

Persistent Systems, LLC
Form 442 Experimental License Modification Application
WJ2XTP
File No. 0184-EX-CM-2019

NARRATIVE EXPLANATION OF OPERATION AND NATURE OF APPLICANT

Persistent Systems, LLC wishes to modify by this application a granted Experimental License, WJ2XTP (0518-EX-CN-2018) to add a new antenna with the same geographic coordinates but with a higher power level in the bands 2200-2290 MHz and 4400-4800 MHz, so as to permit sector antenna tests at New York, NY and within 32 kilometers of 303 Fifth Avenue, New York City.

Persistent is an American manufacturer of high speed, secure data networking equipment for both military/defense and industrial, non-government applications. Principally, Persistent manufactures scalable mobile networking systems based on Wave Relay MANET (Mobile Ad Hoc Networking) Technology. Persistent's products permit voice, video, and situational awareness to mobile users with no reliance on fixed infrastructure. For more than a decade, Persistent has been a pioneer in developing advanced MANET technology and commercializing it in the Defense and Industrial sectors.

The purpose of this modification application is to permit continued research and development and testing of products in urbanized areas. The ongoing R&D activities necessitate a longer period of testing and deployment in the New York City area.

One purpose of this modification application is to permit research and development of Sector Antenna systems for Persistent's products for deployment at military and other Federal facilities on Federal Government S-Band and Lower C-Band frequencies. Specifically, the Sector Antennas that are being developed now are under development for both the United States Air Force and for the Department of Homeland Security (and specifically for Customs and Border Protection). Entirely terrestrial operation is proposed to be conducted with respect to radio modules in the band 2200-2290 MHz which will be for MANET systems and component products for military and DHS deployment only, using the sector antennas under test. The center frequencies 2277.00 MHz and 4700 MHz (with a 20 megahertz occupied bandwidth emission) are the preferred frequencies within the band 2200-2290 MHz to provide a consistent benchmark for testing and evaluation in this environment. Those are not necessarily the frequencies or bands on which the agencies will ultimately use the Sector Antennas. However, the bandwidth of the sector antennas under test include the entirety of 2200-2290 MHz and 4400-4800 MHz. Frequency changes can be conducted remotely should the need to do so arise to avoid interference. All operation will cease immediately in case of any reported interference and not resume until the complaint is resolved to the reasonable satisfaction of the complainant.

The stop buzzer contact for this operation continues to be Mr. Ben Wring, at 646-627-8214.