



MDM.032 working group

Developing a concept for better regulation in General Aviation

Update on Sport and Recreational Aviation

23 June 2008



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Part I: Update on MDM.032

➤ The Advance-NPA 14/2006

- ★ Envisaged a concept for better regulation for general aviation:

➔ http://www.easa.europa.eu/ws_prod/r/r_archives.php

- ★ The comment response document CRD-14-2006 was published on 9 November 2007:

➔ http://www.easa.europa.eu/ws_prod/r/r_archives.php

- ★ The attachment 1 of the explanatory note provide background for A-NPA and CRD



Part I: Update on MDM.032

➤ Continuing airworthiness

- ★ **NPA 2007-08 envisaged many simplifications to Part-M including pilot owner maintenance:**

- ➔ http://www.easa.europa.eu/ws_prod/r/r_archives.php

- ★ **Comment response document 2007-08 was published on 06 March 2008 and was open for reaction until 06 May 2008:**

- ➔ http://www.easa.europa.eu/ws_prod/r/r_crd.php

- ★ **Opinion 02/2008 published 16 May 2008:**

- ➔ http://www.easa.europa.eu/ws_prod/g/rg_opinions_main.php



Part I: Update on MDM.032

➤ Aircraft mechanics licensing

- ★ **NPA 2008-03 Licences for non-complex aircraft maintenance engineers was published on 28 March 2008 and is open for comment until 28 June 2008:**

➔ http://www.easa.europa.eu/ws_prod/r/r_npa.php

- ★ **Opinion to be adopted before the end of this year**



Part I: Update on MDM.032

➤ Pilot licensing (I):

- ★ **Leisure Pilot Licence (LPL)**
- ★ **Publication date of the NPA for Part FCL and Part Medical: 05.06.2008**
- ★ **Workshop FCL in Cologne: 10-11 June 2008 – a second workshop in August 08**
 - ➔ http://www.easa.europa.eu/ws_prod/g/g_events.php
- ★ **More presentations for FCL under “summary” of the FCL workshop (event-page)**



Part I: Update on MDM.032

➤ Pilot licensing (II):

