











Aero Design specializes in prototype aircraft design, manufacturing, and test. We value seeing a product through all phases of its lifecycle, with engineering complementing in-house fabrication, assembly, closed loop with feedback from internal inspection and test. Aero Design provides our customers with fully-developed timely solutions.

Design and Analysis

-  Structural design layout, detailed sizing and work instructions / documentation
-  Solidworks Premium Computer Aided Design / Finite Element Methods
-  Autodesk Fusion360/Inventor Computer Aided Manufacturing
-  Polyworks Component inspection / Reverse engineering/ 3D Scanning

Manufacturing

-  Quality Assurance: Quality Management System certified to the standards of ISO 9001:2015 & AS9100D
-  Sheet/Metal fabrication: CNC Mill and Lathe capabilities for quick part turnaround with in-house CAD, CAM and Inspection. CNC Laser/plasma, complemented by traditional sheet metal fabrication tools and skilled operators
-  Rapid prototyping: Laser cut jigs, templates, gaskets along with 3D printed fixtures and test components
-  Composite manufacturing: Prototype Wet layup, pre-preg, bonded assemblies. Small composite curing oven & In-place oven builds for larger volumes
-  Finishing: Inflatable Paint booth, powder coating of small components and vendors to support other component specific processes
-  Assembly: In-house A&P, bench stock of hardware, 4900ft² shop with 2400ft² hangar, runway access

Customers

Stratolaunch LLC, The Spaceship Company, NASA, Zone 5 Technologies, AFRL, DZYNE Technologies, Perlan Project, Lockheed Martin

Manufacturing Equipment:

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| Haas GM-2 | 145"x87.5"x22" CNC Mill (3 Axis) |
| Shopsabre IS612 | 145"x85"x12" CNC Router (3 Axis) |
| Haas UMC-500 | 24"x16"x16" CNC Mill (5-Axis) |
| Haas VF-2 | 30"x16"x20" CNC Mill (3 Axis) |
| Haas TL-1 | 16"x30" CNC Lathe 2.1" through bore |
| Hardinge HVL-H | 11"x18" Manual Lathe |
| Laser Cutter | 24"x24" 1200W Fiber (Sheet-metal cutting) |
| Laser Cutter | 51"x71" 150W CO2 Laser (Wood/Acrylic cutting) |
| Laser Cutter | 12"x24" 40W CO2 Laser (Wood/Acrylic cutting and engraving) |
| Laser Marking | 30W MOPA Laser with Scan Head (Metal engraving) |
| Laser Marking | 60W MOPA +30W Diode Laser with Scan Head (Metal engraving) |
| Bambulab H2D Pro | 13.75" x 12.5" x 12.5" 3D printer PLA, Nylon 12, ABS |
| 2x Markforged Onyx Pro | 12.5"x 5.2"x 6.0" 3D printer Carbon filled Nylon (ONYX) |
| Lincoln Torchmate 4800 | 48"x96" 80amp CNC Plasma (cuts & marks up to 3/4" THK metal) |
| TECNA TE90 MKII | 50kVa Spot Welder |
| Miller Dynasty 300 | 300amp SquareWave TIG Welder |
| Miller Dynasty 200DX | 200amp SquareWave TIG Welder |
| Miller Syncrowave 250DX | 250amp SquareWave TIG Welder |
| Millermatic 252 | MIG Welder |
| Titan 25T | 25 Ton 36" wide CNC press brake |
| Tennsmith HBU48-16 | 61" Box and Pan Brake |
| Pexto Stomp Shear | 36" Stomp Shear |
| Rotex 18A | 0.0625" – 2" 18 station turret punch |
| DoALL 2013-V | 20"x13" Vertical Bandsaw |
| Grizzly G0561 | 7"x12" Horizontal Bandsaw |
| Despatch | 18"x18"x18" Oven |
| Romer Arm 8525 | 7-Axis Ultra-High Accuracy CMM Arm with Laser Scanner |
| Hexagon Leica AT960 MR | Laser Tracker with 65' Radial Range |
| AP21 Positioner | Leica Absolute Positioner for Laser scanner with AT960 Laser Tracker |
| AS1, AS1XL | High resolution and large volume laser scanners |
| Brown & Sharpe Xcel 765 | Coordinate Measuring Machine |
| Standridge Granite | 48"x72" Grade A Granite Table |
| Standridge Granite | 36"x48" Grade A Granite Table |
| Starrett 0"-72" | Height Gauges |
| Metrology Tools | Mitutoyo Calipers, Micrometers, depth gauges, Gauge blocks, pin & ring Gauges, etc. |
| Extensive stock of aircraft hardware | AN, MS, NAS, HiLok, Clickbond, AMP and other specialty aircraft hardware |