

NARRATIVE STATEMENT OF MARK IV INDUSTRIES CORP.
APPLICATION FOR EXPERIMENTAL LICENSE

In this application, Mark IV Industries Corp. ("Mark IV") requests an experimental license to conduct technical research and equipment development, field testing and customer demonstration of devices and systems to operate in the Dedicated Short-Range Communications Service (DSRC) in the 5.850-5.925 GHz band. See the Commission's Report and Order [FCC 03-324] in WT Docket No. 01-90 / ET Docket No. 98-95, released February 10, 2004. This research and development is being conducted in connection with Federal Highway Administration contract with ARINC.

A. Program of Testing

Mark IV is requesting this authority to conduct (1) experimentations; (2) research; (3) technical demonstrations; (4) field strength; (5) demonstrations of equipment to prospective purchasers; (6) testing; and (7) development of radio technique, equipment, operational data, or engineering data.

Mark IV's systems may also be operated at trade shows and other venues to demonstrate how they can be deployed to meet DSRC applications for vehicles, heavy trucks, buses, trains and emergency vehicles.

The operation of Mark IV's DSRC systems as proposed here will contribute to the development and extension of radio technology to enhance vehicle safety, efficiency of use of the transportation infrastructure, mobility, emergency incident response from public safety agencies, safety of commercial vehicle operations and management and security of the flow of cargos throughout the nation.

B. Additional Technical Specification

Based on discussions with the OET staff, Mark IV is providing following additional technical information:

(1) Power – Mark IV will comply with the maximum antenna input power limits in the FCC's DSRC rules, 28.8 dBm (750mw).

(2) Emissions – Mark IV will use emissions which comply with the emissions mask and formulas in the FCC approved ASTM-DSRC Standard for Class C devices.

(3) Protection for Government Radar Operations – Mark IV will accept grant conditioned to prohibit its research and development operations being conducted closer than seventy-five kilometers from any government radar site listed in Section 90.371(b) of the FCC's rules.

C. Justification For Broad Geographic Scope

Mark IV is expecting to deploy systems for trials under different road conditions and weather conditions and to demonstrate system capabilities to state department of transportation officials throughout the U.S. On-site demonstrations are particularly helpful to gain familiarity with equipment compatibility, functionality on their systems, and the range of potential uses which they can serve. This large area license (covering most of the U.S.) would be more efficient for the FCC staff than having Mark IV file numerous duplicative STA requests, in which the only substantive difference would be the location of the testing.