EASA

EMERGENCY AIRWORTHINESS DIRECTIVE



AD No: 2007-0200-E

Date: 30 July 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):

Moravan Aviation s.r.o

Z 42, Z 142 and Z 242 series

TCDS Number: EASA A.027

Foreign AD: Not applicable

Supersedure: Czech CAA AD No.T-098/2000, T-099/2000R1, T-100/2000R1, T-101/2000R1,

T-004/2001R1 and T-068/2003

ATA 04, 57	Introduction of new Airworthiness- and Operating Limitations
A1A 04, 31	Introduction of new An worthiness- and Operating Limitations
Manufacturer(s):	Moravan Aviation s.r.o (formerly Moravan n.p, Moravan a.s, MORAVAN - AEROPLANES a.s)
Applicability:	Zlin Z 42, Z 42M, Z 42MU, Z 142, Z 142C and Z 242L aircraft, all serial numbers without the wing reinforcement modification
Reason:	Installation of G-load monitoring units on some Zlin Z 42 series aircraft has revealed that the real intensity of aerobatic operation of some aircraft considerably exceeded the original expectations that had been used to determine the operational limitations. As a result, these aircraft exceeded the calculated 'total limit load' spectra and limit design aerobatic load spectrum.
	Further investigations determined the need to prohibit operations under the Aerobatic ("A") category for Zlin Z 42 series aircraft with non-reinforced wings and the need to replace some airframe/wing attachment parts to maintain airworthiness of these aircraft in the long term.
	For the reason described above, this Emergency Airworthiness Directive (EAD) prohibits "A" category flights for Zlin Z 42 series aircraft with non-reinforced wings, restricts certain aircraft to Normal ("N") category operations, limits to 190 Flight Hours (FH) the time that can be flown under "A" and Utility ("U") categories and introduces new life limits and new inspections requirements to be inserted into the operators' maintenance programmes.
Effective Date:	01 August 2007

1. For aircraft having accumulated more than 190 FH Time in "A + U" category:

Before further flight after the effective date of this directive:

- **1.1** Modify the Aircraft Fight Manual (AFM) to introduce **prohibition of operations under the "A" and "U" categories** and to introduce the **pre-flight inspection of the upper wings bolts** of the airframe/wing attachment as instructed in the paragraph (§) 4.1.4 for Z 42 and Z 142 aircraft and in the § 4.4 for Z 142C and Z 242L aircraft of the referenced MORAVAN Mandatory Service Bulletin (MSB), as applicable to type;
- **1.2** Install a placard in the cockpit in full view of the pilot, without risk of being inadvertently removed or hidden, to introduce the following information:

AEROBATIC & UTILITY FLIGHTS PROHIBITED

- **Note 1**: Inserting a copy of this AD into the AFM is considered as acceptable to comply with the requirements of § 1.1 of this directive.
 - **1.3** Accomplish all actions as instructed in the § 4.1.2 for Z 42 and Z 142 aircraft and in the § 4.2 for Z 142C and Z 242L aircraft of the referenced MORAVAN Mandatory Service Bulletin (MSB), as applicable to type;
- **Note 2**: After compliance with § 1.3 of this AD, "N" category flights only may be resumed until the aircraft reaches its service life of 3 600 FH.
 - **1.4** At the next "B" check, "C" check or "Overhaul" check, whichever occurs first after the effective date of this AD, accomplish all actions as instructed in the § 4.1.3 for Z 42 and Z 142 aircraft and in the § 4.3 for Z 142C and Z 242L of the referenced MORAVAN Mandatory Service Bulletin (MSB), as applicable to type;

Compliance:

2. For aircraft having accumulated 190 FH Time or less in "A + U" category:

- **2.1** Before further flight after the effective date of this directive, modify the AFM to introduce **prohibition of operations under the "A" category** and to introduce the **pre-flight inspection of the upper wings bolts** of the airframe/wing attachment as instructed in the § 4.1.4 for Z 42 and Z 142 aircraft and in the § 4.4 for Z 142C and Z 242L aircraft of the referenced MORAVAN Mandatory Service Bulletin (MSB), as applicable to type;
- **2.2** Before further flight after the effective date of this directive, install a placard in the cockpit in full view of the pilot, without risk of being inadvertently removed or hidden, to introduce the following information:

AEROBATIC FLIGHTS PROHIBITED

- **Note 3**: Inserting a copy of this AD into the AFM is considered as acceptable to comply with the requirements of § 2.1 of this directive.
 - **2.3** Upon accumulating 190 FH in "**A + U**" category, replace the placard installed as required by § 2.2 of this directive with another one, in full view of the pilot, without risk of being inadvertently removed or hidden, to introduce the following information:

AEROBATIC & UTILITY FLIGHTS PROHIBITED

- **2.4** At the next "C" check or "Overhaul" check, whichever occurs first after the effective date of this directive, accomplish all actions as instructed in the § 4.1.3 for Z 42 and Z 142 aircraft and in the § 4.3 for Z 142C and Z 242L of the referenced MORAVAN Mandatory Service Bulletin (MSB), as applicable to type;
- **Note 4**: After compliance with § 2.3 and § 2.4 of this AD, "N" category flights only may be resumed until the aircraft reaches its service life of 3 600 FH.

	Note 5: After accomplishment of the instructions contained in § 4.2 of the referenced MORAVAN Mandatory Service Bulletin (MSB) Z42/55a and Z142/54a, as applicable, Z 42, Z42M, Z42MU and Z 142 aircraft can be operated beyond the 3 600 FH service life limit, up to the new 4 800 FH service life limit in the Normal category only.
	3. For all affected aircraft:
	Within 60 days after the effective date of this directive, update the approved Operator's maintenance programme to insert the new requirements introduced in § 4.1.3 and § 4.1.4 for Z 42 and Z 142 aircraft and in the § 4.3 and § 4.4 for Z 142C and Z 242L of the referenced MORAVAN Mandatory Service Bulletin (MSB), as applicable to type.
	MORAVAN Mandatory Service Bulletins:
Ref. Publications:	Z42/55a for Z42, Z42M and Z42MU aircraft; Z142/54a for Z142 aircraft; Z142C/31a for Z142C aircraft; and Z242L/51a for Z242L aircraft; at original issue or later approved revisions of these documents.
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.
	The safety assessment has requested not to implement the full consultation process and an immediate publication and notification
	 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: MORAVAN AVIATION s.r.o. Letiště 1578, 765 81 Otrokovice, Czech Republic; telephone +420 57 608 3940; Fax +420 57 608 3009; E-mail: zlinservice@zlinaircraft.cz