

## **GE ROLLS-ROYCE FIGHTER ENGINE TEAM'S 'OUTSTANDING' TEST YEAR CONTINUES**

Farnborough Air Show, UK – 20 July 2010 - The fourth F136 engine to test in 2010 is in final assembly and will begin running within a few weeks, as the GE Rolls-Royce Fighter Engine Team moves toward flight testing next year in the F-35 Lightning II Joint Strike Fighter.

The fourth engine (Engine 007) will begin its initial testing at GE's facility at Evendale, Ohio, US, where it will undergo performance operability qualification testing.

The Fighter Engine Team has successfully tested three engines already this year, meeting or exceeding all test requirements. Testing recently began on Engine 005 at the US Air Force Arnold Engineering Development Center, in Tullahoma, Tennessee, US, the first production-configuration F136 engine to test at AEDC.

Two new engines are also in assembly: Engine 008 will begin testing later in the summer and Engine 009 will follow within a few months. That will make a total of six F136 engines in test in 2010, with the program on schedule to complete 1000 hours of testing this year.

The F136 is meeting all performance expectations -- demonstrating the vital role that it will play competing in the Joint Strike Fighter program over several decades.

"All of our testing thus far confirms the outstanding design and performance of the F136 engine. This year, 2010, will turn the final corner on our ground-test program and put us on run-up to flight test in 2011. We are excited about nearing that milestone and we look forward to the JSF engine competition to come soon after," said Al DiLibero, President of the GE Rolls-Royce Fighter Engine Team.

Production has already begun on Flight Test Engine 41, the first F136 to fly in the F-35 Lightning II aircraft. Final assembly will take place in early 2011, followed by the beginning of acceptance testing by mid-year.

"This is an exciting time for the F136 program as we watch all our hard work prove successful, and as we begin the transition from a ground-test program to flight test. This demonstrates not only the success of the F136 design, but also the advanced status of the program overall, and with a major milestone in our sights – taking to the skies in an F-35," said Mark Rhodes, Senior Vice President of the GE Rolls-Royce Fighter Engine Team.

The GE Rolls-Royce Fighter Engine Team is completing the fifth year of its System Development and Demonstration (SDD) contract with the US Government Joint Program Office. Production will begin in 2012, with customer deliveries scheduled for 2013.

### **Editor's notes**

The F136 engine is a product of the best technology from GE and Rolls-Royce, two world-leading propulsion companies. The GE Rolls-Royce Fighter Engine Team has designed the only engine specifically developed for the F-35 aircraft, offering extra temperature margin and affordable growth. The F136 engine will enter production in 2012.

GE - Aviation, with responsibility for 60 percent of the F136 program, is developing the core compressor and coupled high-pressure/low-pressure turbine system components, controls and accessories, and the augmentor. Rolls-Royce, with 40 percent of the F136 program, is responsible for the front fan, combustor, stages 2 and 3 of the low-pressure turbine, and gearboxes. International participant countries are also contributing to the F136 through involvement in engine development and component manufacturing.

# *Press Release*

The F136 engine is the most advanced fighter aircraft engine ever developed, with a larger core and built-in, affordable growth. The F136 will be available to power all variants of the F-35 Lightning II aircraft for the US military and eight partner nations. The F136 program has already totaled more than 1000 hours of testing in SDD and pre-SDD testing.

The F136 program continues to check off key milestones, including the first test runs for the new F136 engine in early 2009; completion of Critical Design Review in 2008; first tests at the unique, new Peebles, Ohio, test site; and full afterburner test runs at the US Air Force Arnold Engineering Development Center (AEDC) test facility in Tennessee.

The F136 engine program has a solid history of successful program management. As a result, the GE Rolls-Royce Fighter Engine Team consistently receives top reviews from the JPO for program execution.

About 900 engineers and technicians are engaged in the F136 program at GE Aviation's Cincinnati, Ohio, headquarters, and at Rolls-Royce facilities in Indianapolis, Indiana; and Bristol, England.

The F-35 is a next-generation, multi-role stealth aircraft designed to replace the AV-8B Harrier, A-10, F-16, F/A-18 Hornet and the United Kingdom's Harrier GR.7 and Sea Harrier, all of which are currently powered by GE or Rolls-Royce making them the engine powers of choice for the U.S. and U.K. militaries. Potential F-35 production for the U.S. Air Force, Navy, Marines and international customers, including the UK Royal Air Force and Royal Navy, may reach as many as 5000 to 6000 aircraft over the next 30 years.

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