

**ENCLOSURE TO EXPERIMENTAL RADIO STATION KK2XFV
RENEWAL APPLICATION TO
FEDERAL COMMUNICATIONS COMMISSION
DATED 30 JULY 1990**

**EXPERIMENTAL SERVICE (RESEARCH)
SECTION 5.204 EXPERIMENTAL REPORT**

The equipment for which this renewal application is being submitted is used to provide a signal source for performing design verification and acceptance testing (radiation patterns and gain) of microwave antennas which are being developed and manufactured by Radiation Systems, Inc.

During the period of 01 August 1988 to 01 August 1990, the equipment will have been used approximately 5,000 hours for the design verification and acceptance testing of RSi's microwave antennas. Of the approximately 5,000 hours, 70 percent or 3,560 hours of testing was in the 1,000-6,425 MHz range, 15 percent or 750 hours was in the 10,700-14,500 MHz range, and 10 percent or 500 hours was in the 50-990 MHz range. The other 5 percent or 250 hours of testing oscillated within our licensed frequencies from 50 MHz to 18,000 MHz as required by the capabilities of the particular antenna being tested.

The test equipment has been utilized for the development and acceptance testing of over 470 antennas during the license period. Many of these antennas have unique performance characteristics with no comparable antennas being produced by other manufacturers.

It is anticipated that during the period of 01 August 1990 to 01 August 1992, the amount of hours and frequencies used in the design verification and acceptance testing of RSi antennas will increase due to our sales growth and continuing antenna development.

Also enclosed is some descriptive literature describing the antennas RSi has developed and is manufacturing.