

This filing is in support of General Atomics Aeronautical Systems, Incorporated's (GA-ASI) efforts to test command non-payload control (CNPC) prototype radios on its company fleet of unmanned aerial systems (UAS). This testing is needed to further the development of a CNPC command and control data link to be used to remotely pilot company UAS. Once fully matured, the intent is for this new datalink to supplement and eventually replace the current legacy C-band datalink in wide use throughout GA-ASI's company fleet of UAS.

Testing and development of this new datalink will occur at all four of GA-ASI's UAS operating locations: Gray Butte airport (04CA), El Mirage airport (99CL), Laguna Army Airfield (KLGF), and Grand Forks AFB (KRDR). Each of these airfields will have a stationary, omnidirectional antenna operating in conjunction with a directional antenna mounted on the unmanned aircraft. The aircraft will be operating at various altitudes and ranges from each airfield, as indicated in the parameters of this filing, to test signal strength, signal to noise ratio, atmospheric noise parameters, effective datalink range, and other metrics. Multiple iterations of testing at each location will provide thorough analytics from which to gauge the effectiveness of the CNPC prototype radios and the new UAS command and control datalink as a whole.