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TRANSMITTER EQUIPMENT CHARACTERISTICS			
1. NOMENCLATURE, MANUFACTURER'S MODEL NO. 99021 MHX-910		2. MANUFACTURER'S NAME Microhard Systems, Inc	
3. TRANSMITTER INSTALLATION UAS - GCS AND UAV INSTALLATION		4. TRANSMITTER TYPE FM	
5. TUNING RANGE 902-928 MHz		6. METHOD OF TUNING Synthesis PLL	
7. RF CHANNELING CAPABILITY 902-928 MHz, 400 kHz steps		8. EMISSION DESIGNATOR(S) FM Modulated 350kF1D	
9. FREQUENCY TOLERANCE < 3 PPM			
10. FILTER EMPLOYED (X one) ☒ a. YES ☐ b. NO			
11. SPREAD SPECTRUM (X one) ☒ a. YES ☐ b. NO		12. EMISSION BANDWIDTH (X and complete as applicable) ☐ CALCULATED ☒ MEASURED	
13. MAXIMUM BIT RATE 175 kbps		a. -3 dB 210 kHz	
14. MODULATION TECHNIQUES AND CODING CPFSK		b. -20 dB 350 kHz	
		c. -40 dB 695 kHz	
		d. -60 dB 1220 kHz	
		e. OC-BW N/A Frequency Hopper	
		15. MAXIMUM MODULATION FREQUENCY 87 kHz	
16. PRE-EMPHASIS (X one) ☒ a. YES ☐ b. NO		17. DEVIATION RATIO 2	
19. POWER		18. PULSE CHARACTERISTICS	
a. MEAN up to 1 Watt		a. RATE N/A	
b. PEP up to 1 Watt		b. WIDTH N/A	
20. OUTPUT DEVICE Advanced Gallium Arsenide HBT		c. RISE TIME N/A	
		d. FALL TIME N/A	
		e. COMP RATIO N/A	
22. SPURIOUS LEVEL 60 dB		21. HARMONIC LEVEL	
		a. 2ND -27 dBm	
23. FCC TYPE ACCEPTANCE NO. Part 15.247 Rules NS 901P5		b. 3RD -30 dBm	
		c. OTHER	
24. REMARKS Microhard Systems, Inc #110 1144-29th Avenue NE Calgary, AB Canada T2E 7P1 Phone (403) 248 0028 Fax (403) 248 2762 Attn: Hany Shenouda			
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ANTENNA EQUIPMENT CHARACTERISTICS		
1. ☐ a. TRANSMITTING ☐ b. RECEIVING ☒ c. TRANSMITTING AND RECEIVING		
2. NOMENCLATURE, MANUFACTURER'S MODEL NO. MM5E900BNC	3. MANUFACTURER'S NAME Radiall - Larson	
4. FREQUENCY RANGE 890 - 960 MHz	5. TYPE 5/8 over 5/8 over 1/4 wave	
6. POLARIZATION Vertical	7. SCAN CHARACTERISTICS	
8. GAIN	a. TYPE N/A	
a. MAIN BEAM 7.2 dBi	b. VERTICAL SCAN	
b. 1ST MAJOR SIDE LOBE N/A	(1) MAX ELEV	
9. BEAMWIDTH	(2) MIN ELEV	
a. HORIZONTAL 360 degrees	(3) SCAN RATE	
b. VERTICAL 60 degrees	c. HORIZONTAL SCAN	
(1) SECTOR SCANNED		(2) SCAN RATE
d. SECTOR BLANKING (<i>X one</i>)		☐ (1) YES ☐ (2) NO
10. REMARKS Ground station side of ground-to-air datalink		
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1. ☐ a. TRANSMITTING ☐ b. RECEIVING ☒ c. TRANSMITTING AND RECEIVING		
2. NOMENCLATURE, MANUFACTURER'S MODEL NO. 900 MHz Yagi Antenna, Model Number PC906N	3. MANUFACTURER'S NAME Cushcraft Corporation	
4. FREQUENCY RANGE 895-940 MHz	5. TYPE 6-Element Yagi	
6. POLARIZATION Vert./Horiz	7. SCAN CHARACTERISTICS	
8. GAIN		a. TYPE
a. MAIN BEAM 8.5 dBd		b. VERTICAL SCAN
b. 1ST MAJOR SIDE LOBE		(1) MAX ELEV
		(2) MIN ELEV
		(3) SCAN RATE
9. BEAMWIDTH		c. HORIZONTAL SCAN
a. HORIZONTAL -3dB, 65 degrees		(1) SECTOR SCANNED
b. VERTICAL -3dB 55 degrees		(2) SCAN RATE
		d. SECTOR BLANKING (X one) ☐ (1) YES ☐ (2) NO
10. REMARKS REFERENCE PART NUMBER 109-1068(CAGE 0A9N8) FILE REFERENCE: DD1494 - GCS 912 DIR, (109-1068) MSH, 0A9N8, 20DEC07 L3 BAI AEROSYSTEMS USES THIS DIRECTIONAL ANTENNA IN UAS GCS EQUIPMENT		
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1. ☐ a. TRANSMITTING ☐ b. RECEIVING ☒ c. TRANSMITTING AND RECEIVING		
2. NOMENCLATURE, MANUFACTURER'S MODEL NO. KD14FREQ(914)	3. MANUFACTURER'S NAME Radiall - Larson	
4. FREQUENCY RANGE 890 - 960 MHz	5. TYPE 1/4 wave stub cut to 914 MHz	
6. POLARIZATION Vertical	7. SCAN CHARACTERISTICS	
8. GAIN		a. TYPE N/A
a. MAIN BEAM 2.15 dBi		b. VERTICAL SCAN (1) MAX ELEV
