Exhibit D

FCC Rule Compliance

FCC Rule	**Compliance Justification**
90.213	As defined in FCC Section 90.213, this radar operates within the frequency range of 5550 MHz to 5650 MHz. Operation of the radar, based on a typical operating transmitted frequency of 5600 MHz at 15 usec pulse width results in an occupied bandwidth of approx. 4 MHz.
2.983(a) - 2.983(c)	FCC form 731 submitted with pertinent information.
2.983(d)(1)	The WDS-9000CS emission type is pulsed RF with variable Pulse Repetition Frequency (PRF) and pulse width.
2.983(d)(2)	The operational frequency is within the range of 5550 to 5650 MHz, changeable by altering configuration jumpers within the Transmitter Frequency Source Module. Frequency stability for this module exceeds 1.0 x 10^7.
2.983(d)(3)	The WDS-9000CS operational peak power is 2.24 kW with a maximum peak power of 2.4 kW. Maximum peak power is attained by adjustment of internal components within the transmitter. Based on the maximum allowable duty cycle of 7% and peak power ratings, the average output power is 156.8 W (2.24 kW peak) to 186 W (2.4kW peak). When using lower PRFs and pulse widths, there average power would be lower. An RF input power value of 3.3 dBm is required to produce an operational peak power of 2.24 kW at 5600 MHz.
2.983(d)(4)	The maximum power of the WDS-9000C is limited to 2.884 kW by the design of the Traveling Wave Tube (TWT). The TWT is internally protected for excessive thermal and electrical conditions. Additional provided to prohibit the use of a duty cycle greater than 7.0%.

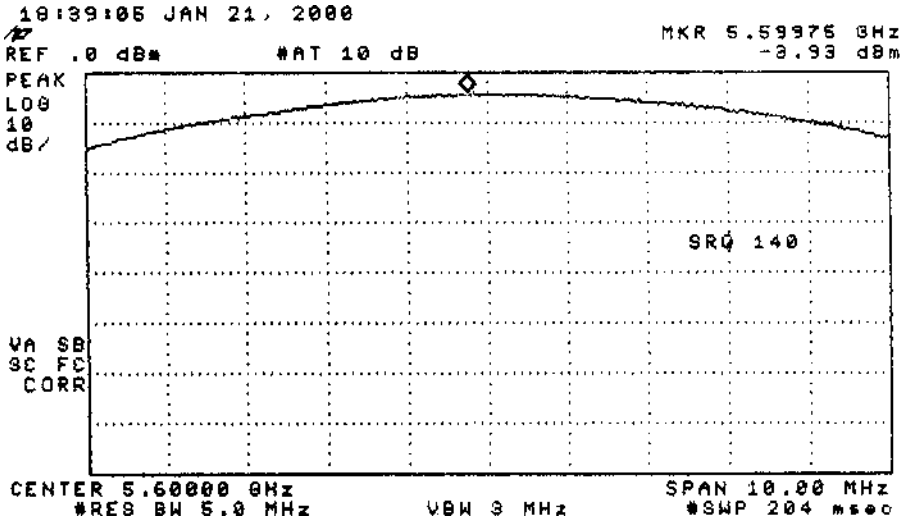

Figure 1 Output Power Level at 5.60 GHz

2.983(d)(5) The principle voltages and currents of the output amplifier are as follows:

(A)	Filament current	2.3 Amps DC
(B)	Input helix intercept current	5.93 mA (typical) 15.6 mA (max)
(C)	Collector Voltage	+6.49 kVDC
(D)	Cathode voltage	-8.5 kVDC
(E)	Detected forward power	2.2-2.5 kW (typical)

2.983(d)(6) Transmitter component descriptions are contained in Exhibit E.

2.983(d)(7) The interconnection of the units in the transmitter shall be shown in Exhibit F.

2.983(d)(8) The instruction books are contained in the attached technical manual set in Exhibit E.

