ABOUT US

The Sustainment Lab supports the federal government and the aviation industry with investigations into the effects of age on commercial and military aircraft.

SUSTAINMENT







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CAPABILITIES

- Teardown Evaluations:
- Large Section Extraction
- · Detailed Disassembly
- Chemical Coating Removal
- Non-Destructive Inspection
 - Close Visual Inspection
 - Florescent Liquid Penetrant Inspection
 - · Magnetic Particle Inspection
 - Bolt Hole Eddy Current Inspection
 - Surface Scan Eddy Current Inspection
 - Magneto OpticImaging Inspection (Eddy Current Technique)
 - Ultra Sonic Inspection
- Failure Analysis
- Optical and Scanning Electron Microscopy
- · Flaw Extent Characterization
- Crack Failure Mode Determination (Fatigue, Stress Corrosion, Overload, etc.)
- · Corrosion Characterization
- · Conductivity Testing
- Chemical Composition Analysis
- · Hardness Testing
- Fatigue Crack Growing Rates
- Process Development

EQUIPMENT

- 21-cubic ft. dry blast paint stripping booth
- for removal of organic coatings
- Magnaflux L-10 coil
- Parker Research AC/DC yoke
- · Liquid penetrant inspection system
- · Magneto optic imaging system
- · Staveley workstation
- Nortec 2000S eddy scope
- Sonic 1200 ultrasonic unit
- Meiji Inc 7-45x optical microscope
- Hirox Co. 50-300x optical microscope
- · Rene Co. digital optical micrometer
- Joel scanning electron microscope
- · Chemical coating removal facility

ENGINEERING EVALUATIONS

- Stress
- Damage tolerance
- · Finite element modeling
- · Repair design

PROJECTS

- KC-135 teardown examination
- C-5A afterown skin testing,inspection and analysis
- F-16 STA teardown examination
- A-10 BHEC specimen generation
- B-52 landing gear and flight control teardown and inspection
- FAA metallurgical/fractographic
- · Evaluation of structural components

CLIENTS

- AdamWorks
- Boeing
- · Lockheed Martin
- · Israel Aerospace Industries
- · Sabreliner Corporation
- Sierra Nevada Corporation

