



2009 FLC Midwest Region Awards

Excellence in Technology Transfer Award

The Excellence in Technology Transfer Award is presented to an employee or team of employees of a Midwest Region member laboratory in recognition of outstanding work during the transfer of a technology between a federal laboratory and another entity.

At the 2009 Midwest regional meeting, a team from the Air Force Research Laboratory (AFRL), 711th Human Performance Wing, Human Effectiveness Directorate, was presented with an Excellence in Technology Transfer Award for their work on the Live-Virtual-Constructive (LVC) training concept. The LVC training concept integrates into a single training event: live elements (i.e., real people using real equipment), virtual elements (i.e., real people using simulated equipment), and constructive elements (i.e., computer generated people or things).

The team of Kristen Barrera, Dr. Winston Bennett III, Lt. Col. Joel Boswell, Kenneth Kleinlein, Lance Call, Scott Swigert, David Greschke, Tim Esplin, Mitchell Zamba, Robert Rickard, Stephen Masters, Don Grantham Jr., Brian Schreiber, Eric Watz, Rod Powers, Rob Lechner, Maj. Jon Giulietti, Glen House, Ken Collier, Capt. Benjamin Harrison, Stephen Riemer, Robert Gomez, and Larry Clemons contributed two pieces of software that became critical components of this emerging concept, which has revolutionized U.S. military training policy.

The AFRL team's software contributions include a "translator" that allows in-flight aircraft and ground-based simulators to communicate seamlessly in their native languages, and the Performance Effectiveness Tracking System (PETS), which collects data from networked LVC simulation environments and organizes it into statistically friendly formats. The use of PETS improves the trustworthiness of readiness and performance assessments of personnel by capturing data that helps training managers evaluate trends in pilot performance and specify individualized training. AFRL conceptualized, developed, and prototyped the software in its own research facilities at Mesa, Arizona, and during development and a live demonstration.

The team's work in developing collaborations was exemplary. The technical work accomplished under a series of Cooperative Research and Development Agreements (CRADAs) includes improved data standards, industry specifications, and the critical ability to pass information back and forth between disparate systems, including simulators, operational aircraft and instrumented range systems. AFRL's first-ever technology demonstration placed them squarely in the lead of the U.S. Joint Forces Command's initiative to develop worldwide LVC training capability at joint and coalition levels.