

May 2, 2014

Julius Knapp  
Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

RE: Request for Experimental License for LTE Broadband Testing at Linthicum, MD,  
File Number 0366-EX-PL-2014.

Dear Mr. Knapp

Booz Allen Hamilton Engineering Services, LLC (Booz Allen E.S.), requests approval of the above referenced Experimental Authorization application in order to conduct testing and demonstration of Long Term Evolution (LTE) broadband communications in the 700 MHz Band 14 spectrum to develop deployable LTE communications systems for use by Public Safety users and FirstNet. The proposed system will not be used for mission critical or safety of life communications.

The frequency ranges involved, 758-768 MHz and 788-798 MHz are licensed on a nationwide basis to the First Responder Network Authority. We understand that concurrence from FirstNet will be required to obtain this authorization.

The authorization will be used to conduct both laboratory and field testing of LTE networks. The laboratory testing will focus on basic configuration, compatibility, and interoperability issues associated with different LTE networks and user devices. The field testing will focus on deployable systems operating over a broadband satellite connection. The ability to link together multiple sites to extend coverage will be a key part of the field testing. Actual user devices will be operated on the deployed network in order to determine real world system performance. By being able to temporarily set up deployable LTE sites at various locations within 10km of Linthicum, MD, a variety of geographies will be available for testing including rural, suburban, urban, and maritime.

In addition to testing, deployable LTE technology may be demonstrated to interested parties from military, government, and public safety user communities.

As such, we believe that granting this STA is in the public interest.

Booz Allen Hamilton Engineering Services, LLC, has thoroughly searched the FCC ULS database and has found no co-channel licensees within 50 km of the proposed test location. We have also confirmed through FCC 13-31 that there are no legacy narrowband or broadband public safety incumbents in this band in the State of Maryland.

The technical demonstration will consist of a low power laboratory LTE system and up to four deployable full-power LTE systems including both commercial eNodeB radio access network technology from vendor Lemko, Inc, and experimental equipment developed by Booz Allen Hamilton. In the spirit of standards-based multivendor solutions, additional eNodeB technology from other vendors may also be evaluated. In addition to the RAN infrastructure, user devices from a range of vendors consisting of smartphones, tablets, dongles, and vehicular routers will also be evaluated. The goal is to determine employment strategies for single- and multiple-site deployable LTE systems for use by Government, Public Safety, and FirstNet. The deployable systems will be operated on an itinerant, temporary basis only as required by the proposed work. Operation in Band 14 is required in order to accurately test propagation characteristics and the unique Band 14 vendor products intended for the public safety market.

Band 14 user devices from vendors Elektrobit and Harris Corp. will be tested and additional user devices are being sought from all other vendors having announced products for Band 14 operation. By testing multiple user devices, compatibility and interoperability will be tested and utility for public safety applications will be determined.

The proven Booz Allen Hamilton RapydConnex<sup>SM</sup> deployable satcom system will serve as the basis for operation of the proposed LTE testing. This system provides high speed satellite communications links, core network routing services, network security, and hosted applications for use by government, military, and public safety users. By combining the proposed LTE network with the RapydConnex platform, a practical architecture for deployable LTE networks is created.

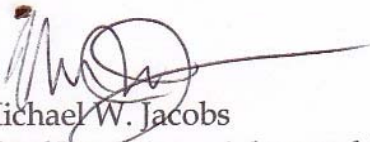
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Booz Allen Hamilton Engineering Services, LLC understands that operation under this experimental license would be for a temporary time period of twenty-four months duration, is non-renewable, and that no other rights to this spectrum are conferred through the granting of the authorization. Should testing be required after expiration of the authorization, a new application would need to be filed. It is also understood that all operations under this authorization are secondary to use by FirstNet and that the test will be terminated should FirstNet, the FCC, or any other licensed user report harmful interference or upon request of FirstNet. All operations related to the authorization will occur within 10 kilometers of the Booz Allen Hamilton Engineering Services location in Linthicum, MD. Booz Allen E.S. will maintain control of the system at all times and will provide stop buzzer contact information for immediate termination of any tests underway.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael W. Jacobs', with a long horizontal line extending to the right.

Michael W. Jacobs  
Chief Engineer - Advanced Systems  
Telephone: 443 758 5788  
Email: jacobs\_michael@bah.com

Booz Allen Hamilton  
Engineering Services, LLC