TRINITY BEND SOLUTIONS, INC.
STATEMENT IN SUPPORT OF
EXPERIMENTAL LICENSE
SPECIAL TEMPORARY AUTHORITY APPLICATION

Pursuant to Section 5.61 of the Rules and Regulations of the Federal Communications Commission (FCC or Commission), Trinity Bend Solutions, Inc. (TBSI) seeks an Experimental Special Temporary Authority (STA) License to test radio equipment on frequencies in the S-Band (2025-2304, 2400-2480 MHz) and C-Band (4400-4940 MHz) frequency range to demonstrate intelligence, surveillance, and reconnaissance (ISR) system viability for air-to-ground and ground-to-air data transmissions between mobile radios and Unmanned Aircraft Systems (UAS).[1]

TBSI, headquartered in Cedar Park, Texas, is a defense subcontractor working with the Idaho National Laboratory (INL) to test and demonstrate UAS ISR Radio equipment capabilities for planned use by the United States Air Force (USAF) and United States Marine Corps (USMC). ISR systems are principal elements of U.S. defense capabilities, and include a wide variety of systems for acquiring and processing information needed by decisionmakers and military commanders to promote national security.[2]

An Experimental STA is requested to conduct limited air-to-ground and ground-to-air data transmissions using Secure CDL ISR Radios (SCISR). The SCISR Radio equipment is experimental and is still in development by L3 Communications, Cubic, Rockwell Collins, and RT Logic. This STA seeks authority for testing at Fort Story, VA for a very brief duration: from April 29, 2019 through May 14, 2019. Transmissions will be conducted to demonstrate viability of the radios and antennas and will not be used to control the UAS.

This STA is required so that TBSI and INL can create a program of record for the USAF and USMC. The ultimate goal if testing proves successful is to deploy this equipment to support active military and intelligence operations in the field as soon as possible. The SCISR Radio equipment proposed for this testing is considered Type 1 Product under the National Information Assurance Glossary. As such, it is a classified or controlled item endorsed by the National Security Agency (NSA) for securing classified and sensitive U.S. Government information, when appropriately keyed. Pursuant to Section 5.84 of the Commission's Rules[3], TBSI will conduct operations on a non-interference basis. Accordingly, the following individuals will act as a "stop buzzer" if any issues regarding interference arise during testing:

Primary Chris Joyce, 702-526-1322

Secondary: Matt Balderree, 208-599-4324

[1] 47 C.F.R. 5.61(a)(1)-(3).
[2] RICHARD A. BEST, JR., CONG. RESEARCH SERV., RL 32508, INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR) PROGRAMS: ISSUES FOR CONGRESS (2005).
[3] 47 C.F.R. 5.84.

Tertiary: Jodie Boyce, 208-403-3291

Antenna and Location Information

Both a directional and omnidirectional antenna will be used during testing. The directional antenna will be a ground-based Troll A-600. A datasheet for the Troll A-600 is available at https://trollsystems.com/images/Troll_DataSheetsPDF/a600data_2011.pdf. The omnidirectional antenna will be mounted on the UAS and will transmit from at or below 5,000 feet above ground level.

For the foregoing reasons, TBSI respectfully submits that approval of this application for Experimental STA is in the public interest, convenience, and necessity.

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Should the Commission require additional information, it is asked to contact Chris Joyce 702-526-1322, chris@trinitybendsolutions.com