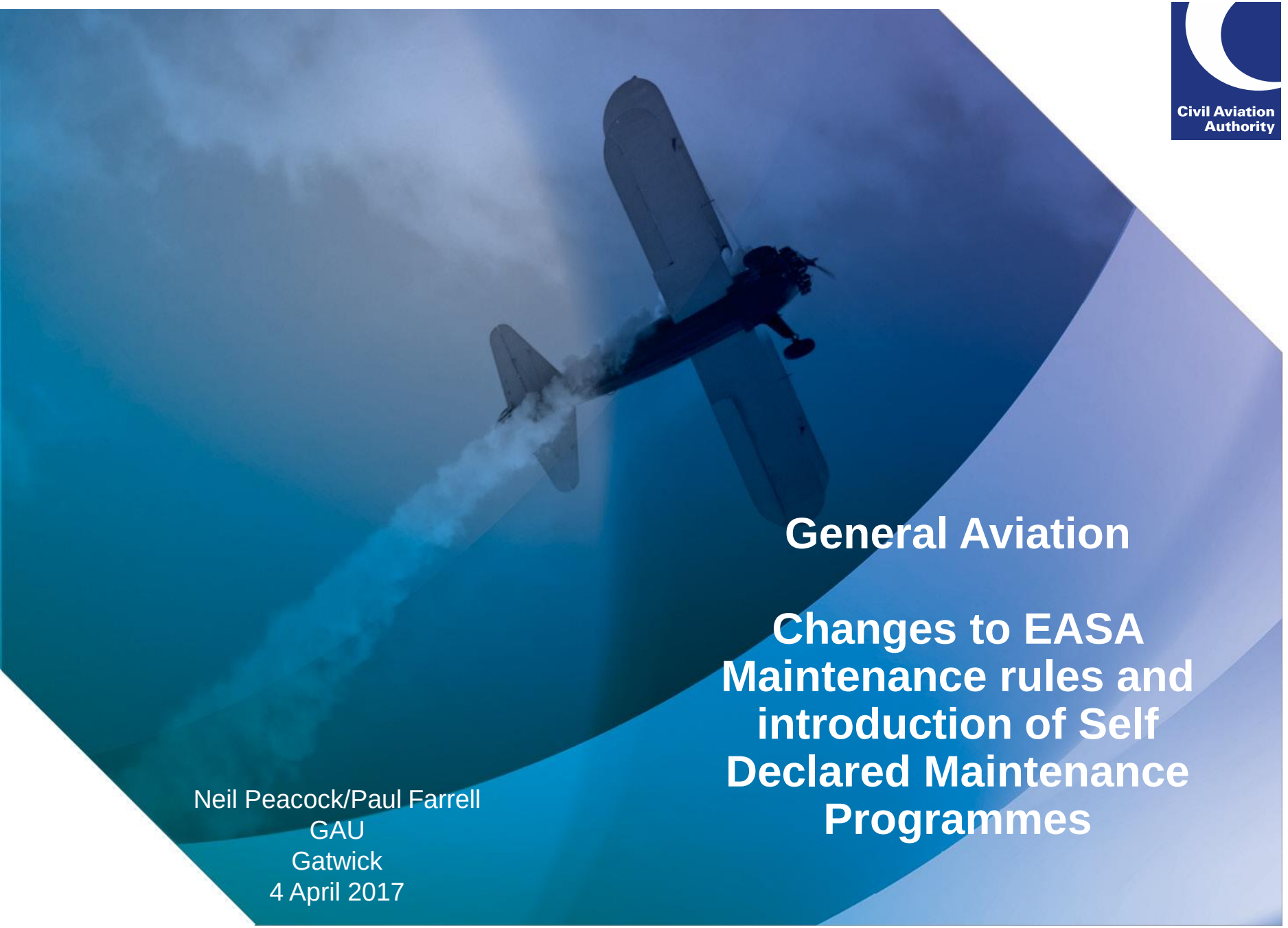


General Aviation

Changes to EASA Maintenance rules and introduction of Self Declared Maintenance Programmes

Neil Peacock/Paul Farrell
GAU
Gatwick
4 April 2017

Changes to Part M

Opinion 05/2016 published by EASA on 13 April 2016.

