Notification of a proposed Certification Memorandum

Changes to seating systems initially authorised under a UK Technical Standard Order

UK Civil Aviation Authority	**CERTIFICATION MEMORANDUM** **Changes to seating systems initially approved under a UK Technical Standard Order**	Doc. No: UK.CM.CS.1001 Issue: 1 - PROPOSED Date: --

Regulatory requirement(s):

Annex I to UK Regulation (EU) 748/2012:
Point 21.A.91 – Classification of changes to a type-certificate
Point 21.A.97 – Requirements for approval of a major change
Point 21.A.433 – Requirements for approval of a repair design
Point 21.A.435 – Classification and approval of repair designs
Point 21.A.611 – Design changes
Point 21.A.804 – Identification of parts and appliances

Certification Specifications:
CS23.561, CS23.562, CS23.785, CS23.853, CS23.1301
CS23.2270(Amdt 6), CS23.2325(Amdt 6), CS23.2500(a)(Amdt 6)
CS25.561, CS25.562, CS25.785, CS25.853, CS25.1301
CS27.561, CS27.562, CS27.785, CS27.853, CS27.1301
CS29.561, CS29.562, CS29.785, CS29.853, CS29.1301

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UK.CM.CS.1001 Issue 01 - PROPOSED

Log of issues

Issue	Issue date	Change description
1-Proposed	-	Proposed Certification Memorandum for public consultation.

Contents

1. Identification of Issue

1.1. Purpose

This Certification Memorandum (CM) provides information, clarification and procedural guidance for the modification and repair of seating systems holding UK Technical Standard Order (UKTSO) authorisation.

Where 'UK Technical Standard Order (UKTSO)' is referenced within the remaining text, it shall be read to include European Technical Standard Order (ETSO), or Technical Standard Order (TSO) as applicable.

This CM addresses modifications that result from design changes or repairs pursuant to UK Regulation (EU) Initial Airworthiness 748/2012, when the modification is performed by an organisation other than the UKTSO Authorisation (UKTSOA) holder.

1.2. Background

1.2.1. UKTSO Seat Systems

Seating systems produced by a manufacturer holding a UKTSO Authorisation must meet the Minimum Performance Standards (MPS) described in the applicable version of UKTSO-C39 or UKTSO-C127.

Seating systems commonly integrate other UKTSO authorised articles into the design of the seat article. For example, restraints produced by a manufacturer holding a UKTSOA must have met the MPS described in UKTSO-C22 or UKTSO-C114.

Non-TSO functions (NTF) are typically integrated into the seating system. These non-TSO functions are provided by components such as in-flight entertainment (IFE) systems, floor proximity lighting, and reading lights.

1.2.2. Design Changes and Repairs to UKTSO Seat Systems

A modification to a UKTSO seat article or seating system, is a change to the approved design, and may be accomplished in accordance with Subpart O of Annex I (Part 21) to UK Regulation (EU) Initial Airworthiness 748/2012, specifically 21.A.611, which provides for:

a) the holder of the UKTSO authorisation may make minor design changes to the article.

b) any design change by the holder of the UKTSO authorisation, which is a major change, requires a new authorisation.

c) no design change by a party other than the UKTSO authorisation holder may be performed unless the party seeking approval applies under 21.A.603 for a separate UKTSO authorisation.

The above points summarise that an existing UKTSO authorisation cannot be changed by anyone other than the holder, unless a new UKTSO authorisation is sought. For Repairs to UKTSO articles, a similar position is summarised in point 21.A.431A(e) of Annex I (Part 21) to UK Regulation (EU) No. 748/2012

The associated guidance material within GM to 21.A.611 Design Changes offers an alternative route for 'airline or maintenance organisations' (the 'modifier'):

'— when an airline or a maintenance organisation is designing a change (based on data not published in the TC holder or Original Equipment Manufacturer documentation) on an article installed on an aircraft, such a change can be considered as a change to the product in which the article is installed, not to the article taken in isolation. Therefore, Subpart D can be used for the approval of this change that will be identified as a 'change to product x affecting article y', but not 'change to article y'.'