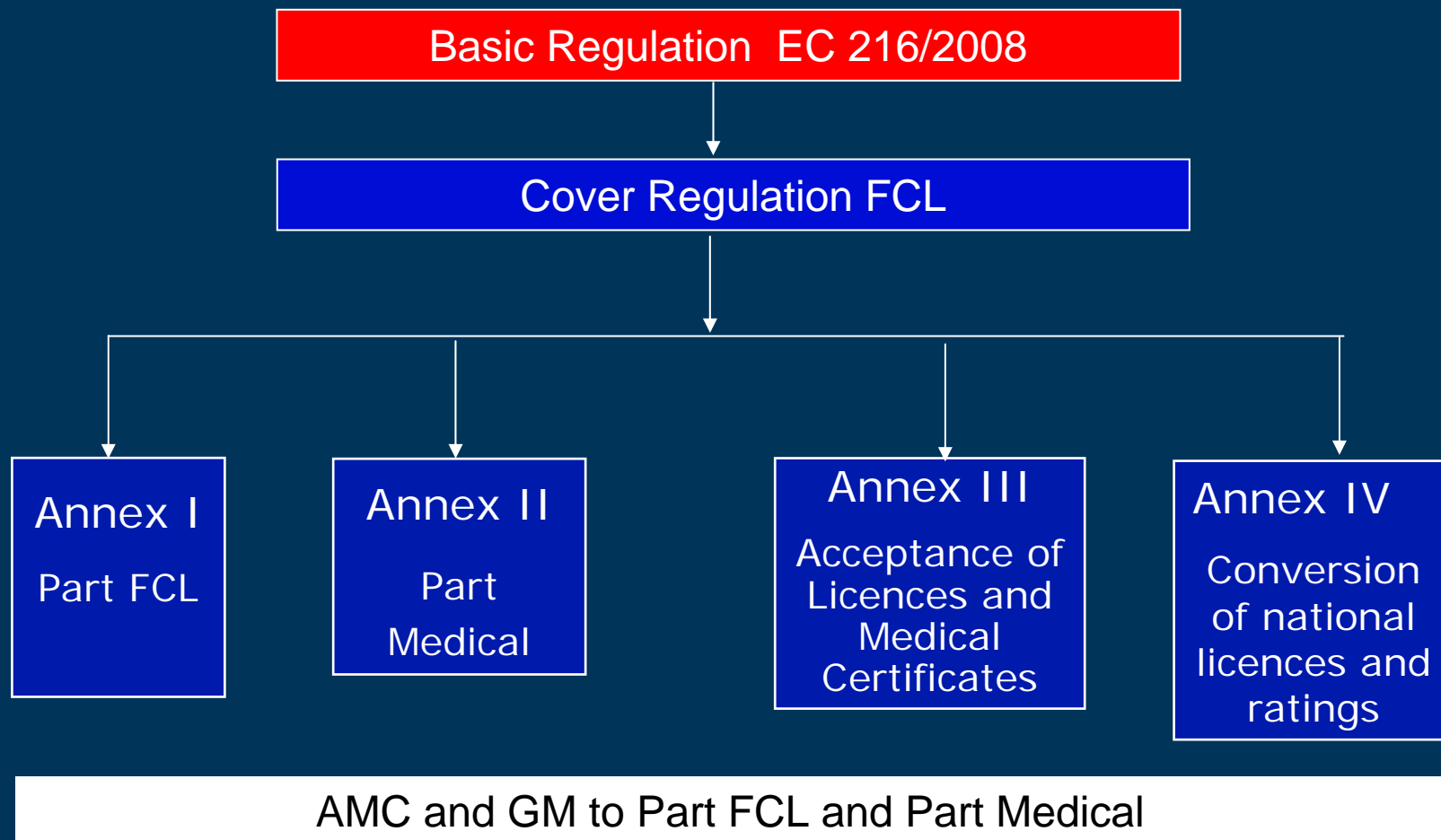
★ **Implementing rule should address:**

- Common requirements
- Specific requirements for the basic LPL-aeroplane and helicopter categories
- Specific requirements for LPL aeroplanes LPL(A)
- Specific requirements for LPL helicopters LPL(H)
- Specific requirements for LPL sailplanes LPL(S)
- Specific requirements for LPL balloons LPL(B)
- LPL Flight Instructor and Flight examiner
- LPL Medical



Part I: Update on MDM.032

Leisure Pilot Licence FCL - Structure





Part I: Update on MDM.032

NPA 2008/17b Draft Opinion Part-FCL

Pilot licensing (II)

- Subpart A - General Requirements
- Subpart B - Leisure Pilot Licence (LPL)
- Subpart C - PPL / SPL / BPL
- Subpart D/E/F - CPL / MPL / ATPL
- Subpart G - Instrument Rating - IR
- Subpart H - Class and Type ratings
- Subpart I - Additional Ratings
- Subpart J - Instructors
- Subpart K - Examiners



Part I: Update on MDM.032

➤ Operations:

