

This authorization is required for the RF Jammer, a component of the Falcon Edge Electronic Warfare Suite being developed by Northrop Grumman Corporation for use on the United Arab Emirates Air Force F-16 aircraft. This aircraft is being sold to the UAE AF under a direct commercial contract with US government oversight. Details of the capabilities of the Falcon Edge system are classified, therefore much of the information required for the application is being provided in a classified attachment. The Falcon Edge EW Suite consists of a Radar Warning Receiver (RWR) and an RF Jammer. The RWR detects radar signals and provides track files to the Jammer. The Jammer transmits a signal designed to confuse the incoming Radar signal - only for those Radars that it was programmed to jam and only after the pilot provides consent to jam.

This application is being submitted to obtain approval to transmit test signals that will be transmitted by the Jammer whenever it is powered up. The system performs two different tests during initialization, approximately five minutes after it is powered up. These signals are designed to (1) optimize ERP and (2) ensure that all transmit and receive antennas are functional. The first test signal is a series of pulses transmitted at 40 different frequencies. This calibration signal is performed for six different Microwave Power Modules (MPM), each of which is connected to a separate antenna. The calibration test lasts a total of five seconds (including all frequencies for all antennas). The antenna connectivity test consists of a series of pulses transmitted at three different frequencies. This test is also repeated for each MPM and the test lasts a total of 203 ms (including all frequencies for all antennas). Details of each of the test signals, pulse width, pulse repetition interval, etc., are provided in Exhibit 1.