AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/Z-242L/3 Amdt 1 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Moravan Zlin Z-242L Series Aeroplanes

AD/Z-242L/3 Airworthiness and Operating Limitations 10/2007 Amdt 2 DM

Applicability: Model Z 242L aircraft, all serial numbers, without the wing reinforcement

modification incorporated.

Requirement: 1. For aircraft that have accumulated more than 190 flight hours in Aerobatic plus Utility category:

- a. Modify the Aircraft Flight Manual (AFM) to introduce prohibition of operations under the Aerobatic and Utility categories and to introduce the pre-flight inspection of the upper wing bolts of the airframe/wing attachment in accordance with paragraph 4.4 of Moravan Mandatory Service Bulletin Z 242L/51a original issue, or later EASA approved revision.
- b. 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 Directive into the AFM is considered as acceptable compliance with Requirement 1.a. of this Directive.

c. Accomplish the requirements of paragraph 4.2 of Moravan Mandatory Service Bulletin Z 242L/51a original issue, or later EASA approved revision.

After compliance with Requirement 1.c. of this Directive, Normal category flights may be resumed and continued until the aircraft service life of 3,600 flight hours is reached.

- d. Accomplish the requirements of paragraph 4.3 of Moravan Mandatory Service Bulletin Z 242L/51a original issue, or later EASA approved revision.
- 2. For aircraft that have accumulated 190 flight hours or less in Aerobatic plus Utility category:

Moravan Zlin Z-242L Series Aeroplanes

AD/Z-242L/3 Amdt 2 (continued)

- a. Modify the AFM to introduce prohibition of operations under the Aerobatic category and to introduce the pre-flight inspection of the upper wing bolts of the airframe/wing attachment in accordance with paragraph 4.4 of Moravan Mandatory Service Bulletin Z 242L/51a original issue, or later EASA approved revision.
- b. 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 2: Inserting a copy of this Directive into the AFM is considered as acceptable compliance with Requirement 2.a. of this Directive.

c. Replace the placard installed as required by Requirement 2.b. 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

d. Accomplish the requirements of paragraph 4.3 of Moravan Mandatory Service Bulletin Z 242L/51a original issue, or later EASA approved revision.

After compliance with Requirements 2.c. and 2.d. of this Directive, Normal category flights may be resumed and continued until the aircraft service life of 3,600 flight hours is reached.

3. For all affected aircraft:

Update the approved Operator's Maintenance Program by inserting the new requirements introduced in paragraphs 4.3 and 4.4 of Moravan Mandatory Service Bulletin Z 242L/51a original issue, or later EASA approved revision.

Note 3: EASA Emergency AD 2007-0200-E refers.

Compliance: For Requirements 1.a., 1.b. and 1.c. Before further flight.

For Requirement 1.d: At the next "B" check, "C" check, or "Overhaul" check, whichever occurs first after 2 August 2007.

For Requirements 2.a. and 2.b: Before further flight.

For Requirement 2.c: Upon accumulating 190 flight hours in Aerobatic plus Utility category.

For Requirement 2.d: At the next "C" check or "Overhaul" check, whichever occurs first after 2 August 2007.

Moravan Zlin Z-242L Series Aeroplanes

AD/Z-242L/3 Amdt 2 (continued)

For Requirement 3: Within 60 days after 2 August 2007.

This Amendment becomes effective on 2 August 2007.

Background:

The Czech CAA received a report of a wing failure on a Model Z-142 aircraft. As a result, a restriction was placed on aerobatic and spinning manoeuvres until a NDI inspection of the wing spar attachment fittings was accomplished.

The Czech CAA also required certain limitations due to the detection of aircraft operating at variance with conditions on which the technical service life of the airframe is based. These limitations were reflected in AD/Z-242L/4.

Amendment 1 was issued in response to a revision of the related Czech AD and a revision of an FAA AD which required replacement of the wings after a certain operational time. The initial issue of the FAA AD resulted from mandatory continuing airworthiness information issued by the Czech CAA. The restrictions only took account for the aerobatic load spectrum and did not account for the aerobatic frequency. The restrictions also addressed the life limit of the wings when they should have addressed the life limit of the entire airframe (life limit of the aircraft). Although the aerobatic frequency extended the operational times, it more importantly ensured that all aircraft (even those that have not reached the operational limits) are not subject to fatigue cracking caused by exceeding the aerobatic frequency. This Directive required operational restrictions and incorporated the aerobatic frequency; and life limited the aircraft rather than just the wings.

Amendment 2 is issued in response to a new EASA AD, which was prompted by further investigation that has determined the need to prohibit operations under the Aerobatic 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.

This Directive prohibits Aerobatic category flights for Zlin Z 42 series aircraft with non-reinforced wings, restricts certain aircraft to Normal category operations, limits to 190 flight hours the time that can be flown under Aerobatic and Utility categories, and introduces new life limits and new inspection requirements to be inserted into the operator's maintenance programmes.

Moravan Zlin Z-242L Series Aeroplanes

AD/Z-242L/3 Amdt 2 (continued)

The original issue of this Airworthiness Directive became effective on 15 September 1999.

David Villiers

Delegate of the Civil Aviation Safety Authority

1 August 2007