



OEM Cost-Saving Solutions

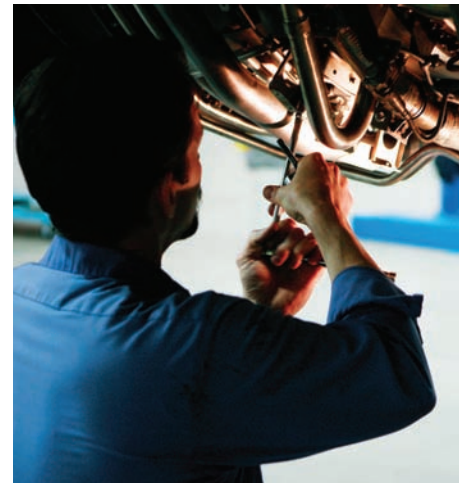
Cooperative Agreements Extend GE's Global Reach, Provide Multiple Benefits to Customers

GE Aviation continues to extend its services reach through cooperative agreements with independent and airline maintenance, repair and overhaul (MRO) companies operating in every region of the world. These agreements range from engine MRO and material solutions to technology licensing and training.

Complementing the services provided through GE's five overhaul facilities worldwide, these agreements couple GE and/or CFM56* engine material solutions with the convenience and efficiencies afforded by a global network of top-quality MROs and authorized original equipment manufacturer (OEM) parts distributors.

Bill Millhaem, general manager of material solutions at GE Aviation, says aligning with third-party MROs is a win-win solution. "We can deliver value for the MROs to help them offer an OEM product that will be of a known pedigree and configuration. Long term, this will drive lower cost for the airlines in the configuration management and ongoing airworthiness management of their fleets."

Following are recent examples of how GE is expanding its services network, creating value for engine operators and MROs.



Iberia Maintenance & Engineering Becomes Preferred Provider

GE and Madrid-based Iberia Maintenance & Engineering have entered into an agreement to designate Iberia as the preferred regional fulfillment center for the maintenance, repair and overhaul of CFM56-5A engines within Europe, Africa and the Middle East.

Iberia will also enter into an OnPoint* solutions agreement with GE for material and services to be used in the maintenance, repair and overhaul of these engines. In addition, the agreement will include repair of the engine parts and components as well as a used material agreement for CFM56-5A engines.

Says Manuel Lopez Aguilar, executive vice president of Iberia Maintenance & Engineering,

"The signature of this agreement represents for Iberia Maintenance a big step ahead in our strategy to be one of the top leaders of engine maintenance service providers. Being a member of the GE network demonstrates that you have attained the highest standards of quality, efficiency and customer support, and this is the commitment of Iberia to our customers and GE."

The OnPoint solutions agreement builds on the ongoing relationship between the two companies. Since 2007, Iberia has had an agreement with GE to develop new repairs for the CFM56-5A engine, and Iberia Maintenance continues to use only genuine OEM parts when providing MRO services for the engine.

"As part of this agreement," adds Aguilar, "Iberia Maintenance will continue investing in new technologies and improvements in processes and procedures in order to maintain our competitiveness and increase customer satisfaction."

As Spain's largest air transport group and the fourth largest in Europe, Iberia's business is focused on three main activities: transport of passengers and cargo, aircraft maintenance, and handling services in airports. Iberia Maintenance carries out inspections and repairs of airframes, aircraft engines and components for the Iberia fleet and those of 100 customers worldwide.

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ST Aerospace to Provide GENx Engine Support

Singapore Technologies Aerospace Ltd (ST Aerospace) has signed an agreement with GE Aviation that enables ST Aerospace subsidiary ST Aerospace Engines Pte Ltd (STA Engines) to serve as an approved provider of GENx* on-wing support services for GENx-1B/-2B engines.

Under this agreement, ST Aerospace will use GE material and GE-approved repair processes for customers at its U.S. and Singapore facilities. GE will provide ST Aerospace with technical support, including training, technical manuals and equipment. In addition, ST Aerospace will have access to GENx engineering support—ensuring leading-edge technology for ST Aerospace’s maintenance processes and

that GENx operators are provided with the highest standards in on-wing support.

“ST Aerospace is pleased to commit the necessary resources and efforts to support the entry into service of the GENx engine,” says TAY Kok Kiang, president of ST Aerospace. “With many GENx operators being our current customers in other aspects of aviation support, we believe we can efficiently support GE’s commitment to ensure responsive support to its customers. We view our partnership seriously, and this is the cornerstone of our collaboration with airlines and OEMs.”



Operating a 24/7 global MRO network, with facilities in the Americas, Asia Pacific and Europe, ST Aerospace is one of the world’s largest independent MRO providers.



