

INTERNATIONAL
STANDARD

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Third edition
Troisième édition
1992-12-15

**Aircraft – Environmental conditions and test
procedures for airborne equipment**

**Aéronefs – Conditions d'environnement et
procédures d'essai pour les équipements
embarqués**



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ISO 7137:1992 (E/F)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 7137 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Sub-Committee SC 5, *Environmental and operational conditions for aircraft equipment*.

This third edition cancels and replaces the second edition (ISO 7137:1987) and ISO 2653:1975, of which it constitutes a technical revision to endorse publications EUROCAE/ED-14C and RTCA/DO-160C (revisions of EUROCAE/ED-14B and RTCA/DO-160B).

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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International Organization for Standardization
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Avant-propos

L'ISO (Organisation internationale de normalisation) est une fédération mondiale d'organismes nationaux de normalisation (comités membres de l'ISO). L'élaboration des Normes internationales est en général confiée aux comités techniques de l'ISO. Chaque comité membre intéressé par une étude a le droit de faire partie du comité technique créé à cet effet. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec l'ISO participent également aux travaux. L'ISO collabore étroitement avec la Commission électrotechnique internationale (CEI) en ce qui concerne la normalisation électrotechnique.

Les projets de Normes internationales adoptés par les comités techniques sont soumis aux comités membres pour vote. Leur publication comme Normes internationales requiert l'approbation de 75 % au moins des comités membres votants.

La Norme internationale ISO 7137 a été élaborée par le comité technique ISO/TC 20, *Aéronautique et espace*, sous-comité SC 5, *Conditions d'ambiance et d'environnement pour les équipements aéronautiques*.

Cette troisième édition annule et remplace la deuxième édition (ISO 7137:1987) ainsi que l'ISO 2653:1975, dont elle constitue une révision technique pour entériner les publications EUROCAE/ED-14C et RTCA/DO-160C (révision des publications EUROCAE/ED-14B et RTCA/DO-160B).

L'attention des utilisateurs est attirée sur le fait que toutes les Normes internationales sont de temps en temps soumises à révision et que toute référence faite à une autre Norme internationale dans le présent document implique qu'il s'agit, sauf indication contraire, de la dernière édition.

Aircraft — Environmental conditions and test procedures for airborne equipment

1 Scope

This International Standard lists the different environmental conditions and test procedures for airborne equipment and is primarily intended for civil and/or transport aircraft applications.

This International Standard is an endorsement of sections of publications EUROCAE/ED-14C and RTCA/DO-160C¹⁾, which supplement several ISO International Standards.

2 Requirements

Environmental conditions and test procedures applicable to airborne equipment are laid down in EUROCAE/ED-14C and RTCA/DO-160C, which are adopted as *de facto* ISO International Standards.

All environmental conditions and test procedures laid down in EUROCAE/ED-14C and RTCA/DO-160C are not necessarily applicable to all airborne equipment. The selection of the appropriate environmental conditions and test procedures is the responsibility of the writer (author) of the performance standards for the specific airborne equipment.

3 Test procedures

The test procedures given in table 1 are issued or endorsed by ISO.

4 Reference to ISO test procedures

When referring to environmental conditions and test procedures dealt with in this International Standard, reference shall be made to the number of this International Standard and to the reference number of the test procedure as given in table 1. Use the example given below as a model.

EXAMPLE

Reference to the test procedure for fluids susceptibility in accordance with section 11 of EUROCAE/ED-14C and RTCA/DO-160C shall be made as follows:

Test procedure ISO 7137 - 1.6

5 Revision of EUROCAE/ED-14 and RTCA/DO-160

It has been agreed with EUROCAE and RTCA that Technical Committee ISO/TC 20 will be consulted in the event of any revision or amendment of these publications.

1) These publications can be obtained from the following addresses:

EUROCAE (European Organization for Civil Aviation Electronics), 11 rue Hamelin, 75783 Paris Cedex 16, France

RTCA (Radio Technical Commission for Aeronautics), One McPherson Square, 1425 K Street N.W., Suite 500, Washington, DC 20005, USA.