EXHIBIT A

NARRATIVE STATEMENT IN SUPPORT OF PROPOSED EXPERIMENTAL OPERATION

LBA Technology, Inc. proposes to conduct experiments to investigate the possibility of improving the efficiency and bandwidth of short antenna radiators. This research is expected to identify ways in which the performance of restricted height antennas in the Traveler's Information Service may be improved. Should improvements be possible, LBA Technology, Inc. is prepared to incorporate them into production antenna systems. The availability of such enhanced performance antenna systems would result in more intelligible TIS broadcasts, with a corresponding benefit to the public of being able to better receive the public safety and other broadcasts intended of the TIS.

At present the Traveler's Information Service (TIS) is authorized under Part 90.242 of the FCC Rules for operation with antennas restricted to 15 meters in height at 530 and 1610 kHz. Such antennas are electrically very short, and current approaches to these antenna systems result in very poor efficiency and extremely restricted bandwidth. As a consequence, the permitted 10 watt TIS transmitter output power is frequently inadequate to reach authorized radiated field intensity values, resulting in additional FCC workload to evaluate and grant waivers of the rules to permit greater transmitter power.

In addition, the bandwidth of typical TIS antennas is so restricted as to impair the transmission of normal voice with reasonable fidelity. Since the transmissions are intended to be received by the general public on automobile radio receivers, presently available quality is unacceptable to many radio listeners. The staff of LBA Technology has monitored a number of TIS installations and found the audio quality to even be unacceptable to an engineering listener. As a consequence, it is believed than many TIS installations are being utilized by only the small fraction of the public willing to put up with its quality deficiencies.

Current engineering design techniques using the numerical electromagnetic code (NEC) and other techniques have permitted LBA Technology to create design concepts for alternative approaches to the TIS antenna problem. In the course of this experimentation, LBA will construct both full size and model antennas of smaller size for testing under actual transmission conditions. The primary test site will be at the LBA laboratory facility at 1214 Mumford Road in Greenville, North Carolina. However, it is also proposed that the experimental antenna systems will be tested in other localities within a ten-mile radius of Greenville and chosen to simulate other field installation conditions which might be encountered in actual deployment of the antenna systems, particularly with respect to ground system configurations and limitations. In no case will any antenna structure be erected with a maximum height of more than 15 meters. No test installation will be

made in any location which would require notification to the FAA. Therefore, there will be no aeronautical hazard created by the operation proposed under this experimental authority.

Experimentation has been proposed directly upon TIS frequencies 530 and 1610 kHz. There are no known TIS authorizations within 50 miles of Greenville, North Carolina. Part 90.242 normally requires coordination between co-channel TIS stations spaced at less than 9.3 miles. Thus, an adequate margin exists that there is no reasonable probability of interference with any existing TIS authorization. Because of the low power, inefficient antenna, and intermittent operation, no interference is expected to any other service.

In order to characterize properly the properties of a structure capable of radiating on both TIS frequencies, a mid-point test frequency is also desired. After investigation of available frequencies, it appears that 1040 kHz could be used without interference to any existing radio stations via daytime groundwave propagation. This frequency would not be used during night hours. An interference analysis has been carried out under the standards of Part 73 of the FCC Rules, using the assumption of a 90° radiator with complete ground system. Under these highly conservative conditions, the co-channel 0.025 mV/m interference contour would extend a maximum of 30 miles, or 40 miles from the centroid of the operational area. No co-channel station has a 0.5 mV/m protected contour within 100 miles of the area centroid.

For adjacent channel protection at a 0 dB ratio, a clearance of 7 miles, or 17 miles from the centroid would be required. No adjacent station puts a 0.5 mV/m contours within 40 miles of the centroid. Thus, this proposal would also fully protect adjacent channel stations.

In order to permit physically manageable supplemental modeling of the antenna structures, three other frequencies have been requested at 2.650, 5.200, and 8.050 MHz. No facilities operating on those frequencies within 100 miles have been identified. It is not anticipated that the proposed intermittent experimental operation will cause interference to any existing service. In any event, LBA will identify experimental transmissions and will immediately cease experimental operations if notified of interference. It will work directly with the Commission and any affected parties to adjust its hours of operation and other characteristics to avoid repetitions of interference events.

LBA proposes to comply with any Commission rules and/or requests regarding reporting of its activities under this experimental license. The term of the license is requested to be two years in order to accommodate its research objectives.

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