



Part-21 Rulemaking Update

Initial Airworthiness

Part 21 DOA Implementation and Product Certification Workshop

18-19 November 2015

Jan Novak

Regulations officer – Initial Airworthiness

Regulations and Certification Policy section (CT.7.1)

Your safety is our mission.

EASA is an agency of the European Union





Contents

- Part-21 status
- Recent changes
- Pending opinions / decisions
- Ongoing tasks



Contents

- Part-21 status
- Recent changes
- Pending opinions / decisions
- Ongoing tasks



Part-21 status

COMMISSION REGULATION (EU) No 748/2012

(03.08 2012) including **Annex I: Part-21**

- Recast of Regulation No 1702/2003 including its amendments **1-7**
- Amendment **1**: COMMISSION REGULATION (EU) No **7/2013** (08.01.2013)
 - Implementation of CAEP/8 recommended amendments
- Amendment **2**: COMMISSION REGULATION (EU) No **69/2014** (28.01.2014)
 - Operational Suitability Data (OSD)
- Amendment **3**: COMMISSION REGULATION (EU) No **2015/1039** (30.06.2015)
 - Flight Testing



AMC & GM to Part-21 status

- **AMC & GM to Part 21, Issue 2** (30.10 2012)
 - Recast of Issue 1, including its amendments 1-9
- Amendment **1**: ED Decision **2013/001/R** (23.01.2013):
 - Implementation of CAEP/8 amendments
- Amendment **2**: ED Decision **2014/007/R** (31.01.2014):
 - Operational Suitability Data (OSD)
- Amendment **3**: **ED Decision 2015/026/R** (10.11.2015):
 - Flight testing



Contents

- Part-21 status
- Recent changes
- Pending opinions / decisions
- Ongoing tasks



Recent changes

- **COMMISSION REGULATION (EU) 2015/1039 on Flight testing** of 30 June 2015 (published 1. July 2015)
- Amending Part-21:
 - POA and DOA to establish Flight Test Operations Manual (FTOM)
 - New Appendix XII
 - Definitions of the terms 'flight tests', 'flight test engineer' (FTE) and 'lead flight test engineer' (LFTE)
 - Specification of 4 categories of flight tests depending on the safety risk
 - Competence and experience requirements for pilots and LFTE



Recent changes

» Transitional measures :

- » National LFTE license: until 31 December 2017
- » FTOM: from 1 January 2016
- » Appendix XII (LFTE training and competency): from 1 January 2018
- » Pilots in Cat 1 and 2 flight tests per current PART-FCL
- » Pilots in Cat 3 and 4 flight tests and FTE: grandfathered (within the scope of function at 31 December 2017)



Recent changes

- ED Decision **2015/026/R** (10.11.2015) on **AMC/GM for Flight testing** implementing rules
 - AMC on Flight Test Operations Manual (FTOM)
 - GM for Appendix XII
 - AMC for LFTE training courses
 - AMC on LFTE medical fitness



Recent changes

- **ED Decision 2015/016/R** (08.07.2015):
 - **CS-STAN**: a new CS for standard changes and repairs to be approved by stakeholders (PHASE 1) (no EASA LOI)
 - Equivalent to **FAA Advisory Circular AC 43-13-2B**



Recent changes

- **COMMISSION REGULATION (EU) No 376/2014** on Occurrence Reporting (adopted 3 April 2014) has come into effect on 15 November 2015
 - 2 parallel regulatory systems for occurrence reporting with not exactly overlapping scope (EASA IR vs. R 376/2014)
 - Mandatory and voluntary reporting
 - Reporting also by natural persons (individuals) and not approved organisations
- **COMMISSION IMPLEMENTING REGULATION (EU) 2015/1018** (adopted 29 June 2015) laying down a list classifying occurrences in civil aviation to be mandatorily reported
 - For design and production related reportable occurrences – aligned with Part-21 (in general terms)



