

Denmark's IFAD A/S delivers breakthrough software to **P&W's** F135 Propulsion System

EAST HARTFORD, CONN. JUNE 02, 2003: IFAD of Denmark, under contract to Pratt & Whitney (P&W) has developed software that has demonstrated the capability to dramatically decrease the time required to optimize engine control software communication on the F135 propulsion system, being developed to power the Lockheed Martin F-35 International Joint Strike Fighter.

Recent tests of the IFAD developed system have shown marked improvement over legacy systems. IFAD's software optimizes the manner in which individual software packages communicate with the primary engine control unit which increases system speeds and eliminates the potential for computer processor overload in the F135 control system. Although, these tests are preliminary in nature, the results have been extraordinary. The sequencing of the engine control system was conducted by hand and could take up weeks to complete. Through the use of IFAD's system the amount of time required to perform this complex operation was reduced from weeks to hours, with minimized errors. Implementation of this program also creates additional time and cost savings during development by allowing development teams to explore further system optimization scenarios and minimizing the cost of rework cycles.

The success of this system has led to further negotiations between IFAD and P&W in the software development field as well as technical support for the systems.

"Pratt & Whitney is proud to be leading the way in providing great opportunities to the industry of our JSF partner nations," remarked Ed O'Donnell F135 International Director at P&W. "We are overjoyed with the success of the IFAD system. IFAD's contribution

to the F135 propulsion system is just the latest example of international cooperation paying dividends to the JSF program."

Pratt & Whitney's F135 propulsion system will power all versions of the F-35 JSF - CTOL (conventional takeoff and landing), CV (carrier variant), and STOVL (short takeoff/vertical landing). The first production configuration F135 goes to test in 2003, has its first flight in the F-35 in 2005, and enters production in 2007. The F135 is an evolution of the F119 engine powering the F/A-22 Raptor. Up to 6,000 F-35 fighters could be produced for U.S. and international customers.

IFAD is a 16-year-old high technology company specialising in customer-specific development of advanced information technology systems for commercial, defence, and space markets. IFAD is a global supplier of professional software development tools (VDMTools) that support precise modelling and validation of critical software applications.

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