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BAE SYSTEMS

Exhibit 2

April 3, 2014

Julius P. Knapp, Chief
Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Application of BAE Systems Land & Armaments L.P. for Experimental Special Temporary Authority, File No. 0047-EX-ST-2014

Mr. Knapp:

BAE Systems Land & Armaments L.P. ("BAE Systems") hereby requests the consent of The First Responder Network Authority ("FirstNet") to BAE Systems' application for experimental Special Temporary Authority ("Experimental STA") for experimental operations, which includes operations using FirstNet's 700 MHz band spectrum. BAE Systems proposes to test a custom-designed microwave transmitter in an exclusively indoor environment to support a U.S. Army contract (US Space and Missile Defense Command Contract # W9113M-13-C-0018), for the purpose of developing technology and systems with counter-improvised explosive device (IED) applications. The proposed operations are sought for a period of 180 days, between March 10, 2014 and September 10, 2014. This request for FirstNet's concurrence is premised on the temporary operations that confirm to the following parameters:

1) Operation will be confined to fixed, exclusively indoor operations, at BAE Systems' campus at Fridley, MN. Transmissions will involve the use of a single fixed antenna, which will be located only within a .05 km radius around the centerpoint coordinates specified in the STA Request. There will be no portable or mobile units involved in the experiment.

2) BAE Systems has requested authority from the FCC to operate over the 758-769 MHz and 788-799 MHz bands, which are currently licensed on a nationwide basis to FirstNet.

3) Operation will begin when the Commission grants the requested Experimental STA and will continue for no longer than September 10, 2014. The Experimental STA cannot be renewed. To the extent that BAE Systems would like to obtain additional Experimental STA use of the radio frequencies licensed to FirstNet, beyond the 180 day period to which this application refers, BAE Systems must file a separate request with the FCC. BAE Systems understands that an experimental Special Temporary Authority or license only permits shared use of the subject radio frequencies and that it may have to coordinate with other entities licensed for experimental purposes.

4) BAE Systems has analyzed the information from the FCC's license databases and has determined that the proposed operations would not interfere or create a significant potential for interference with any public safety operations in the 700 MHz band. To

that end, the following public safety operations (which includes each of the incumbent narrowband operations specified in FCC 13-31) have concurred in BAE Systems' proposed experimental STA: WPRV428 (Lessee: Great River Energy, Licensee: Access 700, LLC), WQGF840 (Licensee: County of Dakota), WQGF841 (Licensee: County of Anoka), WQGF842 (Licensee: County of Washington), WQGF844 (Licensee: County of Chisago), WQGF845 (Licensee: County of Carver), WQGF846 (Licensee: County of Hennepin).

5) This temporary operation will not be used in mission-critical operations or in the delivery of live transmissions in duties to protect life, property or safety. As explained above, these operations will be limited within an extremely limited area, and will involve only fixed, ground-based operations in a completely indoor environment, on BAE Systems' campus location within a .05 km radius of the centerpoint coordinates specified in the STA Request.

6) BAE Systems has provided "stop buzzers" contacts in case of interference issues: Luis Hernandez, 612-247-3566, Luis.Hernandez@baesystems.com; Alternate Stop Buzzer: James Anderson, 612-437-6101.

7) All experimental operations by BAE Systems will be secondary, meaning that they must not cause interference to narrowband or broadband operations authorized on a primary basis, including in the spectrum licensed to FirstNet. Narrowband or broadband operations authorized on a primary basis, including in the spectrum licensed to FirstNet, have no obligation to mitigate any interference that such primary operations may present to the BAE Systems experimental operations. BAE Systems understands that if, during the term of the STA, FirstNet or its assigns or lessees, plans to deploy in this area, BAE Systems may have to reduce the coverage or power levels of its experimental transmissions or cease them entirely.

   In this regard, it is noted that under the circumstances BAE Systems must seek experimental authority to operate on the FirstNet bands, and the company does not have the flexibility in this case to avoid such bands or tune away from them for this experiment. As an initial matter, this is to confirm that the experiment is required to be conducted pursuant to the strict specifications of a military contract. While the specific mission and employment of the system is classified secret and cannot be discussed in this public forum, BAE Systems can confirm that there are mission critical reasons that require transmission on the requested frequencies. Should additional classified information be required by FirstNet regarding the mission and employment of the system, such information would have to be obtained through classified processes from the applicable Army program office, the contact information for which can be provided by BAE Systems. Such additional information should be unnecessary, however, as BAE Systems can confirm that due to the power levels employed (both peak and average) for this experiment, there are no filters that can be properly integrated with the system to tune out the FirstNet frequencies/bands while still allowing fulfillment of the experiment's objectives.

