

## Description of Test Range Transmitter

The transmitter site consists of a microwave signal generator mounted in a metal air-conditioned enclosure, whose output is routed via an RF switch to one of multiple horns (15 dBi typical gain.) The horns and feeds provide high quality linear or circular polarization over the satellite operational bands:

3.40 – 4.20 GHz	5.85 – 6.725 GHz
7.25 – 7.74 GHz	7.90 – 8.40 GHz
10.7 – 12.75 GHz	13.25 – 14.5 GHz or 17.3 – 18.4 GHz
17.7 – 21.2 GHz	27.5 – 31.0 GHz

The maximum expected EIRP is from 20 to 24 dB, depending on the band.

The enclosure is mounted on the roof of a shelter at a site leased from East Texas Towers (but may later be mounted on a tower under 30-ft in height.)

The enclosure is oriented so that the horns are aimed at a receive site on a hilltop some 9 miles away at an angle of approximately 340 deg TN.