For file no. 0343-EX-ST-2012

## **Antenna Background**

Figure 1 below shows the dimensions of the Big Dish structure. Figure 2 shows the Dish pointed at its minimum elevation angle of  $+3^{\circ}$  for two different azimuth pointings.

The minimum elevation pointing gives the Dish its highest vertical profile, with the upper rim of the reflector 47.7 m (156.5 ft) above local ground level (169.20 m above the WGS-84 ellipsoid).

When the Dish is pointed at the zenith, the tip of the feed tripod is 47.1 m (154.6 ft) above ground level (168.6 m above the WGS-84 elliposid).

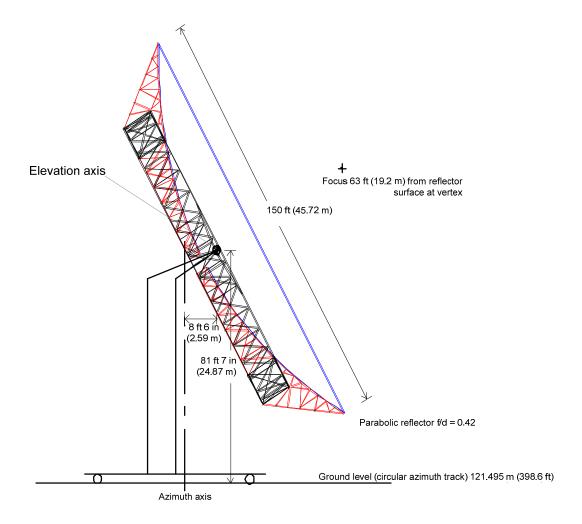


Figure 1. Big Dish Antenna Dimensions





Figure 2. Dish Pointed at +3° Elevation.