

TV Microwaves Company  
Special Temporary Authority Application  
File No. 0534-EX-ST-2009

### **Directional Antenna Exhibit**

The transmitting antenna that will be used for this limited-time STA (exclusively for the days November 14, 15, and 24-26, 1009 will be a commercially manufactured video cone-type microwave antenna with a beamwidth not to exceed 20 degrees, mounted so that transmissions from the rocket will be directed toward the single receive location at Tillamook OR.

Antennas on the UHF portable units for ground coordination will be non-directional "rubber-duck" type, zero or negative gain antennas, sold with the commercially manufactured UHF portable transceivers.