- ★ **Publication of the NPA:
August /September 2008**

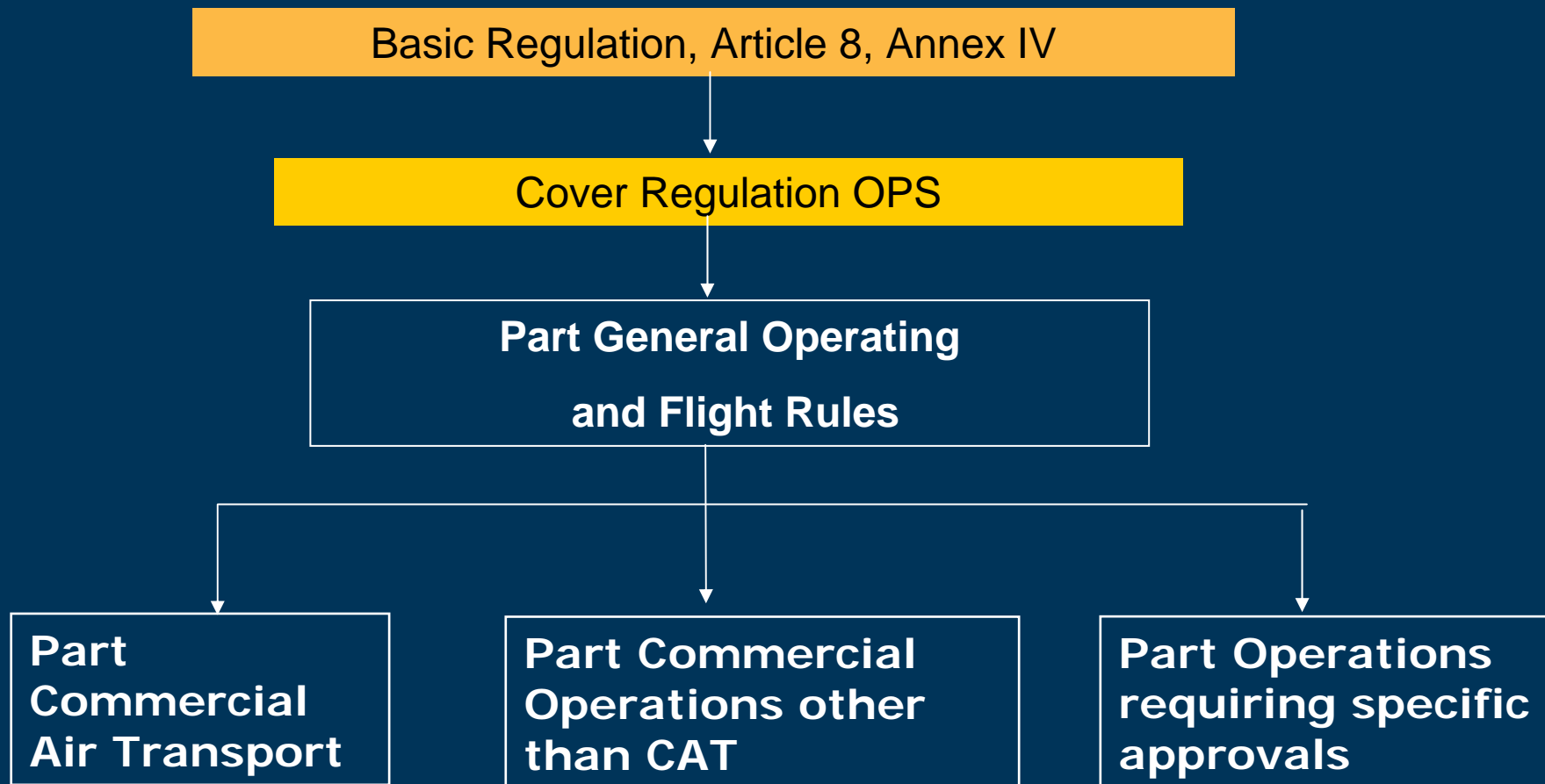
- ★ **Part OPS GEN: General operating and
flight rules**

- ➔ Subpart A: General
- ➔ Subpart B: Operational procedures
- ➔ Subpart C: Aircraft performance and operating limitations
- ➔ Subpart D: Instruments, data and equipment
- ➔ Subpart E: Manuals, logs and records
- ➔ Subpart F: Security



Part I: Update on MDM.032

Air Operations – planned structure





Part I: Update on MDM.032

➤ Commercial activities (216/2008):

- ★ 'commercial operation' shall mean any operation of an aircraft, in return for remuneration or other valuable consideration, which is available to the public or, when not made available to the public, which is performed under a contract between an operator and a customer, where the latter has no control over the operator;



Part I: Update on MDM.032

- **Complex-motor-powered aircraft means (216/2008):**
 - ★ ***(i) an aeroplane:***
 - with a maximum certificated take-off mass exceeding 5,700kg or;
 - certificated for a maximum passenger seating configuration of more than nineteen, or
 - certificated for operation with a minimum crew of at least two pilots, or
 - equipped with (a) turbojet engine (s) or more than one turboprop engine, or



Part I: Update on MDM.032

- **Complex-motor-powered aircraft means (216/2008):**
 - ★ ***(ii) a helicopter certificated:***
 - with a maximum certificated take-off mass exceeding 3,175kg or;
 - For a maximum passenger seating configuration of more than nine or
 - certificated for operation with a minimum crew of at least 2 pilots; or
 - ★ ***(iii) a tilt rotor aircraft;***



