side connector of the device when entering FPP mode. Rather, the subscriber will query the field radio authorized service personnel for a password since the hardware USB dongle was already utilized in enabling the FPP feature via the customer programming software.

Q3) Please explain compliance with applicable 90.203(j) provisions, also as relative to the following from KDB pub 579009 D01 v03.

"Manufacturers must ensure that equipment manufactured or imported after the transition date has the 25 kHz capability disabled. If this is done through programming software then the appropriate software must be modified to comply with this requirement and the previous version of the software must be updated or replaced."

R3) FPP option does not change any of the feature set of the radio and is compliant to applicable 90.203(j) provisions.

Q4) Cover letter mentions "code plug" - please give details about what that is in terms of hardware and/or software.

R4) A codeplug is a solid-state chip inside a radio where the radio's personality data is stored. Personality data is created using the Motorola Customer Programming Software (CPS). CPS defined data can be transferred to the radio's chip or to a codeplug file. Codeplug files can be archived on the computer's hard drive for later use.

Q5) Cover letter mentions "frequencies that can be programmed from the keypad will only be those frequencies that are certified by the FCC for that particular transmitter". This seems to refer to frequencies under the part 2 subpart J equipment authorization, however it might be appropriate to clearly address compliance also for 90.427(b) "... no person shall program into a transmitter frequencies for which the licensee using the transmitter is not authorized."

R5) CPS will only enable the frequencies that the radio is certified for and FPP will access those identical sets of frequencies. It's important to note that these radios are for licensed services and the licensee (i.e. authorized service personnel) shall program only authorized frequencies, this meeting the requirements of Rule Part 90.427 (b).

Q6) For each of 90.203(g)(1), 90.203(g)(2), 90.203(g)(3), 90.203(g)(4), please summarize whether and how the device complies, for the original filing AND with changes per this application.

R6) The present process of using a Dongle coupled with a password given to authorized service personnel meets or exceeds the requirements of Rule Parts 90.203 (g) (1-4). Instead of the Dongle, the proposal is to use a password which will be available only to authorized service personnel and this meets the requirements of Rule Parts 90.203 (g) (1-4).

Q7) Consistent with 2.1033(c)(3), please submit herein a current version of the device operating instructions being furnished to users, and/or intended revised version in case any changes are anticipated based on the matter in this filing.

R7) Attached.

Q8) Concerning code or special instructions to be provided to the person making these changes, specifically who is it available to and how is it distributed and managed?
[KDB pub. 594280 v01r02 "Certain applications for equipment authorization for non-SDR transmitters that have software configuration control for radio parameters, or other technical parameters as reported to the Commission to ensure compliance must provide a technical description of how such control is implemented to prevent third party modification and to ensure the device only operates within the grant of authorization."]

R8) Instructions for operating in the FPP mode will be made available through the detailed user manual for APX subscribers. This manual is provided to customers through CD's that ship with the subscriber as well as online at Motorola's customer website that requires authentication via username and password. At this site the password will be created by the authorized service personnel.

Q9) Given that most of the radios are software programmable and the concept of "front panel" programming is replaced by software configuration, please give more details how this and/or similar radios are programmed today? Are there levels of software keys that are managed and only distributed to certain parties? Is this information included in the application for equipment authorization?

R9) Codeplug changes to any Motorola subscriber requires the use of the Motorola Customer Programming Software (CPS) along with a specific programming cable that attaches to the radio's side connector. The CPS is distributed to authorized service personnel.

Q10) Is the capability proposed in this filing already available in the current radios and need to be activated retroactively or is this something planned for future radios?

[2.1043(c) "statement indicating whether the change(s) will be made in all units (including previous production) or will be made only in those units produced after the change is authorized."]

R10) The capability is in the current shipping products; however a firmware change would be required in order to enable the FPP feature to work without a dongle attached to the subscriber. The subscriber already queries the customer for a password, thus there would be no change to subscriber firmware for that step of the process.

Q11) Given that Form-731 listing includes part 80, compliance supporting information will be needed for at minimum for 80.203(b); also KDB pub. 149672 v01r01 item 2).

Original grant info, for reference:

All line-entries 136-174 MHz.

All line-entries rated output 6 W.

80, 90 20K0F1E

80, 90 16K0F3E

90.210 11K0F3E

90.210 8K10F1D

90.210 8K10F1E

90.210(e) 8K10F1W

general 2.106 etc. summary, for info/reference

The following is based on 2.106 listings,

vers. FCC ONLINE TABLE OF FREQUENCY ALLOCATIONS, May 25, 2012

136-137 87

137-138 25



FCC ID: AZ489FT3829

138-144 no FCC alloc. nor service rules
144-148 97
148-150.05 25
150.05-150.8 no FCC alloc. nor service rules
150.8-152.855 22,90,95
152.855-154 74D,90
154-156.2475 80,90,95
156.2475-157.0375 80,87
157.0375-157.1875 80
157.1875-157.45 80,87,90
157.45-161.575 22,74D,80,90
161.575-161.625 22,80
161.625-161.775 22,74D,74H
161.775-161.9625 80,90
161.9625-162.0375 80
162.0375-173.2 74D,90
173.2-173.4 90
173.4-174 no FCC alloc. nor service rules

R11) FPP option does not change any of the feature set of the radio and is compliant to all of the rules parts 80 and 90.

If you require any additional information, please contact me at (954) 723-5793 (Phone).

Sincerely,

A handwritten signature in black ink that reads 'Mike Ramnath'.

Mike Ramnath (signed above)

Manager, Regulatory Compliance

Email: Mike.Ramnath@motorolasolutions.com

EXHIBIT 13