

NARRATIVE STATEMENT

Pursuant to Section 5.3(d) and (f) and Section 5.61 of the Commission's rules, 47 C.F.R. §§ 5.3(d), (f), 5.61 (2016), Motorola Solutions, Inc., hereby respectfully requests special temporary authority ("STA") from **July 14 through July 27, 2018**, to test and demonstrate prototype equipment. Specifically, grant of the STA would allow Motorola Solutions to operate prototype equipment in the 758-768/788-798 MHz band for evaluation by the Department of Defense ("DoD") in connection with the July 2018 U.S. Special Operations Command (USSOCOM) Technical Experimentation (TE) 18-3 Event. The proposed tests and demonstrations will be conducted at the Fort A.P. Hill Asymmetrical Warfare Training Center in Bowling Green, Virginia. The DoD contact for this event is Thomas W. McGowan (mcgowat.ctr@socom.mil). The proposed operation will not involve live-duty operations by first responders or others to protect life, property, or safety.

A. Purpose of Operation and Need for STA:

Motorola Solutions is a leading manufacturer of mobile radio equipment for the public safety and homeland security community and is continually engaged in the design and development of new and innovative communications equipment. The experimental authority requested herein will allow the company to demonstrate the functionality of prototype devices designed to support the needs of the public safety and homeland security community.

Specifically, Motorola Solutions proposes to conduct demonstrations of prototype equipment for the Department of Defense. To accommodate set-up requirements as well as to ensure all operations up to demo tear-down are covered by Commission authorization, Motorola Solutions respectfully requests that the FCC grant the STA for the period July 14 through July 27, 2018.

Grant of an STA will allow Motorola Solutions to demonstrate prototype equipment and obtain additional feedback so that it may enhance the company's efforts to design, develop and improve its equipment to meet the communications needs of potential users.

B. Location of Proposed Operation:

Motorola Solutions proposes to conduct tests and demonstrations within a one-kilometer radius of the two locations specified in the attached application and as specified below:

Fort A.P. Hill
Asymmetrical Warfare Training Center
Bowling Green, Virginia 22427
38° 06' 01.0" North Latitude
77° 17' 25.2" West Longitude
(NAD 83 Datum)

C. Technical Specifications:

1. Frequencies Desired

Motorola Solutions requests authorization to operate in the bands 758-768/788-798 MHz allocated for a nationwide public safety broadband network yet to be built and licensed to the First Responder Network Authority ("FirstNet").

2. Effective Radiated Power

All power levels will comply with the limits set forth in the FCC's rules, including those relating to human exposure to radiation.

Up to 10 portable/mobile units will be deployed and configured to operate at a mean power level of 160 mW effective radiated power ("ERP"). Notwithstanding this configuration, uplink power control of the mobile / portable devices will limit ERP of these devices to 10 mW ERP or less. The base station will be located at the convention center and will be configured to operate at a mean power level of 100 mW ERP. Motorola Solutions will reduce the actual powers to the minimum power needed for successful operation, based on set-up and testing at the demonstration site.

3. Modulation and Emissions

Motorola Solutions proposes to operate using OFDMA/LTE modulation for the base downlink channels and SC-FDMA modulation for the mobile portable uplink channels. The primary emission designators are 5M0G7D, 5M0W7W, 5M0G2D, 5M0D7D, 10M0G7D, 10M0W7W, 10M0G2D, and 10M0D7D. Other emission modes may be utilized, but in no event will the emissions extend beyond the frequency bands requested.

4. Antenna Information

The antenna for the temporary fixed base station will be located at the Fort A.P. Hill Asymmetrical Warfare Training Center in Bowling Green, Virginia at a height no greater than 20 feet above the floor. The portable/mobile unit antennas in and around the demonstration site will be located as required for a successful demonstration. No antennas will be mounted in a fashion that will require approval under FAA and FCC rules and regulations.

5. Equipment To Be Used

Motorola Solutions expects to conduct its demonstration with one base unit and up to ten mobile/portable units. Motorola Solutions will limit the power, area of operation, and transmitting times to the minimum necessary to provide an effective demonstration.

D. Protections Against Causing Interference:

As noted above, Motorola Solutions has requested authority to operate in the 758-768/788-798 MHz bands allocated for a nationwide public safety broadband network and licensed to FirstNet. Motorola Solutions certifies that the Governor-appointed State Single Point of Contact, as specified at www.firstnet.gov/consultation, has been notified of STA application (*i.e.*, Jocelyn Bagby; telephone: 804.225.4506; email address: Jocelyn.Bagby@vdem.virginia.gov). Moreover, Motorola Solutions has established a point of contact (“POC”) identified below with “kill switch” authority and will send the POC’s contact information to FirstNet upon agency approval of the requested STA.

Motorola understands that it must not cause interference to FirstNet operations or those approved to operate in Band 14 per license (*i.e.*, FirstNet Spectrum Management Lease Agreement (“SMLA”) licensees/current incumbents) and that failure to coordinate effectively may result in immediate suspension of its authority until such time, as determined by FirstNet, that its operations may continue.

Motorola Solutions also understands that it must accept interference from any other users of these bands and that it is its responsibility to coordinate its operations with other authorized user during the conference and that any failure to coordinate effectively may result in the immediate suspension of its authority until such time, as determined by FirstNet, that the operations may continue.

Motorola Solutions also conducted a search of the Commission’s Universal Licensing System (“ULS”) database and verified that the proposed demonstration in Orlando should not interfere with any primary operations in that spectrum. Moreover, under Commission rules, Low Power TV stations and auxiliary stations were previously required to vacate the 700 MHz band, so no interference should occur to broadcast facilities.

Furthermore, as noted above, the length of the tests and demonstrations will be limited, extending only from July 14 through July 27, 2018.

In summary, proposed operations consistent with the commitments and statements presented above should not result in interference with any licensed operations. Should interference occur, Motorola Solutions will take immediate steps to resolve the interference, including if necessary arranging for the discontinuance of operation.

E. FCC Restrictions on Operation:

Motorola Solutions is not seeking authority to perform a market study under the requested STA. Moreover, no fees will be charged to entities using the equipment during this test. After the test is completed, Motorola Solutions will disassemble the demonstration facilities.

Motorola Solutions also recognizes that the operation of any equipment under experimental authority must not cause harmful interference to authorized facilities. In the unlikely event interference occurs, Motorola Solutions will take immediate steps to resolve the interference, including discontinuance of operation if necessary.

Entities will be advised in accordance with Section 2.803 of the Commission's rules, 47 C.F.R. §2.803 (2017), that any unapproved devices which have not been authorized as required by the FCC are not being offered for sale or lease, or sold or leased, until authorization is obtained.

F. Public Interest Statement:

Motorola Solutions submits that issuance of an STA as requested is in the public interest, convenience, and necessity. Grant of an STA will help Motorola Solutions to develop innovative equipment that will accommodate the communications needs of the public safety community.

G. Contact Information:

Department of Defense Contact:

Thomas W. McGowan
USSOCOM Headquarters
Email: Mcgowat.ctr@socom.mil

Technical Contact and "Stop Buzzer/Kill Switch:"

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