

# DARcorporation News

April 2017

## Featured Service

### Structural Design and Analysis

DARcorporation engineers are capable of performing Finite Element Analysis (FEA) and using analytical methods to carry out structural analyses including strength, stiffness, elastic stability, dynamic modes and responses (vibration suppression), fatigue, flutter, crash/impact, etc.

The structural analysis provides selection of materials, material thicknesses, composite layup schedule and produces an optimized structural configuration.

### Loads Reports for Certification

We can analyze an airplane design and produce detailed loads reports that can be submitted to aviation authorities such as the FAA and EASA for certification.

DARcorporation is the exclusive distributor of [FAR 23 LOADS](#), a software that provides the means to calculate and print a loads report for FAA Type Certification.

### Key Capabilities:

#### Structural Analysis

- Stress and Strength
- Structural Dynamics
- Fastened, Bonded and Welded Joints
- Buckling and Crippling
- Composite Layup Schedule
- Propeller/Fan Design
- Aircraft Structural Modification (Airframe Alteration)
- Antenna Fairing and Radome Structural Analysis

#### Loads

- V-n Diagram
- Flight Loads
- Loads Report based on FAA FAR Par 23

#### Fatigue and Crack Growth

- Fatigue and Damage Tolerance
- Crack Initiation, Crack Growth and Life Prediction
- Complex Crack Geometries with Multiple Cracks

#### Structural Test

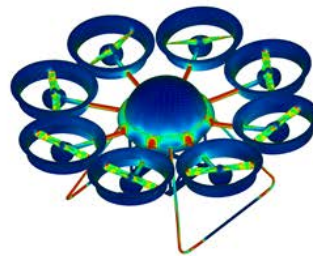
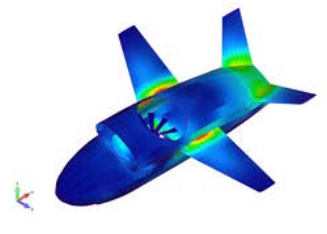
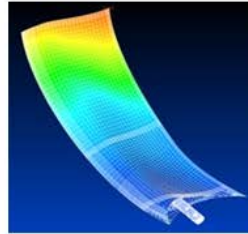
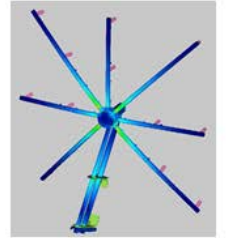
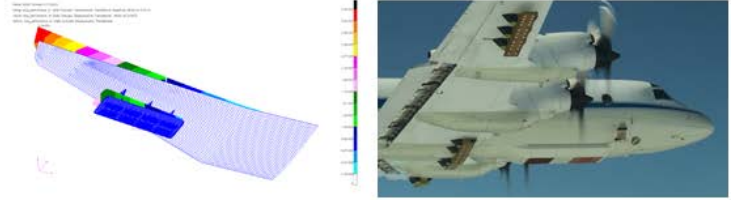
- Static Load Test
- Ground Vibration Test (GVT)

#### Aeroelasticity

- Flutter
- Divergence
- Aeroservoelasticity

#### Bird Strike and Crash Analysis

- Bird Strike/Impact Analysis
- Crashworthiness



Let us know how we can support your projects!

Contact Us

# DARcorporation

