



EPIC AIRCRAFT NEWS

E1000 CERTIFICATION UPDATE



"Certification requires collaboration across the entire organization and with the FAA. It is extremely demanding, but also rewarding when you have an aircraft as exciting as the E1000. We are absolutely focused on reaching the finish line this year."

– Doug King, Epic CEO

E1000 CERTIFICATION ON TRACK

With over 1,200 drawings approved, structural testing in full swing, and the first conforming prototype slated to fly this spring, Epic Aircraft is pushing hard to achieve Type Certificate by year end.

This final stage of certification proves that the aircraft complies with all FAA regulations and is accomplished through a rigorous series of flight, structural and fatigue testing protocols. To satisfy these requirements, Epic is building two conforming flight test articles (FT1 & FT2) and two conforming structural test articles (ST1 & ST2).



MATING OF FT1 WING & FUSELAGE



FLIGHT TESTING

FT1 testing will focus on assessing the following:

- General Handling Qualities
- Operational Performance
- Systems Operations in Normal Mode
- Failure Scenarios & Extreme Conditions
- Icing Regulations (FIKI)

FT2 is scheduled to fly this fall and will be the first fully-conforming prototype, including all production systems and interiors. FT2 testing will demonstrate compliance of all components and systems, including fuel, hydraulic, avionics, navigational, environmental, and cabin systems.

STRUCTURAL TESTING

Structural testing of individual component parts is nearing completion, as ST1 enters production. ST1 is intended for destructive testing in which the test article is subjected to stress beyond normal and abnormal operations to the point of failure to prove strength of structure. ST2 will undergo fatigue and life cycle testing to demonstrate damage tolerance over time and under extreme conditions at all stages of flight operations. All structural testing will be conducted at Epic's R&D Facility in Bend, Oregon.

ENGINEERING RESOURCES

Epic is fortunate to have 5 Designated Engineering Representatives (DERs) on staff, who are authorized by the FAA to approve engineering technical data, witness FAA compliance tests, and perform compliance inspections, greatly improving the speed, efficiency, and integrity of Epic's certification program and schedule.

INVESTING FOR VOLUME PRODUCTION

In tandem with certification, the Epic manufacturing team is actively preparing for Production Certificate and volume ramp. Foremost among these priorities is establishing a quality system that demonstrates Epic's ability to consistently reproduce the E1000 aircraft to the same conforming standards. The E1000 production line, which will eventually yield one aircraft per week, utilizes lean manufacturing practices to standardize procedures, optimize quality and increase efficiency.



CNC 5-Axis

SERVICE, SUPPORT & TRAINING

To complement its exceptional technology, Epic is establishing a comprehensive customer care program, including technical and flight training resources; response center services; customer communications; aircraft monitoring systems; and authorized regional service centers.

"We have a great team. We have the necessary resources, knowledge and experience to make this happen. We are excited about the product and confident in our ability to deliver an aircraft that will rock this industry."

– Doug King, CEO



Calibrated Load Frame

For ultimate strength & life cycle testing of carbon fiber parts, shown here performing shear test.



Ultrasonic Scanner

For advanced ultrasound testing of composites, shown here performing NDI scan of carbon fiber part.



Structural Testing

Static component testing of the E1000 horizontal stabilizer at Epic's R&D Facility.



Coordinate Measurement

Performs 3-D inspections, tool certifications, CAD comparisons & dimensional analysis.

