# Part-M impact on GA maintenance organizations

## EASA inquiry dated 4 July 2011

1. Who is SAMA
2. What is GA
3. The topics of the inquiry
4. Our proposals
5. Discussion, Q&A

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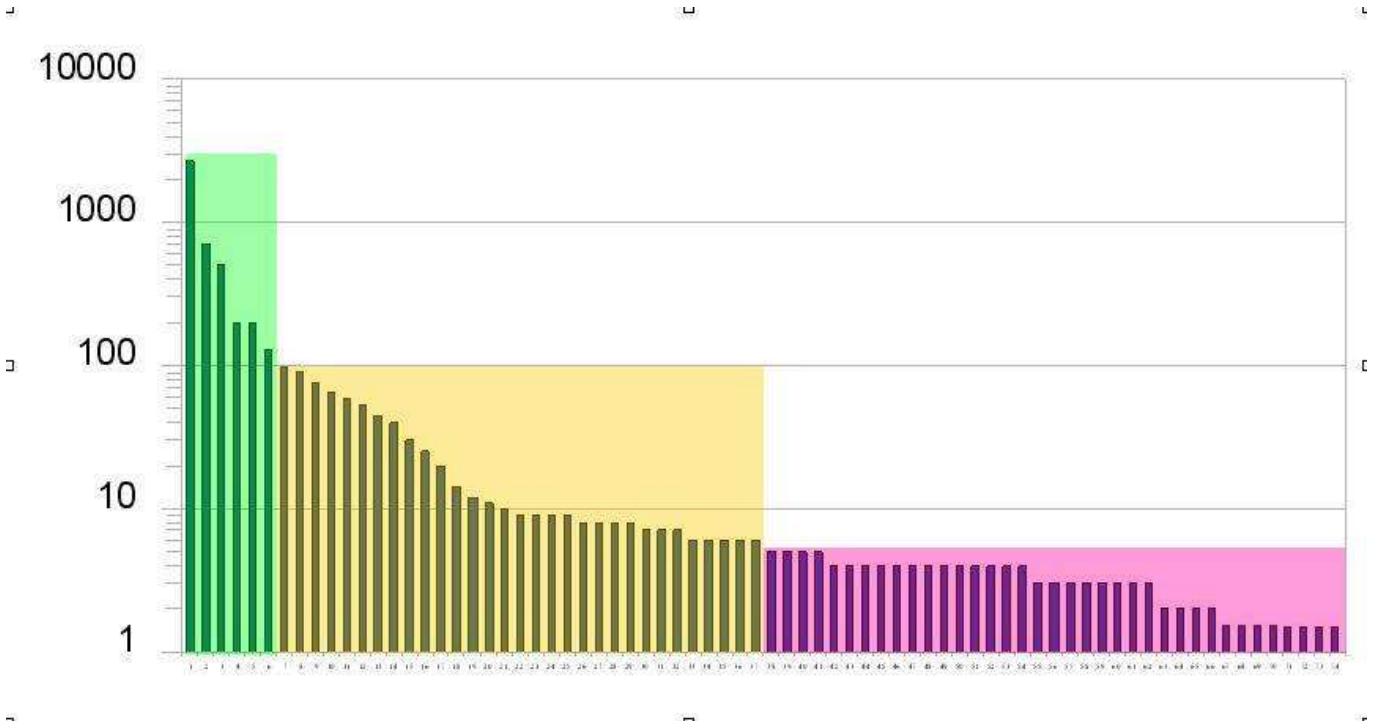
- 54 years old, 34 years in aviation, B1 Licence, 13 years as engineer hands on
- Maintenance manager of part 145 with 44 aircraft in regular service for 15 years
- Management buy out of ASB 2004
- ASB was founded 1967
- Creating workplaces for 27 men and women

# airservicebasel

- Entered new facility in 2009
- PART 145, FAA Part 145, Bermuda DCA approval
- Total staff 27, 15 licensed engineers
- Total aviation maintenance experience in this typical SME is > 100 years

# SAMA proposal on M regulation format

## SAMA‘s membership landscape



# What is GA?

Practical, maintenance point of view:

Very wide spectrum of different:

- Organisation from on person to SME‘s
- working environments,
- operational conditions,

Very wide spectrum of different aircraft:

- Gliders, light aircraft, some light complex, a lot of non complex
- helicopters
- medium and ‚large‘ complex aircraft

# What is GA?

*EU Definition (COM(2007)869 final):*

*Communication from the Commission*

*An Agenda for **Sustainable** Future in General and Business Aviation*

General and Business aviation is very diverse.

It encompasses activities ranging from recreational flying with non-powered aircraft to complex operation of high-performance business jets and specialised aerial works.

This creates challenges, as policy initiatives can not be based on the "one size fits all" approach.

