



# Curtis-Straus<sup>®</sup>

Worldwide Regulatory Approvals Experts

5/8/06

To: Federal Communications Commission  
7435 Oakland Mills Road  
Columbia, MD 21046-1609

Curtis-Straus LLC TCB  
527 Great Rd  
Littleton, MA 02702

Gentlemen:

The purpose of the attached materials is for a new limited modular equipment authorization for the Colubris Networks CM9-C1 (FCC ID RTP550-10016-7). The CM9-C1 is only to be used in the Miltope CAP which is installed in aircraft by professional installers. It is a low power communications device transmitter that operates in the ranges 2.4GHz and 5GHz bands. The CM9-C1 is a modified version of the CM9 which was originally granted authorization (modular) under FCC ID: NKRCM9. The CM9-C1 differs in the following ways:

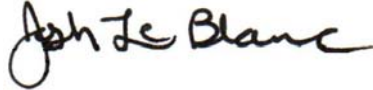
- 1) The addition of a band pass filter prior to the 5GHz power amplifier.
- 2) The addition of the following antennas:

Antenna	Gain (dBi)	Frequency of Operation
Miltope p/n: 901167-2	2.6dBi@ 2.45GHz, 1.2dBi@ 5.25GHz, 1.2dBi@ 5.8GHz	2.39 – 2.49GHz 4.9 – 5.9GHz
Miltope p/n: 901563-2	4.75dBi@ 2.45GHz, 4.85dBi@ 2.50GHz, 5.0dBi@ 4.8GHz, 5.0dBi@ 5.25GHz, 4.0dBi@ 5.875GHz	1.9GHz – 2.5GHz 4.8GHz – 5.875GHz
Miltope p/n: 901058-1	5.0dBi@ 2.35GHz	2.2-2.5GHz
Miltope p/n: 901167-1	3.5dBi@ 2.45GHz, 2.5dBi@ 5.0GHz 3.5dBi@ 5.25GHz, 3.5dBi@ 5.8GHz	2.39 – 2.49GHz 4.9 – 5.9GHz
Gore GSC10-82701-XX (XX signifies antenna length)		1.9GHz – 2.5GHz 4.8GHz – 5.875GHz

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It was determined from the manufacturer's datasheets that the addition of the filter on the 5GHz RF line should only lower the emissions in the band reject range and has no effect on the 5GHz output due to the filter being ahead of the power amplifier feed back leveling (see F0918 Filter Spec.pdf for details). Spurious emissions were re-measured. The original application exhibits (FCC ID: NKRCM9) is included to provide test data for the remainder of the tests not affected by the addition of the antennas and band pass filter.

Sincerely,

A handwritten signature in black ink that reads "Josh LeBlanc". The signature is written in a cursive, slightly slanted style.

Josh LeBlanc  
EMC Engineer