This program supports two US Army programs and one US Navy program with development of small unmanned aerial vehicles for operational usage. Integration of the Direct Digital Link radio capability will augment capability for both services. The radio is currently in use on other unmanned aerial vehicles and this program will maintain commonality for the services.

This radio is manufactured by AeroVironment Inc. The key feature of this radio is that both command and control, as well as video downlink can be accomplished via the same radio. For this integration, the frequency bands requested are 1711.5-1721.5 MHz and 1755-1848 MHz. Both the aerial installation and the ground control station transceiver have identical power characteristics (1.5 watt). The aerial antenna has a gain of 2 dbi. The ground control station antenna has a gain of 8.5 dbi. (See the notional antenna configuration figure below)



The operations requested in this application apply to two separate locations:

The first site is at the Honeywell facility. This is Honeywell's tethered flight facility in Albuquerque, New Mexico. Location is: N35 11' 32.35", W106 35' 29.84". The elevation of this site is approximately 5100 feet MSL. Since the vehicle is constrained by the tether, the maximum altitude of the vehicle is 180 feet AGL.

The second site is on the New Mexico National Guard Armory facility in Rio Rancho, New Mexico and is approximately 20 miles west and north of Albuquerque. Location is: N35 22' 27.64", W106 39' 06.12". The elevation of this site is approximately 5640 feet MSL. This site is where Honeywell performs flight test of our unmanned air vehicles, although we operate below 250 feet AGL.