



AEROSPACE RECOMMENDED PRACTICE

ARP5526™

REV. F

Issued 2003-01
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Superseding ARP5526E

Aircraft Seat Design Guidance and Clarifications

RATIONALE

The change in this revision represents the latest agreement obtained by the SAE SEAT Committee to include the latest industry needs (limitation to one standard literature pocket, adding object entrapment, under seat baggage definition, adding details for tamper-evident device, e.g., Lifestock storage location) including consideration of current regulatory standards and guidance. It includes a harmonization with AS8049 and ARP6909 as well as some improvements for the wording and conversion errors.

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Tel: +1 724 776 4970 (outside USA)

For more information on this standard, visit

<https://content/ARP5526F/>

This is a preview. Click here to purchase the full publication.

SAE WEB ADDRESS:

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1. SCOPE

This SAE Aerospace Recommended Practice (ARP) documents a common understanding of terms, compliance issues, and design criteria to facilitate certification of seat installations specific to Part 25 aircraft. This ARP provides general guidance for seats to be installed in Part 23 aircraft and Parts 27 and 29 rotorcraft and does not specify specific designs or design methods for such certification.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AFRL-HE-WP-TR-2002-0170 CAESAR: Summary Statistics for the Adult Population (ages 18-65) of the United States of America

AS5678 Passive RFID Tags Intended for Aircraft Use

AS8049 Performance Standard for Seats in Civil Rotorcraft, Transport Aircraft, and General Aviation Aircraft

2.2 NAS Publications

Available from Aerospace Industries Association, 1000 Wilson Boulevard, Suite 1700, Arlington, VA 22209-3928, Tel: 703-358-1000, www.aia-aerospace.org.

NAS809 Specification - Aircraft Seats and Berths

2.3 CFR Publications

Available from the United States Government Printing Office, 732 North Capitol Street, NW, Washington, DC 20401, Tel: 202-512-1800, www.gpo.gov.

Code of Federal Regulations Title 14 Part 23 (14 CFR Part 23) Airworthiness Standards: Normal, Utility, and Acrobatic Category Airplanes

Code of Federal Regulations Title 14 Part 25 (14 CFR Part 25) Airworthiness Standards: Transport Category Airplanes

Code of Federal Regulations Title 14 Part 27 (14 CFR Part 27) Airworthiness Standards: Normal Category Rotorcraft

Code of Federal Regulations Title 14 Part 29 (14 CFR Part 29) Airworthiness Standards: Transport Category Rotorcraft

Code of Federal Regulations Title 14 Part 121 (14 CFR 121) Certification and Operations: Domestic, Flag, and Supplemental Air Carriers and Commercial Operators of Large Aircraft

2.4 FAA Publications

Available from Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591, Tel: 866-835-5322, www.faa.gov.

AC 25-17A CHG 1 Transport Airplane Cabin Interiors Crashworthiness Handbook

AC 25.785-1B	Flight Attendant Seat and Torso Restraint System Installations
ANM-04-115-28	Subject: Policy Statement on an Unreliable Design of Seat Belt Attachment, Fittings on Passengers' Seats and Compliance with § 25.601
ANM-03-115-31	Policy Statement on Conducting Component Level Tests to Demonstrate Compliance with §§ 25.785(b) and (d)
PS-ANM100-2003-10019	Subject: Policy Statement on Evaluating a Seat Armrest Cavity for a Potential Fire Hazard
PS-ANM-25.853-01-R2	Subject: Flammability Testing of Interior Materials

Special Airworthiness Information Bulletin (SAIB) NM-04-37, issued December 22, 2003, recommends that a specific design of seat belt attachment fitting be replaced with an improved design fitting.

2.5 Civil Aerospace Medical Institute

Available from the United States Government Printing Office, 732 North Capitol Street, NW, Washington, DC 20401, Tel: 202-512-1800, www.gpo.gov.

DOT/FAA/AM-03/9	Human Factors Associated with the Certification of Airplane Passenger Seats: Life Preserver Retrieval
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2.6 NASA Publications

NASA Technical Services, NASA STI Program STI Support Services, Mail Stop 148, NASA Langley Research Center, Hampton, VA 23681-2199, 757-864-9658, Fax: 757-864-6500, <http://ntrs.nasa.gov/>.

NASA-STD-3000 Vol. I	Man Systems Integration Standards Rev. B, NASA Johnson Space Center, Houston, TX, 1995.
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2.7 UL Publications

Available from UL, 333 Pfingsten Road, Northbrook, IL 60062-2096, Tel: 847-272-8800, www.ul.com.

UL 1439	Tests for Sharpness of Edges on Equipment
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2.8 RTCA Publications

Available from RTCA, Inc., 1150 18th Street, NW, Suite 910, Washington, DC 20036, Tel: 202-833-9339, www.rtca.org.

DO-160G	Environmental Conditions and Test Procedures for Airborne Equipment
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3. RECOMMENDED PRACTICES

FAR references can be considered valid across aircraft categories: 14 Code of Federal Regulations Parts 23, 25, 27, and 29.

3.1 Seat Back Handhold in Turbulence

3.1.1 Applicable Policy and Regulations

14 CFR Part 25.785 (j) Amendment 25-88

If the seat backs do not provide a firm handhold, there must be a handgrip or rail along each aisle to enable persons to steady themselves while using aisles in moderately rough air.

AC 25-17A CHG 1 par. 81.b (6) Crashworthiness Handbook