

Exhibit A. Experiment Objectives & Operations

Stanford Telecom intends to deploy a three (3) transmitter System Validation Single Frequency Network (SV-SFN) to validate and optimize a terrestrial system that will augment a satellite Digital Audio Radio Service (DARS) system. Satellite signals at S-Band do not fully provide coverage to urban areas due to the severe blockage from buildings. Consequently, a terrestrial network will retransmit the satellite service signal to provide coverage in those urban areas where the satellite signal is blocked. To demonstrate and optimize the network planning and terrestrial waveform, Stanford Telecom plans to conduct a series of tests beginning in August 1998 using a limited number of transmitters.

Testing of the SV-SFN transmitter system will consist of two types of measurements:

1. Channel characterization, including signal power and multipath characteristics, to assist in establishing and validating propagation and channel models for a single frequency network; and,
2. Waveform performance assessment, which will be accomplished by capturing sampled data in the field for analysis in the laboratory.

Consequently, on any given field testing day, one transmitter may be operating or all three (3) of the transmitters may be emitting RF energy simultaneously. These measurements will help verify techniques and equipment.

To allow the field collection to proceed efficiently and to ensure the accuracy of the data, the testing team will be able to remotely control and monitor the three transmitters via a phone connection. Figure A-1 illustrates the test architecture. For example, the testing team will be able to independently turn on and off each of the three transmitters. This control will allow the rapid detection of any problems or the immediate shut-down of the transmitters, if necessary.

Testing is planned for a limited number of days during the period of August through December 1998. Stanford Telecom will conduct tests during normal working hours; non-working hour testing is not planned. The transmitters will only emit RF energy when tests are being conducted—the transmitters will be turned off at all other times.

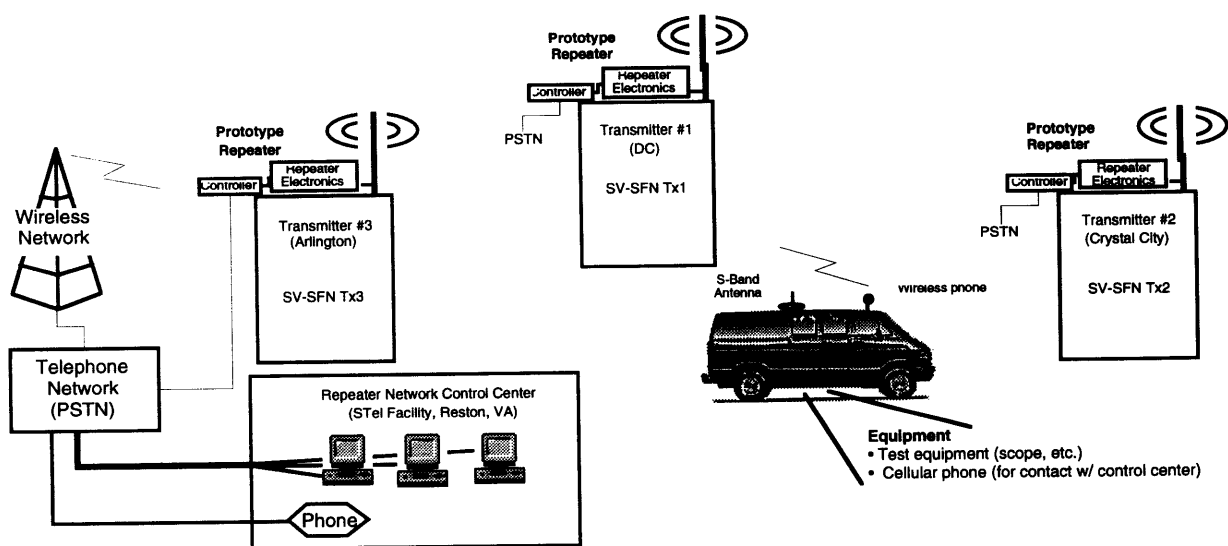


Figure A-1. Experiment Configuration