Contents

- Part-21 status
- Recent changes
- Pending opinions / decisions
- Ongoing tasks



Pending opinions/decisions

➤ RMT.0225 Ageing Aircraft

- Development of an *Ageing Aircraft Structure plan (Phase I)*
- Scope: Large aeroplanes only
- Affects the **existing** and future TC & STC applicants/holders
- Complex and controversial task
- Safety and harmonisation arguments
- Changes to Part-26/CS-26, CS-25, AMC-20, ...
- 'Legal hook' in Part-21, link to Part-M
- Status:
 - CRD external consultation (1 Month) 2016/Q1
 - Opinion beginning 2016/2Q



Pending opinions/decisions

- RMT.0262 Embodiment of LOI into Part-21: **Phase 1** (IR only)
 - Level of Involvement (LOI) of the Agency in product certification
 - Relocation of Part-21 requirements applicable to the Agency from LOI affected Subparts B, D, E, M, O
 - Alignment with the Basic Regulation regarding the TC basis (support to deviations, ESF, notification obligation)
 - Improvements, streamlining, corrections, consistency issues
 - CRD & Opinion planned 2016/Q1-Q2



Contents

- Part-21 status
- Recent changes
- Pending opinions / decisions
- Ongoing tasks



Ongoing tasks

- RMT.0262 Embodiment of LOI into Part-21: **Phase 2** (AMC/GM material)
 - Agency task will build on LOI pilot projects and resulting draft EASA Working Instructions (WI) and Certification Memos (CM) going to be used in cert projects to test the LOI implementation
 - AMC/GM material will only be drafted when experience is available from the use of WI and CM in certification practice
 - Industry will be consulted through LOI SG



Ongoing tasks

- RMT.0550 Embodiment of SMS into Part-21
 - The task **reset** in draft 2016-2020 RMP
 - New ToR 2016/Q1 based on a new concept for **coordinated** SMS implementation in **Part-145** and **Part-21** (DOA & POA)
 - EASA **FS** takes a lead on the concept
 - Concept tentative **parameters**:
 - **Phase 1**: necessary changes to implementing rules to become ICAO compliant
 - Annex 19 is the reference
 - Minimum changes to Section A to add missing elements only
 - Harmonised amendments to the affected IR to respect multiple organisation approvals



Ongoing tasks

- **Phase 2: AMC & GM for SMS**
 - Maximum flexibility to the stakeholders
 - Proportionality
 - In collaboration with the stakeholders based on a future industry SMS standard
 - When available and acceptable may be considered for AMC/GM material



Ongoing tasks

- RMT.0607 'Changes to OSD'
 - AMC/GM to Part-21
 - Filtering/identification of design changes that can impact OSD
 - OSD change minor–major classification
 - Application of 21.A.101 CPR to Major
 - How to combine design change + OSD change under one approval (2 processes – 1 approval)
- NPA planned 2016/Q1



Ongoing tasks

- RMT.0018 & RMT.0571 (21.026) Installation of parts and appliances released without an EASA Form 1 or equivalent
 - Currently EASA Form 1 is always required except 'standard parts' and certain parts for ELA 1 or ELA 2 aircraft
 - To address parts supplied but not produced by a POAH, e.g.:
 - 'non-aviation parts' incl. commercial parts (e.g. IES videos, screens...)
 - non-required 'mission' equipment (e.g. AF cameras)
 - OPS required parts (e.g. First aid kits ...)
 - Risk-based (SMS) concept respecting proportionality criteria:
 - Safety risk significance in the design
 - Complexity and production process risks
 - Type of operation (e.g. leisure vs CAT)



Ongoing tasks

- RMT.0681 Occurrence reporting
 - To align all the EASA Implementing Rules and AMC/GM with **Regulations No 376/2014** on the reporting, analysis and follow-up of occurrences in civil aviation.
 - ToR issued 30 September 2015



