

KOKU-KU-KI-215

No. TCD-7856-2011

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Japan Civil Aviation Bureau

TAIKUSEI-KAIZEN-TSUHO

Airworthiness Directive

The undermentioned examinations or modifications are mandatory.

1. Applies to: Airplanes equipped with seats manufactured by Koito Industries. Except airplanes equipped with seats which comply with airworthiness requirements of the seats.

Note1) NAMC, Airbus, Boeing, Douglas and Fokker Airplanes may be equipped with seats manufactured by Koito Industries, but not limited to.

2. Compliance is required as indicated, unless already accomplished.  
To prevent injuries to flightcrew and passengers result from seats or their components which may not meet to flammability, static strength and dynamic strength criteria, accomplish the following.

2.1 Within 3 years after the effective date of this AD, determine if the seat cushions (here defined as seat bottom and seat back, excluding head and leg rest cushions) are shown to be compliant with Chapter 3 of TAIKUSEI-SHINSA-YORYO(Japanese Airworthiness Standard, hereinafter referred to as YORYO) section 4-10-2-3(equivalent to FAR 25.853(c))(either by original certification basis or post TC modifications of the airplane) in accordance with a method approved by the Director-General of Japan Civil Aviation Bureau(hereinafter referred to as JCAB).

Note2) The test plan shall be approved by JCAB.

Note3) Test specimen shall be constructed from in-service cushions in accordance with FAA Advisory Circular (hereinafter referred to as AC) 25.853-1 or brand new cushions confirmed to conform with in-service

cushions by JCAB.

Note4) Test shall be conducted by Approved Organizations accepted by JCAB (including production organization and design organization approved by FAA or EASA(the same shall apply hereinafter)) or under JCAB supervision. Test facility at Koito under JCAB supervision is usable after May 23, 2011. An independent approval of the seat cushion such as TSO-C72 may be sufficient to show compliance.

2.2 If, as a result of the confirmation by paragraph 2.1 of this AD, seat cushions are not shown to be compliant with YORYO section 4-10-2-3 (equivalent to FAR 25.853(c)), remove, replace or modify the cushions in accordance with a method approved by the Director-General of JCAB, within 3 years after the effective date of this AD.

Note5) Replacement cushions installed on airplanes required to meet YORYO section 3-8-1A(equivalent to FAR 25.562) requirements(either by original certification basis or post TC modifications of the airplane) must have consistent seat bottom stiffness and seat reference point locations in accordance with AC 25.562-1B. However, compliance with YORYO section 3-8-1A-3b(equivalent to FAR 25.562(c)(2)) does not need to be shown.

2.3 Within 2 years after the effective date of this AD, for airplanes required to meet YORYO section 3-8-1A(equivalent to FAR 25.562) requirements (either by original certification basis or post TC modifications of the airplane), determine if the seats are shown to be compliant with paragraph 2.3.1 or 2.3.2 in accordance with a method approved by the Director-General of JCAB.

2.3.1 YORYO section 3-8-1-2c(b) and (c) (equivalent to FAR 25.561(b)(3)(ii) and (b)(3)(iii)) correspond to certification basis of the airplane or certification basis of installing the seats

2.3.2 YORYO section 3-8-1A-2b and 3-8-1A-3g (equivalent to FAR 25.562(b)(2) and (c)(7)

Note6) The test plan shall be approved by JCAB.

Note7) Test specimen shall be seats removed from service, spare seats delivered at same time as in-service seats or brand new seats confirmed to conform with in-service seats by JCAB.

Note8) Test shall be conducted by Approved Organizations accepted by the JCAB or under JCAB supervision.

Note9) The use of similarity is acceptable to show that the results obtained from a chosen test article are valid for other seat part numbers. The methodology shall be approved by the Director-General of JCAB.

Note10) The generation of sharp edges or injurious surfaces during the structural testing performed to comply with this AD is not compliant with the requirement.

2.4 If, as a result of the confirmation by paragraph 2.3 of this AD, seats are not shown to be compliant with paragraph 2.3.1, remove, replace or modify the seats within 2 years after the effective date of this AD.

2.5 If, as a result of the confirmation by paragraph 2.3 of this AD, seats are shown to be compliant with paragraph 2.3.1, determine if the seats are shown to be compliant with paragraph 2.3.2 in accordance with a method approved by the Director-General of JCAB within 6 years after the effective date of this AD.

2.6 If, as a result of the confirmation by paragraph 2.5 of this AD, seats are not shown to be compliant with paragraph 2.3.2, remove, replace or modify the seats within 6 years after the effective date of this AD.

2.7 If, as a result of the confirmation by paragraph 2.3 of this AD, seats are not shown to be compliant with paragraph 2.3.1 nor 2.3.2, remove, replace or modify the seats within 2 years after the effective date of this AD.

2.8 Within 2 years after the effective date of this AD, for airplanes not required to meet YORYO section 3-8-1A(equivalent to FAR 25.562) requirements (either by original certification basis or post TC modifications of the airplane), determine if the seats are shown to be compliant with

YORYO section 3-8-1-2c(b) and (c) (equivalent to FAR 25.561(b)(3)(ii) and (b)(3)(iii)) correspond to certification basis of the airplane or certification basis of installing the seats in accordance with a method approved by the Director-General of JCAB.

Note11) The test plan shall be approved by JCAB.

Note12) New-build test article is acceptable for testing.

Note13) Test shall be conducted by Approved Organizations or under JCAB supervision.

Note14) The use of similarity is acceptable to show that the results obtained from a chosen test article are valid for other seat part numbers. The methodology shall be approved by the Director-General of JCAB.

Note15) The generation of sharp edges or injurious surfaces during the structural testing performed to comply with this AD is not compliant with the requirement.

2.9 If, as a result of the confirmation by paragraph 2.8 of this AD, seats are not shown to be compliant with YORYO section 3-8-1-2c(b) or (c) (equivalent to FAR 25.561(b)(3)(ii) or (b)(3)(iii)), remove, replace or modify the seats within 2 years after the effective date of this AD.

2.10 After the effective date of this AD, excluding paragraph 2.10.1 and 2.10.2, do not install any Koito Industries seats and their components on any airplane, unless in compliance with the requirement of this AD.

2.10.1 Seats and their components may be removed from service and re-installed on airplanes.

2.10.2 New seats and their components may be installed as direct spares for the same part number seats and their components.

2.11 If the seats meet to all applicable paragraph 2.1 through 2.9, excluding seats which comply with all airworthiness requirements of the seats, deface the Specification Approval number and TSO number on placards of the seats, and remove the seats within 10 years after the effective date of this AD.

2.13 An alternative means of compliance with this AD may be used, if approved by the Director-General of JCAB.

### 3. Remarks

3.1 This AD becomes effective on August 1, 2011.