



FCC/MELLON

NOV 02 1998

S-3562-EX-1998

Brigham Young University
Information Technology Services
290 FB
Provo UT 84602

October 7, 1998

Federal Communications Commission
Experimental Radio Services
P.O. Box 358320
Pittsburgh PA 15251-5320

Dear FCC:

In accordance with Section 5.56 of the Commission's Rules, we request special temporary authority ("STA") to operate an experimental radio facility for the purpose noted below.

The Fee Code for this application is EAE. A check for \$45.00 and Form 159 are enclosed.

In support of this request, the following is shown:

1. Applicant's Name and Address.

Brigham Young University
Provo UT 84602
Attention: Jim Manookin
290 FB
Tel. No: 801 378 7547

2. Need for Special Action.

The STA is requested in order for us to evaluate a new generation of local area automatic vehicle monitoring ("AVM") technology described below.

3. Type of Operation.

The operation of the system is intermittent in that a signal is transmitted only when a vehicle is present. This low power signal will be continuously directed at the area into which tagged vehicles will travel. Accordingly, we request authority for continuous transmission.

4. Purpose of Operation.

The AVM system will be used at our facilities to identify, automatically, vehicles equipped with a transponder (tag). The system consists of a reader that transmits an unmodulated signal and passive transponder devices attached to the vehicles to be identified. Specifically, the applicant's AVM system will be used to control access to specific parking facilities on BYU campus and to monitor their usage.

5. Date of Operation.

The evaluation of the AVM system is planned to commence within two weeks of the date of this request. Actual operation is to commence following receipt of the requested authorization and is to continue for a period of up to six months.

6. Class of Station.

The station class is experimental.

7. Location of Proposed Operation.

The operation will be conducted at:

Brigham Young University
Provo UT 84602

8. Equipment to be Used.

The equipment to be used consists of a new generation of tag readers being developed by Amtech Corporation. The antenna will be attached to the reader.

9. Frequencies Desired.

The desired frequencies are:

Gate 1 entrance	902.00 MHz
Gate 1 exit	915.00 MHz
Gate 2 entrance	915.00 MHz
Gate 2 exit	928.00 MHz

10. Radiated Power.

The maximum effective radiated power will be approximately four watts or less, with radiated energy directed primarily toward access control gates.

11. Type of Emission.

The emission is 50KONON. It is a continuous wave signal from the reader. Frequency stability is 50 ppm. The low level modulated backscatter signal returned by the passive transponder has an occupied bandwidth of approximately 2.5 MHz. It is reduced in field strength more than 39 dB from the signal transmitted by the reader.

12. Overall Height of Antenna Above Ground.

The antenna will be less than 12 feet above ground.

13. Anti-Drug Abuse Certification.

The applicant hereby certifies that neither it, its officers and directors, nor any party with a five percent or greater interest in this request for special temporary authority has been convicted of offenses consisting of the distribution or possession of controlled substances, as such terms are defined in Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862.

If there are any questions about this application, please contact the undersigned.

Thank you for your prompt attention to this request.

Respectfully,



James H. Manookin

By:  _____

Title: Systems Engineer

Date: October 7, 1998