




Proposed CM-MCSD-001

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EASA	NOTIFICATION OF A PROPOSAL TO ISSUE A CERTIFICATION MEMORANDUM
	<p>EASA Proposed CM No.: EASA Proposed CM – MCSD – 001 Issue: 01 Issue Date: 16th of April 2014 Issued by: ICA and Maintenance Training section Approved by: Head of Certification Experts Department Regulatory Requirement(s):</p> <p>1) Commission Regulation (EC) No 216/2008, Article 5, which includes the elements of operational suitability evaluation as part of the type certification; and</p> <p>2) 21.A.15, 21.A.16A, 21.A.16B and related AMC & GM (Commission Regulation (EU) No 69/2014 amending Regulation (EU) No748/2012)</p>

In accordance with the EASA Certification Memorandum procedural guideline, the European Aviation Safety Agency proposes to issue an EASA Certification Memorandum (CM) on the subject identified below.

All interested persons may send their comments, referencing the EASA Proposed CM Number above, to the e-mail address specified in the "Remarks" section, prior to the indicated closing date for consultation.

EASA Certification Memoranda clarify the European Aviation Safety Agency's general course of action on specific certification items. They are intended to provide guidance on a particular subject and, as non-binding material, may provide complementary information and guidance for compliance demonstration with current standards. Certification Memoranda are provided for information purposes only and must not be misconstrued as formally adopted Acceptable Means of Compliance (AMC) or as Guidance Material (GM). Certification Memoranda are not intended to introduce new certification requirements or to modify existing certification requirements and do not constitute any legal obligation.

EASA Certification Memoranda are living documents into which either additional criteria or additional issues can be incorporated as soon as a need is identified by EASA.

Subject

Type rating determination and minimum syllabus considerations for maintenance certifying staff type rating training in light of Operational Suitability Data requirements

Log of Issues

Issue	Issue date	Change description
01	16.04.2014	First issue.

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1. INTRODUCTION

1.1. PURPOSE AND SCOPE

The purpose of **this** Certification Memorandum is to provide specific guidance for compliance with certification requirements as stipulated by Annex I Part-21 to Commission Regulation (EU) No 748/2012 in 21.A.15(d)3 coupled with regulatory proviso 21.A.16A and 21.A.16B.

This Certification Memorandum describes how the TC Holder should perceive the Part-21 regulatory requirements regarding the OSD element for MCSD. This Certification Memorandum presents a series of considerations that should guide the TC Holder regarding EASA's approach in preparation of the Special Condition which will be included in the operational suitability data certification basis to address the OSD-MCSD. It is neither the role nor the intent of this Certification Memorandum to be understood or used as a substitute for the CS-MCSD (which is under development at the time of release of this Certification Memorandum).

It should be understood that any TC reference in this Certification Memorandum is generic in nature and should be considered as being also applicable/valid to/for restricted type certificates (RTC) and supplemental type certificates (STC) as well as changes to TC, RTC or STC.

1.2. REFERENCES

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

Reference	Title	Code	Issue	Date
(EU) No 748/2012 amended by (EU) No 69/2014	Implementing rules for the airworthiness and environmental certification of aircraft and related products, parts and appliances, as well as for the certification of design and production organisations	-	-	27.01.2014
ED Decision 2014/007/R	AMC & GM to Part 21	-	Amendment 2 to Issue 2	31.12.2014

1.3. ABBREVIATIONS

The following abbreviations are used in this Certification Memorandum:

Abbreviation	Meaning
A/C	Aircraft
AML	Aircraft Maintenance Licence
CA	Competent Authority

Abbreviation	Meaning
CM	Certification Memorandum / Memoranda
CRI	Certification Review Item
CS	Certification Specification
CS-MCSD	Certification Specifications-Maintenance Certifying Staff Data
DOA	Design Organisation Approval
EHA	Electro Hydraulic Actuator
EBHA	Electric Back-up Hydraulic Actuator
LHGS	Local electro Hydraulic Generation System
MCS	Maintenance Certifying Staff
MCSD	Maintenance Certifying Staff Data
OEB	Operational Evaluation Board
OSD	Operational Suitability Data
RCCB	Remote Control Circuit Breaker
RMP	Rule Making Plan
RMT	Rule Making Task
RTC	Restricted Type Certificate
SC	Special Condition
SSPC	Solid State Power Controller
STC	Supplemental Type Certificate
TASEm	Training Area of Specific Emphasis maintenance
TC	Type Certificate
TCDS	Type Certification Data Sheet
TCH	Type Certificate Holder
VFG	Variable Frequency Generator
WG	Working Group

1.4. DEFINITIONS

The following definitions are used in this Certification Memorandum:

Definition	Meaning
a/c configuration	The configuration of the respective aircraft as defined by type design.

2. BACKGROUND

The inclusion of OSD compliance requirements for TC Holder in the type certification, as stipulated by 21.A.15(d), includes in 21.A.15(d)3, TC Holder obligations regarding “the minimum syllabus of maintenance certifying staff type rating training, including determination of type rating”.

Whilst, in accordance with the RMP, the Agency is not expected to finalise and release the corresponding CS-MCSD before 2018 (see the end date planned for RMT.0106(21.039e)), there is a need for immediate guidance to be provided to TC Applicants regarding the EASA certification policy in the field of OSD-MCSD.

Participation in the WG for task 21.039e, as well as several pilot projects conducted by EASA in the OEB-MCS area, lead to a series of considerations that are brought to the attention of future applicants for OSD-MCSD (see chapter 3 of this CM).

