

**PEOPLE OF ACTION**  
**1416 Hollister Lane**  
**Los Osos, CA 93402**

Exhibit AA  
KPAT KGDP-FM  
August 14, 2004  
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**Statement of Norwood J. Patterson**

In anticipation of a grant for the higher tower on Harris Grade (199' AGL) a special 4-bay tower  $S=.85\lambda$  was designed, built, and purchased from Dielectric, specifying a 199' tower.

Dielectric's design specifies that the tower (unobstructed) must continue to a height of at least five (5) feet (1.5 meters) above the top antenna bay.

During construction, this condition will be met. The tower will continue above the top bay of the KGDP 4-bay array 5' (1.5 m.) with no obstructions. No distortion to the KGDP-FM directional antenna array will occur.

See the attached Pattern Certification of Dielectric.



**Norwood J. Patterson, President**  
**People of Action, Licensee KGDP-FM**

8-14-04

## PATTERN CERTIFICATION

### Method of Measurement

The azimuth pattern for "SANTA MARIA", Dielectric Document Sketch # 61, was measured in the following manner.

A single 4.4 to 1 scale model "DCRH" bay radiator was mounted on a similarly scaled model of the tower according to information provided to Dielectric by the customer; refer to Dielectric Document Sketch # 61. The antenna under test, all parasitics, all known tower appurtenances, and the tower section were rotated through 360 degrees while receiving a signal at the appropriate frequency from a linear cavity-backed source antenna. Both the horizontal and vertical polarization azimuth patterns were measured in an anechoic test range.

The transmit and scale model antennas are mounted at identical elevations and at opposite ends of the chamber. A Hewlett Packard model 8711A network analyzer was used to supply the RF signal the source antenna at 4.4 times the fundamental FM frequency and to receive the signal intercepted by the antenna under test. The received signal was converted to a relative level, referenced to the source. This level was stored on a computer acting as the master controller. The computer controls the measurement system via IEEE-488 control bus through a GPIB card.

### Statement of Qualifications

John Schadler is the Director of Antenna Design and Development here at Dielectric. He has been working for Dielectric since 1986. He received a BS in Electrical Engineering from Penn State University, and a Masters in Electrical Engineering from Drexel University. He has multiple patents in the areas of circular polarization, centerfed antennas, broadband and multi-channel antennas, common aperture antennas, and DTV antennas.

Signed by: \_\_\_\_\_

Date: \_\_\_\_\_