Further, GM to 21.A.431(e) Repairs to UK technical standard order (UKTSO) articles other than auxiliary power units (APUs), provides similar consideration for repairs to articles installed on an aircraft to be performed as a 'repair to product x affecting article y', but not 'repair to article y'.

UK CAA Safety Notice SN2026/001, published February 2026, contained recommended considerations on the topics of classification and compliance demonstration when such design changes or repairs to aircraft seating systems are being performed as a 'change to product x affecting article y', but not 'change to article y', by an organisation other than the UKTSOA holder.

This Certification Memorandum provides guidance to complement those Safety Recommendations.

1.2.3. Installation vs. Article Approval

A seat or berth article approved as part of an aircraft type design (under a TC or STC), is approved for installation in an aircraft with an associated approved interior arrangement. However, an article initially authorised under a UKTSOA is authorised only for design and production of the article, and a separate approval is required for aircraft installation. Therefore, the use of a UKTSO authorised seat, berth, floatation cushion or restraint does not guarantee a compliant aircraft installation.

The installer should be aware that UKTSO articles may be used on multiple aircraft models with varying certification basis, special conditions, and airworthiness directives; therefore, the data required for installation may differ from model to model.

Similarly, design changes and repairs must be substantiated relative to the certification standards for the aircraft; therefore, design changes and repairs based solely on compliance to UKTSO article requirements are not sufficient.

NOTE: A UKTSO defines a set of Minimum Performance Standards (MPS) issued by the Regulatory Authority for specified materials, parts, processes, and appliances intended for use on civil aircraft. UKTSO C-127 requires seats to meet the MPS based upon the requirements of SAE Aerospace Standard AS8049, "Performance Standards for Seats in Civil Rotorcraft and Transport Airplanes", as amended by the UKTSO document.

1.2.4. Dynamic Seat Considerations

Dynamic seats are installed across a wide range of aircraft, from general aviation through to air transport, including rotorcraft. Historically, aircraft seats were designed to comply solely with static strength requirements (CS2X.561). In the late 1980s, dynamic seat performance standards - introduced by the FAA through FAR 25.562 - were adopted into the requirement of CS2X.562, to further enhance occupant survivability and address aircraft crashworthiness.

Although CS2X.562 is applicable to new type-certificated aircraft, UK Regulation (EU) No. 2015/640 Additional Airworthiness, Annex I (Part-26), required most new seats on transport aircraft issued with first certificate of airworthiness on or after 26 February 2021, to be compliant with the newer performance standards. Pursuant to Part 26.60, transport aircraft that were not required to meet CS 2X.562 as part of the original type design are now required to meet the new CS2X.562 requirement for any new aircraft produced.

Note: Many of the 'dynamic' requirements contained within the Minimum Performance Standards (MPS) of UKTSO-C127 align with those specified in CS2X.562.

The new CS2X.562 requirements took distinct parts of the seats that were typically approved separately, such as UKTSO seat restraints, and created an integrated seating system evaluation method by levying requirements on the seating system.

Modifications affecting the strength or stiffness of a seat part may affect the seating system, and thus may affect the dynamic loading of the structure and the loads transferred to the occupant. **Therefore, a modification to a part either in the direct load path or within striking distance of the occupant will typically require a dynamic assessment.** For this reason, any changes to common components such as seatbelts, cushions, IFE system hardware, seat back tray tables, and any other item added or removed from the seat, an assessment must be conducted to verify that the seating system structural integrity and occupant injury performance is maintained.

1.3. Related Publications

This Certification Memorandum is published to

- Complement the recommendations of the CAA Safety Notice SN2026/001, and
- Provide further guidance supplementing Annex I (Part 21) to UK Regulation (EU) No. 748/2012.

The guidance provided in this Certification Memorandum is harmonised with *FAA Advisory Circular AC 21-25B, Approval of Modified Seating Systems Initially Approved Under a Technical Standard Order, 11 January 2016,* with the following exceptions:

- Context amended to address the requirements of UK Regulation (EU) No. 2018/1139.
- Consideration for this guidance is limited to design changes and repairs performed by an organisation *other than* the UKTSO Authorisation holder (UKTSOAH).
- Consideration for Minor or Major Classification references to EASA Certification Memorandum CM-21.A-CS-001 Issue 02, "Classification of design changes to cabin interiors of Large Aeroplanes".
- References to Letter of Design Approval (LODA) removed
- Non-TSO Functions (NTF) (such as In-flight entertainment systems, reading lights etc) are not addressed within this guidance.
- Further guidance not addressed by FAA AC 21-25B has been added (such as Effect on UKTSO Marking).

