

**FORM 442 FILE NO. 0087-EX-PL-2004**  
**ATTACHMENT: DESCRIPTION OF PROJECT**

This license application is in support of a multi-year Harris Corporation project to test and demonstrate end-to-end infrastructures which support Air Traffic Control air-to-ground communications. Types of communications supported include conventional analog voice and digital voice and data link. Types of modulation supported include conventional AM-DSB and VHF Digital Link (VDL) Mode 3, which is a digital time-division multiple access (TDMA) protocol based on D8PSK modulation. This effort is supported by Harris Corporation internal funding, with the cooperation of industry partners such as Rockwell-Collins and Avidyne Corporation. Frequency allocations are required because a full characterization of performance is not possible without separation of components designed for airborne and ground installation. Suggested frequencies for the ground station are between 136.0 MHz and 137.0 MHz, as this sub-band has been used for several years for VDL Mode 3 digital transmission. Three frequency allocations are requested to enable demonstration of channel switching and interoperability, together with independent demonstration of switch modernization technology.