

Contact: Justin Combs

Lambda Technologies Corporate Headquarters

3929 Virginia Avenue Cincinnati, OH 45227-3411

Tel: (513) 561-0883 Toll-Free: (800) 883-0851 Fax: (513) 322-7186

E-mail: jcombs@lambdatechs.com

FOR IMMEDIATE RELEASE

FAA Grants AMOC for Low Plasticity Burnishing Damage Is Mitigated in Main Landing Gear

Cincinnati, June 1, 2013 - The first FAA Alternative Method of Compliance (AMOC) for Low Plasticity Burnishing (LPB®) has been granted to Delta Airlines. The AMOC, 11-036, allows the use of LPB to mitigate fatigue cracking in the landing gear of the DC-9-81, DC-9-82, DC-9-83, DC-9-87, MD-88, and MD-90-30. Previously, an Airworthiness Directive required that the shock cylinders of each landing gear had to be frequently inspected, adding considerable cost to the overall maintenance of the aircraft. LPB treatment is considered a terminating action for these mandated inspections. One treatment cycle completely eliminates the need for any further inspection. By using robots, processing can be done quickly, without having to remove the landing gear. The AMOC is part of the collaboration between Delta TechOps, Delta's maintenance division, and Lambda Technologies, the company that created LPB.

Significant performance and life improvements have been documented with the use of LPB in other applications. Thousands of engine and structural components have been treated with LPB in military applications. SBIR contracts with NAVAIR have led to full production, reducing processing costs for the P-3 Orion propeller bore and mitigating FOD in the F402 engine used in the AV-8B Harrier. More than 11,000 Harrier engine vanes have been LPB processed without a single failure. This AMOC represents another major step forward for the use of LPB in the commercial sector.



Robotic LPB Processing of Landing Gear

"Implementing the robotic processing was a great step forward for this project," says Mike Prevey, Project Manager at Lambda. "It gave us the flexibility to get this done quickly, without requiring a massive overhaul operation. We can apply LPB just to the critical areas in the hanger with the plane still fully intact."

LPB is a patented, proven surface treatment that provides a deep layer of compressive residual stress to mitigate fretting, corrosion pitting, stress corrosion cracking, or foreign object damage in the critical, highly-stressed areas of metallic components. LPB delivers significant fatigue life extension with minimal initial capital investment and low production costs. LPB is FAA accepted for the repair and alteration of aircraft components.



The engineered use of beneficial compressive residual stress represents a new way of thinking about aircraft design and maintenance support. Inducing controlled, beneficial compression into a part extends its fatigue life and increases damage tolerance without changing the material or design. All LPB processed parts are FAA sanctioned alterations of original OEM components and do not fall under the Parts Manufacturing Authority (PMA).

Lambda Technologies is an innovative company incorporating a premier materials research laboratory with a world-class engineering and production enterprise dedicated to the development and optimization of surface treatments to improve component performance. For additional information on Lambda Technologies or the LPB process, contact Justin Combs at (513) 561-0883 or visit www.lambdatechs.com.

Original document available at http://www.lambdatechs.com/documents/AMOC.pdf

###