

Dataradio Inc.  
Montreal, Canada

**ENGINEERING STATEMENT  
OF CONSTANTIN PINTILEI**

The application consisting of the attached engineering exhibit and associated FCC form 731 has been prepared in support of a request for a Class II Permissive Change for EOTGPDA.

The certification EOTGPDA has been granted to Dataradio Inc for its Gemini/PD radio modem. Gemini/PD is comprised of the Dataradio COR Ltd. (DRL) Mobile Data Platform (MDP) UHF (403 MHz-512MHz) Transceiver with the Dataradio Inc Gemini Modem. Dataradio Inc does the final assembly and markets the Gemini/PD unit. The original certificate has been granted for a 2-level FSK type of modulation scheme (DGMSK) with three emission designators 8K60, 15K0, 15K3F1D and 4-level FSK with four emission designators 15K6, 16K0, 8K17 and 8K67F1D. The change intends to add to the 4-FSK emission designator list a new value of 16K8F1D. This change involves the firmware only, with no change whatsoever occurring in the hardware.

EXISTING CONDITIONS

The unit utilized for these occupied bandwidth and mask-compliance measurements was a prototype built from production EOTGPDA with beta-level firmware used to create the modulation scheme. The transceiver operates on frequencies ranging from 403.000 MHz to 512.000 MHz. The frequency tolerance of the transceiver is .00015% or 1.5 parts per million as granted in EOTGPDA.

PROPOSED CONDITIONS

It is proposed to accept the request for the GEMINI/PD, 403-512 MHz Transceiver/Modem/GPS 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 2.1041 and 2.1049 of Rules Service Co rev.2-154, Mar 15,2000. Equipment performance measurements were made in the engineering laboratory located at 5500 Royalmount ave, Montreal, Canada. All measurements were made and recorded by myself or under my direction. The performance measurements were made between Oct 29, 2001 and Nov 03, 2001

CONCLUSION

Given the results of the measurements contained herein, the applicant requests to be applied a Class II Permissive Change for the Certificate EOTGPDA to add the emission designators 16K8F1D to the existent list.

*Constantin Pintilei*

11/07/2001

Constantin Pintilei, Eng  
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