CFM Completes eCore Demonstrator 1 testing

On schedule for eCore Demonstrator 2 run in mid-2011

FARNBOROUGH, England - 19 July 2010 - CFM International has completed 150 hours of testing on eCore Demonstrator 1 as development of the advanced LEAP-X engine continues. Overall, CFM has completed approximately 4,500 hours of component, rig, and engine tests of LEAP-X core technology to date and the program is on schedule for engine certification in 2014.

"We are extremely pleased with the results from eCore Demonstrator 1 test program," said Ron Klapproth, LEAP-X program director for CFM International. "The hardware performed as good or better than we anticipated and we have validated that this technology will meet the commitments we have made for this program."

CFM is currently receiving hardware for the build-up of eCore Demonstrator 2, which will begin testing in mid-2011. eCore Demo 2 will feature a 10-stage high-pressure compressor and two-stage high-pressure turbine, along with the lean burn, low emissions TAPS combustor. CFM will run a third core configuration in 2012, just prior to the first full LEAP-X1C engine test in early 2013.

The company plans to complete approximately 150 – 200 test hours of testing on eCore Demonstrator 2 in GE’s special altitude test facility in Evendale Ohio. The heavily instrumented core tests approximately 2,000 different engine parameters. This unique test facility allows CFM to put the hardware through its paces by simulating both ground and altitude conditions over a much greater operating range than could be conducted with a full engine test. It allows engineers to see how the core behaves outside of standard operating conditions at extremes the hardware would never encounter in typical commercial airline service.

"The success of these tests validates CFM’s rigorous core development philosophy," said Klapproth. "We go through this process because our engines operate eight to 10 cycles per day and, in that environment, reliability simply cannot be compromised. We believe this is the only way to ensure our customers of absolutely the highest levels of reliability at entry into service."

Phase 1 testing began on schedule in June 2009 and the hardware accumulated approximately 35 hours. Phase 2 testing was completed in May of this year, and the test vehicle logged an additional 115 hours. Phase 2 focused on aerodynamic performance parameters; the aeromechanical properties of the blades and how they respond to vibration and natural frequencies; and operability to ensure the engine maintains the CFM reputation for stall-free operation. All of the data collected from these tests is feeding into eCore Demonstrator 2.
CFM International is a 50/50 joint company between Snecma (Safran group) and GE. It is the world's leading producer of commercial aircraft engines, with more than 21,000 delivered since the company's formation in 1974.

For more information, contact:

**Jamie Jewell**
513.552.2790
jamie.jewell@ge.com
Mobile: 513.885.2282

**Rick Kennedy**
513.243.3372
rick.l.kennedy@ge.com
Mobile: 513.607.0609

**Antoinette Menard**
33.1.69.87.09.28
antoinette.menard@snecma.fr
Mobile: 33.6.74.78.10.65