## Exhibit: Question 4, Directional Antenna Information

Two transmitters will be utilized as part of a federal research contract, one mounted on a high altitude balloon and one mounted on a Mobile Ground Station (MGS). The Mobile Ground Station will 'chase' the balloon on the ground with a small directional antenna mounted on a vehicle. The directional antenna will track the balloon payload and thus Azimuth and Elevation angles of the ground system will be constantly changing as the geometry between the MGS and Balloon changes throughout the flight. The MGS is primarily intended for receive only applications, except in the case of suspected payload malfunction. Should such a malfunction occur, override and/or reset commands will be transmitted from the MGS via the directional antenna. Maximum power of the radio is +20 dBm, into an 11.5dBi directional yagi antenna, for a maximum EIRP of +31.5dBm. The half power beamwidth (aka -3dB beamwidth or Full-Width Half Maximum beamwidth) is approximately 45 degrees.