Inspectie Verkeer en Waterstaat

Civil Aviation Authority Netherlands
Airworthiness Directive

Nr. NL-2008-001

Date: 1 September 2008
Type Approval Holder: Funkwerk Avionics GmbH (Formerly Filser)
Type/Model designation(s): TRT600 and TRT800 series transponders
ETSO Approvals: LBA 10.930\063NTS, EASA.21O.045, EASA.21O.268, EASA.21O.269

Caution

This Airworthiness Directive is issued by the Minister of Transport, Public Works and Water Management in accordance with the Aviation Act 2001 (Wet Luchtvaart), Article 3.22. Airworthiness Directives affect aviation safety. These are regulations which require immediate attention. No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements thereof, unless otherwise agreed with the Authority of the State of Registry (EC2042/2003, M.A.201 & M.A.303).

THIS AIRWORTHINESS DIRECTIVE IS PUBLISHED BY THE CAA-NL:
• Acting as Airworthiness Authority (ICAO Annex 8) as the State of Registry

Supersedure: Not applicable

Subject: ATA 34 – Navigation – Mode-S Transponders – Limitation

Applicability: All aircraft as referred to in Annex II of the EC Basic Regulation 216/2008 (historic aircraft, amateur built aircraft, micro light aircraft) equipped with Funkwerk Avionics GmbH (Former Filser) TRT600, TRT800, TRT800A and TRT800H Mode-S transponders, all part numbers, all serial numbers.

Reason: CAA-NL has received reports of intermittent loss of detection on Mode-S Secondary Surveillance Radar (SSR) of aircraft equipped with Funkwerk Avionics transponders. These transponders are approved by EASA under Part 21. EASA has already issued EASA airworthiness directive 2008-0158, dated 21 August 2008 addressing the problems with these transponders for the aircraft under their responsibility. Since the transponders are known to be installed in aircraft which are certificated under national standard, this national AD is issued.

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, CAA-NL 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 disruptions in the Air Traffic Management process, potentially compromising aircraft safety. For the reason described above, pending the availability of a modification that is being developed by Funkwerk Avionics, this AD requires the implementation of an operational limitation on all aircraft equipped with these transponders, and the installation of a placard in full view of the pilot(s).

Effective date: 04 September 2008

Mandatory Actions and Compliance Times:

Required as indicated, unless accomplished previously.

Within 7 days after the effective date of this AD, accomplish the following:

(1) Amend the applicable Aircraft Flight Manual (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 this AD into the AFM, section Limitations.

(2) 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".

Referenced Publication(s):

None.

Note: Reports from Air Navigation Service Providers (ANSP), as well as data from flight trials, have shown the intermittent loss of detection on Mode-S Secondary Surveillance Radar (SSR) of aircraft equipped with Funkwerk Avionics (former Filser) transponders. The AC-mode function from these transponders was constantly detectible. In regions where only S-mode surveillance is active, the air traffic controllers cannot provide assistance. In The Netherlands the ANSP works with mixed surveillance, so the air traffic controllers will always have information on their screen about the whereabouts of an aircraft, only the S-mode "label" is not shown all the time. This fact alone does not raise safety issues. Neither is there a safety issue for the functioning of the TCAS-ACAS system, because it uses AC-information.
Individual acceptance by the ANSP for each airspace entry will result in a high workload for the air traffic controllers. A general acceptance for airspace entry with Filser transponders is being developed by the LVNL and The Ministry of Defence for Dutch airspace. The acceptance will be notified to the airspace users by AIC-B and NOTAM. This could also be the fact in other foreign airspace.

Remarks :

- For any question concerning the technical content of the requirements in this AD, please contact: 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
- Compliance with this directive must be recorded in the proper Aircraft Log Book(s).
- Where applicable, the requirements of this directive must be integrated into the aircraft's Maintenance Schedule.

Address inquiries concerning this AD to : Civil Aviation Authority, Unit Object Permits, P.O. Box 575, 2130 AN Hoofddorp, The Netherlands; telephone +31-70-4562839; facsimile +31-70-4563006; e-mail Info.Register@ivw.nl.