EASA

AIRWORTHINESS DIRECTIVE



AD No: 2007-0156

[Corrected: 14 June 2007]

Issued: 31 May 2007

No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.

Type Approval Holder's Name:

Type/Model designation(s):

Honeywell International, Inc.

Comm Units and Mode S Transponders

ETSO Authorization Number: Various, including EASA.21O.006 (for XS-857A) and

EASA.21O.012 (for RCZ-8XX).

Foreign AD: United States FAA 2006-19-04

Supersedure: This AD supersedes and cancels EASA AD 2005-0021.

ATA 23

Communication – Comm Units & Transponders – Modification / Replacement

Manufacturer(s):

Honeywell International, Inc. [and any predecessor company]

This Airworthiness Directive (AD) applies to:

- (1) RCZ-833J part numbers (P/Ns) 7510700-763 and -863; RCZ-833K P/Ns 7510700-765 and -875; RCZ-851J P/N 7510700-813; RCZ-851K P/N 7510700-815; and RCZ-854J P/Ns 7510700-725 and -825 Communication Units; and
- (2) XS-856A P/Ns 7517400-865 and -885; XS-856B P/Ns 7517400-866 and -886; and XS-857A P/Ns 7517400-876 and -896 Mode S Transponder Units.

Applicability:

The referenced equipment is known to be installed on, but not limited to the following aeroplanes:

BAE Systems (Operations) Ltd. Jetstream 4100 series;

Bombardier BD-700-1A10 and BD-700-1A11; Cessna Model 525, 550, 560 and 650 series;

Dassault Model Falcon 900EX and Falcon 2000EX series;

EMBRAER Model EMB-135 and -145 series:

Learjet Model 45;

Lockheed Model 382G series;

Raytheon Model Hawker 800, Hawker 800XP, and Hawker 1000 series.

Reason:	A design deficiency causes the transponder to revert to standby mode if a change of the 4096 ATC code (also referred to as the Mode A code) is not completed within 5 seconds. As a consequence, the SSR radar symbol and label associated with the aircraft's position will no longer be shown on the ATC ground radar display. Also, aircraft collision avoidance systems (ACAS) on board own and other aircraft will be compromised. Current operational procedures, typically, do not require the crew to recheck the transponder status after changing the 4096 ATC Code. This type of failure will increase ATC workload and will result in improper functioning of ACAS. EASA AD 2005-0021 was issued to require modification within 9 months of P/N 7510700-725, -763, -765, -813, -815, -825, -863 and -875 Communication units, or replacement thereof with modified units. This AD takes over this requirement for those P/N's and adds the P/N 7517400-865, -866, -876, -885, -886 and -896 Mode S Transponder Units now addressed by FAA AD 2006-19-04. This AD is republished to correct some typographical errors in referenced ASB numbers and to clarify that some ASB numbers refer to the same actual document(s).
Effective Date:	14 June 2007
Compliance:	Unless accomplished previously in accordance with either EASA AD 2005-0021 or FAA AD 2006-19-04, compliance is required as follows: (1) For aeroplanes equipped with Honeywell RCZ-833J, RCZ-833K, RCZ-851J, RCZ-851K or RCZ-854J Communication Units, P/N's as listed in part (1) of the applicability section of this directive: (a) Within 5 days after 01 August 2005 [the effective date of EASA AD 2005-0021], amend the applicable Airplane Flight Manual, Normal Procedures Section, to include the following statement: "After completion of any 4096 ATC Code change (also referred to as Mode A Code), check the status of the transponder. If the transponder indicates that it is in standby mode, re-select the desired mode (i.e. the transponder should be in the active mode)." (b) Within 9 months after 01 August 2005 [the effective date of EASA AD 2005-0021], modify the affected Communications Units in accordance with the instructions contained in Honeywell Alert Service Bulletin (ASB) A24-3851-002 or ASB A21-3851-005, as applicable; Note 1: Accomplishment of the modification or replacement with a modified unit in accordance with the instructions contained in Honeywell ASB 7510700-23-A0048 and, as necessary, ASB 7517400-23-A6015 Revision 001 is an acceptable alternative to the requirements of paragraph (1)(b) of this directive. (c) Concurrently with the modification or replacement as required by paragraph (1)(b) of this directive, but not later than 9 months after the effective date of this directive, replace the XS-852E/F mode S transponder of the COM unit with a new or modified XS-852E/F mode S transponder of the COM unit with a new or modified XS-852E/F mode S transponder that has MOD V installed, in accordance with Honeywell Alert Service Bulletin 7510700-23-A0047 Revision 001, dated July 29, 2005. (2) For all airplanes, unless already accomplished in accordance with paragraph (1)(a) of this directive: (a) Within 5 days after the effective date of this directive, amend the applicable Airplane Flight Manual, Normal Pr

	"After completion of any 4096 ATC Code change (also referred to as Mode A Code), check the status of the transponder. If the transponder indicates that it is in standby mode, re-select the desired mode (i.e. the transponder should be in the active mode)." (3) For aircraft equipped with Honeywell XS-856A, XS-856B or XS-857A
	Mode S Transponder Units , P/N's as listed in part (2) of the applicability section of this directive:
	(a) Unless already accomplished in accordance with the requirements of FAA AD 2006-19-04, within 9 months after the effective date of this directive, replace the modification plate of the transponder with a new plate and test the transponder, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7517400-23-A0017, dated January 23, 2006. If the transponder fails the test, before further flight, reinstall MOD Y into the transponder as specified in paragraph (3)(b) of this directive.
	(b) Before or concurrently with the actions required by paragraph (3)(a) of this directive, install MOD Y into the applicable mode S transponder, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7517400-23-A6016, dated August 30, 2005.
	(4) After accomplishing the replacements or modifications required by paragraph (1)(b) and/or (2)(b) and (3) of this directive, as applicable, the AFM amendment required by paragraph (1)(a) and/or (2)(a) of this directive may be removed from the AFM.
Ref. Publications:	Honeywell Technical Newsletter A23-1146-004; Honeywell Alert Service Bulletin (ASB) A24-3851-002 [7510700-23-A6046]; Honeywell ASB A21-3851-005 [7510700-23-A0047]; Honeywell ASB 7510700-23-A0047 Rev.1; Honeywell ASB 7510700-23-A0048; Honeywell ASB 7517400-23-A0017; Honeywell ASB 7517400-23-A6015 Rev.1; Honeywell ASB 7517400-23-A6016; or later approved revisions thereof.
Remarks :	 If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD.
	 This AD was posted on 14 May 2007 as PAD 07-085 for consultation until 28 May 2007. No comments were received during the consultation period.
	 Enquiries regarding this AD should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail ads@easa.europa.eu.
	 For any question concerning the technical content of the requirements in this AD, please contact: Honeywell International, Inc., Customer Service Technical Operations Center, 21111 N. 19th Avenue, Phoenix, Arizona 85027-2708, United States of America; telephone (USA and Canada) 1-800-601-3099 or (International) 1-602-365-3099.