2.983(d)(9) The RF power applied to the TWT is adjustable to achieve a value slightly below the saturation point of the TWT. The procedure requires measuring the output power from the Transmitter Frequency Source Module and adding a RF attenuator to it's output so that the final output power is +3.3 dBm (at 5.60 GHz). Since the module contains a pulse modulator RF switch, a nominal voltage of +4.7 volts DC is required to "hold" it open for CW power measurements. Figure 2 shows an example of this method.

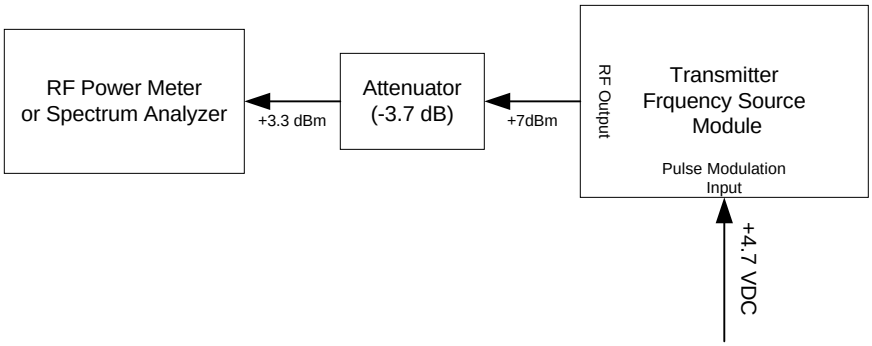

Figure 2 Adjusting TWT RF Input Power

2.983(d)(10) Frequency determination and stabilization is provided by a frequency synthesizer component in the Transmitter Frequency Source Module of the receiver assembly. Frequency synthesizer requirements are specified and shown in Exhibit E.

2.983(d)(11) The TWT had a noise figure of 30.6 dB. Further reduction of spurious transmitted radiation is achieved by the use of optional filters dependant on output frequency selected.

The modulation limit (pulse width) is internally limited to 15 usec to prevent damage or excess average power.

The power limit controlled by RF drive power, helix current, and cathode voltage.

2.983(d)(12) This section is not applicable to this equipment.

2.983(e) All measurements are test results of the working equipment.

2.983(f) The equipment identification label is shown Figure 3.

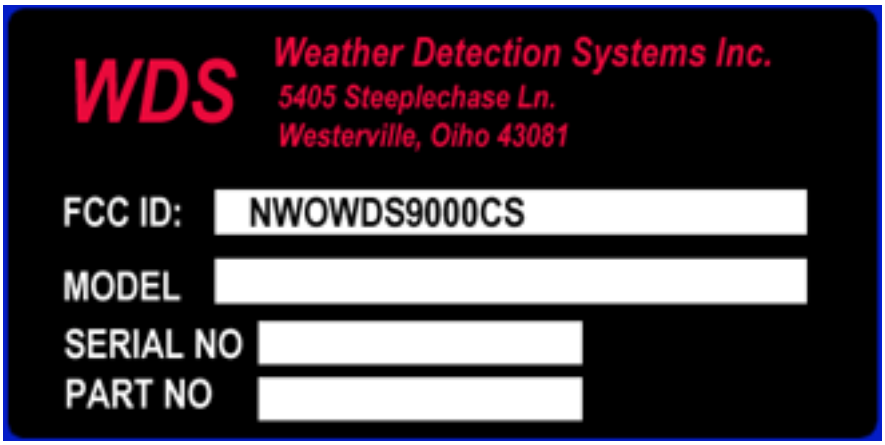

Figure 3 Equipment Identification Label

2.985(a) The peak value for this measurement is 63.5 dBm (2.25KW) @ 5.55GHz, 63.6 dBm (2.32KW) @ 5.60GHz, and 63.6 dBm (2.32KW) @ 5.65GHz. RF power output measurements are achieved by the use of a RF dummy load. The configuration for peak power testing is shown in Figure 4.

