

**Narrative Statement:**

KeyW Corp is a medium sized business that holds many DoD contracts for developing and testing ground based and airborne radar systems. This license application is in direct support of our Air Force customer to develop and test a ground-based radar system. This STA would be applicable to our Severn, MD office location, 7763 Old Telegraph Rd, where radar development and testing is taking place. We are seeking a 2 km radius around the office but would settle for less or adhere to keep out zones as guided. The radar system is dual band operating in S and X band. The radar system is software defined and tunable within the bands. For S Band, we are seeking authority to transmit with 1 GHz of instantaneous bandwidth (IBW) between 2.6GHz and 3.8GHz at 80W output power. We can notch out frequencies as directed. For X Band, we are seeking approval to radiate at a 2.4GHz IBW between 7.5G and 12 GHz at 120W output power. Like S Band, we can tune the center frequency within the band and notch out undesired frequencies from the IBW. We realize BWI airport may be using frequencies in this band and will notch or tune away from what they are currently using.

This application is seeking to extend file number 0537-EX-ST-2019: Call Sign WO9XIO, while respectfully requesting that special condition 4 be removed. This experimental system was designed to track aircraft and end to end system testing needs to test the emissions above the horizon.

This STA will be used to test and validate operation of this experimental system. Once thorough testing has concluded, KeyW will apply for a long-term experimental license and cite system performance based upon actual measurements.