Communication System Description

(Taken in part from the Control Station Description)

The ground control station communicates to the UAS through the use of a Commbox, manufactured by Procerus Technologies. The Commbox uses the same make and model of radio modem found on the NOVA; a one-watt Microhard Nano n920. This modem operates in the un-licensed 902-928 MHz range of the ISM band, and no further FCC clearance or license is required to operate. The modem operates on a proprietary frequency hopping management technology called DTS. An extension of this means that all frequency management is done internal to the hardware, and the user cannot change or modify the frequencies at either modem. This eliminates the possibility of the PIC causing a LOSS-LINK scenario. A Digi antenna is connected to the Commbox to accomplish this. The Commbox communicates to the Ground Station Laptop (GSL) through a Radio-shack USB-RS232 converter.