



FCC application for Modify FORM 422

Pursuant to application modification for callsign: WF2XNE, FRN: 0019958503

Narrative describing usage of frequency

- a) The Reason that Fortress is seeking this license is to support a program of research and experimentation focused upon the development of products that operate in conjunction with 802.11p, Wireless Access in Vehicular Environments and DSRC (Dedicated Short Range Communications) which use the 5.825GHz – 5.925GHz spectrum for the ITS communications. The goal is to implement products to the 802.11p standard. Since these products need to operate wireless between vehicles as well as between vehicles and ground stations, this is by necessity an outdoor technology. The equipment to be used is the standard set of Fortress 802.11a (commercially available) radios, with software specially modified to access these frequencies.
- b) The objective is to create products which follow the 802.11p standards and to improve and optimize the performance of these products for the benefit of our customers.
- c) These radio frequencies already operate in simulation as well as in the anechoic chamber. However, access to multiple, independent vehicles, moving at different rates of speed and in different directions is a necessary component to the research. The software and radio driver algorithms which allow large numbers of vehicles, large rates of speed, RF obstructed operations, and operations under heavy load still need significant work and it is Fortress' intention to pursue improvements in these algorithms as part of a product offering.