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January 7, 2003

Commission's Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Comments of the AHMCT Research Center, University of California-Davis, In the Matter of Amendment of the Commission's Rules Regarding Dedicated Short-Range Communications in the 5.850-5.925 GHz Band (5.9 GHz Band), WT Docket No. 01-90

Dear Secretary:

We are writing in response to the Proposed Rulemaking on DSRC in the 5.9 GHz band. The Advanced Highway Maintenance and Construction Technology (AHMCT) Research Center at the University of California – Davis is dedicated to research and development of sensing, communications, robotics, and automation technologies in the service of improving the safety, efficiency, and security of our transportation systems. We view the planned DSRC service as a critical enabling technology in support of such advanced systems, and wish to provide our views regarding the proposed rulemaking.

In many areas, our views are supportive of those presented by ITS America. With regard to “Interoperability,” we believe that it is imperative that a standard be selected for DSRC, and we concur with the FCC and ITSA that the proposed ASTM standard is appropriate. In particular, we are encouraged that the ASTM standard is in part based upon the IEEE 802.11a standard, which is beginning to see widespread public and private sector deployment. With respect to “User Eligibility and Shared Use,” we believe that shared public safety and private use will be essential to achieve desired economies of scale, allowing more rapid and cost-effective deployment of the service; however, we do feel that public safety use must receive priority, and represent the dominant use of the frequency band. Regarding “Spectrum Auctions” as well as “Licensing Plan,” we feel that ITSA has very clearly responded, and support their position in these areas.

Our main response is in the area of "FCC Definition of DSRC Service." We agree with the basic premises of the FCC definition. However, in specifics, we urge addition of a key enabling service within the services listed in Appendix B of the NPRM document. This service would consist of transmission of differential corrections data for use with Global Positioning System (GPS) receivers. National (or continent-wide) availability of such corrections data would provide a key improvement in safety and efficiency of the National Transportation network, and may also have important security implications. Development of this type of robust, distributed differential corrections network is currently occurring at the AHMCT Research Center, but widespread deployment will rely upon availability of an interoperable national transmission network as provided by the DSRC network. This and similar services would rely upon the “non-voice” data transmission as included in

the current FCC DSRC definition. We strongly urge that the definition still include a component for “non-voice” data transmission, and we also urge that this specific service be listed in addition to those already present in Appendix B.

Thank you for your consideration in this matter.

Sincerely,

Ty A. Lasky, Ph.D.,

Research Engineer,

on behalf of the Advanced Highway Maintenance and Construction Technology Research Center at the University of California—Davis