On-going tasks

➤ RMT.0252 Instruction for Continuing Airworthiness (ICA)

5 Subtasks

- Definition and identification of ICA
- Completeness of ICA
- Level of involvement of the competent authority
- Availability of ICA
- MRB Scheduling Information (guidance on the MRB process)
- Acceptance/approval of ICAs by other than the authority
- Certification Maintenance Requirements
- NPA 2016
- CRD + Opinion 2018



Ongoing tasks

- **RMT.0278 (MDM.078)** Importing of aircraft from other regulatory system and Part-21 Subpart H review
- Issuance of ARC and C of A to aircraft entering the EU aviation system under the Basic Regulation from outside:
 - Imported non-EU/EASA A/C
 - EU state aircraft
 - EU aircraft re-entering after they lost valid C of A or ARC
- Identification of documents, approvals, inspections and other maintenance tasks needed
- ToR RMT.0278 & RMT.0536 (MDM.078) (01.02.2013)
- Next deliverable NPA: 2016/Q1

Thanks for your attention!

Questions?

Your safety is our mission.

EASA is an agency of the European Union





Recent changes

- **COMMISSION REGULATION (EU) 2015/640** (23 April 2015) **Additional airworthiness specifications for a given type of operations**
 - Annex I – **Part-26**
 - Transfer of JAR-26
 - 2 years transition

- **ED Decision 2015/013/R** (08.05.2015) **Certification Specifications** for additional airworthiness specifications for operations
 - Annex I – **CS-26**

- Part-26/CS-26 will be used for other 'retroactive' airworthiness requirements



Ongoing tasks (Technical)

➤ CS-ETSO Updates

- RMT.0206 (NPA 2015-02, current CS-ETSO regular updates cycle)
- IMA Project
- RMT.0457 (Future CS-ETSO updating cycle)



Ongoing tasks (Technical)

- RMT.0456 (IMA)
- ASD tasked to develop draft material
 - ETSO 2C153
 - AMC 20-170
- NPA on ETSO 2C153 planned for July / August 2015
- AMC material will follow later



On-going Part 26/CS-26 tasks

- RMT.0069 **Dynamic testing 16g**
 - Agency task
 - NPA 2013-20 consultation until 31/01/2014
 - CRD & Decision at final stage
 - Final discussions on exclusion of certain BA

- RMT.0070 **Fire hazard in Class D cargo compartments**
 - NPA 2013-23 consultation until 24/02/2014
 - NPA concludes that a mandatory retrofit is not justified
 - CRD + Opinion planned 1Q 2015



On-going (Part 26/CS-26 tasks

➤ RMT.0560 Halon phase out to comply with ICAO

➤ NPA 2014-26 issued 18.11.2014

➤ replacement of halon in:

➤ lavatory waste receptacle

➤ portable hand-held fire extinguishers for use in cabins and crew compartments

➤ fire protection systems in aircraft cargo compartments

➤ engine/APU compartments

➤ production cut-in

➤ No production cut-in proposed



On-going tasks

- Task RMT.0264 Executive interiors accommodation
 - amend and/or complement CS-25 by introducing new provisions for executive ('VIP') interiors, taking into account the compensating factors offered by such interiors and their utilisation
 - Industry-led working group
 - NPA drafted by the Group
 - NPA to be issued soon by Agency with slight modifications



On-going tasks

- Task RMT.0384 Open rotor engine and installation
 - Define safety objectives based on the unique nature of the open rotor configuration. New provisions for CS-25 and CS-E
 - Industry-led working group
 - NPA being drafted, planned for publication 02Q2015



On-going tasks

- Task RMT.0249 Recorders installation and maintenance thereof - certification aspects
 - Affects CS-25, and also CS-23, -27, -29
 - Improve the availability and quality of data recorded by flight recorders in order to better support safety accident investigation authorities.
 - Introduce specs for installation of deployable recorders.
 - NPA estimated 03Q2015