VOLVO AERO

Volvo Aero's lightweight case technology chosen for the GP7000 engine for the Airbus A380

Pratt & Whitney has selected Volvo Aero to design and develop a new, lightweight turbine exhaust case (TEC) for the Engine Alliance GP7000 engine for Airbus' new A380 jumbo jet. The agreement also anticipates that Volvo Aero will assume responsibility for manufacturing and product support for the TEC during the engine's lifetime.

"This is a major success for Volvo Aero's technology efforts and solid confirmation that we are moving in the right direction with our focus on lightweight designs," comments Olof Persson, President of Volvo Aero.

The turbine exhaust case is a highly critical part of the aircraft engine because, among other reasons, it has as an integral feature one of the two support systems that carry the weight of the entire engine. Pratt & Whitney has tracked Volvo Aero's strategy of focusing on lightweight technologies for aircraft engine components and, when the need arose to redesign the existing component, Volvo Aero was contacted about an alternative design.

Among other features, the new Volvo Aero design reduces the weight of the TEC by more than 10%, resulting in a substantial benefit in terms of fuel consumption and environmental impact.

An extensive development program has been established to verify the new design and validate that the new TEC meets the high goals established. Following TEC validation, it is projected that series production of the new TEC for the GP7000 engine could start as early as 2010. At the end of the same year, Volvo Aero would take over full manufacturing responsibility.

"In addition to the sales generated, it is important for us that our efforts to develop our know-how in lightweight technology are bearing fruit," says Olof Persson. "This is important for the future, particularly considering the current environmental debate."

October 8, 2007

For more information, contact Nils-Olof Gustafsson, Account Manager for Pratt & Whitney business at Volvo Aero, +46 70 573 81 85..

Facts about GP7000:

The Engine Alliance GP7000 family is derived from two of the most successful wide body engine programs in aviation history – The GE90 and PW4000. Building on the GE90 core and the PW4000 low spool heritage, the GP7000 is a refined derivative with a responsible infusion of new, proven technologies.

The engine is offered in two ratings appropriate for today's A380 configurations and take-off weights: GP7270 for the 560-ton passenger version and GP7277 for the potential 590-ton A380-800 freighter. The Engine Alliance is a 50/50 joint venture between GE Aviation and Pratt & Whitney.

Press release

The first A380 aircraft will be delivered to a commercial customer, Singapore Airlines, later in October. This aircraft has Trent 900 engines. During the third quarter of 2008, the Emirates airline of the United Arab Emirates will be the first to begin flying the A380 with GP7000 engines. Emirates has ordered 47 A380s and holds an option for another eight aircraft.

Currently, the GP7000 engine accounts for 54% of all orders booked, with the Trent 900 accounting for 46%.