Part I: Update on MDM.032

- **Industry standard (AMC to Part-21/Part-M):**
 - ★ **Standards established or published by an official body whether having legal personality or not, which are widely recognised (by consensus) by the aviation community as constituting good practices**



Part II: Presentation of NPA 2008-07

➤ Overview:

- ➔ The intention is to create a lighter regulatory regime based around a new process for the European Light Aircraft (ELA).
- ➔ ELA is not a new category of aircraft defined by criteria such as stalling speed or certification code, but is a substantially simpler new process for the regulation of aircraft and related products, parts and appliances.
- ➔ The intention is to issue type certificates for the type and certificates of airworthiness for the individual aircraft.
- ➔ The ELA is sub-divided into two sub-processes: ELA 1 and ELA 2



Part II: Presentation of NPA 2008-07

➤ Overview

➤ Items common to the two sub-processes:

- Reliance on qualified entities (QE) for design and for production
- Production organisation approvals (POA): the intent is to use subpart G of Part-21 where the quality system is replaced by organisational reviews.
- Approval of parts: creation of a system of parts that need a form 1 and parts that doesn't. Part that would continue to need a form 1 would be life limited parts, primary structure and flight controls.



Part II: Presentation of NPA 2008-07

➤ Overview

★ ELA 1 (I)

- ➔ A **non-complex aeroplane, sailplane or powered sailplane** with a Maximum Take-Off Mass (MTOM) less than 1000kg
- ➔ A **balloon** with a maximum design lifting gas or hot air volume of not more than:
 - ➔ 3400 m3 for hot-air balloons
 - ➔ 1050 m3 for gas balloons
 - ➔ 300 m3 for tethered gas balloons
- ➔ An **airship** designed for not more than two occupants and a maximum design lifting gas or hot-air volume of not more than:
 - ➔ 2500 m3 for hot-air airships
 - ➔ 1000 m3 for gas airships



Part II: Presentation of NPA 2008-07

➤ Overview

★ ELA 1 (II)

- ➔ A **piston engine** installed in aircraft referred to in this paragraph
- ➔ A **propeller** installed in aircraft referred to in this paragraph



Part II: Presentation of NPA 2008-07

➤ Overview

✧ ELA 1:

➔ *Demonstration of capability for design:*

- ➔ Approval of certification programme by EASA in lieu of DOA or AP to DOA although the applicant may elect to have a higher design approval.

➔ *Creation of a Certification Specification- Light Sport Aeroplanes (CS- LSA) to complement existing CS (CS-22 for sailplanes and powered sailplanes, CS-VLA for very light aeroplanes, etc):*

- ➔ this CS would define the applicability (criteria include maximum take-off mass of 600Kg) and refer to the ASTM standard that is used in the FAA light sport aircraft rule.



Part II: Presentation of NPA 2008-07

➤ Overview

★ ELA 2:

- ➔ A **non-complex aeroplane** with MTOM less than 2000kg
- ➔ A **very light rotorcraft**

- ➔ A **balloon** not in ELA 1
- ➔ A **hot-air airship** not in ELA 1
- ➔ A **manned gas airship** meeting all the following elements:
 - ➔ (i) 3% maximum static heaviness
 - ➔ (ii) Non vectored thrust (except reverse thrust)
 - ➔ (iii) Conventional and simple design of:
 - » **Structure**
 - » **Control system**
 - » **Ballonet system**
 - ➔ Non power assisted control



Part II: Presentation of NPA 2008-07

➤ Overview

★ ELA 2 (II):

- ➔ A **piston engine** installed in aircraft referred to in this paragraph
- ➔ A **propeller** installed in aircraft referred to in this paragraph



Part II: Presentation of NPA 2008-07

➤ Overview

★ ELA 2:

➔ *Demonstration of capability for design:*

➔ **Alternative Procedures to DOA will apply although the applicant may elect to have a higher design approval.**



Part II: Presentation of NPA 2008-07

➤ Overview

- ★ Creation of a system of standard changes and standard repairs:
 - ➔ Applicable to aircraft below 5700 kg MTOM; rotorcraft below 3175 MTOM, sailplanes, powered sailplanes, balloons and airships.



