

Exhibit 1

The license requested is for an airborne Synthetic Aperture Radar (SAR) system. The purpose is to map ground terrain at different resolutions to determine target detection, location and assessment. The method of mapping is to illuminate an area for a specific time interval with a KU band, linear FM modulated, pulsed radar system from an aircraft. The returns are to be received, digitized and processed into human readable imagery for assessment and utility.

The system is to be flown on a variety of aircraft, including a Piper Navajo and an F-16 fighter. The purpose of the experimentation is to show the utility of various radar collection modes with varying resolutions and collection scenarios.

The system will be extending the capabilities of the radio art by achieving very high-resolution imagery not commonly attempted with image quality approaching that of optical systems.

The system consists of a VME based radar control system with 300 watt peak transmitter and a three axis gimballed flat plate antenna operating between 16.3 and 17.5 Ghz capable of standoff ranges of 2-20 nm.