



Ministry of Infrastructure and the  
Environment



# Continuous Airworthiness Management

Contracting  
by an AOC-holder  
to a CAMO

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## Outline of the presentation

- History in the Netherlands.
- ICAO Annex 6.
- When is contracting possible?
- Oversight.



## History in the Netherlands

- In the days before EU-law and EASA:
  - Sightseeing and SPO flights did not require an AOC;
  - For non-AOC, Continuous Airworthiness Management was not regulated;
  - The owner was responsible for the Continued Airworthiness of his aircraft;
- The AMO's:
  - Performed the Continuous Airworthiness Management,
  - Controlled the Technical Records, and
  - Performed the CofA Renewal Inspections on behalf of the Authority;



## ICAO Annex 6 Chapter 8

- 8.1.1 Operators **shall ensure** that, in accordance with procedures acceptable to the SofR:
  - a) each aeroplane they operate is maintained in an airworthy condition;
  - .....
- 8.1.4 An operator **shall employ** a person or group of persons **to ensure** that all maintenance is carried out in accordance with the maintenance control manual.
- 8.1.5 The operator **shall ensure** that the maintenance of its aeroplanes is performed in accordance with the maintenance programme.
- 8.2.1 The operator **shall provide**, ....., a maintenance control manual, acceptable to the SofR, in accordance with the requirements of 11.2.



## ICAO Annex 6 Chapter 11.2 MCM

- a. The administrative arrangements between the operator and the AMO;
- b. Names and duties of the person(s);
- c. Reference to the AMP;
- d. Retention of the maintenance records;
- e. Monitoring, assessing and reporting maintenance and operational experience;
- f. Service information reporting requirements of Annex 8;
- g. Assessing/implementing continuing airworthiness information;
- h. Implementing mandatory continuing airworthiness information;
- i. Monitoring the performance and efficiency of the maintenance programme;
- j. The fleet;
- k. Recording and rectifying unserviceabilities;
- l. Occurrence reporting.



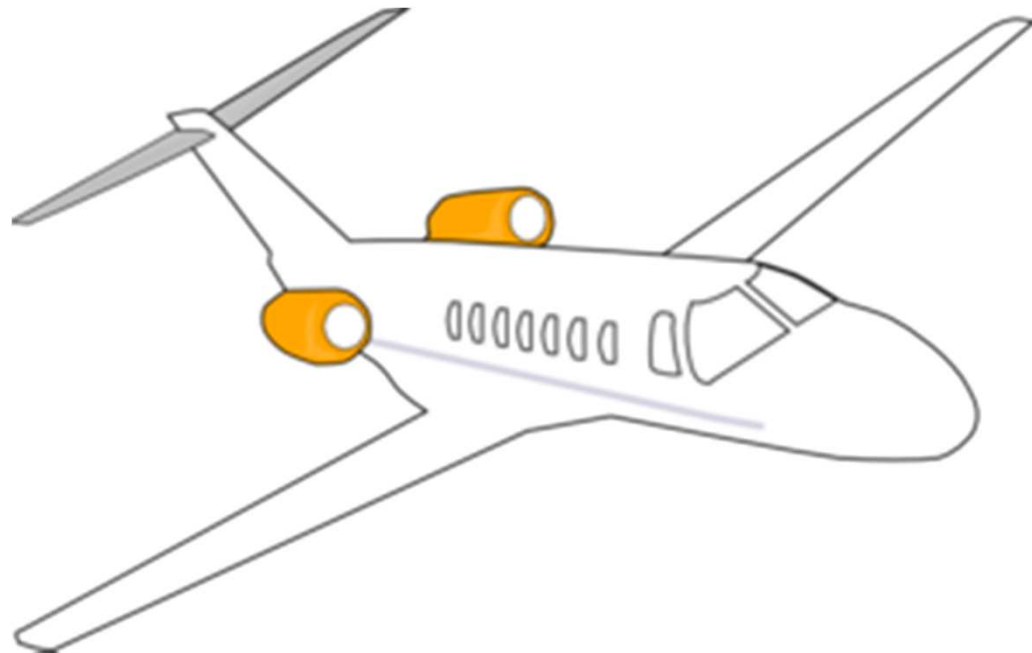
## Sub-contracting ↔ Contracting

- Sub-contracting:  
Work is performed by a non approved organisation under the quality control and with the procedures of the operator.
- Contracting:  
Work is performed by an approved organisation (CAMO) under its own quality system with its own procedures.  
Contracting Operator takes credits for the CAMO approval.
- Do we need a CAW equivalent for the Form 1 issued by an AMO or the statement issued by a DOA?



## When is contracting to a CAMO possible?

- (Small) Operators with Non-CMPA;
- Non Complex Operators with CMPA;
- Start-up;
- Pooling of resources.





## Non Complex Operators (AMC1 ORO.GEN.200(b))

- Limited numbers of personal;
- Simple fleet (single type in limited numbers);
- No added risk by special approvals related on CAW performance;
- All aircraft on the register of the SofO;
- Operational environment;



## Contract $\leftrightarrow$ Own CAMO

- Post-holder Maintenance  $\rightarrow$  Contract control,  
MCM  $\leftarrow$  interface  $\rightarrow$  Contract  $\leftarrow$  interface  $\rightarrow$  CAME,  
MCM gives references to CAME of contracted CAMO,
- Content of Contract: Appendix I to Part M,  
Possible additions: ATL and MEL  
Allocated resources
- Preferably: CAMO = Part-145 AMO with proper A rating,  
Additional Content of Contract: Appendix XI to AMC M.A.708(c).



## Advantages of contracting

- Availability of specialised staff at the CAMO;
  - Redundancy in case of absence (holiday).
  - Performance of CAW-tasks can be of a higher quality then when the (small) operator performs these tasks himself.
  - Economics of scale works two ways.
- 
- Better use of scarce expertise needed for:
    - Reliability Programs,
    - Engine Health Monitoring/Vibration Health Monitoring



## Disadvantages of contracting

- Less flexibility for the AOC holder;
- AOC holder being dependable on the CAMO;
- AOC holder still needs a Post-holder;
- AOC holder tend to rely on the CA oversight of the CAMO;
- CA's oversight is more complicated;

But:

We use it in Design, Production and Maintenance.



## Oversight with contracted CAW 1

- Within one State, one office = Easy:  
→ Talk to the officer on the next desk;
- Within one State, regional offices = Less easy:  
→ Talk to an officer in the other office in the same language;
- Between 2 Member States = More complicated:  
→ Talk to an officer in a different language and with a different cultural background, but working with the same regulations.



## Oversight with contracted CAW 2

- Between 2 Member States Cooperative Oversight:  
Agreement between Competent Authorities (ARO.GEN.300(e)).
- CA of the AOC holder shall inform the CA of the CAMO:
  - The specific nature of the AOC holder;
  - The complexity of its activities;
  - The results of past certification and/or oversight activities;
  - The assessment of associated risks;
  - The result of ACAM inspections and other oversight.
- Will look at the AOC side of the interface;



## Oversight with contracted CAW 3

- Between 2 Member States Cooperative Oversight: Agreement between Competent Authorities (ARO.GEN.300(e)).
- CA of the CAMO:
  - Will use this information in planning its oversight;
  - Will oversee the total scope of work at the CAMO;
  - Will look at the CAMO side of the interface;
  - Will inform the CA of the AOC holder of the results of its oversight related to the contracted work performed, including possible relevant product samples.



Questions ?