Component Repair Highlights

Following are three recently released CF6* and CF34* repairs, developed to help improve customers’ cost of ownership:

CF6-80C2/-80E HPT Rotating Interstage Seal Repair of Diameter B and Diameter D:

Repairs are now available to address wear or fretting on diameter B and/or D on the CF6-80C2 and CF6-80E Rotating Interstage Seals. These repairs provide significant customer savings—94% savings over the new part purchase price.

CF6-80C2 Fan Mid-Shaft Assembly—Forward Inner, Forward Outer and Aft Outer Thread Nickel Plating Restoration:

This repair provides a solution to strip the existing coating and reapply nickel to the threads, salvaging a part that historically would have been scrapped.

CF34-8C/-8E Combustor Outer Shell Seal Groove Weld Repair:

This repair removes unserviceable sections of the seal ring and replaces them with new material. This repair addresses previously non-repairable inner seal wear and thickness conditions, reducing the number of outer shells that will need to be scrapped.

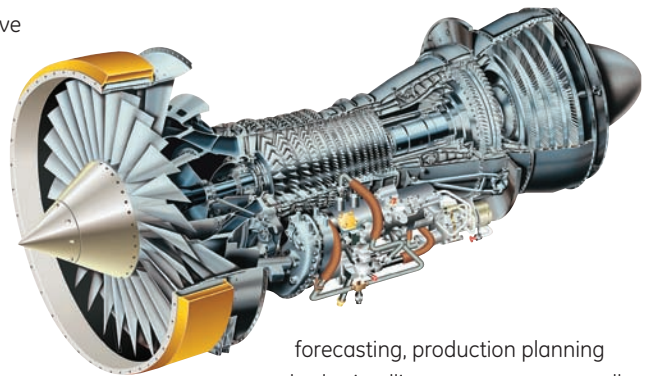
Contact: **Scott Welsh** scott.welsh@ge.com

Aviall to Distribute Unique Spare Parts for CF34-3 Engines

GE Aviation has signed an exclusive distributor agreement with Aviall Services, Inc. covering unique spare parts for GE CF34-3 engines over the remaining life of the engine.

Under the agreement:

- Aviall will become responsible for forecasting, ordering and delivering all genuine OEM replacement parts that are unique to CF34-3 engines and will assume responsibility for documentation management, worldwide inventory deployment, warehousing and product distribution of these parts.
- GE will continue to provide all CF34-3 life-limited parts and will retain technical responsibility for the engines.
- Aviall will also use its advanced, award-winning technologies to support CF34-3 engine spare part sales analysis, line item



forecasting, production planning and sales intelligence systems, as well as end-customer requirement planning, advance provisioning and supply-chain administrative needs.

A unit of Aviall, Inc., a wholly owned subsidiary of The Boeing Company, Aviall Services, Inc. is headquartered in Dallas, Texas. The company is a leading solutions provider of aftermarket supply-chain management services for the aerospace, defense and marine industries.

Contact: **Brian Ovington** brian.ovington@ge.com

Cooperative Agreement Advantages

- Access to the latest OEM technology, manuals and training opportunities
- Improved availability/access to GE and CFM56* engine parts as well as overall material solutions benefits (e.g., the right mix of new, used and technology upgrade parts and components)
- Enhanced OEM product/technical support
- Increased slot availability for customers’ engine overhauls
- Introduction of new repairs for engine parts and accessories

One-Stop Customized Tooling Support

Providing Efficient, Effective OEM Solutions in a Tough Economy

Whether they own two aircraft or hundreds, contract with a service shop for repair and overhaul or do all their own maintenance, aircraft engine operators can benefit from the ground support equipment and customized tooling recommendations provided by GE Aviation's Customer Tooling Solutions (CTS) team.

Line maintenance tooling. Transportation and shipping stands. Water wash equipment. Shop tooling. CTS serves all GE and CFM International commercial engine lines and GE military engine lines as well as all GE marine and industrial applications. In existence since the early 1990s, the group was reorganized and relocated from Mount Laurel, New Jersey, to Cincinnati, Ohio, in 2007.

One call or e-mail quickly links customers to CTS:

1.877.432.3272 (within the U.S.)
+1.513.552.5740 (outside the U.S.)
aviation.toolingorder@ge.com

"What sets us apart from other, non-OEM tooling solution providers can be summarized in two words: technical support," says Tim Meyers, CTS business leader. "GE owns the tooling designs. We have the OEM technical expertise. We provide the OEM support. Our understanding of an engine's workscope facilitates the manufacturing of a customized set of tools that enables customers to do very specific work on their engines."

