

WSTIAC Success Story:

Viable Combat Avionics Initiative

Digital Video Recorder (DVR) – Crosscutting Solution

Problem: An immediate and urgent Air Force need was identified during the avionics integrated change road-mapping process performed under the VCA program. It was determined through the viability analysis process that many different aircraft platforms were using videotape cockpit recorders that were no longer being supported by the original equipment manufacturers (OEMs). Each weapon system platform and associated maintenance organization was on its own to find a means to keep the system operational or be forced to fly without the capability. WSTIAC, working with the Aeronautical Enterprise Program Office, identified four commercial-off-the-shelf digital video recorder systems that could potentially be tailored to fill this requirement. These digital replacements also offered recording capabilities in addition to video, including MUX data, aircraft structures, mission replay, electronic combat, etc.

Solution: Pilot program was developed to investigate potential design alternatives and prove the concept. WSTIAC worked with the F-16 Air National Guard at Ogden, Utah, to develop the detailed requirements as the F-16 platform expressed the most urgent need. The acquired solution also works on A-10 and F-15 platforms. This activity was driven by parts obsolescence and not necessarily economics. However, Return on Investment (ROI) studies have determined that a 2-to-1 cost savings over the original video recorder equipment will be realized as a result of the tremendous improvement leading to overall life cycle cost avoidance.

