All antennas listed as directional are the same experimental antenna to be used in different locations. The height above ground is listed as $5182 \mathrm{~m}(\sim 17,000 \mathrm{ft})$ because this antenna will be in a pod mounted to an aircraft with an expected altitude of $17,000 \mathrm{ft}$ AGL.

The table below lists the half-power beam width for this antenna.

| Frequency (MHz) | HPBW (degrees) |
| :--- | :---: |
| 400 MHz | 100 |
| 500 MHz | 88 |
| 1000 MHz | 50 |

Since the antenna will be in a pod mounted on an aircraft, the orientation of the antenna with respect to true north and the horizon will change. However with respect to the aircraft, the antenna will be 90 degrees from the nose (pointing starboard) and 14 degrees below the aircraft's horizon.

All other antennas are the antennas used on the COTS equipment identified in this application and will be "hand-held."