# The topics of the inquiry

## An overview of SAMA‘s Opinions

**1. Rule format**

This is our main concern.

**2. Maintenance programmes**

Maintenance programmes for aircraft in General Aviation operations should generally refer to manufacturer‘s recommendations.

Indirect approval light/non complex aircraft can be left to certifying staff knowing their operational context

**3. Approval of repairs and modification**

Repairs and modifications on non complex aircraft shall be acceptable if completed in accordance with accepted standards, e.g. FAA AC43.13.

# Overview of SAMA‘s Opinions (cont‘d)

**4. Acceptance of US/CDN components**

Compatible components released to any accepted, non-EASA Standard shall be acceptable for installation. Additional EASA certifications or releases do not increase the safety level.

**5. Pilot owner maintenance**

We have no indications that the pilot-owner scope of work on non complex aircraft presents any safety risks.

**6. Independent certifying staff**

Maintenance release of non complex aircraft (as well as for Annex II aircraft) shall be open for appropriately type qualified independent certifying staff.

**7. Licensing of certifying staff**

We favor a practice related B3, Part-66 upgradeable licence.

# Overview of SAMA‘s Opinions (cont‘d)

## 8. Airworthiness review staff

For non-complex aircraft, certifying staff may not only review the aircraft and recommend ARC renewal, but also be allowed to directly renew the ARC.

The restriction of this right to a C licence holder is be appropriate.

## 9. CAMO

The CAMO concept introduces at least one additional interface into formal airworthiness and introduces an additional source of potential errors in SME organisations. We recommend to withdraw the CAMO requirement for non complexaircraft

# Overview of SAMA‘s Opinions (cont‘d)

**10.ACAM:** Verification of verification. The ACAM concept does not add aircraft safety and should be eliminated for aircraft not engaged in public air transport..

# Overview of SAMA‘s Opinions (cont‘d)

**Why EASAregulation cannot work:**

- Pythagorean theorem: 24 words
- Lord's prayer: 66 words
- Archimedes' Principle: 67 words
- Ten Commandments: 179 words
- Gettysburg address: 286 words
- Declaration of Independence: 1,300 words
- US Constitution & all 27 Amendments: 7,818 words
- EU  on the sale of cabbage: 26,911 words

# Overview of SAMA‘s Opinions (cont‘d)

**Why EASA can’t work:**

- **1972** FOM PRIVATE JET SERVICES
  - 66 PAGES / 14 POINTS / INCL. MEL & ALL COMPANY FORMS
- **1988** FOM JET AVIATION
  - 156 PAGES / 12 POINTS / INCL EXPENSE & UNIFORM REG.
- **1998** JAR OPS MANUAL JET AVIATION
  - 412 PAGES / 9 POINTS / ONLY OM – A PART
- **2005** JAR OPS MANUAL UPDATED
  - 1’000 + PAGES / 8 POINTS / OM – A / B / D / TRTO
- **2007** JAR →EU – OPS MIGRATION
  - 2’000 + PAGES / 8 POINTS…….NO END IN SIG

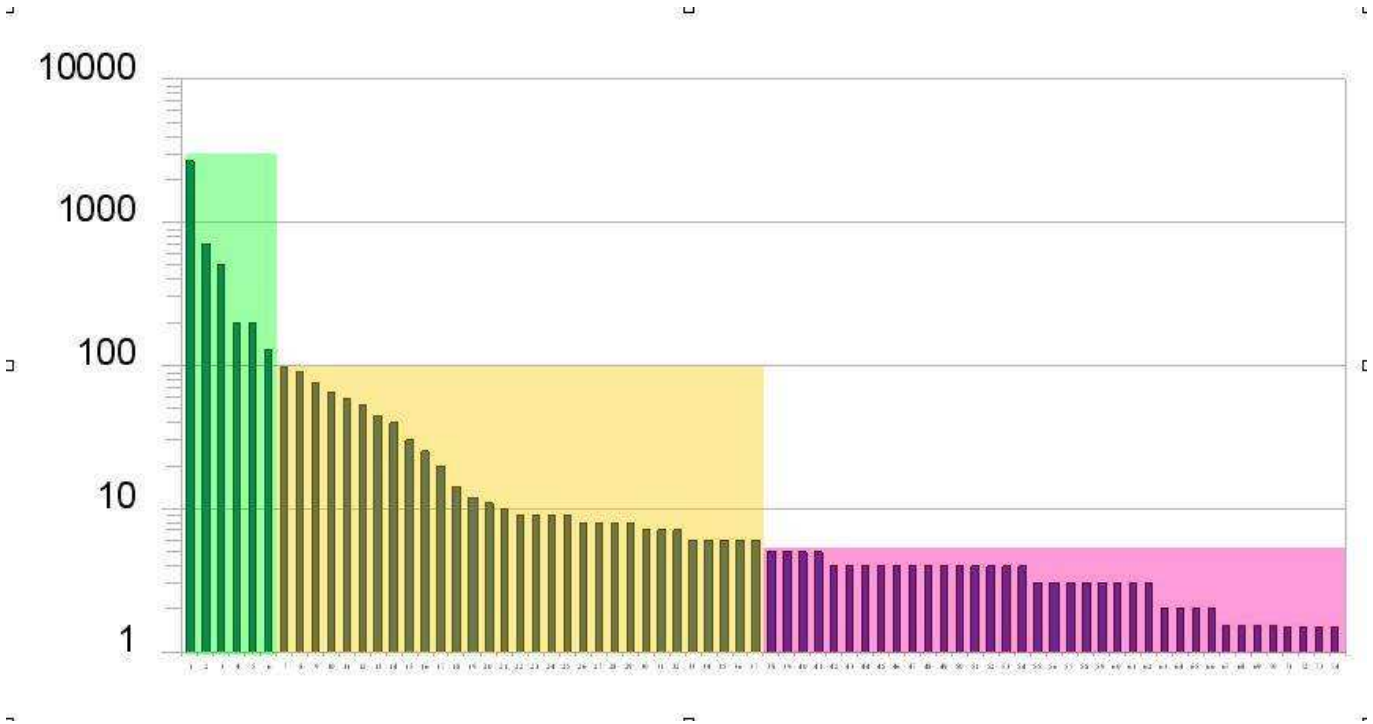
# Overview of SAMA‘s Opinions (cont‘d)

