Congregation Agudas Achim
Austin, TX

LOCATION: 7300 Hart Lane, Austin, TX 78759

SCOPE OF CONSULTING: Speech-reinforcement sound system design

COMPLETION DATE: Designed 1999 / Installed 2001

ARCHITECT: Lake|Flato Architects, Inc.

ASSOCIATED ACOUSTIC CONSULTANT: Orpheus Acoustics

REFERENCES: Kim Monroe, project architect (210-227-3335)
Chris Brooks, acoustic consultant (717-291-9123)

DESCRIPTION: This strikingly modern Sephardic-style synagogue is part of a new Jewish community and worship center for a large and growing Conservative congregation, including a sanctuary seating 1000, chapel, social hall, synagogue offices and education wing. Main floor and balcony levels wrap around three sides of the sanctuary, which features a central Tebah for Torah reading. The bema, with Ark and rabbi’s pulpit, are at the east wall. While the natural acoustics were designed to support unamplified speech from both tebah and bema—without compromising responsiveness of the sanctuary for congregational prayers and responses—electronic speech reinforcement was still considered necessary for untrained voices.

The sound system provides “hands-free” speech and vocal reinforcement for worship services. Microphone signals from talkers at the bema and tebah are fed through automatic mixers and then a multichannel digital-signal-processor configured with an innovative “zoned delay-level matrix.” A ten-zone system of overhead distributed ceiling and pendant loudspeakers are discretely integrated into the building. This complex system simultaneously maintains “location realism” to talkers at both bema and tebah for listeners throughout the sanctuary. Other sound system features include program monitor loudspeakers for ancillary & support areas, assisted-listening system for the hearing impaired, and accommodation for a modest speech & music recording system for archive use or cassette tape distribution to the home-bound.

A separate dining hall sound system was also included in the project.
MAIN SANCTUARY – VIEW FROM REAR BALCONY