

Modification of Experimental License
Call Sign: WD2XJX
File Number: 0044-EX-ML-2006

ViaSat, Inc. wishes to modify its existing experimental license, call sign WD2XJX. The modifications consist of adding and modifying frequency bands of operation. The Experimental license is used by ViaSat's antenna systems (AS) group in Atlanta for the purposes of antenna development. Specifically, this license modification will allow the licensee to provide RF signal testing within the address locations noted in the application. ViaSat will transmit low level CW signals for the purpose of injecting a test signal into antenna systems undergoing factory testing with the purpose of undergoing factory testing involving antenna boresight and antenna focus and alignment testing. The licensee will also test for Passive Intermodulation Products using the 9.14m antenna pointed in the zenith position for one set of frequencies.

Tables 1, 2 and 3 below provide a summary of all the frequencies and their associated power and emissions which are to be modified or added.

Technical inquiries can be directed to either Daryl Hunter at ViaSat or Ken Ryan at Skjei Telecom.

Daryl Hunter, ViaSat, Inc.
6155 El Camino Real
Carlsbad, CA 92009
Email: daryl.hunter@viasat.com
Phone: 760-476-258

Submitted on January 14, 2008 by: Kenneth G. Ryan, P.E., Consultant to ViaSat, Inc.
Skjei Telecom, Inc.
7777 Leesburg Pike, Suite 315N
Falls Church, VA 22043
Phone: 703-917-4020
Email: ken.ryan@skjeitelecom.com

Table 1: Frequencies and Power Levels Required
Location 1: Duluth (Gwinnett), GA
3235 Satellite Blvd, Building 400 or 800 TBC, Duluth, GA

Purpose: To allow licensee to provide RF signal testing within the address location of this building. Transmit low level CW signals for the purpose of injecting a test signal into the antenna system undergoing boresight testing. No changes to this section of the license are requested.

	Station		Frequency Band	Vendor and PN for Transmitting equipment		Antenna Pointing angles from Location 1		Polarization	Antenna Size	Transmit output power	Effective ERP
	Type	Class	(MHz)	Agilent RF Source	Scientific Atlanta Antenna	Azimuth	Elevation		(ft)	(dBm)	(watts)
C	FX	NON	2200	83751B	22-4A , 28-2	90°	-2°	RHC or LHC	4	-40	0.00003
C	FX	NON	2250	83751B	22-4A , 28-2	90°	-2°	RHC or LHC	4	-40	0.000031
C	FX	NON	8200	83751B	22-4A , 28-8	90°	-2°	RHC or LHC	4	-50	0.000049

Table 2: Frequencies and Power Levels Required
Location 2; Duluth (Gwinnett), GA
1725 Breckinridge Plaza, Duluth, GA

Purpose: To allow licensee to provide an RF signal at Zenith only for detection of Passive Intermodulation Products by injecting short duration test signals into antenna system undergoing factory testing.

	Station		Frequency Band	Vendor and PN for Transmitting equipment		Antenna Pointing angles from Location 2		Polarization	Antenna Size	Transmit output power	Effective ERP
	Type	Class	(MHz)	Agilent RF Source	Scientific Atlanta Antenna	Azimuth	Elevation		(ft)	Watts	(dBW)
R	FX	NON	7900-8400	MCL	Model 16469	0°	90°	RHC or LHC	13.8	2KW	82 dBW

Table 3: Frequencies and Power Levels Required
Location 2; Duluth (Gwinnett), GA
1725 Breckinridge Plaza, Duluth, GA

Purpose: To allow licensee to provide RF signal testing within the address location of this building. Transmit low level CW signals for the purpose of injecting a test signal into the antenna system undergoing factory testing for antenna focus and alignment.

	Station		Frequency Band	Vendor and PN for Transmitting equipment		Antenna Pointing angles between receive and transmit location		Polarization	Antenna Size	Transmit output power	Effective ERP
	Type	Class	(MHz)	Scientific Atlanta Source	Scientific Atlanta Antenna	Azimuth	Elevation		(ft)	(dBm)	(watts)
R	FX	N0N	1435 to 1559	2150	22-8A , 28C-1	0°	0 to 2°	Linear or Circular	4	-30	1.0
R	FX	N0N	1650 to 1660.5	2150	22-8A , 28C-1	0°	0 to 2°	Linear or Circular	4	-30	1.0
R	FX	N0N	1668.4-1850	2150	22-4A , 28C-2	0°	0 to 2°	Linear or Circular	4	-30	1.0
R	FX	N0N	2000-2400	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	1.0
R	FX	N0N	3400-4200	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	4.0
R	FX	N0N	4500-4800	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	4.0
R	FX	N0N	5700-6850	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	4.0
R	FX	N0N	7000-7100	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	4.0
R	FX	N0N	7250-7750	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	4.0
R	FX	N0N	7900-8400	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	5.0
R	FX	N0N	10700-14500	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	5.0
R	FX	N0N	17300-21200	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	5.0
R	FX	N0N	27500-31000	2150	22-4A , 28C-8	0°	0 to 2°	Linear or Circular	4	-30	5.0

Key: C = existing licensed frequency band (no changes)
M = modification to existing licensed frequency band
R = Required new frequency band.