



COMMENT RESPONSE DOCUMENT
EASA PROPOSED AIRWORTHINESS DIRECTIVE (PAD) No. 08-114R1
 CLOSED FOR COMMENTS ON: 31 March 2009

PARAGRAPH OR SECTION COMMENTED	COMMENT / PROPOSAL	AUTHOR OF THE COMMENT	DATE OF COMMENT	PCM RESPONSE
Applicability	<p>Tyrolean Airways is operating a fleet of 11 DHC-8-300 aircraft equipped with TDR-94D transponders (p/n 622-9210-007) and Honeywell AZ810 air data computers. Hence, this proposed AD would be applicable to our fleet, but we have been granted an exemption for the Mode S EHS requirement on these aircraft.</p> <p>The applicability section of the AD should state, that a modification/replacement is not required for aircraft with exemption.</p>	Thomas Bürgler, Tyrolean Airways	06/03/2009	Partially Agreed: In general, aircraft which are declared non-EHS are exempt from the requirements of this AD. There are cases though where aircraft which are declared non-EHS because they cannot transmit all EHS parameters, do transmit a limited subset of EHS parameters. If that is the case, those parameters shall be properly transmitted and meet the requirements of this AD. The wording in the AD will be revised to reflect this.
General, Applicability, etc.	<p>Following the broadcasting of the new revision of the PAD 08-114, please find hereafter the AIRLINAIR response.</p> <ul style="list-style-type: none"> - The manufacturer ATR send you, following the broadcasting of this PAD at revision 0 several comments that you have taken no account. - In applicability paragraph, what is the part number of the ADC AZ800 & AZ810 type offending in the incident reports. - What is the offending technical function in the incident reports & what is the link between this problem and a transponder P/N 622-9210-007 not use in MODE-S EHS configuration. (The TDR-94D P/N 622-9210-007 is the ATR standard without MODE-S EHS capability). 	Cédric Boullet, Airlinair	13/03/2009	<ul style="list-style-type: none"> - Not Agreed: Our response to the comments provided by ATR for the first term, have been published in the CRD to PAD 08-114. - See response to comments issued by Marion Choudet of ATR in the EASA CRD to PAD 08-114. - A description of the problem which leads to an unsafe condition is provided in the 'Reason'-section of the (P)AD. The relationship with non-EHS transponder systems is

	<p>- After analyzing and verifying the interpretation with the authorities, it appears that all ATC P/N 622-9210-007 not coupled in a MODE-S (EHS) system has no subject to be modified.</p> <p>- It would be possible to, if we refer to §1 to this PAD, to select the P/N 622-9210-007 for a single use MODE-S (ELS) on our A/C which are not MODE-S (EHS).</p> <p>- For the same problem, HONEYWELL compliance to operators 4 years to retrofit all MST-67A (see AD EU-2008-0159 rev00). Why in this AD is there a compliance time of 12 months if you take an interval of 6 months between the first edition of the PAD & the second one. What is the legitimacy of this AD; is there a true [unsafe] condition?</p> <p>- Our position is very clear to this subject: we do not want to perform this ATC upgrade (5504.00 USD per transponder) for a parameter we do not need on MODE-S (ELS) configuration!</p> <p>For [your] information, the cost for all our fleet is 5504,00 USD x 50 equipments => 275 200,00 USD.</p>			<p>explained below.</p> <p>- Partially Agreed: In general, aircraft which are declared non-EHS are exempt from the requirements of this AD. There are cases though where aircraft which are declared non-EHS because they cannot transmit all EHS parameters, do transmit a limited subset of EHS parameters. If that is the case, those parameters shall be properly transmitted and meet the requirements of this AD. The wording in the AD will be revised to reflect this.</p> <p>- Correct, provided none of the EHS parameters are being transmitted.</p> <p>- Not Agreed: For each safety issue requiring an AD, EASA performs an analysis of the risk, and an assessment of possible mitigations of each risk. Based on the analysis and assessment, EASA determines the compliance time(s). The problems with the Honeywell transponder allowed for an 18 month compliance period, not 4 years.</p> <p>- Noted.</p>
Required Action(s) & Compliance Time(s)	<p>Find below ATR comments to PAD 08-114R1</p> <p>1/According to the reason written, the “unsafe condition” only concerns aircraft equipped with a transponder that transmits the selected altitude. The transmission of this parameter is only required for operation in Mode-S EHS airspace.</p>	Marion Choudet, ATR	27/03/2009	1/ Agreed. If the selected altitude parameter is not being transmitted, then the requirements of the AD are not applicable. The wording in

