



Continuously Pushing the Limits of Innovation, Technology and Conventional Thinking

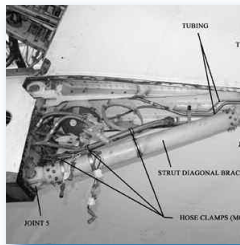
Engineering

Solutions Delivered

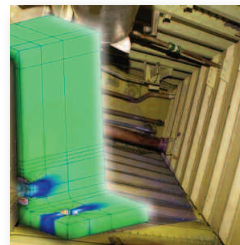
- Navy/Air Force T-6A Aircraft Condition Inspection Specification developed using Damage Tolerance Analysis, Force Structure Maintenance Plan, Reliability-Centered Maintenance Analysis, and Aging Aircraft experience
- Engineering data packages, structural analysis, detail and installation structural and wiring drawings for the installation of an acoustic emissions structural damage detection system on patrol aircraft
- Structural engineering and analysis expertise provided to efforts in reducing E-8 maintenance requirements
- Structural analysis and certification report development for equipment rack installations on patrol aircraft
- Service Life Assessment of Cold Worked Stringer Weep Holes for E-6 using Non-Linear Finite Element Analysis
- Airframe Change Development for E-6 Lower Wing Panels under the E-6 Service Life Extension Program
- Crack Growth and Residual Strength Analysis of T-45 PCU Actuator components in support of Service Life Extension Efforts
- Airframe Repair and Modification with associated Analytical Substantiation combining structural and mechanical design and analysis functions
- Application Development and Deployment of Web-based Engineering Analysis Tools produced by structural and mechanical engineering and information technology
- Avionics Development with associated Structural Modifications and Airframe Changes involving structural, mechanical, electrical and electronic engineering



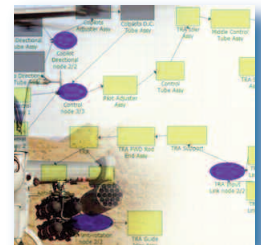
The T-45 cockpit outfitted with integrated digital sensors supported by ASI



E-6 Service Life Extension program support



Finite Element Analysis of E-6 Stringer Weep Hole



Systems Reliability Predictions for AH-1Z

Andromeda Systems Incorporated provides tools and services to **Program Managers** and **Fleet Owners** to gain critical insights and system improvements to optimize operations, make better business decisions and achieve measurable cost savings. These benefits are provided through four *integrated* service areas: **Engineering, Maintenance & Logistics, Information Technology** and **Program Management & Acquisition Support**.

Andromeda Systems Incorporated

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Engineering

By leveraging the depth of knowledge and breadth of experience from within the company's primary service areas, the Engineering Team of **Andromeda Systems Incorporated** provides comprehensive and cost-effective solutions through the synergistic application of cross-disciplinary talent. Combining leading edge technology with classical methods of analysis, our engineering expertise has led the development of equipment and process improvement for both military and commercial systems including aircraft, ground vehicles, facilities, and industrial equipment.

Capabilities

Aircraft Modification & Repair

- All Phases of Engineering Change Development
- Change Assessments impacting
 - Certification Requirements
 - Fatigue Life
 - Logistics
 - Maintainability
 - Reliability
 - Strength
- Design Change Documentation
- MRB Engineering Support to Modification Lines

CAD/CAM

- Computer-Aided Design and Drafting
 - ASME Y14 Standards
 - Legacy MIL-STD-100
- Three-Dimensional Solid Modeling

Electrical/Electronic Systems

Design & Integration

- Electrical Load Analysis
- Electromagnetic Compatibility and Interference Design, Analysis and Testing
- Microcontrollers Integration and Operational Algorithms Development
- Reliability Modeling of Devices and Systems
- Sensor Integration for On-board Performance Monitoring Systems
- Systems Design, Analysis and Integration
- Systems Engineering Support

Fleet Support Engineering

- Engineering Change Development
- Forensics
- Engineering and Aircraft Mishap Investigations
- Process Improvement and Mapping
- Repair Development and Substantiation
- Root Cause Analysis
- Technical Directives
- Technical Instruction Development

Production Support

- Depot Artisan/Mechanic Repair Technique Training
- MRB Engineering Support to Modification Lines
- Repair Development and Substantiation
 - Metallic and Composite Structures

Reliability Engineering

- Assessments
 - In-Service or New System
- Improvement Programs
- Modeling and Simulation
- Predictions
- Program Development
- Reliability Growth Analysis

Structural Analysis

- Static Strength Analysis
- Fatigue and Damage Tolerance Analysis
- Finite Element Analysis
- Certification and Airworthiness Report Development
- Web-Based Engineering Tool Development

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