

This experimental application is for on-site beta testing of a UWB surveillance system that will operate within the technical parameters of Section 15.511 of the FCC Rules. Operation of this UWB surveillance radar system for testing would normally be permitted under Section 2.805 of the FCC Rules without a specific experimental license. However, this system will ultimately require a waiver of the FCC Rule requiring that the emissions from UWB devices employing hopped, stepped, or sequenced operation be measured with the hop, step, or sequenced function stopped. The required waiver is similar to a waiver previously granted to MBOA-SIG (see FCC 05-58). Liberty Defense has filed a request for this waiver, and OET has placed the request on Public Notice (see DA 19-706 and DA 19-898), but the waiver has not yet been granted. Accordingly, Liberty Defense is not currently able to comply with the requirements for 2.805(d)(1), which requires that “[t]he radio frequency device shall be operated in compliance with existing Commission rules, waivers of such rules that are in effect at the time of operation, or rules that have been adopted by the Commission but that have not yet become effective.” Thus, Liberty Defense must operate the device under the authority of Section 2.805(b) which states that “[o]peration of a radio frequency device prior to equipment authorization is permitted under the authority of an experimental radio service authorization issued under part 5 of this chapter”.

Liberty Defense is planning to conduct this beta testing in cooperation with several commercial and government partners. Specifically, the Beta test sites include the Maryland Stadium Authority in Baltimore, MD; the BAPS Shri Swaminarayan Mandir Temple in Lilburn, GA; the University of Wisconsin in Madison, WI; and the Virginia Capitol Police in Richmond, VA. During this beta testing, Liberty Defense will maintain ownership of the UWB systems being evaluated and will support security personnel from its Beta test organizations to operate the UWB surveillance system. Liberty’s devices will be configured such that the operators are not able to modify power levels or frequency ranges outside of the parameters requested under this experimental application. As such, Liberty is assuring that all participants will comply with Part 5 of the FCC Rules. This Beta test is an essential part of the development process to identify issues and learn from testing on how to improve the product before commercialization. Liberty Defense will provide and install the Hexwave equipment at customer location at no cost to the customer. Liberty will also provide project management, product management, installation, and testing resource at no cost to the Beta test participant. Liberty Defense resources will be engaged with Beta test participants’ security and operation team to ensure successful completion of Beta tests. Outcome of Beta tests will help Liberty Defense gather data and information to improve product performance, product training, product installation, and identify new features to integrate the device into participants. In most cases one UWB surveillance portal is planned for each beta testing location. In some cases, more than one portal may be used for testing (e.g. at facilities with multiple controlled entry points). The total number of units used for the beta testing at all locations will not exceed 16 units. Beta test duration at each individual location can be up to 8 weeks with one or multiple test cycle based on scope and timing of each cycle.

Consistent with its previously granted experimental license to conduct experimental testing at its own facility, Liberty Defense will label each unit with the following legend: “For evaluation only; not FCC-approved for sale, marketing, or other distribution to the general public.” Liberty Defense is also aware of the condition required by Section 5.84 that the experimental operations cannot cause harmful interference to other services and that the UWB system must accept harmful interference.