b. 1ST MAJOR SIDE LOBE N/A		(2) MIN ELEV
9. BEAMWIDTH		(3) SCAN RATE
a. HORIZONTAL 360 degrees		c. HORIZONTAL SCAN (1) SECTOR SCANNED
b. VERTICAL 80 degrees		(2) SCAN RATE
10. REMARKS Airborne side of ground-to-air datalink		d. SECTOR BLANKING (<i>X one</i>) ☐ (1) YES ☐ (2) NO
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TRANSMITTER EQUIPMENT CHARACTERISTICS		
1. NOMENCLATURE, MANUFACTURER'S MODEL NO. P-Series Radio Transceivers	2. MANUFACTURER'S NAME FreeWave Technologies, Inc	
3. TRANSMITTER INSTALLATION UAS - GCS AND UAV INSTALLATION	4. TRANSMITTER TYPE GFSK Communication	
5. TUNING RANGE 1350-1390 MHz	6. METHOD OF TUNING Digital Synthesizer	
7. RF CHANNELING CAPABILITY 230.4 kHz increments starting from 1350.144 MHz	8. EMISSION DESIGNATOR(S) 230KF1D	
9. FREQUENCY TOLERANCE 1.5 ppm	12. EMISSION BANDWIDTH (<i>X and complete as applicable</i>) ☐ CALCULATED ☒ MEASURED	
10. FILTER EMPLOYED (<i>X one</i>) ☒ a. YES ☐ b. NO		
11. SPREAD SPECTRUM (<i>X one</i>) ☒ a. YES ☐ b. NO		
13. MAXIMUM BIT RATE 115.2 kbps	15. MAXIMUM MODULATION FREQUENCY 57.6 kHz	
14. MODULATION TECHNIQUES AND CODING 2 levels GFSK, frequency hopping	17. DEVIATION RATIO 1	
16. PRE-EMPHASIS (<i>X one</i>) ☐ a. YES ☒ b. NO	18. PULSE CHARACTERISTICS	
19. POWER a. MEAN Programmed up to 1 Watt b. PEP N/A	a. RATE N/A b. WIDTH N/A c. RISE TIME N/A d. FALL TIME N/A e. COMP RATIO N/A	
20. OUTPUT DEVICE MOSFET	21. HARMONIC LEVEL	
22. SPURIOUS LEVEL -70 dBc	a. 2ND -50 dBc b. 3RD -70 dBc c. OTHER -70 dBc	
23. FCC TYPE ACCEPTANCE NO. N/A		
24. REMARKS Item 10: Gaussian Low-pass filter Item 11: Frequency hopping is employed using up to 112 discrete channels in an orthogonal hop sequence. The total number of frequency channels available for the radio is 173. Minimum hop band required is not limited The hopping rate is software defined Any channel or group of channels can be locked out		
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1. ☐ a. TRANSMITTING ☐ b. RECEIVING ☒ c. TRANSMITTING AND RECEIVING		
2. NOMENCLATURE, MANUFACTURER'S MODEL NO. Straight Dipole Antenna, MD06-010	3. MANUFACTURER'S NAME Radiall	
4. FREQUENCY RANGE 1350-1390 MHz	5. TYPE Straight Dipole Antenna	
6. POLARIZATION Vertical	7. SCAN CHARACTERISTICS	
8. GAIN		a. TYPE
a. MAIN BEAM 6.5 dBi Max	b. VERTICAL SCAN	
b. 1ST MAJOR SIDE LOBE N/A		(1) MAX ELEV
		(2) MIN ELEV
		(3) SCAN RATE
9. BEAMWIDTH		c. HORIZONTAL SCAN
a. HORIZONTAL N/A		(1) SECTOR SCANNED
b. VERTICAL -3dB , >90 Degrees		(2) SCAN RATE
		d. SECTOR BLANKING (X one)
		☐ (1) YES ☐ (2) NO
10. REMARKS REFERENCE PART NUMBER 109-1103(0A9N8) FILE REFERENCE: DD1494 - GCS 1350 Omni, (109-1103) MSH, 0A9N8, 20DEC07 L3 BAI AEROSYSTEMS USES THIS ANTENNA WITH UAS GCS EQUIPMENT.		
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ANTENNA EQUIPMENT CHARACTERISTICS		
1. ☐ a. TRANSMITTING ☐ b. RECEIVING ☒ c. TRANSMITTING AND RECEIVING		
2. NOMENCLATURE, MANUFACTURER'S MODEL NO. SP-1.535 STANDARD PARABOLIC ANTENNA	3. MANUFACTURER'S NAME Radio Waves, Inc	
4. FREQUENCY RANGE 1.30 to 1.535 GHz	5. TYPE Parabolic	
6. POLARIZATION Vertical	7. SCAN CHARACTERISTICS	
8. GAIN		a. TYPE N/A
a. MAIN BEAM 20.5 dBi		b. VERTICAL SCAN
b. 1ST MAJOR SIDE LOBE N/A		(1) MAX ELEV N/A
		(2) MIN ELEV N/A
		(3) SCAN RATE N/A
9. BEAMWIDTH		c. HORIZONTAL SCAN
a. HORIZONTAL 25		(1) SECTOR SCANNED N/A
b. VERTICAL 25		(2) SCAN RATE N/A
		d. SECTOR BLANKING (<i>X one</i>) ☐ (1) YES ☒ (2) NO
10. REMARKS		
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