<p>Most of ATR aircraft equipped with transponder P/N 622-9210-007 or 622-9210-108 do not have the Mode S EHS capability. For those aircraft, the selected altitude is not transmitted by the transponder for the simple reason that it is not an input to the transponder.</p> <p>If the PAD remains as is, it would make mandatory the modification of transponders on aircraft on which the unsafe condition CANNOT exist. Considering the cost of such a modification and the compliance time, this is not acceptable. EASA must only address the "unsafe condition" and not impose a costly and constraining modification on aircraft that are not concerned by the unsafe condition.</p> <p>Therefore ATR suggest EASA to review the applicability and corrective actions of this PAD.</p> <p>An AD prohibiting the use of concerned P/N for mode S EHS capability would be better.</p> <p>2/ 12 months for the compliance time is unrealistic considering that "approved aeroplane modification instructions" are not yet available for all aeroplane concerned. As to ATR, we need at least 4 to 6 months to review P/N 622-9210-409 performance with regards to our technical specification, perform qualification tests, certify the installation of this new P/N, issue the Service Bulletin for in-service aircraft retrofit and have an adapted logistic policy with the supplier. In addition, even if the P/N was already certified on ATR aircraft, the 12 months requirement would generate a significant cost burden for operators concerned, in a very short period. And finally, we raise the question: is the 12 months compliance time really justified by the "unsafe condition" identified?</p> <p>Consequently, we ask EASA first to delay the issuance of this AD to a date when all approved aeroplane modification instructions will be available.</p> <p>And we also ask EASA to review the compliance time let to operators to modify their aircraft, taking in consideration data such as, probability of occurrence of incorrect selected altitude transmitted, fleet of aircraft concerned (only those having the EHS capability), exposure time to the unsafe condition during a flight, number of flight hours performed by the fleet concerned vs. number of reported transponder failures.</p> <p>3/ The EHS capability is performed on ATR aircraft through modification n° 05570. With this modification, transponder input data are coming from both the ADC and the MPC. According to tests performed on our aircraft, it seems that the selected altitude</p>		<p>the AD will be revised to reflect this.</p> <p>2/ Not Agreed: A 12 month compliance period is considered sufficient, taking into consideration that the initial version of this PAD was already issued in October 2008.</p> <p>3/ Partially agreed. ATR aeroplanes on which the affected transponder and ADC installation has been done in</p>
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	<p>parameter used by the transponder is the one from the MPC, with no identified anomaly. We have asked Rockwell Collins to confirm this and we are waiting for their answer. If Rockwell Collins can confirm this, then it would mean that all ATR aircraft with EHS capability, fitted with modification n°05570 (or associated SB ATR42-34-0165 & ATR72-34-1092) could be excluded from the applicability of this AD.</p> <p>We request EASA an additional delay in order to obtain this information.</p>			<p>accordance with an ATR design definition, although equipped with transponders and Honeywell AZ800 or AZ810 ADC as listed in the Applicability section of this AD, are exempt from having to meet the requirements of this AD, since on these aeroplanes' original architecture, the Selected Altitude is not provided by the ADC. The Final AD has been amended accordingly.</p>
Applicability	<p>EASA PAD 08-114 R1 is applicable to Rockwell Collins Mode S Transponders P/N 622-9210-007 and 622-9210-108 when installed on aircraft equipped with Honeywell AZ800 or AZ810 Air Data Computers. This combination is applicable to ATR 42 and ATR 72 aircraft. Aer Arann has a suggestion/concern with this PAD.</p> <p>The reason for this PAD is due to an incorrect transmission of the Mode S Enhanced Surveillance Selected Altitude Parameter. Therefore, presumably, it does not affect aircraft which only have Elementary Surveillance Mode S installed, which can be in accordance with a Eurocontrol exemption.</p> <p>Consequently, Aer Arann request that EASA issue the associated Airworthiness Directive with a statement in the applicability statement "This AD is not applicable to aircraft not equipped with Mode S Enhanced Surveillance", or words to that effect.</p>	Rory Hensey, Aer Arann	31/03/2009	<p>Partially Agreed: In general, aircraft which are declared non-EHS are exempt from the requirements of this AD. However, there are cases where aircraft which are declared non-EHS do transmit a limited number of EHS parameters. If that is the case, those parameters shall be properly transmitted and must meet the requirements of this AD. The wording in the AD will be revised to reflect this.</p>