
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.

Radio Communication and Navigation Equipment

AD/RAD/89**Funwerk Avionics GmbH TRT800A
and TRT800H Transponders****5/2009**

Applicability: Mode-S transponders manufactured by Funkwerk Avionics GmbH (formerly Filser Electronic GmbH), except those marked Mod-Index 10 as follows:

- Model TRT800A, all part numbers (P/N), serial numbers (S/N) up to and including 40539908, and
- Model TRT800H, all P/N, S/N up to and including 30250007.

Note 1: These transponders are known to be installed on, but not limited to, the following aircraft types:

<i>Manufacturer</i>	<i>Model</i>
<i>APEX (Robin)</i>	<i>DR1050, DR250, DR350 and DR400 series</i>
<i>Cessna (including Reims Aviation in France)</i>	<i>150, 172, 182, 210, T303 and 337 series</i>
<i>Diamond Aircraft Industries</i>	<i>DV 20</i>
<i>Extra</i>	<i>EA-300 series</i>
<i>Grob</i>	<i>G 109 B powered sailplane and G 115 series</i>
<i>Mooney</i>	<i>M20J</i>
<i>Piper</i>	<i>PA-28 series</i>
<i>Scheibe</i>	<i>SF 25 C Powered Sailplanes</i>
<i>True Flight Holdings (Grumman, American)</i>	<i>AA-5B</i>

- Requirement:**
1. Replace the affected transponder with a unit that has been modified in accordance with Funkwerk Avionics Service Bulletin (SB) TRT800-A-H-1 Revision 1.04 dated 17 October 2008 or later revision approved by the European Aviation Safety Agency (EASA).
 2. Transponders, as identified in the Applicability Statement, may not be installed on any aircraft, unless it has been modified in accordance with SB TRT800-A-H-1 Revision 1.04 or later revision approved by the EASA.

Note 2: EASA AD 2008-0183 refers.

Compliance: For Requirement 1 - Before 19 November 2010.

Radio Communication and Navigation Equipment

AD/RAD/89 (continued)

For Requirement 2 - After 18 November 2010.

This Airworthiness Directive becomes effective on 7 May 2009.

Background: EASA has received reports of intermittent loss of detection on Mode-S Secondary Surveillance Radar (SSR) of aircraft equipped with Funkwerk Avionics TRT800A Transponders. Reports from Air Navigation Service Providers (ANSP), as well as data from flight trials, have shown that the unit fails to perform as expected.

Based on the information provided in the reports, EASA has determined that operation of these transponders in airspace where Mode S interrogations are used by the ground systems could create disruptions in the Air Traffic Management process, potentially compromising aircraft safety.

Whilst very few TRT800 transponders are known to be in Australia, CASA has decided to issue this Directive which requires the modification of affected transponders and limits their installation in aircraft after 18 November 2010.



James Coyne
Delegate of the Civil Aviation Safety Authority

26 March 2009