
AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/ROBIN/27 Amdt 1 and issues the following 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.

Robin Aviation Series Aeroplanes

**AD/ROBIN/27
Amdt 2**

Rudder Pedal Bars

1/2008

Applicability: Model R 2100, R 2100 A, R 2112, R 2120 U, R 2160, R 2160 D, and R 2160 I aircraft, serial numbers 1 through 378; and aircraft not fitted with reinforced rudder bars part number (P/N) 27.40.31.010 and P/N 27.40.31.020.

Model HR 200/100, HR 200/100S, HR 200/120, HR 200/120B, and HR 200/160 aircraft, serial numbers 1 through 378, and aircraft not fitted with reinforced rudder bars part number P/N 27.40.31.010 and P/N 27.40.31.020.

Note 1: This Directive is not applicable if reinforced rudder bars are already installed in accordance with a previous issue of this Directive.

Note 2: This Directive is not applicable to the R 2000 series aircraft manufactured by Alpha Aviation. These aircraft are fitted with reinforced rudder bars at manufacture.

- Requirement:**
1. For Model R 2000 series aircraft, replace the left rudder bar P/N 27.23.05.010 and the right rudder bar P/N 27.23.05.020 with reinforced rudder bars part number P/N 27.40.31.010 and P/N 27.40.31.020 respectively, in accordance with Alpha Aviation Service Bulletin AA-SB27-003.
 2. For Model HR 200 and R 2120 U aircraft, check the geometrical shape of both the rudder bars in accordance with Figure 1. Maintain the rudder bars in the neutral position and measure distances G1, G2, and D1, D2 (the distance between the foot tubes and the front face of the frame box located under the seats). The difference between G1 and G2, or D1 and D2 is the distortion.
 - a. If D1=D2 and G1=G2 (+/- 5mm), there is no significant distortion and no action is required, re-inspect at intervals not to exceed 500 hours time in service.
 - b. If the distortion is between 5mm and 10mm, re-inspect at intervals not to exceed 100 hours time in service, until replaced with reinforced rudder bars part number P/N 27.40.31.010 and P/N 27.40.31.020 in accordance with AA-SB27-003.

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AD/ROBIN/27 Amdt 2 (continued)

- c. If the distortion is equal to or greater than 10mm, replace both rudder bars in accordance with AA-SB27-003.

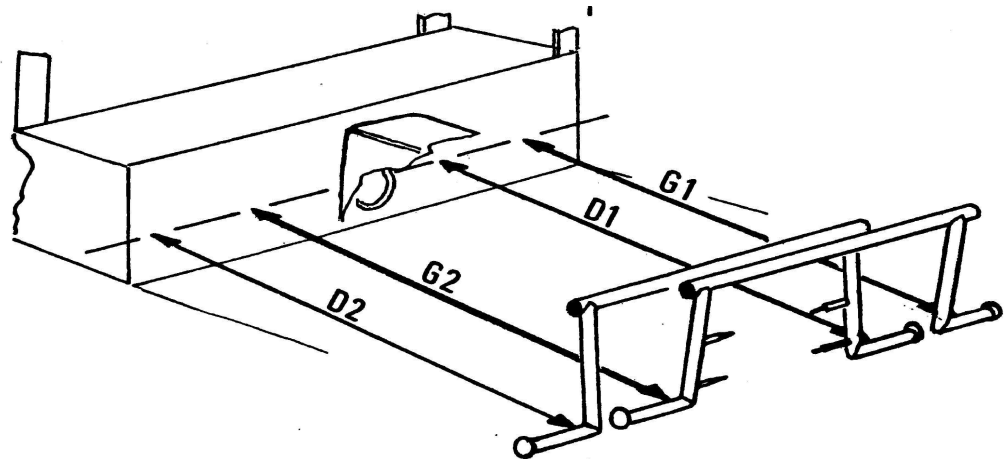


Figure 1

Note 1: Reinforced rudder bars part number P/N 27.40.31.010 and P/N 27.40.31.020 have a flat welded reinforcing gusset on the right side and a bent welded reinforcing gusset on the left side. Refer to AA-SB27-003 for details.

Note 2: The installation of P/N 27.40.31.010 and P/N 27.40.31.020 rudder bars is terminating action to the requirements of this Directive.

Note 3: NZ CAA AD DCA/R2000/23B refers.

- Compliance:
1. Within 50 hours time in service after 17 January 2008 or before 17 April 2008, whichever occurs first, unless already accomplished.
 2. Within 100 hours time in service after 17 January 2008, and thereafter at the intervals specified in Requirement 2, until both rudder bars are replaced with P/N 27.40.31.010 and P/N 27.40.31.020 rudder bars.

This Amendment becomes effective on 17 January 2008.

Background: The manufacturer received a report of rudder bar distortion which occurred during intensive aerobatic operation.

Amendment 1 was issued in response to a NZ CAA AD, which was prompted by the new Type Certificate holder for the HR 200 and R 2000 series aircraft, Alpha Aviation; correcting the applicable aircraft serial number range and including a means of identifying reinforced rudder bars.

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AD/ROBIN/27 Amdt 2 (continued)

Amendment 2 is issued in response to a revision of the related NZ CAA AD, which expands aircraft applicability and reduces the inspection interval for unmodified HR 200 and R 2120 U aircraft.

A handwritten signature in black ink, appearing to read 'David Villiers', with a long horizontal stroke extending to the right.

David Villiers
Delegate of the Civil Aviation Safety Authority

29 November 2007