



BELAC NEWS

A Chromalloy Joint Venture Company

From the President of BELAC LLC

Demand continues to grow for Parts Manufacturer Approval (PMA) blades around the world — and BELAC serves an increasing number of aircraft operators that are reducing costs while ensuring safety, reliability and top performance.

When BELAC began producing High Pressure Turbine blades in 2002, many of our customers were in North America. Product reliability, durability and superior performance were demonstrated again and again as more operators used the blades.

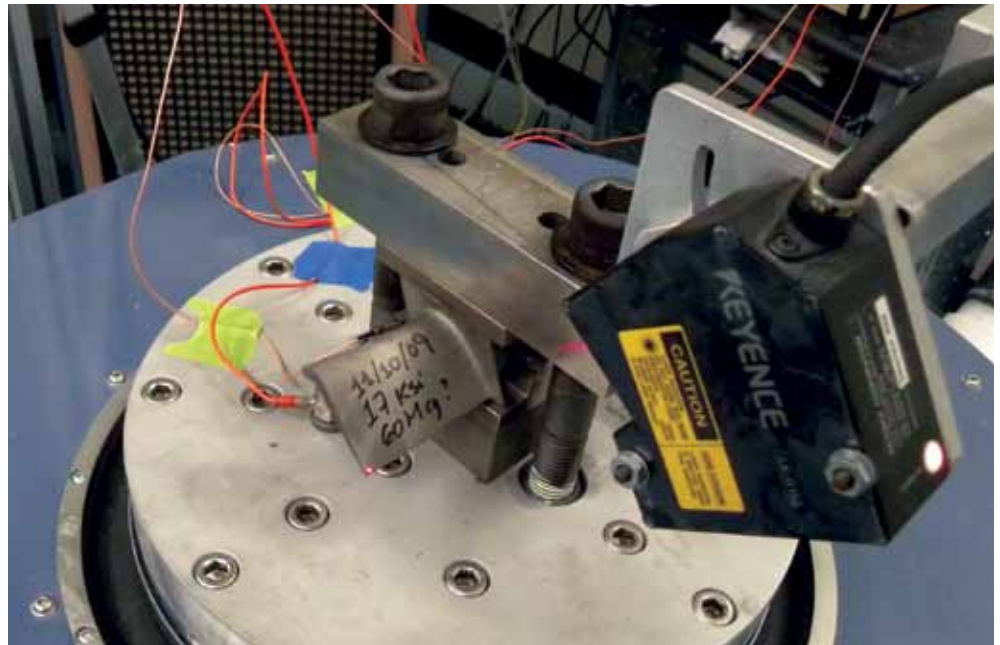
Now with more than 270 million flight hours, a stellar safety record and our relentless delivery schedule, BELAC blades fly in all regions of the world. And we continue to reach out to airlines that may not be familiar with the savings associated with alternative parts.

The first Independent and Alternative Materials Conference was held in China in December 2009. BELAC participated to discuss PMA engineering, design, production and performance data — as well as the savings airlines realize by choosing alternative materials. Sponsored by Chromalloy, the conference featured speakers from airlines and regulatory agencies who addressed all aspects of PMA — from manufacturing and product support to regulatory review.

Additional Alternative Materials conferences are being scheduled this year in Asia and Latin America.

Let us show you the performance data from equipment in service — and you can decide if exceptional performance, reduced maintenance requirements and cost savings can benefit your maintenance operation.

Chong Yi
President



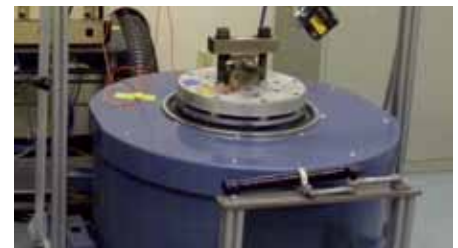
BELAC brings high cycle fatigue testing in-house

As part of the company's Parts Manufacturer Approval (PMA) development, BELAC now conducts high cycle fatigue testing on fabricated turbine engine parts to substantiate that they meet or exceed rigorous FAA standards.

"A highly specialized capability, high cycle fatigue testing is now performed at BELAC's Oldsmar, Fla., facility," said **Chong Yi**, President. "Only a few facilities in the world offer this advanced testing."

High cycle fatigue testing is a dynamic test in which a part or test specimen experiences a reversed and repeated cycle of stress — and eventually fails or fractures due to a crack in the blade. To simulate the extreme conditions of a gas turbine engine during operation, the high cycle fatigue test performs up to 100 million cycles or until a failure in the material is recorded.

The number of cycles to failure of the blade identifies the blade fatigue life at different levels. BELAC parts



developers use high cycle fatigue testing and other tests to ensure the durability of the blades and to ensure that each piece meets or exceeds the part specification. In addition, each part is subject to several inspections as part of the production cycle.

The testing requires that operators have advanced training and technical expertise enabling them to perform tests and interpret the results. In the past, BELAC technical experts waited for equipment availability at outside test facilities. "That slowed the product development and PMA approval cycle," Yi said. 🌐

BELAC quality system recertified

BELAC LLC was recertified by the FAA following a recent Aircraft Certification Systems Evaluation Program (ACSEP) audit. The audit determines compliance with Federal Aviation Regulations and examines quality system procedures. In addition to the Federal Aviation Regulations, the BELAC quality system also recently received NQA recertification ISO 9001-2000 and AS9100B requirements. 🌐



For information about pricing and availability, contact

Ken Crilley
BELAC LLC
420 Commerce Blvd.
Oldsmar, Florida 34677

Phone: 813-749-3200
Fax: 813-749-3201
E-mail: sales@belac.com



BELAC to provide High Pressure Turbine blades to Pakistan International Airlines

BELAC LLC was selected by Pakistan International Airlines to provide High Pressure Turbine (HPT) blades for the fleet's CFM56-3 and CF6-80C2 engines.

"With this contract BELAC adds another commercial carrier to our long list of operators around the world using HPT blades for the CFM56-3 and CF6-80C2 engines," said **Chong Yi**, President. "By selecting our FAA-approved blades the airline will realize cost savings, exceptional reliability and top performance."

BELAC will deliver six sets of HPT blades during 2010.

Over the course of seven years and approximately 270 million flight hours, BELAC HPT blades have demonstrated outstanding quality, reliability and performance, while saving operators up to 40 percent off the cost of new



original equipment manufacturer parts. They are subject to the same rigorous design and manufacturing processes and FAA scrutiny as original equipment manufacturer blades. 🌐