For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (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.

Piper PA-31 Series Aeroplanes

AD/PA-31/130  Rudder Torque Tube Assembly and Rudder Rib  2/2004

Applicability: Model  Serial numbers
PA-31, PA-31-300, PA-31-325  31-2 through 31-8312019
PA-31-350  31-5001 through 31-8553002
PA-31P  31P-1 through 31P-7730012
PA-31P-350  31P-8414001 through 31P-8414050
PA-31T  31T-7400001 through 31T-8120104
PA-31T1  31T-7804001 through 31T-1104017
PA-31T2  31T-8166001 through 31T-1166008
PA-31T3  31T-8275001 through 31T-5575001

Requirement: 1. Install an inspection hole in the rudder skin for the rudder torque tube assembly in accordance with Piper Aircraft Service Bulletin (SB) No. 1105A, dated 22 September 2003; or, instead of installing an inspection hole, use the tooling hole in the rudder bottom rib. Enlargement of the diameter of the tooling hole by a maximum of 0.25 inches may be accomplished to facilitate inspection and corrosion treatment.

2. Visually inspect the rudder torque tube and associated ribs for corrosion in accordance with SB No. 1105A.

3. If corrosion damage is detected:
   a. Replace the rib/rudder torque tube assembly; or,
   b. Repair the damaged torque tube using an approved repair design. FAA AD 2003-24-07 paragraph (f) specifies repair issues to be addressed.

Note: FAA AD 2003-24-07 Amdt 39-13376 refers.
Piper PA-31 Series Aeroplanes

AD/PA-31/130 (continued)

Compliance: 1. Within 150 hours time in service after 19 February 2004, unless already accomplished.

2. Before further flight after accomplishment of Requirement 1, and thereafter at intervals not to exceed 12 calendar months.

3. Before further flight after any Requirement 2 inspection where corrosion damage is detected.

This Airworthiness Directive becomes effective on 19 February 2004.

Background: The FAA received several reports of rudder torque tube and rib corrosion on Piper PA-31 Series aircraft. The area surrounding the rudder torque tube assembly and rudder rib does not have a means or access to inspect this area and no way for water to drain out. Corrosion in the rudder torque tube assembly and rudder rib could result in failure of the rudder torque tube, and consequent loss of rudder control.

David Villiers
Delegate of the Civil Aviation Safety Authority

8 January 2004

The above AD is notified in the Commonwealth of Australia Gazette on 28 January 2004.