3. EASA CERTIFICATION POLICY

3.1. EASA POLICY

The OSD-MCSD applications could be submitted either in accordance with the obligation deriving from 21.A.15(d) or on a voluntary basis (see GM No 1 to 21.A.15(d)). Moreover, a TC Holder could voluntarily apply for an OSD-MCSD evaluation of an already certificated type (this case is currently referred to as a “catch-up”).

All and any of the above applications should lead to the same EASA certification policy guidelines as specified in chapter 3 of this CM.

Until 18 December 2015 the applicant for approval of OSD is not required to extend the scope of its DOA to include OSD. The DOA holder, seeking the extension of the DOA scope of approval to cover the OSD-MCSD projects, should successfully complete such projects with a high visibility to and participation of the Agency.

The MCSD set submitted by the applicant to the Agency should be complemented by provisions regarding the preservation of continued operational suitability compliance as applicable.

3.2. TYPE RATING DETERMINATION

The type rating proposed by the TC Applicant / TC Holder and evaluated by the Agency is the type rating for the purpose of AML endorsement. Based on a favourable conclusion of the evaluation, this type rating will be included in Appendix I to AMCs of Part-66.

The type rating(s) determined should address all (new) models/variants specified in the TCDS.

3.3. MINIMUM SYLLABUS CONTENT

The minimum syllabus content specified for the type should be clearly identified and allocated to one of the formal “box” categories (see GM No 3 to 21.A.15(d)) in order to highlight its mandatory or non-mandatory status. The contents should address the theoretical and practical type training as defined in Appendix III of Part-66 and be segregated as such.

Whilst the TC Holder should be adequately supporting each proposed element and its “box” categorisation, we provide below a list of expected content elements. The actual applicants should consider these examples as being neither limiting nor exhaustive for their proposal:

Box1

- Type rating determination (see 3.2 of this CM).
- The aircraft configuration to be addressed in accordance with the certificated type design. This configuration should be detailed to the ATA system – subsystem level and include the categorisation of technical information to be addressed in training (e.g. location, description, indication, normal operation, abnormal operation, MMEL specific maintenance actions). The list should be detailed to ATA component level in cases when the novelty or other characteristics of the component justify/require such a detail. The certificated a/c configuration detailed in Box1 should cover the complete base aircraft configuration and leave any certificated configuration options (i.e. options at system, subsystem or equipment/appliance level in addition to/in place of the base configuration) to be addressed in Box2.
- TASEm – any element considered by the applicant as having a degree of novelty, specificity or uniqueness relevant to the maintenance of his product. This could be a technical or operational feature that maintenance personnel needs to be aware of and take into consideration (e.g. a 5000 psi hydraulic; LEHGS; EHA and EBHA; VFG; SSPC and RCCB; new materials and related processes).

Box2

- Student prerequisites (knowledge, experience, qualification) for the particular a/c type training (e.g. previous exposure to and type of a/c maintenance experience; a/c type maintenance related elements for composite repair and bonding and appropriate knowledge, experience, and awareness in accordance with AMC 20-29, SAE AIR 5719)
- Any options at system, subsystem or equipment/appliance level which are in addition to/in place of the aircraft base configuration (the content under this bullet point should be linked to the above second bullet point in Box 1 suggested content).
- The logical sequence (i.e. time wise order) of imparting training elements from minimum syllabus (e.g. ATA29 training on hydraulic system(s) configuration should precede ATA27 training on flight controls actuation).
- TCH recommendations for:
 - type training minimum syllabus instructional duration (i.e. consolidated per the whole minimum syllabus and/or segregated per elements of the minimum syllabus)
 - specific Maintenance Training Simulation Devices (MSTD) to be used in imparting some of the type training minimum syllabus elements

Box3

- All and any elements identified by applying the Box1 type of content rationale and which should be considered in addressing a difference training between types or models under the same type (as categorised in Appendix I to AMCs of Part-66).

Box4

- All and any elements identified by applying the Box2 type of content rationale and which should be considered in addressing a difference training between types or models under the same type (as categorised in Appendix I to AMCs of Part-66).
- Any additional elements (i.e. in addition to and beyond the Box1, Box2 and Box3 content) which are recommended by the TCH to the OSD-MCSD user.

3.4. WHO THIS CERTIFICATION MEMORANDUM AFFECTS

This Certification Memorandum affects all applicants for a new TC, Equally affected would be the TC Holder who (as mentioned in GM No 1 to 21.A.15(d)) is voluntarily applying for the OSD-MCSD evaluation for an aircraft which is not in Group1 (per GM 66.A.45) or for an already certificated aircraft.

Since the data resulting from the TC Holder compliance with OSD-MCSD should be made available to Part-147, Part-145 and Part-M organisations involving MCS for that product, the respective organisations are indirectly affected by this Certification Memorandum.

This Certification Memorandum also affects indirectly the individual MCS personnel holding as well as the CAs issuing AML with type rating endorsement per Part-66 provisions and the oversight CAs for any of the concerned Part-147, Part-145 or Part-M organisations.

Moreover, the CAs that approve one-off type training courses or examinations/assessments for a product under OSD-MCSD applicability, or develop and administer directly such examinations/assessments, should consider, in their respective activity, the end result of the process described in this Certification Memorandum.

4. REMARKS

1. This EASA Proposed Certification Memorandum will be closed for public consultation on the **28th of May 2014**. Comments received after the indicated closing date for consultation might not be taken into account.
2. Comments regarding this EASA Proposed Certification Memorandum should be referred to the Certification Policy and Planning Department, Certification Directorate, EASA. E-mail CM@easa.europa.eu or fax +49 (0)221 89990 4459.
3. For any question concerning the technical content of this EASA Proposed Certification Memorandum, please contact:

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