

August 1, 2002

FCC
Experimental Radio Services
P.O. Box 358320
Pittsburgh, PA 15251-5320

Dear Sir:

My company, VertexRSI, is planning to conduct antenna testing on a special C-band 4.8m satellite antenna at our facility in Kilgore, Texas on or about August 20th of 2002. We have conducted a frequency coordination, via Comsearch, (see attached) and have filled with the FCC for a experiential license for this station to operate. In order to ensure that the station is licensed in time to meet our testing schedule we are submitting a STA request (form 159-C is attached).

The license is for VertexRSI, 2600 N. Longview Street, Kilgore , TX 75622. The antenna will be a special modified version of our 4.8m C-band high wind design with a 4-port circular feed in a fixed configuration. The testing will consist of antenna transmit and receive patterns, G/T measurement, Intelsat SSOG carrier line-up tests on the Intelsat 903 satellite. The testing is scheduled to begin on 8/21 and complete on 8/30 and will likely be conducted from 8 AM till 5PM Central Time. The station will be equipped with 2.2 kW Klystron amplifiers in a redundant configuration, redundant Newtec modulators and upconverters, redundant LNAs and block down converters. The stations will be conducting the tests on transponder 38, 6382-6423 MHz on the Intelsat 903 satellite located at 325 degree East. For the antenna testing a low power CW carrier will be used. For the carrier line-up a digital video carrier will be transmitted with an EIRP of no more than 59.6 dBW/MHz.

I trust that this application will be received favorably and that we will be receiving our STA prior to August 21.

Sincerely,



William C. Powell
Program Manager
VertexRSI
770-689-2044

enclosures

0301-EX-ST-2002



COMSEARCH®

SUPPLEMENTAL SHOWING, PART 25.203(C)

VertexRSI
Kilgore, Texas
Temporary Transmit-Only Earth Station
Operation Dates: 08/01/2002 to 9/30/2002

PURSUANT TO PART 25.203(C) OF THE FCC RULES AND REGULATIONS THE ABOVE REFERENCED SATELLITE EARTH STATION WAS COORDINATED WITH THE EXISTING LICENSEES AND APPLICANTS WHOSE FACILITIES COULD BE AFFECTED. COORDINATION DATA WAS FORWARDED ON June 25, 2002.

THE FOLLOWING CARRIERS OR THEIR DESIGNATED COORDINATION AGENTS WERE NOTIFIED:

AT&T COMM. OF THE SOUTH CENTRAL STATES
AT&T CORP.
AT&T WIRELESS SRVCS OF FL (AR,LA,OK,TX)
CENTENNIAL SOUTHEAST LICENSE COMPANY LLC
COMSEARCH
CORBAN COMMUNICATIONS INC.
DALLAS MTA, L.P.
DALLAS SMSA LIMITED PARTNERSHIP
EAST TEXAS TRANSMISSION CO
LOUISIANA STATE COMMUNICATION SECTION
MICRONET COMMUNICATIONS INC
NORTHEAST TEXAS CELLULAR TELEPHONE CO
NORTHEAST TEXAS CONSORTIUM(NETnet)
PATHNET, INC. - DEBTOR IN POSSESSION
PUBLIC SERVICE COMPANY OF OKLAHOMA
SOUTHWESTERN BELL TELEPHONE, L.P.
SOUTHWESTERN ELECTRIC POWER COMPANY
TECNET INC
TEXAS RSA #10B3 LIMITED PARTNERSHIP
TEXAS RSA 10B1 LIMITED PARTNERSHIP
TEXAS RSA 11B LIMITED PARTNERSHIP
TEXAS RSA 7B1 LTD PARTNERSHIP
TYLER-LONGVIEW-MARSHALL MSA LTD PARTNERS
UNITED WEHCO INC.
Verizon Wireless Texas, LLC
WWC TEXAS RSA LIMITED PARTNERSHIP

THERE ARE NO UNRESOLVED INTERFERENCE OBJECTIONS WITH THE STATIONS CONTAINED IN THESE APPLICATIONS.

RESPECTFULLY SUBMITTED,

SENIOR MANAGER
SATELLITE SERVICES

SATELLITE EARTH STATION
FREQUENCY COORDINATION DATA
06/25/2002

Company	VERTEX RSI	
Earth Station Name, State	KILGORE, TX	
Latitude (DMS) (NAD83)	32 24 21.6 N	
Longitude (DMS) (NAD83)	94 51 13.8 W	
Ground Elevation AMSL (Ft/m)	350.02 / 106.68	
Antenna Centerline AGL (Ft/m)	8.99 / 2.74	
Transmit Antenna Type:	FCC32	VertexRSI 4.8 meter KPC
6.0 GHz Gain (dBi) / Diameter (m)	48.1 / 4.8	
3 dB / 15 dB Half Beamwidth	0.50 / 1.00	
Operating Mode	TRANSMIT ONLY	
Modulation	DIGITAL	
Emission / Transmit Band (MHz)	36M0G7F / 5925.0000 - 5929.0000,	
	36M0G7F / 6021.0000 - 6047.0000,	
	36M0G7F / 6080.0000 - 6180.0000,	
	36M0G7F / 6243.0000 - 6425.0000	
Max. Available RF Power (dBW)/4 kHz)	-12.50	
(dBW)/MHz)	11.50	
Max. EIRP (dBW)/4 kHz)	35.60	
(dBW)/MHz)	59.60	
Max permissible Interference Power		
6.0 GHz, 20% (dBW/4 kHz)	-154.0	
6.0 GHz, 0.0025% (dBW/4 kHz)	-131.0	
Range of Satellite Arc (Geostationary)		
Degrees Longitude	21.5 W / 143.0 W	
Azimuth Range (Min/Max)	99.1 / 244.0	
Corresponding Elevation Angles	5.3 / 26.9	
Radio Climate	A	
Rain Zone	2	
Max Great Circle Coordination Distance (Mi/Km)		
6.0 GHz	144.7 / 232.9	
Precipitation Scatter Contour Radius (Mi/Km)		
6.0 GHz	62.1 / 100.0	

