



design
testing
certification
support



FMS Aerospace

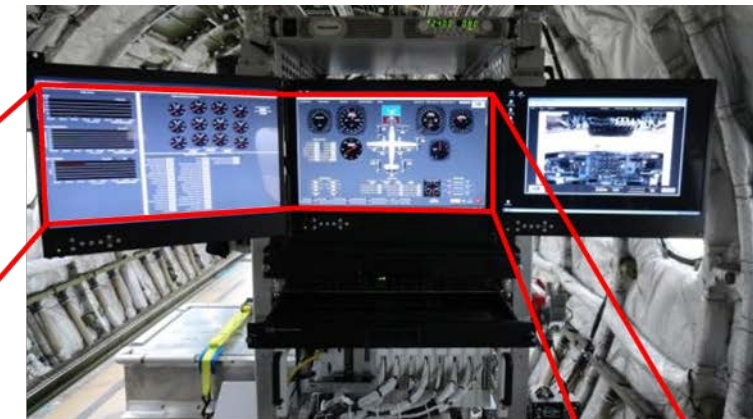
Innovative Solutions to
AIRCRAFT DESIGN & FLIGHT TEST PROBLEMS

INSTRUMENTATION & DATA ACQUISITION SOLUTIONS

Advanced digital data acquisition systems utilizing the latest technology.

Featuring real-time data post-processing and display capabilities for monitoring of critical parameters and analysis automation.

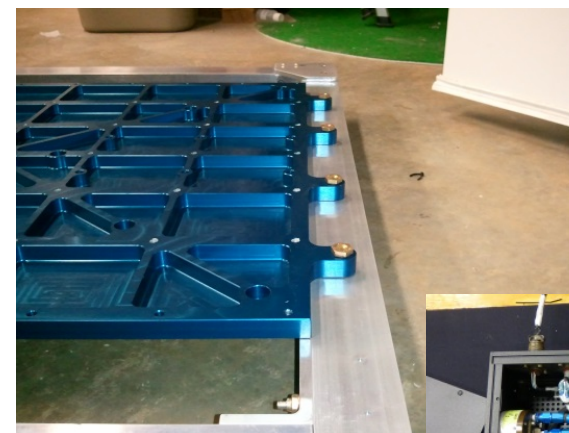
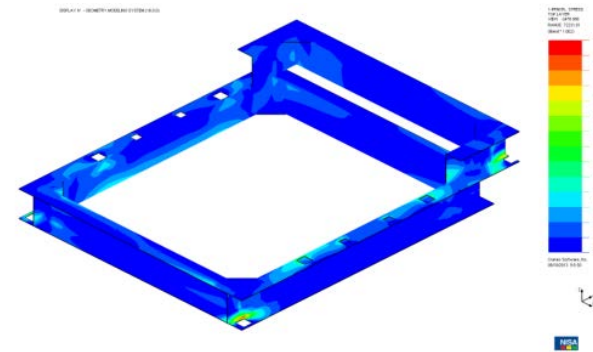
- ✓ User-Defined Data Acquisition Solutions
- ✓ High Channel Count
- ✓ Miniaturization & Small Form Factor Possible
- ✓ Robust, Ruggedized, Cost-Effective, Low Failure Rate
- ✓ Custom Software & User Interface Development
- ✓ Data Logging For Post-Flight Analysis & Archiving
- ✓ Analog & Digital Data Acquisition, Avionics Bus Interfaces
- ✓ All Measurement Types
- ✓ Precision Pitot-Static Measurements & Calibrations
- ✓ Digital solid-state AHRS
- ✓ Advanced Static & Kinematic GPS Positioning
- ✓ Static Structural Testing Support
- ✓ Real-Time Stress Monitoring
- ✓ Structural Health Monitoring Systems
- ✓ Fatigue Spectrum Development
- ✓ Structural Vibration Characterization
- ✓ Caution & Warning Exceedance Alarms
- ✓ Aeroacoustics
- ✓ Noise Level Measurements



FLIGHT TEST INSTRUMENTATION RACK SOLUTIONS

Equipment rack solutions customized to the unique requirements of your program.

We understand that every project is different and specialize in working with you to develop an answer that satisfies the specific requirements, specifications and objectives of your product development effort – within a budget that fits your needs. Engineering consulting providing a total end-to-end solution...



✓ Customizable / Stackable Design

Standard 12U and 14U stackable units

Accepts all standard 19" rack-mountable hardware

Aviation-grade hardware

Customized sensor enclosures

✓ Structural Analysis and Substantiation

Light weight aluminum 6061-T651 & 7075-T651 construction

Aircraft-specific structural clearance of rack mounting provisions

Satisfies 16g forward, $\pm 4.5g$ lateral inertial load cases when fully populated

FAA DER 8110-3 airworthiness approval available

CUSTOM AIR DATA SOLUTIONS

Precision air data solutions to support position error determination, RVSM certification and reliable airspeed measurements at high angles of attack & sideslip.

✓ Straight Nose & Swivel-Head Air Data Boom Installations

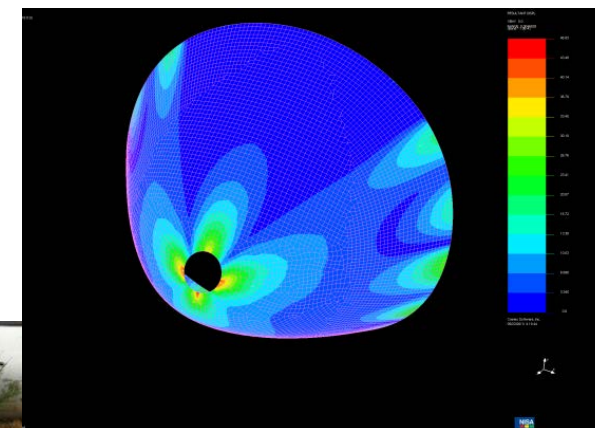
- Light weight design concept
- Nose and wingtip installations
- Design & structural substantiation fully supported
- Flutter clearance included when required
- In-flight air data boom calibrations

✓ Static Trailing Cones

- Custom lengths available to support different aircraft types & configuration layouts
- Installation design and structural substantiation support
- Takeoff and landing procedure development to prevent cone damage
- Flight test techniques minimize test time
- Level of precision supports RVSM certification

✓ Total Air Temperature Measurements

- High quality, industry standard aviation TAT probes
- Precision of measurements supported by wind tunnel testing
- In-flight probe recovery factor determinations available



CONTACT US

Call or email us today to talk about the unique requirements of your aircraft design, development or certification program and how to get the engineering resources that you've been looking for in place right away.

Call us at: 256-763-0062

Find us on the web at: <http://www.fmsaero.com/contact-us>

