Dataradio COR
Waseca, MN U.S.A.

ENGINEERING STATEMENT
OF Dale E Jordan

The application consisting of the attached engineering test report and associated FCC form 731 has been prepared in support of a request for a Class II Permissive Change for NP4-5028-502.

The certification NP4-5028-502 has been granted to Dataradio COR for its Viper 200 radio modem. Dataradio COR does the final assembly and markets the Viper 200 unit. The NP4-5028-502 certificate has been granted for several bit rates at 2, 4-level FSK type of modulation scheme with a total of 6 emission designators. The change intends to add an 8 and 16-FSK modulation scheme with 10 new bit rates (3K20F1D, 3K45F1D, 8K50F1D, 8K08F1D, 17K8F1D, 17K0F1D, 33K3F1D, 34K0F1D, 36K0F1D, 33K0F1D). This change involves the firmware only, with no change whatsoever occurring in the hardware of the Viper 200 transceiver.

EXISTING CONDITIONS

The unit utilized for these occupied bandwidth and mask-compliance measurements was a Pilot unit built from production NP4-5028-502 with variant modulation source (prototype board and firmware) used to create the modulation scheme. The transceiver operates on frequencies ranging from 216.000 MHz to 222.000 MHz. The frequency tolerance of the transceiver is 1.0 parts per million as granted in NP4-5028-502.

PROPOSED CONDITIONS

It is proposed to accept the request for the Viper 200 Transceiver/Modem for operation in the band of frequencies previously outlined. The applicant anticipates marketing the device for use in wireless transmission of data.

PERFORMANCE MEASUREMENTS

All measurements for Occupied Bandwidth and mask compliance as per 2.1043 (b)(2) were conducted in accordance with the Rules and Regulations Section 2.1041and 2.1049 of Title 47 of the Code of Federal Regulations. Equipment performance measurements were made in the engineering laboratory located at 299 Johnson Ave, Waseca, MN 56093 USA. All measurements were made and recorded by myself or under my direction. The performance measurements were made between February 5, 2010 and February 10, 2010.

CONCLUSION

Given the results of the measurements contained herein, the applicant requests to be applied a Class II Permissive Change for the Certificate NP4-5028-502 to add the emission designators of 3K20F1D, 3K45F1D, 8K50F1D, 8K08F1D, 17K8F1D, 17K0F1D, 33K3F1D, 34K0F1D, 36K0F1D and 33K0F1D to the existent list.

2/17/10

Dale E Jordan
R&D Test Engineer, Dataradio COR.