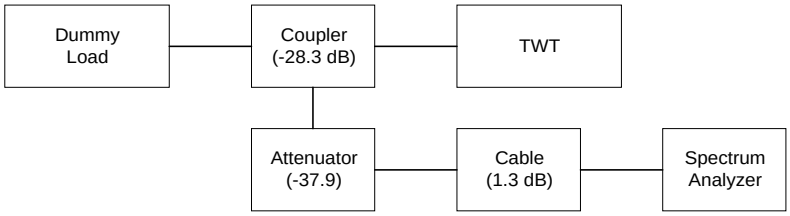

Figure 4 Peak Power Measurement Test Configuration

2.985(b) & (c) These sections are not applicable to this equipment.

2.987(a) - (c) These sections are not applicable to this equipment.

2.987(d) Compliance to the applicable rules with regard to modulation is proven by the equipment authorization procedure in paragraph 2.989 (i).

2.989(all) Measurement of the occupied bandwidth results in Figure 5. The occupied bandwidth is obtained from the spectrum analyzer plot measuring the bandwidth at the –34.29 dB point.

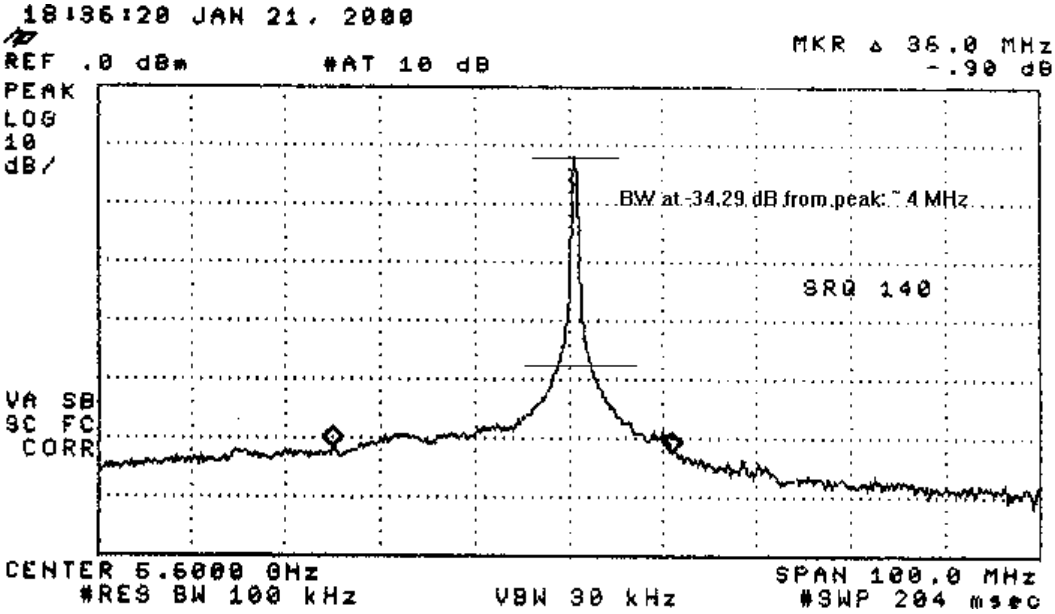

Figure 5 Occupied BandWidth at 5600 MHz

This point is also calculated by numerically integrating the sin(x)/x curve as shown in Table 1. From the integration it can be seen that the point at which 99% of the total power is contained is ±15 spectral lines (30 total) or –34.29dB relative to the main lobe. The calculation an measurement indicate an occupied bandwidth of less than 5 MHz with 15 usec pulse modulation.

