

Southwest Research Institute® (SwRI®) applies an integrated project team approach using systems engineering processes to solve customer problems. SwRI staff members have experience and expertise covering the entire systems engineering spectrum including requirements analysis, specification development, preliminary design, detailed design, integration and testing (I&T) and prototyping.

SwRI maintains full integration laboratories and test facilities for I&T support. The Institute also has extensive experience in integrating new and replacement line and shop replaceable units (LRU/SRU) on aircraft, as well as developing requirements specification documents and performing trade studies.



DDI15226

SwRI has supported a variety of avionics systems engineering programs including integration of the Situational Awareness Data Link (SADL) system, Precision Engagement (PE), Global Air Traffic Management (GATM), Enhanced Global Positioning System / Inertial Navigation System (EGI), Turbine Engine Monitoring System / Airborne Data Recorder (TEMS/ADR), and Head Up Display (HUD) on the A-10 aircraft.



MASA photo

SwRI has performed numerous avionics and support equipment redesigns for the F-16 aircraft. One recent example is the replacement of a video interface circuit card assembly (CCA) and core memory module in the Expanded Programmable Display Generator (XPDG). This redesign provided significantly improved reliability and maintainability (R&M) of the XPDG, thereby reducing the associated maintenance costs.



OOD photo