This Certification Memorandum does not contradict the guidance contained within FAA AC 21-25B.

2. Applicability

This Certification Memorandum is applicable to persons and Design Organisations ('the modifier') seeking to perform design changes or repairs to UKTSOA seating systems installed or to be installed in the following:

- CS-23 normal-category aeroplanes
- CS-25 large aeroplanes
- CS-27 small rotorcraft
- CS-29 large rotorcraft

3. CAA Certification Policy

3.1. Applicable Regulations

Installation or modification to a seating system originally authorised under UKTSO must be approved in accordance with the requirements of Annex I (Part 21) to UK Regulation (EU) No. 748/2012.

Where the modifier is the article UKTSOA holder, and is electing to show that the modified article still meets the UKTSO standards, then Point 21.A.611 (a) or (b) of Annex I (Part 21) to UK Regulation (EU) No. 748/2012 applies.

Where the modifier is other than the article UKTSOA holder, then the requirements of Subpart D of Annex I (Part 21) to UK Regulation (EU) No. 748/2012 apply for design changes, as stated within GM to Point 21.A.611, or the requirements of Subpart M of Annex I (Part 21) to UK Regulation (EU) No. 748/2012 apply for repair approvals, as stated within GM to Point 21.A.431(e).

All modifications must be substantiated by test and/or analysis to show that the applicable requirements are met.

3.2. General Considerations for Design Changes or Repairs to UKTSO Seating Systems

A UKTSOA signifies stand-alone authorisation of an article, and such an authorisation is not considered an approval to install the article on an aircraft.

During certification of the installation of a UKTSO-authorised article, the applicant may elect to claim elements of credit towards the showing of compliance with the aircraft airworthiness requirements, taken from the demonstration of compliance to the requirements of the UKTSO Minimum Performance Standards (MPS) (as MC9: Equipment Qualification, per Appendix A to AMC 21.A.15(b)).

Where a design change or repair design to a UKTSO-authorised seat article may affect any previous credit claimed from the article authorisation, this should be fully assessed by the modifier responsible for the change or repair.

The modifier should take appropriate steps to:

A) assess any impact on the previous qualification demonstrated by the UKTSO authorisation (against the UKTSO MPS), and
B) inform a determination as to any further showing of compliance required for the changed equipment to continue to comply with the aircraft airworthiness requirements.

The modifier should refer to the article's applicable UKTSO(s)[1], and the referenced MPS, to perform an assessment of impact against each requirement.

Any impact on the article's ability to continue to comply with the UKTSO MPS may have an effect on

- the requirements for Instructions for Continued Airworthiness (see Section 3.6),
- the continued validity of the UKTSOA, and
- the appropriate marking of the equipment per the requirements of CS2X.1301[2] (see Section 3.7)

3.3. Major vs. Minor Design Change or Repair

This Certification Memorandum does not provide further guidance on classification related to changes or repairs to aircraft seating systems.

The UK CAA consider classification of design changes and repairs to seating systems to be adequately addressed by existing regulation Points 21.A.91 and 21.A.435 of Annex I (Part 21) to UK Regulation (EU) No. 748/2012, associated GM to 21.A.91, and CM-21.A-CS-001 Issue 02, published by EASA[3], on "Classification of design changes to cabin interiors of Large Aeroplanes".

Per GM 21.A.91, para 3.3, wherever there is doubt as to the classification of a change, the CAA should be consulted for clarification.

[1] In cases where more than one UKTSOA is applicable to a seat system, such as where a seat authorised to UKTSO-C127 will feature a seat restraint authorised to UKTSO-C22, the effect of any proposed change to all affected UKTSOs should be determined by the modifier. In the example, a change to the seat restraint shall require assessment of both the seat restraint UKTSO MPS *and* the seat UKTSO MPS.