Part II: Presentation of NPA 2008-07

➤ Next steps:

- ★ **AMC to be produced or modified**
- ★ **Review of comments received**
- ★ **Intend is to issue the Opinion on Part-21 by the end of the year**
- ★ **MDM.032 group will continue augmented by two independent experts**



Summary/ Conclusions

- Overview of MDM.032
- Presentation of the NPA 2008-07

We strongly encourage you to comment!
Please use the CRT tool on the EASA website!
<http://hub.easa.europa.eu/crt/>



Annex 1 more details on the NPA

➤ Regulatory Impact Assessment:

★ Two options envisaged:

- ➔ Do nothing
- ➔ Develop an ELA process

★ Qualitative assessments for the impacts

★ Conformity to ICAO Annex 8 has been checked

★ Foreign comparable regulations were listed

★ Develop an ELA process was retained



Annex 1 more details on the NPA

➤ Competent Authorities:

- ★ 'Definition' is provided in the explanatory note
- ★ Clarify the possibility for a Member State to nominate more than one competent authority provided there is no overlap
- ★ An AMC will be developed in due course



Annex 1 more details on the NPA

➤ Qualified Entities (QE) (I):

- ★ **Need careful review**

- ★ **Concept clarified by Regulation 216/2008**

 - ➔ "Qualified Entity" means a body which may be allocated a specific certification task by, and under the control and the responsibility of, the Agency or a national authority.

 - ➔ Appendix 5 defines *criteria* for QE

- ★ **Can not issue certificate or legal approval**

- ★ **Agency intent to use them in addition to already accredited national Authorities**



Annex 1 more details on the NPA

➤ Qualified Entities (QE) (II):

- ★ Will need modification to the Management Board decision on guidelines for allocation of tasks to national authorities
- ★ Will need to define appropriate accreditation and oversight procedures
- ★ Will need to define effective working procedures
- ★ Attachment 1 and 2 of the explanatory note provide more explanations



Annex 1 more details on the NPA

➤ Design approvals:

- ★ **ELA 1: approval by the agency of a certification programme detailing the means for compliance demonstration**

- ➔ Same applies to STC and major repairs for ELA 1
- ➔ Issue of transferability of TC or STC

- ★ **ELA 2: Alternative procedures for DOA (AP-DOA)**

- ➔ Scope for AP-DOA has been increased



Annex 1 more details on the NPA

➤ Production approvals:

- ★ **ELA 1 and 2: subpart G applies but with the quality system replaced by organisational reviews**



Annex 1 more details on the NPA

➤ Combined POA/DOA:

- ★ **Optional**
- ★ **Included in a new subpart L**
- ★ **Concept needs careful review**
- ★ **Lead to the issue of one certificate in the Member State make use of article 20 2 (b) (ii) of regulation 216/2008**
- ★ **In all other cases, two certificates**
- ★ **Specific wordings have been included in the new Subpart L**



Annex 1 more details on the NPA

- Limiting the number of parts that need a form 1:
 - ★ Limit the burden
 - ★ Safeguards
 - ★ More open for ELA 1 than ELA 2
 - ★ Modification to Paragraph 21A.307 in Subpart K
 - ★ Specific question asked:
 - ➔ Limit to aircraft used for non-commercial purposes?



Annex 1 more details on the NPA

➤ Creation of a CS for light sport aeroplanes:

★ 3 paragraphs:

- Applicability
- Categories
- Airworthiness code

★ Refer to ASTM international F 2245



Annex 1 more details on the NPA

- **Introduction of standard changes and standard repairs:**
 - ✦ **Applicable beyond ELA**
 - ✦ **Similar to the US concept of AC 43-13 1B and 2B**
 - ✦ **Two new paragraphs 21A.96 and 21A.436**
 - ✦ **Idea is to issue specific Certification Specification**
 - ➔ This create a legal act by the Agency
 - ➔ Ensure proper safety level



Annex 1 more details on the NPA

- **Fees and charges:**
 - ★ **Difficult issue**
 - ★ **Fees and Charges Regulation does not envisage that fees are levied directly by QE**
 - ★ **Need further study**