Note: Horizon is less than 0.2 degrees at all azimuths

Table of Earth Station Coordination Values
06/25/2002

Earth Station Name KILGORE TX
 Owner VERTEX RSI
 Latitude (DMS) (NAD83) 32 24 21.6 N
 Longitude (DMS) (NAD83) 94 51 13.8 W
 Ground Elevation (Ft/m) 350.02 / 106.68 AMSL
 Antenna Centerline (Ft/m) 8.99 / 2.74 AGL
 Antenna Model VertexRSI 4.8 meter KPC
 Objectives: Transmit -154.0 (dBW /4 kHz) TX Power -12.5 (dBW/4 kHz)

Azimuth (Deg)	Horizon Elevation Angle (Deg)	Antenna Disc. Angle (Deg)	6.0 GHz	
			Antenna Gain (dBi)	Coordination Distance (Km)
0	0.00	99.07	-10.00	135.7
5	0.00	94.09	-10.00	135.7
10	0.00	89.11	-10.00	135.7
15	0.00	84.13	-10.00	135.7
20	0.00	79.15	-10.00	135.7
25	0.00	74.18	-10.00	135.7
30	0.00	69.20	-10.00	135.7
35	0.00	64.23	-10.00	135.7
40	0.00	59.25	-10.00	135.7
45	0.00	54.29	-10.00	135.7
50	0.00	49.32	-10.00	135.7
55	0.00	44.36	-9.18	138.0
60	0.00	39.41	-7.89	141.9
65	0.00	34.47	-6.44	146.5
70	0.00	29.55	-4.76	152.1
75	0.00	24.65	-2.80	159.1
80	0.00	19.81	-0.42	169.7
85	0.00	15.06	2.55	181.3
90	0.00	10.54	6.43	196.2
95	0.00	6.73	11.30	213.4
100	0.00	5.41	13.67	232.8
105	0.00	7.94	9.50	206.3
110	0.00	12.00	5.02	190.8
115	0.00	16.09	1.84	178.5
120	0.00	20.12	-0.59	169.1
125	0.00	24.07	-2.54	160.0
130	0.00	27.94	-4.16	154.2
135	0.00	31.69	-5.52	149.5
140	0.00	35.29	-6.69	145.6
145	0.00	38.70	-7.69	142.5
150	0.00	41.88	-8.55	139.9
155	0.00	44.78	-9.28	137.7
160	0.00	47.31	-9.87	136.0
165	0.00	49.40	-10.00	135.7
170	0.00	50.97	-10.00	135.7
175	0.00	51.95	-10.00	135.7
180	0.00	52.29	-10.00	135.7

Table of Earth Station Coordination Values
06/25/2002

Earth Station Name KILGORE TX
Owner VERTEX RSI
Latitude (DMS) (NAD83) 32 24 21.6 N
Longitude (DMS) (NAD83) 94 51 13.8 W
Ground Elevation (Ft/m) 350.02 / 106.68 AMSL
Antenna Centerline (Ft/m) 8.99 / 2.74 AGL
Antenna Model VertexRSI 4.8 meter KPC
Objectives: Transmit -154.0 (dBW /4 kHz) TX Power -12.5 (dBW/4 kHz)

Azimuth (Deg)	Horizon Elevation Angle (Deg)	Antenna Disc. Angle (Deg)	Antenna Gain (dBi)	6.0 GHz Coordination Distance (Km)
185	0.00	51.95	-10.00	135.7
190	0.00	50.97	-10.00	135.7
195	0.00	49.40	-10.00	135.7
200	0.00	47.31	-9.87	136.0
205	0.00	44.77	-9.28	137.7
210	0.00	41.89	-8.55	139.9
215	0.00	38.70	-7.69	142.5
220	0.00	35.43	-6.73	145.5
225	0.00	32.51	-5.80	148.5
230	0.00	30.08	-4.96	151.4
235	0.00	28.26	-4.28	153.7
240	0.00	27.18	-3.86	155.2
245	0.00	26.94	-3.76	155.6
250	0.00	27.54	-4.00	154.7
255	0.00	28.94	-4.54	152.8
260	0.00	31.02	-5.29	150.2
265	0.00	33.67	-6.18	147.3
270	0.00	36.76	-7.13	144.2
275	0.00	40.18	-8.10	141.2
280	0.00	43.86	-9.05	138.4
285	0.00	47.74	-9.97	135.7
290	0.00	51.76	-10.00	135.7
295	0.00	55.90	-10.00	135.7
300	0.00	60.13	-10.00	135.7
305	0.00	64.42	-10.00	135.7
310	0.00	68.77	-10.00	135.7
315	0.00	73.16	-10.00	135.7
320	0.00	77.58	-10.00	135.7
325	0.00	82.02	-10.00	135.7
330	0.00	86.47	-10.00	135.7
335	0.00	90.93	-10.00	135.7
340	0.00	95.38	-10.00	135.7
345	0.00	99.83	-10.00	135.7
350	0.00	104.26	-10.00	135.7
355	0.00	104.04	-10.00	135.7