

U S WEST, Inc.
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Elridge A. Stafford
Executive Director-
Federal Regulatory

March 15, 1995

Mr. H. Franklin Wright
Office of Engineering and Technology
Frequency Liaison Branch
2025 M Street, N.W., Room 7326
Washington, D.C. 20554

RE: U S WEST Communications, Inc.
Call Sign KK2XCC; File Numbers; 2148-EX-PL-91,
2148-EX ~~3306~~-EX-ML-92, 3630-EX-ML-93, 3630-EX-R-93,
RR-93 4064-EX-ML-93
Twelfth Quarterly Report
PCS Experimental License for Boulder, CO

Dear Mr. Wright:

Enclosed please find U S WEST Communications' twelfth quarterly report addressing the above referenced authorization for PCS field trials in Boulder, Colorado.

Should you have any questions or require additional information, please call me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Elridge A. Stafford".

Enclosure

**U S WEST
Wireless Personal Communications
Experiments**

**Quarterly Progress Report #12
KK2XCC**

March 15, 1995

Submitted to

**Federal Communications Commission
Frequency Liaison Branch
Room 7326
Washington, DC 20554**

Prepared by

**U S WEST Technologies
Wireless Communications Services
4001 Discovery Drive
Boulder, CO 80303**

1. Introduction and Summary

This quarterly report summarizes field testing conducted by U S WEST Technologies in the Boulder Industry Test Bed (BITB) from December 4, 1994 through March 1, 1995. During this quarter, tests involving emissions in the 1850 MHz to 1990 MHz band were conducted on one system. The system used included fourteen radio beacons located at test bed base station sites.

Plans for the next quarter include further technology field tests using CDMA to be performed in conjunction with the Joint Technical Committee (JTC).

2. Field Testing

Field testing was conducted in the BITB using radio frequency beacons placed at fourteen base station sites. Testing was completed on December 31, 1994. Testing included the simultaneous measurement of received signal strength from each beacon unit. With this data, an analysis of path loss and co-channel interference effects were characterized in an effort to assess the performance of low-tier PCS radio systems in the BITB propagation environment.

3. Future Research

As indicated in previous quarterly reports, the BITB facility has been offered to the Joint Technical Committee as a facility for technology field testing. A draft test plan was submitted as a contribution to JTC in June, 1994. Presently, only one technology, PCS1900 (TAG 5), has completed field testing at the BITB facility (testing was completed in November, 1994).

Four technologies have committed to field testing at the BITB in 1995. Upbanded IS-95 (TAG 2), based on CDMA, is scheduled for May, 1995 to June, 1995. Wideband-CDMA (TAG 7), also based on CDMA, is scheduled for June, 1995 to July, 1995. Upbanded IS-54 (TAG 4), based on TDMA, is scheduled for July, 1995 to August, 1995. PACS (TAG 3), based on TDMA, is tentatively scheduled for September, 1995 to October, 1995.