

**MODULATING SIGNAL DESCRIPTION**

To Whom It May Concern:

Mustang Technology Group will use this FCC experimental license to test radar prototypes which are being developed under contract number FA8651-06-C-0240 for the Advanced Guidance Division/Seeker Branch of the Air Force Research Laboratory. The name of the project is Falcon Eye. During testing, the radar prototypes will transmit waveforms with the characteristics listed in Table 1.

<b>Table 1: Nominal Waveform Characteristics</b>				
Parameter	Waveform A	Waveform B	Waveform C	Waveform D
Modulation Type	Linear Frequency	Linear Frequency	Linear Frequency	No Modulation
Duty Cycle	10%	2.5%	0.5%	0.04%
Pulse Repetition Frequency	10 kHz	20 kHz	20 kHz	40 kHz
Center Frequency	5.75 GHz	5.75 GHz	5.75 GHz	5.75 GHz
Bandwidth	50 MHz	50 MHz	50 MHz	50 MHz
Transmit Pulsewidth	10 µsec	2.5 µsec	0.5 µsec	0.02 µsec
Compressed Pulsewidth	20 nsec	20 nsec	20 nsec	20 nsec
Time Bandwidth Product	500	125	25	~1

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