

Odonata Research LLC



6505 E. Central Ave., Ste. 254, Wichita, KS 67206

Odonata Research LLC provides aerospace engineering services in the technical areas of external loads, dynamics, flutter, and mass properties analysis with experience in aircraft ranging from general aviation aircraft to business jets and up to transport aircraft. Using a network of subject matter experts, Odonata Research LLC has the necessary resources and experience to support any project.

- External loads, dynamic loads, and flutter analysis with NASTRAN
- Flight loads analysis (6DOF simulation and distributed loads) with proprietary software
- Ground Vibration Testing
- Flight flutter test support

Thomas M. Hermann

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Thomas M. Hermann is an aerospace engineer and consultant DER for 14 CFR Part 23 and 25 aircraft. His expertise is in external loads (static and dynamic), flutter analysis, ground vibration testing and flight flutter testing. His experience includes flutter and external loads analysis of a business jet modified with wing and fuselage stores; flutter and external loads analysis of a passenger to freighter conversion; static and dynamic loads analysis of a twin turboprop, carrier based, AEW aircraft using both customer proprietary and Nastran aeroelastic models; aeroelastic substantiation, ground vibration testing, and flight flutter testing of the Learjet 70/75; flight flutter and ground vibration testing on the Hawker 4000; crashworthiness analysis of the Beechcraft Beechjet; shimmy stability testing and analysis of the Hawker 800XP; analysis of buffet induced vibrations on the ventral fins of a King Air special missions aircraft. Prior to that, he performed research on unsteady transonic aerodynamics for flutter analysis in the frequency domain at the University of Kansas. As a NASA Langley research scholar, he developed a method for dynamic ground effect testing in the 14x22 foot wind tunnel at NASA Langley. Thomas has a B.S. and M.S. in aerospace engineering from the University of Kansas.

Aircraft Model Experience

- Airbus A320 series
- Beechcraft King Air
- Beechcraft Beechjet
- Boeing 737, 777
- Cessna Citation Sovereign
- Challenger CL-600-2B16 (604 Variant), CL-600-2B19 (RJ 100/200)
- Gulfstream G-III, G-IV, GV-SP
- Hawker 800XP, 4000
- Learjet 40/45 and 70/75
- Northrop Grumman E-2D Advanced Hawkeye