دستورالعمل های هواپیمایی کشوری

Civil Aviation Directive (CAD)
CAD 3608

خصوصیات تایید برای سر و صداهای هواپیما
Certification Specifications for Aircraft Noise

Aircraft Engineering Department

دفتر مهندسی نظارت بر طراحی و ساخت وسایل پرنده

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Civil Aviation Regulation of IR.IRAN
CAD 3608

خصوصیات تایید برای سر و صدا هواپیما
Certification Specifications for Aircraft Noise
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AMENDMENTS
The issue of amendments is announced regularly in the CAO.IRI website, which holders of this publication should consult. The space below is provided to keep a record of such amendments.

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Aircraft Noise

BOOK 1 - Noise requirements
BOOK 2 - Acceptable Means of Compliance and Guidance Material
Forward

1. For the definitions and abbreviations on this Regulation may refer to the CAO.IRI CAD-Definitions.

2. The content of Book 1 is Aircraft Engine Emissions and Fuel Venting requirements and Book 2 is Acceptable Means of Compliance and Guidance Material.
CAO.IRI Certification Specifications

for

Aircraft Noise

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Book 1

Noise requirements
BOOK 1

3608.1 Aircraft noise
(See AMC 36.1 and GM 36.1)

The aircraft must be designed to comply with the applicable noise requirements defined under 21A.18 (a).
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Book 2
Acceptable Means of Compliance
and Guidance Material
AMC 36.1 Aircraft noise

The acceptable means of compliance for aircraft noise are presented in:

(a) for aeroplanes for which Chapter 2 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 1 of CAO IRI ICAS 116 Volume I;
(b) for aeroplanes for which Chapter 3 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 2 of CAO IRI ICAS 116 Volume I;
(c) for aeroplanes for which Chapter 4 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 2 of CAO IRI ICAS 116 Volume I;
(d) for aeroplanes for which Chapter 5 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 2 of CAO IRI ICAS 116 Volume I;
(e) for aeroplanes for which Chapter 6 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 3 of CAO IRI ICAS 116 Volume I;
(f) for helicopters for which Chapter 8 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 2 of CAO IRI ICAS 116 Volume I;
(g) for aeroplanes for which Chapter 10 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 6 of CAO IRI ICAS 116 Volume I;
(h) for helicopters for which Chapter 11 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 4 of CAO IRI ICAS 116 Volume I; and
(i) for aeroplanes for which Chapter 12 of CAO IRI ICAS 116 Volume I, Part II is applicable, Appendix 1 of CAO IRI ICAS 116 Volume I.

GM 36.1 Aircraft noise

Guidance material for the application of the certification specifications for aircraft noise is presented in:

(a) for equations for the calculation of noise levels as a function of take-off mass, Attachment A to ICAS 116 to the Chicago Convention, Volume I;
(b) for evaluating an alternative method of measuring helicopter noise during approach, Attachment D to ICAS 116 to the Chicago Convention, Volume I;
(c) for applicability of noise certification standards for propeller driven aeroplanes, Attachment E to ICAS 116 to the Chicago Convention, Volume I;
(d) for equivalent procedures for sub-sonic jet aeroplanes, Chapter 2 of the International Civil Aviation Organization (CAO IRI) Environmental Technical Manual;
(e) for equivalent procedures for propeller driven aeroplanes over 8,618 kg, Chapter 3 of the CAO IRI Environmental Technical Manual;
(f) for equivalent procedures for propeller driven aeroplanes not exceeding 8,618 kg, Chapter of the CAO IRI Environmental Technical Manual;
(g) for equivalent procedures for helicopters, Chapter 5 of the CAO IRI Environmental Technical Manual;
(h) for evaluation methods, Chapter 6 of the CAO IRI Environmental Technical Manual;
(i) reserved;
(j) for control of noise certification computer program software and documentation related to static to flight projection processes, Chapter 8 of the CAO IRI Environmental Technical Manual;
(k) for calculation of confidence intervals, Appendix 1 of the CAO IRI Environmental Technical Manual;
BOOK 2

(l) for identification of spectral irregularities, Appendix 2 of the CAO IRI Environmental Technical Manual;

(m) for a procedure for removing the effects of ambient noise levels from aeroplane noise data, Appendix 3 of the CAO IRI Environmental Technical Manual;

(n) for reference tables and figures used in the manual calculation of Effective Perceived Noise Level, Appendix 4 of the CAO IRI Environmental Technical Manual;

(o) for worked examples of calculation of reference flyover height and reference conditions for source noise adjustments for certification of light propeller driven aeroplanes, Appendix 5 of the CAO IRI Environmental Technical Manual;

(p) for noise data corrections for tests at high altitude test sites, Appendix 6 of the CAO IRI Environmental Technical Manual; and

(q) for reassessment criteria for the re-certification of an aeroplane from ICAS 116 to the Chicago Convention, Volume 1, Chapter 3 to Chapter 4, Appendix 8 of the CAO IRI Environmental Technical Manual.