

Narrative Exhibit

This application requests authority to add two Earth station locations as points of communication for the currently licensed¹ Dove 1 satellite. The Dove 1 launch is currently scheduled for end of March 2013 aboard the Antares rocket, and the satellite lifetime is expected to be 2 weeks.

Earth Station Description

Morehead State University - Morehead, KY
Latitude/Longitude: 38 11 30 N, 83 26 20 W
Primary Antenna²: 21 m parabolic antenna with 2.4 GHz capable feed.
Secondary Antenna: tripod-mounted, circularly polarized UHF helical

Half Moon Bay, CA
Latitude/Longitude: 37 23 4 N, 122 24 48 W
Primary Antenna: 3 m parabolic antenna with X-band/S-band combined circularly polarized feed
Secondary Antenna: tripod-mounted, circularly polarized UHF helical

NTIA Formatted Data

4.) THE EARTH STATION RECEIVER ANTENNA GAIN, BEAMWIDTH, AZIMUTHAL RANGE, THE SITE ELEVATION ABOVE MEAN SEA LEVEL IN METERS AND THE ANTENNA HEIGHT ABOVE TERRAIN IN METERS (RAD)

RAD01 52G0.41B000-360A00348H025 (Morehead 21 m)
RAD02 11G030B000-360A00348H004 (Morehead UHF helical)
RAD03 31G3.33B000-360A00046H004 (Half Moon Bay 3 m)
RAD04 11G030B000-360A00046H004 (Half Moon Bay UHF helical)

5.) THE EARTH STATION RECEIVER ANTENNA AZIMUTH (RAZ), THE MINIMUM ANGLE OF ELEVATION

RAZ01 V05 (Morehead 21 m)
RAZ02 V05 (Morehead UHF helical)
RAZ03 V05 (Half Moon Bay 3 m)
RAZ04 V05 (Half Moon Bay UHF helical)

¹ Call sign WF9XKA, file number 0898-EX-ST-2012, granted 1/31/2013

² The 21 m antenna has been previously licensed for an unrelated experiment, refer to call sign WE9XNM, file number 0596-EX-ST-2010

7.) THE TRANSMITTER ANTENNA ORIENTATION (XAP), EXAMPLE XAP01 J , AND THE RECEIVER ANTENNA ORIENTATION (RAP), EXAMPLE RAP01 J , WHERE J REPRESENTS LINEAR POLARIZATION. OTHER POLARIZATIONS INCLUDE H FOR HORIZONTAL, V FOR VERTICAL, S FOR HORIZONTAL AND VERTICAL, L FOR LEFT HAND CIRCULAR, R FOR RIGHT HAND CIRCULAR, T FOR RIGHT AND LEFT HAND CIRCULAR, E FOR ELLIPTICAL AND O FOR OBLIQUE ANGLED CROSSED.

XAP01 R (Morehead 21 m)

XAP02 R (Morehead UHF helical)

XAP03 R (Half Moon Bay 3 m)

XAP04 R (Half Moon Bay UHF helical)