#### It's all about speed to certification

HyperSizer software performs design, stress analysis, and detail sizing optimization for composite or traditional metallic materials in systems such as:

- Unmanned Vehicles
- → Fixed and Rotary Aircraft
- Space Launch Vehicles
- Infrastructure
- ✓ HyperSizer enables structural weight reduction by 30-40%
- ✓ HyperSizer replaces the need for spreadsheets and "hand calculations" with automatically generated stress reports for FAA certification.
- ✓ HyperSizer customers are able to produce results faster and more accurately, providing an edge over competitors.



#### Who We Are, What We Do

 Founded in 1995 by NASA aerospace engineers still developing leading edge methods today



- Leaders in Military Structural Design, Analysis, Optimization for meeting the schedule of rapid development projects
- Successfully reduce 30% -40% weight on military aircraft while also in a shortened design cycle
- Provide Critical Role in Certification









Design Analyze Optimize Certify







## Over 20 years of success deployment: Designing | Analyzing | Optimizing

- → Manned Aircraft
- **≯** UAVs
- Space Launch Vehicles

#### Why HyperSizer®?

- Weight Reduced
- Structurally Optimized
- Ahead of Schedule
- Within Budget



# Designing Bell Helicopter's Next Gen Tiltrotor Fuselage

- To meet the aggressive V-280 schedule, HyperSizer was employed in a 'design-byanalysis' approach that successfully sized and analyzed the fuselage structure.
- Bell Helicopter leadership applauded the team for a job well done, ahead of schedule and within budget.
- See full article at <a href="https://hypersizer.com/designing-bell-helicopters-next-gen-tiltrotor-fuselage/">https://hypersizer.com/designing-bell-helicopters-next-gen-tiltrotor-fuselage/</a>

"The automated analysis tool in our software allows the stress analyst to define the required structural configuration, informing the designer about the best configuration that optimizes the stiffness of the structure. A small team of stress and design engineers acquired HyperSizer, the right tool set to support their in-house capabilities and efficiently deliver ahead of schedule."



"The shortened schedule and headcount savings alone are substantial as well as the analysis accuracy that is gained by a standardized tool suite like HyperSizer."



### Why HyperSizer?

- The ONLY commercial software that automates the stress analysis and certification reporting process for military acceptance of structural integrity of aircraft
- ✓ Certify structures faster, <u>FAA certification-ready</u> automated structural reports produced
- ✓ Reduce structural weight 30%-40% lighter, an exceptional achievement for aerostructures
- ✓ Safer, lighter and Manufacturable. Designing with manufacturability in mind from the start yields an easier to manufacture structure
- ✓ Reduce the stress engineering process by an order of magnitude faster, seriously. 10 times faster, proven in previous projects.
- ✓ Save Money on your Program 4 ways:
  - ✓ Schedule duration reduction
  - ✓ Hours allocated to budget reduced
  - End product has reduced failures, reduced weight, and reduced manufacturing issues
  - Performance: A structurally lighter, higher performance vehicle yields long term financial benefits
- Behind HyperSizer is a team of highly experienced stress engineers that can work with you to make your project a success
- HyperSizer partners with all major CAE software, and employs all industry standard methods and practices, see below

#### **Software Partners**

