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/11 Nose Wheel Steering Assembly 2/2007

Applicability: All Cresco 08-600 aircraft on restricted category agricultural operations fitted with nose wheel steering pivot pin part number (P/N) 08-45711-1.

Requirement:

1. Inspect the operation of the nose wheel steering in accordance with the maintenance schedule in Chapter 05-10-00 page 616, of Pacific Aerospace Corporation (PAC) Cresco 08-600 Maintenance Manual (MM).

   Inspect the nose wheel steering and the torque link attachment of the link assembly P/N 245235-2 for wear and cracks, in accordance with the maintenance schedule in Chapter 05-10-00 page 615, and the wear limits and tolerances in Chapter 32-20-00, table 601, page 601 of PAC Cresco 08-600 MM.

   If parts replacement or re-bushing is required, accomplish before further flight.

2. Inspect the nose wheel steering shimmy damper unit P/N 08-45725-2 for security and damage, in accordance with the maintenance schedule in Chapter 05-10-00 page 617 of PAC Cresco 08-600 MM.

   If parts replacement or adjustment is required, accomplish before further flight.

   If adjustment is required, accomplish in accordance with Chapter 32-50-00 page 501, of PAC Cresco 08-600 MM.

3. Remove the nose wheel steering pivot pin P/N 08-45711-1 in accordance with Chapter 32 of the PAC Cresco 08-600 MM, and inspect the nose wheel steering pivot pin using an approved direct or indirect magnetic particle inspection method that is equivalent to ASTM Standard No. E-1444.

   If cracking is detected in the pivot pin, replace before further flight.

4. Inspect the steering tube assembly P/N 245207 and the steering tube end fitting 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 616 of PAC Cresco 08-600 MM.

   If cracking is detected, replace affected part before further flight.

   Re-assemble and lubricate the nose landing gear steering linkage assembly in accordance with Chapters 32 and 12 of PAC Cresco 08-600 MM.

Pacific Aerospace Corporation Cresco Series Aeroplanes

AD/CRESCO/11 (continued)

Note 1: If cotter pin P/N 08-45729-1 does not align with the flat on the pivot pin P/N 08-45711-1, install a washer.

Note 2: A pilot nose wheel shimmy incident report must be investigated to prevent design loads being exceeded in the steering components. Rework or replace worn steering link parts in accordance with the wear limits and tolerances specified in Chapter 32-20-00 table 601of PAC Cresco 08-600 MM. The adjustment of steering damper unit P/N 08-45725-2 must be accomplished in accordance with Chapter 32-50-00 page 501, of PAC Cresco 08-600 MM.

Note 3: 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 4: NZ CAA AD DCA/CRESCO/11 refers.

Compliance:

1. Within 150 hours time in service after 15 February 2007 or 1,500 landings on the nose wheel steering pivot pins, unless already accomplished within the last 150 hours time in service. Thereafter inspect at intervals not to exceed 150 hours time in service or 1,500 landings, whichever occurs first.

2. Within 300 hours time in service or 3,000 landings after 15 February 2007, unless already accomplished within the last 300 hours time in service. Thereafter inspect at intervals not to exceed 300 hours time in service or 3,000 landings, whichever occurs first.

3. Within 150 hours time in service after 15 February 2007 or before exceeding 500 hours time in service on the nose wheel steering pivot pins, whichever occurs later. Thereafter inspect at intervals not to exceed 500 hours time in service.

4. Within 150 hours time in service or 1,500 landings, unless already accomplished during the last 6,000 landings. Thereafter inspect at intervals not to exceed 6,000 landings.

This Airworthiness Directive becomes effective on 15 February 2007.

Background: The NZ CAA received numerous reports of cracked nose wheel steering pivot pins.

David Villiers
Delegate of the Civil Aviation Safety Authority

5 January 2007