Leidos’ Memory Unit Tactical Air Crew Training System (MUTACTS) provides accurate reconstruction of training sorties for the post-flight mission debrief. After-action review of military aircraft training missions is accomplished quickly, accurately and cost-effectively. MUTACTS greatly enhances the training value for every mission through critical analysis of pilot performance and tactics within an optimal recall interval.

Multiple high-activity aircraft are precisely tracked through aerial maneuvers with the pilot-friendly user interface of MUTACTS from Leidos. Synchronized displays include various high-fidelity 3-D viewpoints, such as Plan View, Attached, Flight Following, Cockpit and Interactive views. The viewpoint can be easily manipulated with the provided 3-D motion controller, offering visual navigation with six degrees of freedom. The high-resolution 3-D terrain and 2-D map view is generated using standard data sources such as Compressed ARC Digitized Raster Graphics (CADRG) maps, Controlled Image Base® (CIB®) photo-realistic imagery and Digital Terrain Elevation Data (DTED).

MUTACTS is affordable and maintainable as it is deployed on low-cost, commercial off-the-shelf computers. MUTACTS is mobile and flexible to support training anywhere you fly, using data from onboard avionics and from optional air combat maneuvering instrumentation (ACMI) pods. The built-in Internet communications capability enables synchronized debriefing among multiple systems at different locations.

Exercising the missile shot assessment feature allows for dynamic “what-if” analysis of several possible firing solutions based on the user’s selection of different missiles and targets.
The Cockpit View includes an accurate heads-up display (HUD) from recorded avionics data and provides relational targeting information in support of air-to-air engagements.

MUTACTS imports existing aircraft 1553 mux data from the memory unit (MU) and advanced memory unit (AMU) to recreate events of the sortie. No aircraft modifications or additional equipment are required. All flight data remain intact on the MU/AMU for use by maintenance administrators.

MUTACTS provides an intuitive user interface, complete with flight event marks and VCR-like controls to allow the operator to move the replay quickly to points of interest in the debrief. Optional synchronized cockpit video playback is available through an interface with the compatible digital video debriefing system. MUTACTS currently supports a wide user base, including branches of the U.S. military and national air forces in Europe and Asia. This proven system has been in operation since 1997 and has benefited from continued enhancements to support the latest avionics. Representational validity is ensured through the integration of precise simulations provided by the manufacturer of current weapons systems. With several millions of dollars invested in MUTACTS development, the mature system is now offered at a price that provides exceptional value.

The Electronic Warfare (EW) display is an animated reproduction of the ALR-67 page on the Digital Display Indicator (DDI).

The Azimuth/Elevation shot display is also available to depict AIM-9X and helmet-mounted cueing system data.

**FOR MORE INFORMATION**

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