N	**DB Relative to Main Lobe** 10 LOG (3/(3 +2N)π)^2	**Total Power (2 sided)** ∑ (3/(3 +2N)π)^2
Main Lobe	0 dB	1.00000
0	-13.46 dB	1.09006
1	-17.90 dB	1.12249
2	-20.82 dB	1.13903
3	-23.01 dB	1.14904
4	-24.75 dB	1.15573
5	-26.20 dB	1.16053
6	-27.44 dB	1.16413
7	-28.53 dB	1.16694
8	-29.50 dB	1.16918
9	-30.37 dB	1.17102
10	-31.16 dB	1.17255
11	-31.88 dB	1.17385
12	-32.55 dB	1.17496
13	-33.17 dB	1.17593
14	-33.75 dB	1.17677

15	-34.29 dB	1.17751
16	-34.80 dB	1.17818
17	-35.29 dB	1.17877
18	-35.74 dB	1.17930
19	-36.18 dB	1.17978
20	-36.59 dB	1.18022
100	-50.07 dB	1.18744
317	-60.01 dB	1.18880
1005	-70.00 dB	1.18923
3181	-80.00 dB	1.18937
10065	-90.00 dB	1.18941
* ± N, i.e., 2N = total bandwidth		

Table 1 Occupied Bandwidth

Total Power = 1.18941 (as N goes to infinity)
99% of Total Power is 0.99 x 1.18941 = 1.17751 or at –34.29 dB (where N=15)

2.991 Measurements for conducted spurious emissions from 5 GHz to 60 GHz resulted in only the second harmonic being present at approximately 50 dB below the first harmonic (fundamental at 5600 MHz) as shown in Figure 6. The test configurations for measuring is shown in Figure 7 and Figure 8. This measured difference (50 dB) is greater than the required 43 +10log(Pm) or 43 +10log(2.24) or 46.5 dB minimal difference.

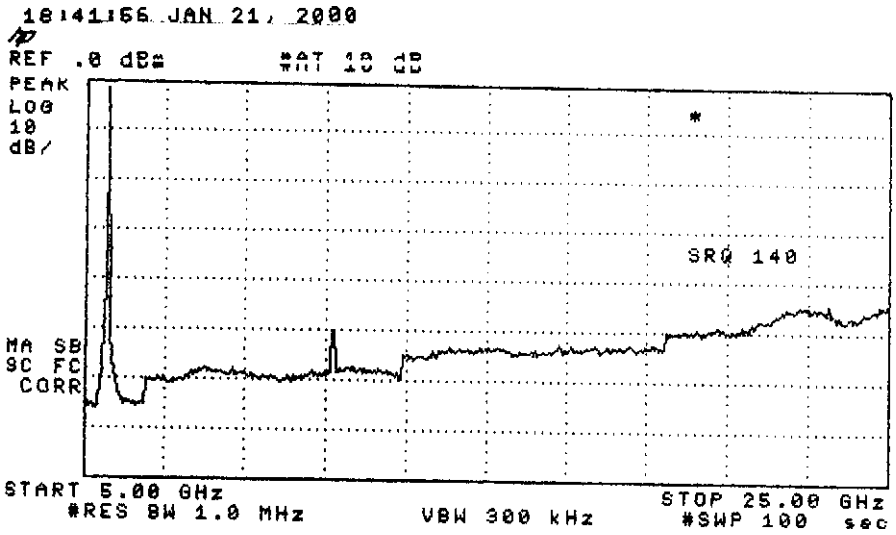

Figure 6 Second Harmonic Measurement

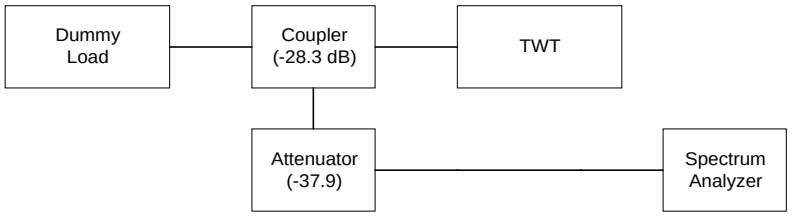

Figure 7 Spurious Conducted Emissions Test Configuration (5 to 25 GHz)