[2] Additionally, CS23.2500 where Certification Specification 23 Amendment 6 is applicable.

[3] Note: EASA intends to revise the previously published CM-21.A-CS-001 Issue 02. At the point of EASA publication, the UK CAA will consider adoption of the revised CM.

3.4. Design Control

The UKTSOA holder holds responsibility to control the design relative to the applicable UKTSO requirements, including all parts, processes, or services procured from an outside source. Similarly, it is the TC/STC/design change holder's responsibility to ensure design changes made to UKTSO articles continue to meet the applicable airworthiness requirements of the aircraft.

It is common for UKTSO-authorised seats to include other UKTSO-authorised articles (such as restraints) in their design. These UKTSO articles are in turn incorporated into the authorised UKTSO design of the seating system.

For example, a seatbelt that has been modified by the UKTSO-C22 manufacturer with a minor design change and that continues to meet the requirements of UKTSO-C22, may or may not continue to be acceptable for use on a UKTSO-C127 seat and/or for installation in an aircraft. This scenario creates a situation in which there are multiple levels of Authority approvals and requires a clear understanding for the design change responsibility. In this example, the UKTSO-C22 seatbelt UKTSOA holder can make a minor design change[4] pursuant to 21.A.611 (a), as long as the design change meets the requirements for a minor change and continues to meet the requirements of UKTSO-C22. Although the minor seatbelt design change continues to meet the requirements of UKTSO-C22, this minor seatbelt design change is also considered a design change to the overall dynamic seating system given that the seatbelt is a subcomponent to the seat assembly. As a result, this seatbelt design change may affect compliance to the requirements of UKTSO-C127. Therefore, it is the seat manufacturer's responsibility to control the seat design relative to UKTSO-C127, including substantiating design changes to supplier subcomponents that also have a UKTSOA. Similarly, it is the TC/STC/design change approval holder's responsibility to ensure the design changes to the seating system still comply with the applicable airworthiness requirements of the aircraft.

Seats are often integrated with electronic components. Some types of changes do not affect compliance to the UKTSO MPS, but may affect compliance to the installation airworthiness requirements. Furthermore, other types of changes to the electronic components may affect compliance to the UKTSO MPS.

3.5. Technical Compliance Considerations

This section describes common modifications to seating systems and how those changes may affect continued compliance to the UKTSO MPS and/or airworthiness requirements.

This section is intended to highlight some common examples; however, it does not provide a comprehensive list of considerations that must be addressed for any particular modification.

3.5.1. Structural Tests

For each seating system previously produced, tested, and certified to the static, dynamic, and/or occupant injury performance standards, the effect of the design change or repair ('modifications') on the validity of those tests must be addressed.

> 3.5.1.1 Static Strength. All seating systems must be approved to meet the applicable static strength load factors. Design changes affecting the weight, centre of gravity, structural strength, and deformation must be substantiated to the applicable requirements.

[4] *Minor design change* in this consideration is the classification applicable to the article per Subpart O of Annex I (Part 21) to UK Regulation (EU) No. 748/2012. This is to be understood as a different classification as to that determined by 21.A.91.

Although UKTSO seating systems require certain minimum required static load factors, load factors for specific installations may exceed the UKTSO required loading and therefore need to be substantiated during the installation, and design change or repair design approval process.

Modifications to the article that are not part of the primary seat structure also need to be assessed for their potential impact on the article meeting the static test requirements[5]. For example, in UKTSO-C39b (National Aircraft Standard 809, subparagraph 4.3.1, governing the static testing of seats and berths), use of the dimensions specified for the application points of the side loads and up loads requires the seat bottom and back cushion systems be in place and a seat cushion compression of 2 inches. If a cushion is removed for the test, or if a seat cushion compression varies from 2 inches, the location for applying the loads must be changed accordingly. Modification of a cushion system will necessitate an analysis to verify the specifications are met. If the specifications are not met, additional tests or analyses will be required.