Proposes a Light Part-M (Part-ML) and a new “Combined Airworthiness Organisation” (Part-CAO)

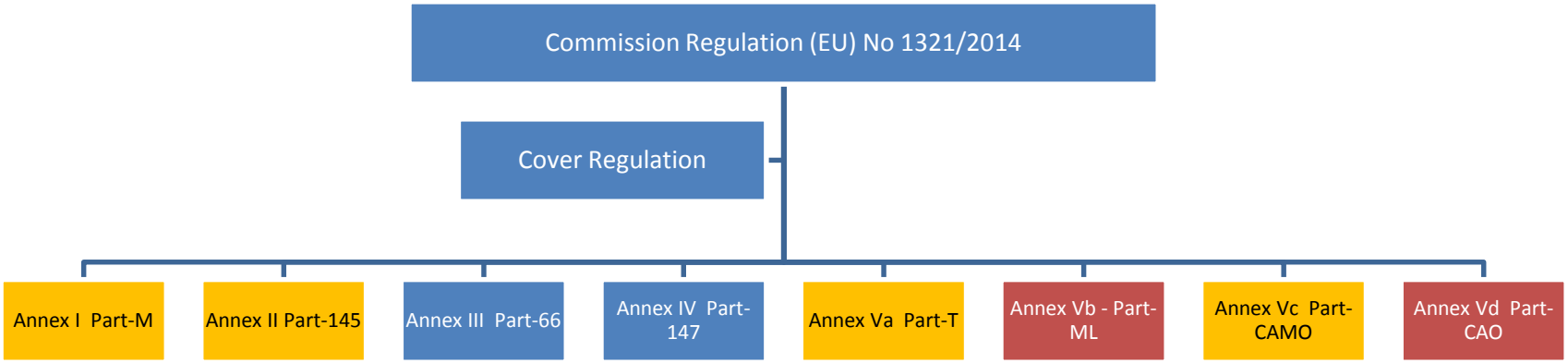
Part M Light

- Applicable to:
  - aeroplanes up to 2730 Kg,
  - other ELA2 aircraft and
  - helicopters up to 4 occupants and up to1200 Kg.

- Applicable to private and commercial operations but not to Commercial Air Transport.

- Part M L covers all sailplanes and balloons, even if they carry passengers (they are excluded from (EC) 1008/2008)

New Regulation Structure



Agenda

- Pilot / Owner
- Engineers
- Approved Organisations
- The Maintenance Programme
- SDMP and LAMP

Part M Light

- Granting more privileges to individuals,
- Declaration of the AMP by the owner/operator
- Deferment of defects by the pilot

Issuing an ARC

Independent certifying staff can issue the ARC together with the 100h/annual inspection (for non-commercial operations)

- Will need to be authorised by the NAA to carry out the Airworthiness Review

Part CAO

New “**Combined Airworthiness Organisation**” (**Part-CAO**) :

- Applicable to non-complex NON-CAT **aircraft (reg 1008/2008**
- Combines the privileges of a Subpart-F maintenance organisation and a CAMO.
- No SMS
- Introduces simplified requirements,.

Part CAO

Organisations required for:

- Maintenance and continuing airworthiness management of aircraft involved in commercial operations.
- Airworthiness reviews of aircraft involved in commercial operations.
- Extension of ARCs.

Flying Training Schools Regulations

- IF Aircraft below 2730 Kgs :
- Operating Rule May be Part NCO (Non commercial use)
- Part ML airworthiness rules apply
- Maintenance may be provided by Individual Part 66 LAE applying standards per Part ML subpart D
- SDMP may be used BUT only if the owner manages the aircraft.

Flying Training Schools Regulations

- Aircraft above 2730 below 5700 Kgs
- Operating Rule May be Part NCO (Non commercial use)
- Part M airworthiness rules apply
- Maintenance provided by Part CAO applying standards of Part M subpart D
- Can use Part CAMO if desired !
- Must use CAO produced AMP.

Current Approvals

- Organisations holding Subpart G, Part-145 or Subpart F approvals will be issued a Part-CAO approval upon application, will have up to 2 years to correct any findings.

- Organisations can keep the current Subpart G or Part-145 approval (needed for complex aircraft and CAT)

Maintenance Programme

Declaration/approval of Maintenance Programme (AMP):

- Under Part-ML it is not possible to have the AMP approved by the NAA.

- For aircraft managed by a CAMO or CAO:
  - The CAMO or CAO approves the AMP.
  - Justifications to deviations from manufacturer recommendations must be provided to the owner.

- For aircraft not managed by a CAMO or CAO:
  - The AMP is declared by the owner.
  - No justification for deviations needed.