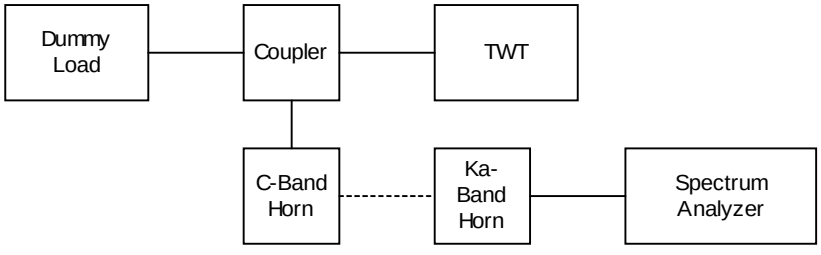

Figure 8 Spurious Conducted Emissions Test Configuration (25 to 60 GHz)

2.993 RFI/EMI detection, was measured at a distance of 3 meters using horns and external mixers, spanning 3 to 60 GHz. In these measurements only the fundamental frequency was detected and was the same power of 96.7 dBuV/m for 5.55, 5.60, and 5.65 GHz.

2.995 The frequency synthesizer component of the Transmitter Frequency Source Module of the Receiver is used to determine the transmitter output frequency. Frequency stability vs. temperature over time is shown in Table 2. The measured frequency stability over 0° C to 50° C exceeds 1.0x10-7.

Elapsed Time	Ambient Temperatures					
	0° C	10° C	20° C	30° C	40° C	50° C
	Average Measured Freqency (Hz)	Average Measured Freqency (Hz)	Average Measured Freqency (Hz)	Average Measured Freqency (Hz)	Average Measured Freqency (Hz)	Average Measured Freqency (Hz)
0 Min.	**5,550,008,960**	**5,550,008,389**	**5,550,007,255**	**5,550,006,126**	**5,550,004,526**	**5,550,003,627**
1 Min.	**5,550,009,023**	**5,550,008,402**	**5,550,007,267**	**5,550,006,195**	**5,550,004,627**	**5,550,003,687**
2 Min.	**5,550,009,042**	**5,550,008,426**	**5,550,007,281**	**5,550,006,208**	**5,550,004,690**	**5,550,003,718**
3 Min.	**5,550,009,007**	**5,550,008,380**	**5,550,007,289**	**5,550,006,206**	**5,550,004,736**	**5,550,003,757**
4 Min.	**5,550,008,939**	**5,550,008,392**	**5,550,007,298**	**5,550,006,223**	**5,550,004,794**	**5,550,003,781**
5 Min.	**5,550,008,882**	**5,550,008,373**	**5,550,007,299**	**5,550,006,216**	**5,550,004,801**	**5,550,003,798**
6 Min.	**5,550,008,868**	**5,550,008,349**	**5,550,007,294**	**5,550,006,209**	**5,550,004,849**	**5,550,003,848**
7 Min.	**5,550,008,855**	**5,550,008,316**	**5,550,007,292**	**5,550,006,187**	**5,550,004,880**	**5,550,003,857**
8 Min.	**5,550,008,846**	**5,550,008,316**	**5,550,007,292**	**5,550,006,180**	**5,550,004,908**	**5,550,003,893**
9 Min.	**5,550,008,849**	**5,550,008,293**	**5,550,007,297**	**5,550,006,181**	**5,550,004,942**	**5,550,003,914**
10 Min.	**5,550,008,823**	**5,550,008,276**	**5,550,007,294**	**5,550,006,176**	**5,550,004,946**	**5,550,003,922**

Table 2 Frequency Stability Over Temperature

2.995(d) The TWT amplifier was designed to operate properly with the nominal AC input voltage of 240 VAC varied ± 10% from 216 VAC to 266 VAC. The RF output of the Frequency Source Module maintained a stable frequency output better than 1.0 x 10^7 while the 120 VAC primary power to the Power Supply Module in the Receiver assembly was varied ± 10% from 108 VAC to 132 VAC.