8) BAE Systems has demonstrated that interference potential to FirstNet and other public safety operations has been substantially mitigated based on several factors, including:

Operation will be confined to fixed, exclusively indoor operations, at BAE Systems' campus at Fridley, MN. Transmissions will involve the use of a single fixed antenna, which will be located only within a .05 km radius around the centerpoint coordinates specified in the STA Request. There will be no portable or mobile units involved in the experiment.

These transmissions will occur indoors within a metallic building, with BAE Systems employing significant radar absorbing materials ("RAM") in that space, and the beam pattern will be projected straight down into dirt and sand. In addition to the wall around the test lab itself, there at least 5 additional walls that the test signals must pass through before reaching the outside of the metallic building. The roof of the building is constructed of multiple layers of sheet metal.

Such factors significantly reduce the potential for interference to public safety operations on the FirstNet Frequencies.

The transmissions will be pulsed in nature, extremely short in duration and will be sporadic and not occurring continuously. Testing will be conducted according to the following limitations:

- Testing for durations of 100 milliseconds shall not occur more than 10 times/day
- Testing for a duration of 15 minutes shall not occur more than 1 time/day
- Testing can be conducted during limited test windows as desired by FirstNet

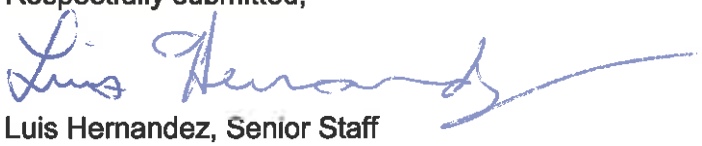
When the above factors are considered collectively, the field strength of BAE Systems' emissions on the FirstNet Frequencies outside the test building will fall below the limits required for unlicensed operation of periodic transmitters set forth at 47 CFR 15.231.

9) The experiments proposed by BAE Systems have the potential to improve the reliability and robustness of the FirstNet network. BAE Systems' technology represents a unique, wideband, tunable system, which as explained above can be characterized as a custom-designed microwave transmitter. The system is not a radar, ground penetrating or otherwise. This compact, portable unit capable of high power operation has the potential to provide the basis for a jam resistant communications network in the future. Specifically, for an LTE cellular-type network to have jam resistance vis-à-vis technique jammers, one approach is for such network to employ specific waveforms that are either difficult to intercept or are rapidly tunable to prevent technique based jammers from properly duplicating their signal. The BAE Systems transmitter employs waveforms that are both difficult to intercept (due to short pulse width) and tunable from one pulse to the next. These characteristics, in combination, present significant obstacles to technique jammers by impeding signal interception and operating at an extremely fast level which would be very stressing for any jamming unit, and it is not clear that current jamming technology could achieve this performance. Another approach for achieving jam resistance for an LTE cellular-type network can involve employing high power to

overcome noise-based jammers. The BAE Systems transmitter can generate high power levels, which has the ability keep the signal to noise ratio high for receivers in the network, even in the presence of noise based jammers, enabling normal network operation. While the experiments to be conducted by BAE Systems under the requested authority relate to overseas military requirements for specific scenarios, it is notable that the flexibility of the BAE Systems technology allows multiple applications to be addressed if appropriate antenna/ancillaries are employed. Thus, the transmitter characteristics described above certainly can be investigated in parallel for how such technology can be fashioned to provide domestic, FCC-compliant usage for the purpose of providing signal jamming prevention for the benefit of public safety communications systems, including but not limited to the FirstNet LTE network.

For the foregoing reasons, with respect to the above-referenced STA Request, BAE Systems requests FirstNet consent to BAE Systems' operation on certain frequencies currently licensed to FirstNet for purposes of testing a microwave transmitter in an exclusively indoor environment to support a U.S. Army contract, for the purpose of developing technology and systems with counter-improvised explosive device (IED) applications. BAE Systems understands that FirstNet's consent may be subject to FirstNet's ongoing ability to monitor any operations and use of FirstNet's licensed spectrum.

Respectfully submitted,



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