

## **Boeing Selects Suppliers for 747-8 Propulsion Systems**

### **Boeing Selects Suppliers for 747-8 Propulsion Systems**

---

The Boeing Company [NYSE: BA] today announced the team of suppliers that will provide propulsion systems for the 747-8 airplane family, which was launched last Nov. 14.

The external team includes General Electric (GE) for engines, Middle River Aircraft Systems for the thrust reverser system, and Spirit AeroSystems, Inc., for the nacelle and strut. The internal supplier team includes Boeing Winnipeg for the aft pylon fairing, Boeing Portland for the engine mounts, and Boeing Propulsion Systems Division for the engine build-up and strut build-up.

"All of these suppliers submitted very competitive bids and we are pleased that they will be able to meet our program targets," said Jeff Peace, vice president - program manager, 747-8 Program, Boeing Commercial Airplanes. "We are excited to have all of them as part of our supplier team for the newest member of the 747 family, which we believe represents the shape of the future."

The 747-8 family includes the 747-8 Intercontinental passenger model and the 747-8 Freighter. GE will supply the GEnx-2B67 engine for the airplane, which is scheduled to enter service in September 2009 for freighter operator Cargolux of Luxembourg. Based on the GEnx engine launched on the Boeing 787 Dreamliner, the engine designed for the 747-8 will be rated at 66,500 pounds of thrust.

The GEnx is the only jet engine being developed with both the front fan case and fan blades made of composite materials to provide greater engine durability and dramatic weight reduction. The engine also features a new-generation combustor for efficient fuel mixing before ignition, which significantly lowers NOx levels. The first full GEnx-2B67 engine will go to test in 2007, with engine certification scheduled for 2008.

"GE is very excited to be selected as the powerplant for the Boeing 747-8 airplane," said Tom Brisken, general manager of the GEnx program at GE - Aviation. "The GEnx engine is based on proven technologies and will provide outstanding economic benefits to the 747-8 program."

Middle River Aircraft Systems (MRAS) will develop, certify and produce the thrust-reverser system for the 747-8. The company will become a new direct supplier to Boeing, supplying the thrust-reverser system directly to Boeing rather than through engine manufacturer GE.

MRAS will begin the design phase immediately and expects to deliver first production hardware in 2008. The supplier will develop an all-composite thrust reverser for the 747-8.

"Our team is excited to be working directly with the Boeing 747-8 Program team," said Sagar Patel, president and general manager of MRAS. "Our advances in composites, acoustics and weight reduction are a perfect fit to the new technologies Boeing is incorporating into this airplane."

Spirit AeroSystems, Inc., will have design and build responsibilities for the engine struts and nacelles for the 747-8. Work will include the upper fairing, fan cowl support beam and strut box for the inboard and outboard struts. Spirit's work package for the nacelles includes the inlet assembly, which will incorporate a seamless, one-piece composite acoustic barrel for a 105-in. diameter fan, composite fan cowl doors, the primary exhaust with sound-dampening chevrons, and plug (or cone).

"We are excited and extremely pleased to have been selected by Boeing as a partner on the 747-8 Program," said Mike King, vice president - general manager, Propulsion Structures & Systems Business Unit. "This work package is not only a great addition to the work we currently perform for Boeing, but it also helps Spirit AeroSystems expand its product portfolio while providing new work for the future."

#### **Additional Information**

##### **Boeing 747-8**

The 747-8 is a family of passenger and freighter airplanes that serves the market for airplanes of 400 seats and larger. The 747-8 Intercontinental passenger airplane seats 450 passengers in a typical three-class configuration and offers the lowest seat-mile cost of any passenger airplane. It provides operators a 14,815-km (8,000-nmi) range, 21 percent greater cargo volume and 8 percent lower seat-mile costs compared to the 747-400. The 747-8 Freighter will fly 8,275 km (4,475 nmi) with a maximum structural payload capacity of 140 metric tonnes (154 tons). It offers 16 percent more revenue cargo volume than the 747-400F with slightly greater range. The 747-8 Freighter upholds its predecessor's legendary efficiency, with equivalent trip costs and 15 percent lower ton-mile costs than the 747-400F. In fact, the 747-8 Freighter will enjoy the lowest ton-mile costs of any freighter, giving operators unmatched profit potential. The first 747-8 Freighter will be delivered to launch customer Cargolux in September 2009.

GE - Aviation, an operating unit of General Electric Company (NYSE: GE), located in Evendale, Ohio, is one of the world's leading manufacturers of jet engines for civil and military aircraft. GE also is a global provider of maintenance and support services for operators of GE jet engines.

#### **Middle River Aircraft Systems**

Middle River Aircraft Systems (MRAS), located in Baltimore, Md., works with the industry's major airframers and engine producers to design, build and support the structures that complement their products. MRAS is one of the world's leading suppliers of jet engine thrust reversers - the brakes of a jet engine - providing reversers for both GE and Pratt & Whitney, the world's largest aircraft engine manufacturers. In addition to design and manufacturing, MRAS provides overhaul and repair services for a variety of aerostructures.

#### **Spirit AeroSystems, Inc.**

Spirit AeroSystems is a former division of The Boeing Company and has been affiliated with Boeing since 1929. As the largest supplier to Boeing Commercial Airplanes, Spirit AeroSystems produces part of every commercial jetliner. Spirit AeroSystems products and services include fuselages, underwing components, composites, wings, spares and repairs. The company's commercial operation in Wichita, Kan., produces the fuselage of the Boeing 737, designs and builds engine nacelles and nose sections for the 737, 747, 767 and 777 jetliners, and was selected to design and build the forward section and engine pylons for the 787.

###

For further information:

Leslie Hazzard

747 Communications

425-342-0447

Rick Kennedy

Public Relations

GE

513-243-3372

Michael DiMauro

Public Relations

Middle River Aircraft Systems

410-682-1142

Fred Solis

Public Relations

Spirit AeroSystems

316-526-2598

mobile: 316-304-6623

---