AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Pacific Aerospace Corporation Cresco Series Aeroplanes

AD/CRESCO/10 MLG Axles 2/2007

Applicability: All Cresco 08-600 aircraft on restricted category agricultural operations fitted with main landing gear (MLG) axles part number (P/N) 08-40021-1, 08-40021-2, or 08-40021-3.

Requirement:

1. For aircraft fitted with MLG axles P/N 08-40021-1 or P/N 08-40021-2.

   Disassemble the MLG wheel assembly, clean the axles and remove as required, in accordance with Chapter 32 of Pacific Aerospace Corporation (PAC) Cresco 08-600 Maintenance Manual (MM).

   a. Inspect the axles for security in accordance with the maintenance schedule in Chapter 05-10-00, page 615 of PAC Cresco 08-600 MM.

   b. Visually inspect axles for cracks, paying particular attention to the shoulder radii, as detailed in Table 1 of PACSL/CR/06-1 Revision 1 and the instructions in PAC Cresco 08-600 MM Supplement PAC/CR/0442.

   c. Inspect the MLG axles for cracks using an approved direct or indirect magnetic particle inspection method that is equivalent to ASTM Standard No. E-1444, and the maintenance schedule in Chapter 05-10-00 page 601, and the instructions in Chapter 32-10-00 page 602, paragraph c, of PAC Cresco 08-600 MM and PACSL/CR/06-1.

   Replace cracked axles before further flight.

   Re-assemble and lubricate MLG axles in accordance with Chapters 32 and 12 of PAC Cresco 08-600 MM.

2. For aircraft fitted with MLG axles P/N 08-40021-3.

   Disassemble the MLG wheel assembly, clean the axles and remove as required, in accordance with Chapter 32 of PAC Cresco 08-600 (MM).

   a. Inspect the axles for security in accordance with the maintenance schedule in Chapter 05-10-00, page 615 of PAC Cresco 08-600 MM.

   b. Visually inspect axles for cracks, paying particular attention to the shoulder radii, as detailed in Table 2 of PACSL/CR/06-1 Revision 1 and the instructions in PAC Cresco 08-600 MM Supplement PAC/CR/0443.

Pacific Aerospace Corporation Cresco Series Aeroplanes

AD/CRESCO/10 (continued)

c. Inspect the MLG axles for cracks using dye penetrant inspection method in accordance with the maintenance schedule in Chapter 05-10-00 page 601, and the instructions in Chapter 32-10-00 page 602, paragraph c, of PAC Cresco 08-600 MM and PACSL/CR/06-1.

Replace cracked axles before further flight.

Re-assemble and lubricate MLG axles in accordance with Chapters 32 and 12 of PAC Cresco 08-600 MM.

Note 1: MOD PAC/CR/0442 introduces axles P/N 08-40021-2 as a replacement for axles P/N 08-40021-1, which are no longer available.

Note 2: MOD PAC/CR/0443 introduces axles P/N 08-08-40021-3, which have a dye penetrant inspection requirement.

Note 3: Torque Plates P/N 08-40055-2 and 08-40056-2 are to be fitted when MLG axles P/N 08-40021-2 or 08-40021-3 are installed.

Note 4: ASTM Standard No. E-1444 establishes minimum requirements for magnetic particle inspection examination used for the detection of surface or slightly subsurface discontinuities in ferromagnetic material.

Note 5: NZ CAA AD DCA/CRESCO/10 refers.

Compliance: 1.a. and 2.a. Within 150 hours time in service after 15 February 2007 or before the accumulation of 1,500 landings on the MLG axles, whichever occurs first; unless already accomplished within the last 150 hours time in service. Thereafter inspect at intervals not to exceed 150 hours time in service or before the accumulation of 1,500 landings on the axles, whichever occurs first.

1.b. and 2.b. Within 150 hours time in service after 15 February 2007 or before the accumulation of 1,500 landings on the MLG axles, whichever occurs first; unless already accomplished within the last 300 hours time in service. Thereafter inspect at intervals not to exceed 300 hours time in service or before the accumulation of 3,000 landings on the axles, whichever occurs first.

1.c. For aircraft fitted with MLG axles P/N 08-40021-1:

Before exceeding 500 hours time in service or before the accumulation of 6,000 landings on the MLG axles, or within 150 hours time in service after 15 February 2007, whichever occurs later. Thereafter inspect at intervals not to exceed 500 hours time in service or before the accumulation of 6,000 landings on the MLG axles, whichever occurs first.

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AD/CRESCO/10 (continued)

For aircraft fitted with MLG axles P/N 08-40021-2:

Before accumulation of 6,000 landings on the MLG axles, and thereafter at intervals not to exceed 6,000 landings on the MLG axles.

2.c. For aircraft fitted with MLG axles P/N 08-40021-3:

Before accumulation of 50,000 landings on the MLG axles, and thereafter at intervals not to exceed 6,000 landings on the MLG axles.

This Airworthiness Directive becomes effective on 15 February 2007.

Background: During a scheduled 500 hour inspection a crack was detected on the MLG axle of a Cresco aircraft. Inspection in accordance with PAC SL/CR/99-2 confirmed the crack. There is a known history of cracking of the MLG axle on Cresco aircraft.

David Villiers
Delegate of the Civil Aviation Safety Authority

5 January 2007