

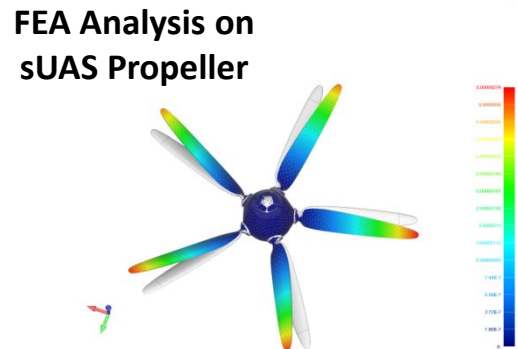
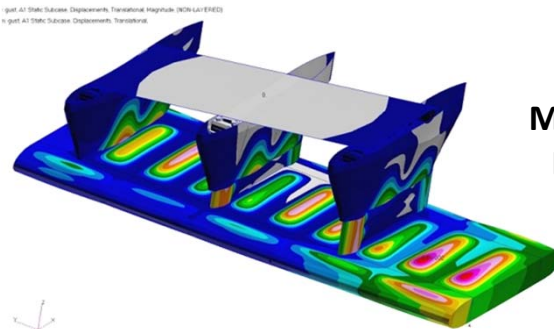
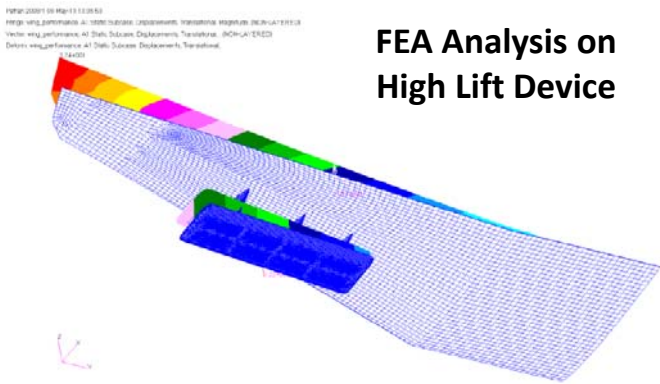
Structural Design and Analysis

DARcorporation has been offering structural design and analysis services since 1991. We use Finite Element Analysis (FEA) methods and software to analyze airplane structures for strength, stiffness, dynamic modes, fatigue, flutter, crash/impact, etc. Results such as stresses, deformations, buckling factors, natural frequencies, flutter speeds, impact forces etc. are compared against possible failure modes to ensure structural integrity. The structural analysis yields selection of materials, material thicknesses, composite layup schedule and produces an optimized structural configuration.

Key Capabilities

- ✓ Structural Analysis
- Stress and Strength
- Structural Dynamics
- Buckling and Crippling
- Propeller/Fan Design
- Aircraft Modifications
- Antenna Fairing and Radomes
- ✓ Loads
- ✓ Fatigue and Crack Growth
- ✓ Structural Testing
- ✓ Aeroelasticity
- ✓ Bird Strike
- ✓ Crash Analysis

Example Projects



Static Load Testing on Wing

