HF120 Engine Entering Formal FAA Certification Test Phase

OSHKOSH, Wisconsin – July 26, 2009 – Engine assembly has begun on the GE Honda Aero Engines’ first HF120 engine for FAA certification testing. The first engine is being assembled consistent with the certification configuration at GE’s manufacturing facility in Lynn, Massachusetts.

“With the experience we’ve gained through our demonstrator engine testing program, we are confident the HF120 engine configuration is mature and are anticipating a smooth FAA certification testing program,” said Bill Dwyer, president of GE Honda Aero Engines. “The first engine to test will run by the end of the summer, and certification testing will continue into 2010.”

The HF120 engine has experienced one of the most extensive engine test programs prior to the official start of FAA certification testing. To date, GE Honda Aero Engines has built and tested eight HF120 engine cores and 11 full engine demonstrators. During testing, the engine has exceeded its design goal of 2095 lbs thrust.

Thirteen HF120 development engines will take part in the certification testing at seven locations in the U.S. and Japan. Tests will include fan blade out, crosswind, stress and endurance testing. GE Honda also plans to test the engine on a flying testbed before flying on the customer certification aircraft. By entry into service, the HF120 will have accumulated more than 15,000 cycles of ground and flight testing.

HF120 engine production will initially begin at GE’s site in Lynn, Massachusetts and will later transition to Honda Aero Inc.’s recently completed engine production and overhaul facility in Burlington, North Carolina.

The GE Honda HF120 engine was launched in 2006 and selected to power Honda Aircraft’s advanced light jet, the HondaJet, and the Spectrum Aeronautical “Freedom” business jet.

Rated at 2,095 pounds of thrust, the HF120 engine succeeds Honda’s original HF118 prototype engine, which has accumulated more than 4,000 hours of testing on the ground and in-flight. GE and Honda redesigned the engine for higher thrust and new standards of performance in fuel efficiency, durability, and low noise and emissions.
GE Honda Aero Engines

The GE Honda HF120 Turbofan Engine

The HF120 technologies include:

- A wide chord, compound-swept front fan and two-stage booster along with composite outlet guide vanes.
- A high-temperature, titanium impellor in the compressor for maximum engine pressure ratio and stall-free performance.
- A compact reverse-flow configuration combustor and single-stage air-blast fuel nozzles.
- Advanced materials in the turbine as well as a two-stage low-pressure (LP) turbine and a counter-rotating high-pressure and LP spool shaft system.

A key cost-of-ownership advantage of the HF120 will be the ability to operate at a best-in-class 5,000 hours between major overhauls. The advanced airfoil materials and coatings that GE and Honda are maturing for the engine’s high-pressure turbine section enable this capability.

In 2004, GE and Honda formed a 50/50 joint venture, called GE Honda Aero Engines, based in Cincinnati, Ohio. The joint company integrates the resources of GE and Honda Aero, Inc., a Honda subsidiary established to manage its aviation engine business.

Honda (NYSE: HMC) is the world’s largest engine manufacturer, annually producing more than 20 million
GE Honda Aero Engines

engines for a wide range of products, including motorcycles, ATVs, generators, marine engines, lawn and garden equipment, and Honda and Acura automobiles.

GE Aviation, an operating unit of General Electric Company (NYSE: GE), is a world-leading provider of commercial and military jet engines and components as well as avionics, electric power, and mechanical systems for aircraft. GE Aviation also has a global service network to support these offerings. GE traces its beginnings to Thomas A. Edison, who established Edison Electric Light Company in 1878.

Visit GE Honda Aero Engines: http://www.gehonda.com/


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