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SPECIAL SECTION

AUDIO IN SPORTS

FOX Tackles the NFL

by Robert Brilliant

LOS ANGELES

If you've ever wondered what it sounds like to be crunched by a 250-pound blitzing linebacker, try listening to a FOX Sports' NFL game in Surround Sound. You may find yourself scrambling right out of your easy chair for the sidelines.

The startling in-the-game realism of Surround Sound is but one aspect of FOX Sports' meticulous efforts to capture realistic, complete, and creative audio for its live productions.

Audio for an NFL game is similar to audio for other FOX Sports broadcasts in that it involves a tight integration of specialized people and equipment, said Jeff Court, vice president of Network Field Operations for FOX Sports and technical coordinator for NFL football.

"It's not just hardware," Court said, "it's people, hardware and process that makes everything work for terrific audio."

The technical crew for every FOX Sports NFL game includes an A1 audio mixer that is in charge of all audio elements of the broadcast. Stationed at the main 64- or 128-input audio board in the production truck, the A1 receives submixed feeds from the field and from the umpire's wireless mic. Other audio elements heard prominently on every broadcast — the stadium address mic used by the referee, the PA system and music/sound effects — come to the truck directly from either the stadium or any num-

ber of disk-based playback systems.

Two A2 audio assistants positioned, respectively, in the field and in the announce booth are responsible for microphone placing and submixing the playing field, the stadium, and the announce talent.

The submixing is done with a modified Mackie 1604 audio board that in turn feeds

Sennheiser SK-250 RF transmitters.

Tuning is critical to maximizing each parabola's performance, Court said.

"A parabolic reflector has one focus point and to be effective you've got to be right on that focus point or you'll have both level and phase differences," Court explained. "For these parabs, that point is about 4.5



the main audio board on the truck.

Most of the game audio is captured from the sidelines with four handheld Crystal Partners Big Ear parabola mics that have been carefully tuned in an anechoic chamber for determination of their optimal focal points. These parabola are fitted with DPA 4060 pre-polarized omnidirectional miniature condenser microphones transmitting through

inches in front of the dish. We install the mic in the tube at the precise distance out and we're set on the actual focus point. When we aim the parabs at the game, they'll capture excellent sound at a very nice distance."

ON THE SIDELINES

Sideline reporters work with Sennheiser 6355 handheld mics, which are also trans-