

The purpose of the frequency authorization is for a flight demonstration of the integration of the X-Net Radio onto a RQ-21A Blackjack. Rather than using the full frequency capability (225 - 2500 MHz), we would like to request a subset of frequency ranges already authorized for the Bandit Radio for the RQ-21A (1370 - 1390 MHz and 1435 - 1525 MHz). Dynamic Spectrum Access (DSA) will be utilized in which the radio simultaneously passively senses the spectrum and maintains transmit communications opportunistically within the unoccupied spectrum. Radio's primary mode of operation will be to cooperate/co-exist with other signals within the frequency ranges given to the radio. At a minimum, the radio will require a single contiguous 20MHz block of frequencies. At most, the radio can handle up to eight non-contiguous blocks of 20MHz. For example, the radio can be configured with the following frequency ranges: 1370 – 1390 MHz, 1435 – 1525 MHz, 1750-1770 MHz, 1770 - 1790 MHz, 1800-1820 MHz, 1820-1840MHz, 2200-2220 MHz, 2220-2240 MHz, 2300-2320 MHz, 2400-2420 MHz. The radio will passively sense all 8 of the 20MHz frequency blocks, but will only choose one at a time for transmit communications.

Flight Level: 5000 Feet/1524 Meters

Radius: 100 Km