

EXHIBIT I

By this application, Satellite CD Radio, Inc. (CD Radio), will begin testing of S-Band terrestrial repeater ground stations for its satellite Digital Audio Radio Service (DARS) system. The overall purpose of the requested experimentation is to finalize the engineering of CD Radio's terrestrial repeaters. CD Radio expects that this effort will yield significant new information about power levels required to ensure satellite DARS reception in urban "canyons" and near other obstacles, and will permit as well measurement of out-of-band emissions from such terrestrial stations.

Specifically, CD Radio plans:

1. To measure objective (e.g., signal strength, delay speed, multipath, etc.) and subjective (e.g., music quality) transmission performance using parameter values of operational system.
 - a) Measurements at S-band in CD Radio's licensed spectrum. No confirming measurements of terrestrial transmission performance for Satellite DARS have yet been made.
 - b) Measurements in a severe urban environment. San Francisco is a particularly difficult propagation environment and, additionally, has subenvironments (e.g., hilly terrain, water boundary, treed areas, etc.)
 - c) Measurements in the projected Satellite DARS environment using transmitter sites suitable for the operational system with objective and subjective performance measured in a moving vehicle.
3. To optimize transmission parameter values particularly transmitter power and modulation.
 - a) Various power levels of the transmitters will be used with a maximum of 1000 watts

- b) Modulation optimization will be checked, especially number of subcarriers, their spacing and symbol guard time. Performance under doppler conditions will also be confirmed.
- c) Out-of-band emissions and spectral occupancy will be measured, including sidelobe regrowth due to transmitter non-linearity.

EXHIBIT II

San Bruno Mt.

AVIATION Light

245.9 153.9 ft.

1380

CD Radio

PROPOSED 8'x10'x10' PANEL
ANTENNA INSTALLATION MOUNTED
ON EXISTING LATTICE TOWER
(FIELD VERIFY ANTENNA LOCATION)

TOP OF ANTENNA 153.9 FT. ABOVE GROUND

FINISHED GROUND

1280 ft

T ELEVATION



CD Radio Inc.
1180 Avenue of Americas, 14th Floor
New York, NY 10036
TEL: (212) 899-5000
FAX: (212) 899-6050

CONSULTANT:

WFI



Wireless Facilities Inc.
San Diego Tech Center
9735 Scripps Ranch, Suite 140
San Diego, CA 92121
Tel: (619) 824-2929
Fax: (619) 824-2928

PROJECT INFORMATION:

**SAN BRUNO MOUNTAIN
TOWER #9**

700 RADIO ROAD
BRISBANE, CA 94005

CURRENT ISSUE DATE:

8/14/98

ISSUED FOR:

EXHIBIT B

REV. DATE: DESCRIPTION: BY:

8/14/98 ISSUED FOR EXHIBIT "B" JM

PLANS PREPARED BY:



**DELTA GROUPS
ENGINEERING, INC.**
CONSULTING ENGINEERS

5000 STONEMASTER DRIVE, SUITE 110
PLEASANTON, CA 94566
TEL 925-468-0110 FAX 925-468-0330

DRAWN BY: CHK: APV:

JM

LICENSURE:

SHEET TITLE:

SOUTH AND EAST
ELEVATIONS

SHEET NUMBER: REVISION:

A2

1

988202

SCALE:

1"=100'

1