

Exhibit 1

This Modification Application for Station WD2XSG requests Commission consent to modify the license to:

- Modify the starting or ending frequency for the following bands:
 - 174-~~216~~ MHz - Modify to: 174-**215** MHz
 - ~~450~~-454 MHz - Modify to: **451**-454 MHz
 - ~~1.61~~-1.85 GHz - Modify to: **1.62**-1.85 GHz
 - ~~2.9~~-4.2 GHz - Modify to: **3.1**-4.2 GHz
 - 5.25-~~5.6~~ GHz - Modify to: 5.25-**5.5** GHz
 - ~~5.65~~-5.925 GHz - Modify to: **5.7**-5.925 GHz
 - 13.25-~~15.7~~ GHz - Modify to: 13.25-**15.6** GHz
 - ~~16.2~~-17.7 GHz - Modify to: **16.3**-17.7 GHz
- Modify the band 1.215-1.27 GHz to the following 4 discrete frequency values:
 - 1.215 GHz
 - 1.2276 GHz
 - 1.25 GHz
 - 1.27 GHz
- Modify the band 1.37-1.559 GHz to the following 3 discrete frequency values:
 - 1.37 GHz
 - 1.41 GHz
 - 1.55 GHz
- Modify the band 2.2-2.45 GHz to the following 2 smaller frequency bands:
 - 2.2-2.3 GHz
 - 2.4-2.45 GHz
- Modify the band 7.125-10 GHz to the following 2 smaller frequency bands:
 - 7.125-8.99 GHz
 - 9.21-10 GHz

In addition, the directional antenna, amplification and RF source is hereby updated to reflect current operations. Pursuant to Section 5.77(b) of the Commission's rules, the following information is requested to become a permanent part of the license.

Directional Antenna Data

For the convenience of the Commission, the following chart defines certain specifications relating to the directional antennas that are to be used in the experiment:

Mfg.	Model Number	Frequency Range	Gain	BW																		
Sunol Sciences	JB1	30-2000 MHz	< 0 dBi below 100 MHz, < 5 dBi below 200 MHz, 7 dBi max 200-2000 MHz	<table><tr><td>Freq</td><td>E-Plane</td><td>H-Plane</td></tr><tr><td><u>MHz</u></td><td><u>deg</u></td><td><u>deg</u></td></tr><tr><td>30</td><td>90</td><td>Omni</td></tr><tr><td>200</td><td>60</td><td>100</td></tr><tr><td>1000</td><td>50</td><td>100</td></tr><tr><td>2000</td><td>50</td><td>100</td></tr></table>	Freq	E-Plane	H-Plane	<u>MHz</u>	<u>deg</u>	<u>deg</u>	30	90	Omni	200	60	100	1000	50	100	2000	50	100
Freq	E-Plane	H-Plane																				
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30	90	Omni																				
200	60	100																				
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ETS Lindgren	3164-06	300-6000 MHz	< 5 dBi below 500 MHz, < 10 dBi below 3000 MHz 13 dBi max 3000-6000 MHz	<table><tr><td>Freq</td><td>E-Plane</td><td>H-Plane</td></tr><tr><td><u>MHz</u></td><td><u>deg</u></td><td><u>deg</u></td></tr><tr><td>300</td><td>65</td><td>105</td></tr><tr><td>1000</td><td>35</td><td>65</td></tr><tr><td>2000</td><td>50</td><td>45</td></tr><tr><td>6000</td><td>20</td><td>20</td></tr></table>	Freq	E-Plane	H-Plane	<u>MHz</u>	<u>deg</u>	<u>deg</u>	300	65	105	1000	35	65	2000	50	45	6000	20	20
Freq	E-Plane	H-Plane																				
<u>MHz</u>	<u>deg</u>	<u>deg</u>																				
300	65	105																				
1000	35	65																				
2000	50	45																				
6000	20	20																				
Condor	AS-48461	2.0-18.0 GHz	5-18 dBi	E Plane: 60 deg - 10 deg H Plane: 60 deg - 10 deg																		
Orbit/FR	6413	18.0-40.0 GHz	19.3 dBi (nominal)	E Plane: 18 deg (nominal) H Plane: 18 deg (nominal)																		

RF Source

Agilent N5230A PNA-L Network Analyzer or equivalent.

Additional Signal Amplification

Additional signal amplification may be necessary to achieve a useful signal to noise ratio for the received signal. The output power of the system will be measured and verified to meet the radiated output power limits set forth in the license.

Mfg.	Model Number	Frequency Range	Gain
HP	8347A	100 kHz – 3 GHz	20 dB, typical
Ophir	5303060	1 – 1000 MHz	38 dB, typical
RF Lambda or equivalent	RFLUPA01M06G	100 – 6000 MHz	38 dB, typical
Wenteq or equivalent	ABL0600-01-3240	10 – 6000 MHz	34 dB, typical
Miteq or equivalent	MPN4-02001800-23P	2 – 18 GHz	24 dBi, minimum
Spacek Labs or equivalent	SGKKa-17-20	18 – 42 GHz	17 dB, typical