

**TECHNICAL INFORMATION FOR 1.5 METER  
TEMPORARY-FIXED KU-BAND EARTH STATION**

(1) Applicant's Name:

Mammoth Mountain  
1 Minaret Road  
Mammoth Lakes, CA 93546

(2) Site Location:

Same as above

(3) Type of Domestic Service:

(a) Class of Station: Temporary-Fixed Earth Station

(b) Regulatory Class: Private

(c) Type of Facility: Transmit-Receive

(4) Frequency Bands:

(a) Receive: 11.7-12.2 GHz

(b) Transmit: 14.0-14.5GHz

(5) Points of Communication:

All Ku-band satellites available for domestic applications

(6) Frequency Coordination Limits:

(a) Range of Satellite Arc

(1) Eastern Limit: 60° W.

(2) Western Limit: 140° W.

(b) Earth Station Elevation at:

(1) Eastern Limit of Arc: 15.7°

(2) Western Limit of Arc: 41.1°

(c) Earth Station Azimuth at:

(1) Eastern Limit of Arc: 110.2°

(2) Western Limit of Arc: 212.2°

(d) Maximum E.I.R.P. density toward the horizon:

-27.4 dBW/4 kHz

(7) Transmitting Equipment:

(a) Number of HPAs: 1

(b) Manufacturer and Model No.: Xicom BFA-200K-LPU

(c) Maximum Power Output (watts): 23.0 dBW (200 watts)

(8) Antenna Facilities:

The antenna conforms to Section 25.209 of the Commission's Rules (29-25 log  $\theta$ ).

(a) Use of Antenna: Communications

(b) Antenna Size: 4.9 feet (1.5 meters)

(c) Type of Feed: Prime Focus, Off-Set

(d) Manufacturer and Model No.: Advent/NewsSwift

1.5M SNG

(e) Antenna gain in dBi and the frequency at which it is measured for:

(1) Transmit: 45.5 dBi at 14.275 GHz

(2) Receive: 43.9 dBi at 11.950 GHz

(f) Elevation of antenna base above ground:

6 feet, 0 inches (1.83 meters); Typical

(g) Height of antenna centerline above antenna base:

3 feet, 0 inches (0.91 meters)

(h) The antenna will be mounted on a roof and rises to a maximum height of 21 feet, 0 inches (6.4 meters) above the ground.

(i) The antenna rises to a maximum height of 6 feet, 0 inches (1.83 meters) above the base on which it is mounted.

(k) 3dB full beamwidth and frequency at which it was measured:

0.90° @ 14.25 GHz

1.07° @ 11.95 GHz

(9) Remote Control operations? No

(10) Receiving System Noise Temperature:

110° Kelvin @ 30° elevation across entire 11.7 - 12.2 GHz receive band.

(11) Specifics of operation (transmitting mode):

(a) Frequency Limits: 14.0-14.5 GHz

(b) Earth Station Antenna Polarization: Linear  
Orthogonal

(c) Description of each R.F. carrier:

One digital carrier for video/voice/data with an emission designator of 36MOG7W.

(d) Maximum E.I.R.P. for each R.F. carrier:

67.5 dBW (digital MCPC)

(e) Maximum E.I.R.P. Density for each R.F. carrier:

28.0 dBW/4 kHz (digital MCPC)