

PINK

UNITED KINGDOM

AERONAUTICAL INFORMATION CIRCULAR

EASA AIRWORTHINESS DIRECTIVE No: 2008-0158 – OPERATIONAL LIMITATIONS FOR FUNKWERK AVIONICS TRT600 AND TRT 800 MODE S TRANSPONDERS

1. Introduction

1.1 The European Aviation Safety Agency (EASA) has received reports of intermittent loss of detection on Mode S Secondary Surveillance Radar (SSR) of aircraft equipped with Funkwerk Avionics GmbH TRT800A SSR transponders. Reports from Air Navigation Service Providers (ANSPs), 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 these transponders do not comply with the prevailing airworthiness requirements. Operation of these transponders in airspace where Mode S interrogations are used by the ground systems could create disruption to the Air Traffic Management process, potentially compromising aircraft safety.

1.2 Therefore, pending the availability of a modification that is being developed by Funkwerk Avionics GmbH, EASA Airworthiness Directive (AD) No: 2008-0158 has been issued, which requires the implementation of an operational limitation on all aircraft equipped with Funkwerk Avionics Mode S transponders, an associated amendment to the Aircraft Flight Manual (AFM), and the installation of an appropriate placard in full view of the pilot(s). The EASA AD is effective from 4 September 2008.

1.3 The purpose of this AIC is to reinforce information detailed in EASA AD No: 2008-0158 and to set out how the operational limitations for aircraft equipped with Funkwerk Avionics Mode S transponders are being applied in UK airspace.

2. Requirements of EASA AD No: 2008-0158

2.1 EASA AD No: 2008-0158 applies to all part numbers and all serial numbers of the following models of Funkwerk Avionics GmbH (formerly Filser Electronic GmbH) Mode S transponders: TRT600, TRT800, TRT800A and TRT800H. These transponders are known to be installed on, but not limited to, aircraft certificated (validated) under EASA Certification Specifications CS-22 or CS-23, or under equivalent national standards of EU Member States prior to 28 September 2003.

2.2 EASA AD No: 2008-0158 requires operators of aircraft equipped with the aforementioned transponders to accomplish the following by 11 September 2008:

- (a) Amend the applicable AFM, Limitations section, to include the following:

“Do not operate this aircraft in airspace where a transponder is required and Mode S interrogation is used by the ground system, unless accepted by the relevant ANSP(s) prior to entering this airspace”.

This may be accomplished by inserting a copy of the AD into the AFM, ‘Limitations’ section.

THE AIC BELOW CONTAINS IMPORTANT INFORMATION REGARDING FUNKWERK/FILSER TRANSPONDERS. THE CONDITIONS OF THE AIC/AD ARE EFFECTIVE IMMEDIATELY; THE AIC IS DUE TO BE PUBLISHED DECEMBER 2008

- (b) Install a placard in full view of the pilot(s), with the following instructions:

“Do not operate this aircraft in airspace where a transponder is required and Mode S interrogation is used by the ground system, unless accepted by the relevant ANSP(s) prior to entering this airspace”.

2.3 No person may operate an aircraft to which an EASA AD applies, except in accordance with the requirements of that AD unless otherwise specified by EASA or agreed with the Authority of the State of Registry.

3. Application of the Requirements of EASA AD No: 2008-0158 in UK Airspace

3.1 It is considered unlikely that pilots will be aware of when and where their aircraft are being interrogated by Mode S ground systems. Therefore, it has been decided that the limitations of EASA AD No: 2008-0158 will be applied in all UK airspace where the carriage and operation of a Mode S transponder is currently mandatory. Consequently, in order to ensure that the requirements of EASA AD No: 2008-0158 are met, aircraft equipped with the Funkwerk/Filser Mode S transponders listed at paragraph 2.1 shall **not** be operated within the following UK airspace:

- (a) Controlled Airspace of classification A to C;
- (b) Controlled Airspace of classification D and E under Instrument Flight Rules;
- (b) Airspace at and above Flight Level 100;
- (c) Notified Transponder Mandatory Zones.

3.2 Pilots of aircraft equipped with the Funkwerk/Filser Mode S transponders listed at paragraph 2.1 may still conduct flights within Class D Controlled Airspace under Visual Flight Rules (VFR) when cleared by the appropriate ATS Units, and in Class E Controlled Airspace under current arrangements for access by VFR flights. However, in these circumstances, the Funkwerk/Filser transponders shall remain switched off while flying within the classification D and E Controlled Airspace unless otherwise instructed by ATC. If the situation arises where ATC asks a pilot of an aircraft equipped with a Funkwerk/Filser transponder to “squawk”, the pilot shall warn the controller of the possibility of receiving spurious radar returns from the transponder.

3.3 Once a suitable modification for the Funkwerk/Filser Mode S transponders is available, EASA will issue a subsequent AD that will set out the rectification action necessary to constitute terminating action to EASA AD No: 2008-0158. Operators compliant with this subsequent EASA AD would no longer be subject to the limitations set out above.

4. Further Information

4.1 Further information or guidance may be obtained from:

Head - Surveillance and Spectrum Management
Directorate of Airspace Policy
Civil Aviation Authority
CAA House
45-59 Kingsway
London
WC2B 6TE

**THE AIC BELOW CONTAINS IMPORTANT INFORMATION REGARDING FUNKWERK/FILSER
TRANSPONDERS. THE CONDITIONS OF THE AIC/AD ARE EFFECTIVE IMMEDIATELY; THE
AIC IS DUE TO BE PUBLISHED DECEMBER 2008**

Tel: 020 7453 6530
Fax: 020 7453 6565

4.2 Enquiries to EASA regarding AD No: 2008-0158 should be directed to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA; E-mail ADs@easa.europa.eu.

4.3 Any questions concerning the technical content of the requirements in EASA AD 2008-0158 should be directed to:

Funkwerk Avionics GmbH,
Gewerbestrasse 2, D-86875, Waal,
Federal Republic of Germany
Telephone +49 (0)8246 96 99 0, Fax: +49 (0)8246 1049
E-mail service@funkwerk-avionics.com
Website: <http://shop.funkwerk-avionics.com>

This circular is issued for information, guidance and necessary action.