

QUESTION 7: PURPOSE OF EXPERIMENT

FCC Form 442, Item 7

This experimental license will cover the continued development, testing and demonstration of experimental and prototype equipment for applications covered in Part 101, Fixed Microwave Services. It will also cover the demonstration of equipment at customer locations and at trade shows. Ensemble Communications is a manufacturer of such equipment.

The Ensemble product uses Adaptive Time Division Duplexing, Adaptive Modulation and Adaptive Time Division Multiple Access with point-to-point and point-to-multipoint architectures. These state-of-the-art technologies have been demonstrated to operate successfully in a laboratory environment and in small-scale deployments. Having access to spectrum on an experimental basis will allow Ensemble to validate its technology in the field and to continue to develop and test performance enhancements to the base technology.

Testing will include, but not be limited to:

- Fade margin measurements
- Link reliability and availability under various weather conditions
- Operation under different modulation modes
- Network interoperability
- Single carrier and multi-carrier performance trade-offs
- Channel capacity limitations
- Network management
- Application testing