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/CESSNA 170/78 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.

Cessna 170, 172, F172, FR172 and 175 Series Aeroplanes

AD/CESSNA 170/78 Amdt 1 — Flexible Fuel Hose End Fittings — 6/2007 DM

Applicability: Cessna Aircraft Models 172R and 172S with the following serial numbers - all inclusive:

Model 172R Serial Numbers (S/N) 17281244 through 17281364, S/N 17281366 through 17281372, S/N 17281374 through 17281376, and S/N 17281379; and

Model 172S Serial Numbers (S/N) 172S9809 through 172S10349, S/N 172S10351 through 172S10374, S/N 172S10376 through 172S10423, S/N 172S10425 through 172S10426, S/N 172S10428 through 172S10430, S/N 172S10432 through 172S10444, S/N 172S10446 through 172S10450, and S/N 172S10452 through 172S10454.

Requirement: **Group 1 - Cessna 172 Aircraft - NOT equipped with the Garmin G1000 System:**

1. Inspect the two end fittings on each of the following hoses in the engine compartment using the instructions of Cessna Service Bulletin (SB) No. SB07-71-01, Revision 1, dated 16 March 2007 or later FAA approved revisions; and the procedures given in the appendix to this AD:

   i) Fuel strainer to engine fuel pump.

   ii) Engine fuel pump to fuel injector servo.

   iii) Fuel injector servo to fuel manifold valve (except turbo models).

   iv) Turbo models only: Fuel injector servo to fuel flow transducer.

   v) Turbo models only: Fuel flow transducer to fuel manifold valve.

   vi) Fuel injector servo fuel return to firewall fitting.

2. If any incorrect torque values are found during the inspection in accordance with Requirement 1 of this AD, establish the correct torque values in accordance with the instructions of Cessna SB07-71-01, Revision 1 or later FAA approved revisions; and the procedures given in the appendix to this AD.

Cessna 170, 172, F172, FR172 and 175 Series Aeroplanes

AD/CESSNA 170/78 Amdt 1 (continued)

Group 2 - Cessna 172 Aircraft - Equipped with the Garmin G1000 System:

1. Inspect the two end fittings on each of the following hoses in the engine compartment using the instructions of Cessna Service Bulletin (SB) No. SB07-71-01, Revision 1, dated 16 March 2007 or later FAA approved revisions; and the procedures given in the appendix to this AD:

   i) Fuel strainer to engine fuel pump.

   ii) Engine fuel pump to fuel injector servo.

   iii) Fuel injector servo to fuel flow transducer.

   iv) Fuel flow transducer to fuel manifold valve.

   v) Fuel injector servo fuel return to firewall fitting.

2. If any incorrect torque values are found during the inspection in accordance with Requirement 1 of this AD, establish the correct torque values in accordance with the instructions of Cessna SB07-71-01, Revision 1 or later FAA approved revisions; and the procedures given in the appendix to this AD.

Note: FAA AD 2007-08-03 Amendment 39-15020 dated 5 April 2007 refers. FAA AD 2007-08-03 supersedes FAA AD 2006-17-04 amendment 39-14725.

Compliance: 1. Within the next 5 hours time-in-service (TIS) after the effective date of this AD.

2. Before further flight.

This Amendment becomes effective on 25 April 2007.

Background: There have been four reports of loose fuel lines connected to the fuel servo or fuel flow transducer. Two reports were of in-flight engine failure on a Model T182T airplane. A third report was of in flight-engine failure on a Model 206H airplane. A fourth report was of a Model 172S airplane that lost engine power on final approach. The intent of this AD is to detect and correct potential loss of fuel flow, which may result in partial or complete loss of engine power and/or fire due to fuel leak.

Amendment 1 of this AD expands the applicability through addition of aircraft serial numbers and provides additional instructions for compliance in the appendix.

Cessna 170, 172, F172, FR172 and 175 Series Aeroplanes

AD/CESSNA 170/78 Amdt 1 (continued)

The original issue of this AD became effective on 4 September 2006.

David Villiers
Delegate of the Civil Aviation Safety Authority

19 April 2007

Cessna 170, 172, F172, FR172 and 175 Series Aeroplanes

AD/CESSNA 170/78 Amdt 1 (continued)

Appendix: Inspection Instructions

Cessna Aircraft Models 172R & 172S

1. Remove upper and side cowlings to perform torque procedure.

2. Remove all signs of old torque putty or paint.

3. Using a suitable tool loosen the hose end fitting of each joint, while using a suitable tool to restrain the other end fitting of the joint to preclude rotation.

4. Using the applicable fitting torque from Cessna Service Bulletin (SB) No. SB07-71-01, Revision 1, dated 16 March 2007 or later FAA approved revisions, torque the hose end fitting to the proper torque, while using a suitable tool to restrain the other end fitting of the joint to preclude rotation.

5. After proper torque has been applied to the hose end fitting, apply the applicable torque paint or putty to the hose end fitting joint.

6. If during any torque procedure any of the non-hose end fittings rotate, stop the torque procedure. Totally disconnect the hose end joint and remove any fitting that has rotated. After the cleaning, visual examination, and/or replacement of the fitting and/ or any seals or sealant, reinstall the fitting and torque it to the applicable requirement. Then reconnect the hose end fitting and repeat Step 4 to step 6 of this appendix, as applicable.