

Operator Performance Laboratory (OPL) Research Project Synopsis



Tactical Aircraft Online Service (TAOS)

**Rockwell
Collins**
Building trust every day

Project Goals:

The Department of Defense is under pressure to provide necessary training to Joint Terminal Attack Controllers (JTACs). The current climate of budget reductions adversely affects the warfighters' ability to adequately train for the modern-day engagements. Qualified JTACs are co-located with friendly forces in theater and are responsible to call in airstrikes on behalf of those friendly forces. This is a difficult task with dire consequences if not done properly. Unfortunately, JTACs in training have very few, if any, opportunities to train with live aircraft as part of their initial and recurrent training.



The need for qualified JTACs is increasing. This is due to the change in conops from the cold war model that had very dense concentration of large forces to the new insurgent war model that disperses our own troops across smaller but very intense fights. In principle, our JTACs are fully trained when they enter active status in theater. In reality, the complex interoperation between troops on the ground, C2 structures, and the pilots delivering the airstrike are tested for the first time when delivering close air support in actual missions at war. The true "train the way we fight" capabilities currently are unavailable.

How it works:

The goal of TAOS is to give our JTACs new tools to train the way we fight. We use Internet-based networking to tie all teams together in net centric training that is based on the LVC model. Our construct provides JTACs with the ability to practice close air support cases at minimal cost. The LVC model connects the live L-29 aircraft at the OPL test range to a command HMMWV that is co-located with the JTACs on their training range. Through digital data link connections and the Internet, it is possible for JTACs to interact with the pilots of the live aircraft in training missions of close air support. TAOS can fully meet the training requirements at a fraction of the cost. Current hourly operating costs for USAF provided live aircraft range from \$18,000 to \$34,000. Our TAOS system can provide the same level of service at a cost that is up to an order of magnitude less expensive.



To schedule a demonstration of our TAOS capabilities, please contact Tom Schnell at 319-631-4445 (thomas-schnell@uiowa.edu) or Alex Postnikov, Rockwell Collins at apostnik@rockwellcollins.com

For more information visit <http://opl.ecn.uiowa.edu>