3.5.1.2 Dynamic Strength and Occupant Injury Protection. Structural modifications that may be acceptable for static seats may not be acceptable for dynamic seats. Dynamic seats require demonstration of the protection of the occupant (such as head injury criterion (HIC), lumbar load, femur load, and restraint loading) subjected to dynamic emergency landing conditions, whereby the structural capability and permanent deformation of the seat is assessed. The following paragraphs of this Certification Memorandum provide some common examples of modifications requiring substantiation and usually require re-testing to verify continued compliance with the dynamic requirements of CS2X.562 and/or UKTSO-C127.

As an alternate to testing for compliance to 2X.562, analysis may be used in accordance with the guidance defined in *FAA AC 20-146, Methodology for Dynamic Seat Certification by Analysis for Use in Part 23, 25, 27, and 29 Airplanes and Rotorcraft,* subject to CAA agreement.

Seat cushions and covers composed of modified materials (e.g., material changes, manufacturing process changes, additions to or modifications of padded dress covers, or modified buildups of identical materials) require substantiation because of the possible increase on pelvic and lumbar column compressive loading or belt loading under the downward and forward combined loading test, and the potential to cause submarining of the occupant. Changes to the seat reference point (SRP), cushion reference point (CRP), or centre of gravity (CofG) should also be evaluated for acceptability.

In some cases, simplified procedures such as those identified in *FAA ANM-115-05-005, Policy Statement on Acceptance of a Component Test Method to Demonstrate Compliance with §25.562(c)(2) for Replacement Seat Bottom Cushions*, may be used to evaluate changes, subject to CAA agreement.

Restraints approved according to UKTSO-C22 or UKTSO-C114 are only evaluated relative to static structural requirements and are not independently certified to meet dynamic seating system requirements. Restraints are substantiated dynamically as part of the dynamic tests for the seating system. Therefore, restraint changes to the webbing material, manufacturing process, stitching, or hardware must be substantiated due to the potential impact to the occupant response and structural loading. For example, changing the weave pattern of identical webbing material may alter the stiffness, strength and dynamic performance of the seating system, which in turn may impact compliance to requirements such as HIC, occupant restraint load limits, and retention of the occupant.

In some cases, simplified procedures such as those identified in *FAA ANM-115-05-10, Policy Statement on an Acceptable Method of Compliance with § 25.562 for Replacing Restraint Systems*

[5] EASA Certification Memorandum S-009, Issue 01 – "Loading Conditions for Occupant Safety in Cabin Interiors" provides guidance on this topic.

on Forward and Aft Facing Seats, may be used to evaluate changes, subject to CAA agreement. Note: refer to Section 3.7 of this Cert Memo for further consideration as to continued validity of the UKTSOA, where simplified procedures are used to demonstrate compliance to aircraft airworthiness requirements.

Modifications to passenger entertainment system components and/or to the meal tray assembly must be substantiated to determine their effect on the dynamic performance of the seating system and whether the modified system still meets the HIC.

For example, changes to these parts that alter the stiffness may affect the ability to absorb impact loads during HIC testing and changes to the meal tray latch may affect the ability of the meal tray to remain stowed.

3.5.2. Fire and Flammability Tests.

The modified seating system must be shown to meet the applicable flammability requirements. The UKTSO flammability requirements vary depending on both the UKTSO revision and on the classification of the seating system (i.e., transport aeroplanes, normal rotorcraft, commuter, etc.). Furthermore, the flammability requirements vary dependent upon the aircraft airworthiness requirements and the amendment level.

3.5.2.1 An example of a common modification for transport aircraft UKTSO-C127 aircraft seats are modifications to the cushion. Transport aircraft seats typically require an oil burner test on a set of representative production seat cushion test specimens. A change to the seat cushion system design might affect the flammability characteristics of the system. Thus, a new configuration or combination of foam, fire blocking layer, and dress cover will require additional testing and approval to establish compliance with the flammability standards. However, changes to dress covers may be qualified by similarity. *FAA AC 25.853-1, Flammability Requirements for Aircraft Seat Cushions*, provides additional information on the approval of seat cushion dress covers on the basis of similarity. If there is a question as to whether a design change to a cushion system is significant enough to require retesting, the UK CAA shall be consulted.

