

VIZADA, INC.
Request for Special Temporary Authority
Andrew 960 Antenna
Exhibit 1 – Callsign KA313

Summary

Vizada, Inc. ("Vizada") requests special temporary authority (STA), beginning November 18, 2009, for a period of 60 days, on an unprotected and non-interference basis to perform testing using a .96 meter Andrew 960 antenna currently licensed under callsign KA313. An STA is requested because Vizada needs to access the AMC-21 satellite (on the Permitted Space Station List) for the testing. None of the technical parameters of Vizada's current authorization will change. Indeed, the only change is to include the AMC-21 as a point of communication for the .96 meter Andrew 960 antenna used in the test.

The proposed testing will involve a performance test of services for U.S. Government customers requiring secure satellite communications. Vizada previously conducted similar testing under a prior STA (File No. SES-STA-20090716-00868).

This antenna is currently licensed by Vizada, Inc. (File No. SES-MOD-20051108-01537) and is listed on the Commission's List of Approved Non-Routine Earth Station Antennas under the callsign KA313 (File No. SES-MOD-20050803-01034).

The .96 meter Andrew 960 antenna will be operating at reduced power levels to transmit to the AMC-21 satellite and will thus meet the requirements of §25.218 of the Commission's Rules by preventing adjacent satellite interference with any adjacent satellites. Furthermore, Vizada hereby certifies that the antenna complies with the gain patterns specified in Section 25.209 of the Commission's Rules.

Technical Parameters of the Proposed Testing

Frequencies: 11700-12200 MHz (transmit)
 14000-14500 MHz (receive)

Emission Designator	Services
3M67G7W Receive	Digital Audio and Data
776KG7W Transmit	Digital Audio and Data

For the testing, Vizada proposes a back-off of 4.1 dB, setting the maximum RF transmit power density limit, input at the antenna flange, to -18.1 dBW/4 kHz. The preliminary link budgets for this proposed testing show that the antenna will be operated at 3.4 dB or greater margin below this limit.

Calculations

Antenna Manufacturer	Andrew
Antenna Model	CM 960 0.96m
Transmit Band	14.00 to 14.50 GHz
Antenna Tx Gain, Co-pol	41.2 dBi at 14.25 GHz
At Off-axis Angle	1.5 deg
Off-axis Gain Envelope	24.6 dBi
Off-axis EIRP Envelope (Power density of -14 dBW/4kHz at antenna flange)	10.6 dBW/4kHz
Gain at 1.5 deg relative to the Main-lobe	-12.5 dB
Actual Gain at 1.5 deg	28.7 dBi
Off-axis EIRP (Power density of -18.1 dBW/4kHz at antenna flange)	10.6 dBW/4kHz
Maximum On-axis EIRP Density per Carrier (Power density of -18.1 dBW/4kHz at antenna flange)	23.1 dBW/4kHz
E.49. Maximum EIRP Density per Carrier	19.7 dBW/4kHz
Margin from the limit	3.4 dB

Conclusion

Because the proposed testing will be used to support secure communications for U.S. Government users, the grant of this requested STA serves the public interest pursuant to Section 25.120(b)(1) of the Commission's Rules. Grant of this STA is respectfully requested on or before November 18, 2009, for a period of 60 days.