Self-Declared Maintenance programme & LAMP

- What
  - Why
    - How

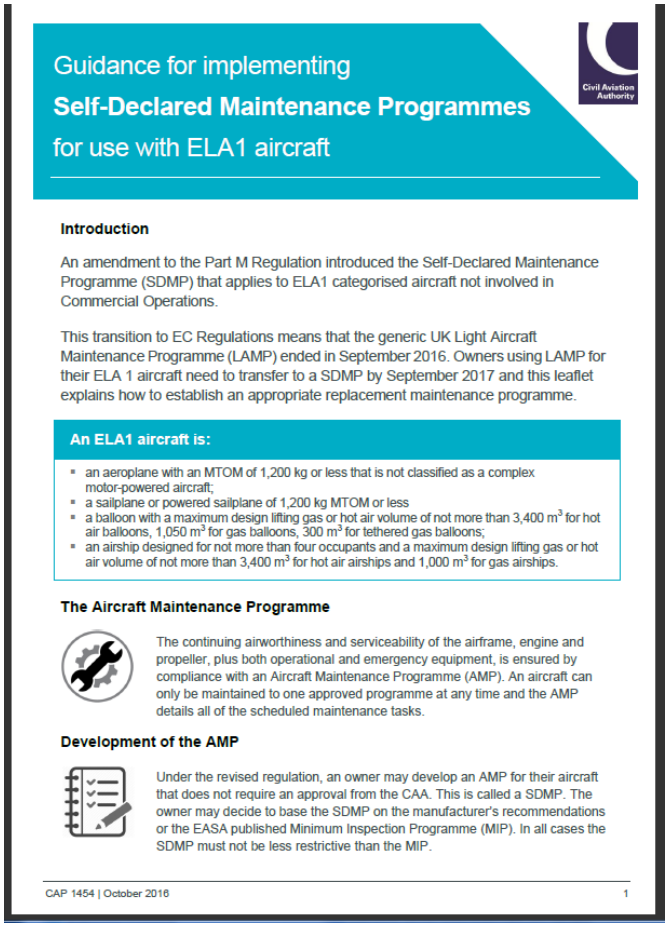
What

- ELA1 aircraft not involved in commercial operations,
  - The aircraft maintenance programme shall
    - identify the owner
    - the specific aircraft , including any installed engine and propeller.
    - Comply with the “Minimum Inspection Programme”, or
    - Design approval holders instructions
  - Under Part M shall be approved by the Authority, or CAMO, or
  - signed by the owner declaring that he/she is fully responsible for its content

Why

- Discrepancies were noted with regard to Aircraft Maintenance Programmes:
  - CAA does not ensure that all a/c have an approved maintenance programme.
  - Amendments of the LAMP (Light Aircraft Maintenance Programme), when linked to a specific registration mark, are not approved.
  - Specific tasks, personalising the maintenance programme for specific registration, do not appear in maintenance programme.

How



Guidance for implementing

Self-Declared Maintenance Programmes

for use with ELA1 aircraft

Civil Aviation Authority

Introduction

An amendment to the Part M Regulation introduced the Self-Declared Maintenance Programme (SDMP) that applies to ELA1 categorised aircraft not involved in Commercial Operations.

This transition to EC Regulations means that the generic UK Light Aircraft Maintenance Programme (LAMP) ended in September 2016. Owners using LAMP for their ELA 1 aircraft need to transfer to a SDMP by September 2017 and this leaflet explains how to establish an appropriate replacement maintenance programme.

An ELA1 aircraft is:

- an aeroplane with an MTOM of 1,200 kg or less that is not classified as a complex motor-powered aircraft;
- a sailplane or powered sailplane of 1,200 kg MTOM or less
- a balloon with a maximum design lifting gas or hot air volume of not more than 3,400 m^3 for hot air balloons, 1,050 m^3 for gas balloons, 300 m^3 for tethered gas balloons;
- an airship designed for not more than four occupants and a maximum design lifting gas or hot air volume of not more than 3,400 m^3 for hot air airships and 1,000 m^3 for gas airships.

The Aircraft Maintenance Programme

The continuing airworthiness and serviceability of the airframe, engine and propeller, plus both operational and emergency equipment, is ensured by compliance with an Aircraft Maintenance Programme (AMP). An aircraft can only be maintained to one approved programme at any time and the AMP details all of the scheduled maintenance tasks.

Development of the AMP

Under the revised regulation, an owner may develop an AMP for their aircraft that does not require an approval from the CAA. This is called a SDMP. The owner may decide to base the SDMP on the manufacturer's recommendations or the EASA published Minimum Inspection Programme (MIP). In all cases the SDMP must not be less restrictive than the MIP.