Aligned at Entry Into Service

"Strategically," says Meyers, "we are now part of GE Aviation's Customer and Product Support Organization. We work in tandem with GE's customer support managers and field service engineers, who are the airlines' daily conduit to the company. As part of this team, we assist airlines as they bring their GE engines into service and as field issues arise. We are our customers' one-stop customized tooling support provider."

CTS is uniquely structured to provide this "one-stop" service. On the front end, there is a CTS customer account manager serving each region of the world. They ensure operators' knowledge of pending tool design changes and compliance with regulatory issues specific to a region or governmental entity, and they expedite tooling deliveries. The CTS team's tooling product managers provide the technical expertise that leads to customized tooling recommendations.

At entry into service, for instance, CTS tooling product managers identify customers' needs for line maintenance equipment specific to their engines' workscope. Then, as engines come in for service, tooling plans are developed to meet very specific maintenance needs. Additionally, as part of the broader GE support team, CTS has the means to facilitate the loan or short-term lease of tooling.

Continuum of Support

Once a tooling order is processed, Customer Tooling Solutions provides follow-on tooling support services such as calibration, maintenance repair and upgrades for new tool



configurations. GE's CTS team is available 24/7 through the GE Aviation Operations Center.

Says Meyers, "In this tough economy, operators want to maximize the life of their engines. Our one-stop solution is in step with this industry reality. Our customers trust us to provide them with cost-effective recommendations that meet their specific needs as efficiently as possible and to be there to back up our product."

Contact: **Tim Meyers** tim.meyers@ge.com

Employing OEM design and manufacturing excellence and backed by GE's global support network, Customer Tooling Solutions works with engine owners and maintenance, repair and overhaul companies to meet their customized needs:

- At **entry into service** for overhaul shop start-up or expansion to a new engine
- For **add-on equipment** to accommodate maintenance base expansion, replenishment and/or replacement

1 Million Flight-Hours

Qatar Airways Celebrates CF6-80E Engine Fleet Milestone



Doha-based Qatar Airways, which operates one of the youngest and most modern fleets in the skies today, has reached the 1 million flight-hours milestone with its GE CF6-80E-powered Airbus A330* aircraft. That equates to nearly 400 flight-hours per day since the airline began operating CF6* engines in 2002.

"GE is proud of the exceptional performance of its CF6-80E engines operated by Qatar Airways, and we join them in celebrating this significant achievement," says David Joyce, president and CEO of GE Aviation. "Qatar Airways and GE have worked together to keep these engines in pristine condition, and Qatar Airways has proven the outstanding performance capabilities of the engine."

The airline currently has a fleet of 31 CF6-80E1-powered A330 aircraft. These engines are covered by an OnPoint* solutions agreement, GE's flexible suite of engine maintenance products and services.

Engine Reliability

In 2007, Qatar Airways set a time-on-wing record for CF6-80E engines operating in a hot, sandy environment by accumulating more than

4,300 cycles on an engine over the course of four years of service.

Beyond CF6 engines, Qatar Airways also operates CFM56* and GE90* engines and has ordered the GENx-1B engine to power its Boeing 787 Dreamliner* aircraft. By 2013, the airline will operate a fleet of 110 aircraft—almost doubling its existing size.

Contact: **Hadley Bowling** hadley.bowling@ge.com

The CF6 File

GE's CF6 engines are among the most utilized and reliable in the industry. Powering more than 10 models of wide-body aircraft, the engines have logged more than 325 million flight-hours in service with more than 260 customers worldwide.

Did You Know?

GE's Flight Operations Support team brings 100-plus years piloting experience to the customer flight crews they train in areas of opportunity to lower costs of ownership and promote fuel conservation.

This training includes power management, exhaust gas temperature margin, use of reduced thrust takeoffs, "normal" versus "derated" climb and other best practices for the efficient operation of GE and CFM International engines.

THE AMERICAS

Mike Munz
michael.munz@ge.com

EUROPE/AFRICA

Jack Lutze
jack.lutze@ge.com

ASIA

Chaker Chahrour
chaker.chahrour@ge.com

CHINA

Mike Wilking
mike.wilking@ge.com


MIDDLE EAST

Muhammad Al-Lamadani
muhammad.al-lamadani@ge.com

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GE Aviation

General Electric Company
One Neumann Way
Mail Drop J4
Cincinnati, OH 45215 U.S.A.
Phone: +1.513.552.3272 (Internationally)
+1.877.432.3272 (Within U.S.)
Fax: +1.513.552.3329
www.geaviation.com/onpoint
E-mail: servicesolutions@ge.com

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