3.5.2.2 The requirements for general aviation aircraft seats vary depending on the UKTSO seat classification and aircraft category. For example, per UKTSO-C127b Type C - Normal, Utility and Acrobatic category aircraft seats must have flame resistant properties. FAA AC 23-2A, Flammability Tests, provides a test procedure for flame resistant testing. UKTSO-C127b also requires Type C - Commuter category seats to be self-extinguishing and tested pursuant to 14 CFR part 23, Appendix F, Part I.

3.5.2.3 There may be circumstances where the testing required by the UKTSO for flammability is insufficient for installation compliance. For example, some transport aeroplanes require seats with large non-metallic panels to meet heat release and smoke emission requirements pursuant to CS25, Appendix F – part IV and part V. Compliance to the heat release and smoke emission is not required under the UKTSO; therefore, in this scenario the installer of the modified seat must ensure the heat release and smoke emission requirements continue to be met.

3.6. Effect on Installation and Maintenance Instructions

3.6.1. Installation Instructions and Limitations (IIL).

Modifications to UKTSO seating systems may affect the original UKTSO IIL; therefore, modifications should address the potential impact the modification has to the UKTSO IIL. It is important to distinguish that the UKTSO IIL are intended to give instructions to the installer for how to install the UKTSO article such that it continues to meet the requirements of the UKTSO. The UKTSO IIL does not ensure

compliance to all of the applicable aircraft installation airworthiness requirements. The UKTSO IIL document is revised only when the modification is performed by the UKTSOA holder.

Note: Some changes to the seating system have no effect on the continued compliance to the applicable UKTSO standard, but may affect compliance to airworthiness requirements for a particular installation. For example, a change in the recline angle of the seat may affect compliance to emergency exit row requirements.

3.6.2. Maintenance Instructions

Modifications to UKTSO seating systems may affect the UKTSO maintenance instructions, as well as instructions for continued airworthiness (ICA) for the aircraft; therefore, modifications should address any applicable changes to the UKTSO maintenance instructions and/or ICA.

Note: For example, UKTSO-C127 requires that maintenance instructions include guidance on the limits of wear and damage permissible to the seat cushions and restraint system webbing material that would warrant replacement. In this case, the maintenance instructions provided by the UKTSO-C22 or UKTSO-C114 restraint manufacturer may not be sufficient to adequately address the continued adherence to the UKTSO-C127 dynamic MPS. Therefore, modifications to the UKTSO-C127 seating system that include changes to the seatbelt or cushion should also address any required changes to the maintenance instructions and/or ICA.

In the case a modification is determined not to affect the maintenance instructions and/or ICA applicable to the changed system; to clearly indicate the status of applicable maintenance instructions and/or ICA, the modifier shall make a statement to that effect within the design or repair documentation.

3.7. Effect on UKTSO marking

Pursuant to CS2X.1301[3], equipment must be labelled as to its identification, function or operating limitations. Modifications to UKTSO seating systems may affect the function or operating limitations as approved by the issued UKTSOA, and the article must be appropriately identified following modification. Subsequently, amendment to the UKTSO article marking must be appropriately considered should the article functions or limitations be affected.

The modifying organisation shall assess any effect on the Minimum Performance Standards (MPS) of the applicable UKTSO(s)[2].

a) Where the modifier assesses the MPS applicable to the UKTSO article is **not affected**, the article continues to meet the applicable UKTSO standards, and the associated marking may remain on the article.
b) Where the modifier assesses the MPS applicable to the UKTSO article is **affected**, continued compliance to the requirement of the MPS must be demonstrated.
    i. Where the modifier demonstrates continued compliance to the requirement of the MPS, the UKTSO marking may remain on the article.
    ii. Where the modifier is unable to demonstrate that the modified article continues to meet the MPS, the modifier shall **permanently strike-through** the UKTSO marking (including UKTSOA number, where present) while retaining all other identifying data. The article shall be appropriately marked to identify "Continued compliance to *UKTSO-Xnnn* has not been shown. Refer to Design Data XYZ".

In **all cases**, the modifier holds the obligation to mark the modified article in accordance with Point 21.A.804 of Annex I (Part 21) to UK Regulation (EU) No. 748/2012, to include a reference to a design approval (e.g., STC number); the modifier's organisation approval number or name and address; or reference to other documentation describing the modification.