CAP 1454 | October 2016 1

Aircraft Maintenance Programme (for aircraft other than 'complex motor-powered aircraft')

Aircraft identification

1	Registration(s):	Type:	Serial No (s):

Basis for the Maintenance Programme

2 **This Aircraft Maintenance Programme complies with (tick one option):**

M.A.302(b), (c), (d), (e) and (g) **(Complete section 3 below), or**

M.A.302(h) **(Only possible for ELA1 aircraft not used in commercial operations)**

For Aircraft Maintenance Programmes complying with M.A.302(h) (see above) the following data is used (tick one option):

Design Approval Holder Maintenance Data **(Complete section 3 below), or**

Minimum Inspection Programme as detailed in the latest revision of AMC M.A.302(i) **, or**

Other Minimum Inspection Programme complying with M.A.302(i) **(List the tasks in Appendix A to this Aircraft Maintenance Programme)**

Design Approval Holder Maintenance Data (not applicable if using Minimum Inspection Programmes)

3	**Equipment manufacturer and type**		**Applicable maintenance data reference (at latest revision)**
	For aircraft other than balloons		
3a	Aircraft **(other than balloons)**		
3b	Engine (if applicable)		
3c	Propeller (if applicable)		
	For balloons		
3d	Envelope **(only for balloons)**		
3e	Basket(s) **(only for balloons)**		
3f	Burner(s) **(only for balloons)**		
3g	Fuel cylinders **(only for balloons)**		

Timescales

Phase 1 - with effect from 1 October 2016

Affected aircraft	Planned outcome
ELA1 aircraft operated privately	All aircraft to be transferred to a SDMP or approved AMP by 30 September 2017. **Note:** All ELA1 aircraft eligible to use the SDMP (provided in (EU) 2015/1088) must transition onto a maintenance programme that complies with Regulation (EU) No 1321/2014 at the next ARC review after 1 October 2016.

Affected aircraft	Aircraft new to the register after 1 September 2016
ELA1 aircraft operated commercially **Aircraft with MTOM of 1200 kg or more but less than 2730 kg** **Helicopters below 1200 kg and up to 4 occupants**	Aircraft are to have a CAA or CAMO-approved maintenance programme. These aircraft have the option to move to a SDMP with the introduction of Part-M Light (Part-ML) (expected during 2017.)
Helicopters above 1200 kg	Aircraft are to have a CAA or CAMO-approved maintenance programme.

Timescales

Civil Aviation Authority

Phase 2 - with effect from the introduction of Part-M Light (Part-ML)

There is no forecast implementation date for Part-ML although it is expected during 2017.

Affected aircraft	Planned outcome
ELA1 aircraft operated commercially **Aircraft with MTOM of 1200 kg or more but less than 2730 kg**	All aircraft to be transferred to a Part-ML-compliant AMP one year after the introduction of Part-ML. These aircraft may continue to use LAMP(A) until one year after the introduction of Part-ML
Helicopters below 1200 kg and up to 4 occupants	All aircraft to be transferred to a Part-ML-compliant AMP one year after the introduction of Part-ML. These aircraft may continue to use LAMP(H) until one year after the introduction of Part-ML **Note:** Part-ML will not contain a MIP for helicopters. The helicopter SDMP is to be based on the continuing airworthiness instructions issued by the DAH.
Helicopters above 1200 kg	All aircraft to be transferred to an approved maintenance programme one year after the introduction of Part-ML These aircraft may continue to use LAMP(H) until one year after the introduction of Part-ML SDMP will NOT be available for these aircraft.

Questions

Minor Mod Approvals and CS STAN

- Minor modifications to CAA regulated aircraft can now be achieved in less time, for less money and with less paperwork.

- CAA has introduced a new process to effectively mirror the use of CS-STAN for UK registered non-EASA aircraft.

- Full guidance has been published as CAP 1419 which sets out how to support a minor modification application, and how to use standard changes and standard repairs of CS-STAN.

- More details http://www.caa.co.uk/General-aviation/Aircraft-ownership-and-maintenance/Minor-modifications/

Definitions

Service/lubrication (SERVICE/LUB)

The term 'service or lubrication' requires that a component or system should be serviced and/or replenished as necessary with fuel, oil, grease, water, oxygen, etc., to a condition specified in the appropriate maintenance manual. The term may also be used to require filter cleaning or replacement.

Inspect (INSP)

An 'inspection' is a visual check performed externally or internally in suitable lighting conditions from a distance considered necessary to detect unsatisfactory conditions/discrepancies using, where necessary, inspection aids such as mirrors, torches, a magnifying glass etc.

Surface cleaning and removal of detachable cowlings, panels, covers and fabric may be required to be able to satisfy the inspection requirements.

Operational check (OP/C)

An 'operational check' is a test used to determine that a system or component or any function thereof is operating normally.

Functional check (F/C)

A 'functional check' is a detailed examination of a complete system, sub-system or component to determine if operating parameters are within limits of range of movement, rate of flow, temperature, pressure, revolutions per minute, degrees of travel, etc., as specified in the appropriate maintenance manual. Measured parameters must be recorded.