## 11. Other considerations (not limited to Part-M)

- **The roles: your safety is our concern**
- **The purpose of regulations**

# SAMA proposal on M regulation format

SAMA‘s membership landscape



# SAMA proposal on M regulation format

| Segment, applicability | Regulation level | Main considerations |
|---|---|---|
| - Airline ops<br>- Complex/large acft<br>- Large MRO | Part-M as is | Part-M is designed for this segment |
| -Commercial & CAT<br>-<19 Pax<br>- no handover MO | Simplified Part-M | SME, multifunction MOs, less specialized; small public impact |
| -Club, private, training, sightseeing<br>- non-complex acft<br>- small, club MO | No Part-M, reference to basic regulation, manufacturer‘s instructions, **owners responsibility** | Maintenance by qualified persons / small MO; negligible third parties risks; strictly local impact. |

# Discussion, questions & answers

Discussion topics:

- General
- Relating to 3 segment proposal
- Relating to other topics
- What next?

**First segment**

I.Type of operation: Airline like operation

II. Type of Aircraft

Complex, large aircraft used in Public/Commercial Air Transport, e.g. airline and charter.

III. Type of maintenance organisation

Complexity:

Shift changes,

(multiple) handovers

multiple locations with each staffed > 10

high depth of penetration

complex widespread international customer base

**Part-M regulations shall apply** and include 145 streamlined exclusively for public air transport .

*Rmk: This  was the sector in mind when Part M was designed. Part-M shall be harmonised with other widely recognised rules in view of worldwide standards*

# Maintenance as well as ops generally performed by large organisations, fleet of same/similar aircraft; high impact / public attention of incidents/accidents

**Second segment**

**I Type of operation**

**Commercial and non commercial operations**

**( but not Public Air transport)**

**II Type of aircraft**

**Complex aircraft and non complex aircraft**

**< 19 PAX**

**III Type of maintenance organisation**

**one shift system**

**(no handovers)**

**Simplified Part-M' regulation shall apply containing everything for this segment**

**CAMO optional, fully integrated or deleted**

**§ define procedures necessary to make CAMO optional**

**§ Simplify**

**Maintenance generally performed by smaller and 'multifunction' MO (SME's), hence broader general competences, less segmented /specialised; far smaller real and public impact of incidents /accidents.**

**Third segment**

**I Type of operation**

**Non commercial operation including Sightseeing and flight training, club activities, leisure and private flying, flight training**

**II Type of aircraft**

**Non complex aircraft, e.g.**

**<2000 kg/ 4 Pax**

**III Type of maintenance organisation**

**club or private operations,**

**Small ~ 25 staff**

**Private Flying, Basic training, Sightseeing Flights.**

# (No Part)

**Reference only to essential (continuing) airworthiness requirements; emphasis on owners responsibility: design owner states minimum maintenance requirements for a type; aircraft owner is responsible for a maintenance program adapted to the particular aircraft and equipment; qualified person validates the maintenance program; a bi-annual review verifies that the aircraft remains airworthy in accordance with these rules.**

# Maintenance generally performed by qualified individuals or small organisations; negligible risks for third parties, strictly personal and local impact of incidents /accidents