Note: Where simplified procedures are applied for compliance demonstration to the aircraft airworthiness requirements, such as those identified in *FAA ANM-115-05-10, Policy Statement on an Acceptable Method of Compliance with § 25.562 for Replacing Restraint Systems on Forward and Aft Facing Seats,* it should be considered if continued compliance with the MPS is satisfied. In this example, while application of the procedures laid down in ANM-115-05-10 may be considered as a means to comply with CS2X.562, the procedures for test are not recognised by the MPS of UKTSO-C127. Therefore, such testing does not demonstrate the article continues to meet the MPS. In this case, following successful test the replacement restraint and seat may be considered approved for installation, but the UKTSO marking on the seat shall be permanently struck-through.

4. Supporting Data

4.1. References

It is intended that the following reference materials be used in conjunction with this Certification Memorandum:

Reference	Title	Code	Issue	Date
[1]	Certification Specifications and Acceptable Means of Compliance and Guidance Material for Normal Category Aeroplanes	CS-23	6	20 December 2023
[2]	Certification Specifications and Acceptable Means of Compliance for Large Aeroplanes	CS-25	28	19 December 2024
[3]	Certification Specifications, Acceptable Means of Compliance and Guidance Material for Small Rotorcraft	CS-27	10	20 December 2023
[4]	Certification Specifications, Acceptable Means of Compliance and Guidance Material for Large Rotorcraft	CS-29	12	18 July 2025
[5]	UK Regulation (EU) 748/2012 Initial Airworthiness (Part 21)	748/2012	-	October 2025
[6]	UK Regulation (EU) 2015/640 Additional Airworthiness (Part 26)	2015/640	-	August 2023
[7]	Certification Specification UK Technical Standard Orders	CS-UKTSO	18	17 December 2025
[8]	UK CAA Safety Notice: Changes to Aircraft Seating by Organisations Other Than the OEM or TSOA Holder	SN-2026/001	1	12 February 2026
[9]	FAA Advisory Circular: Approval of Modified Seating Systems Initially	AC 21-25	B	11 January 2016

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[10]	EASA Certification Memoranda: Classification of design changes to cabin interiors of Large Aeroplanes	CM-21.A-CS-001	02	30 April 2021
[11]	EASA Certification Memoranda: Loading Conditions for Occupant Safety in Cabin Interiors	CM-S-009	01	17 October 2018
[12]	FAA Advisory Circular: Methodology for Dynamic Seat Certification by Analysis for Use in Part 23, 25, 27, and 29 Airplanes and Rotorcraft	*AC20-146*	-	19 May 2003
[13]	FAA Policy Statement: Acceptance of a Component Test Method to Demonstrate Compliance with §25.562(c)(2) for Replacement Seat Bottom Cushions	ANM-115-05-005	-	18 August 2005
[14]	FAA Policy Statement on an Acceptable Method of Compliance with § 25.562 for Replacing Restraint Systems on Forward and Aft Facing Seats	ANM-115-05-10	-	11 April 2005

4.2. Abbreviations

AC	Advisory Circular
AMC	Acceptable Means of Compliance
CM	Certification Memorandum
CofG	Centre of Gravity
CRP	Cushion Reference Point
CS	Certification Specification
DO	Design Organisation
EASA	European Aviation Safety Agency
ETSO	European Technical Standard Order
FAA	Federal Aviation Administration
MPS	Minimum Performance Standard
NTF	Non-TSO Functions
ORS9	UK CAA Official Record Series9

SRP	Seat Reference Point
TSO	Technical Standard Order
UK CAA	United Kingdom Civil Aviation Authority
UKTSO	United Kingdom Technical Standard Order
UKTSOA	UKTSO Authorisation
UKTSOAH	UKTSOA holder

4.3. Definitions

Modification	Design change or repair
Modifier	Organisation other than the UKTSOA Holder performing a modification to a seat system.

5. Remarks

1. For any question concerning the technical content of this CAA Certification Memorandum, please contact: Certification.airworthiness@caa.co.uk