



Contracting of continuing airworthiness management

Feedback to 12D50868, M.014

Lars Haglund, Head of Airworthiness Organisations Section

Johan Brunberg, Airworthiness Inspector & Part-M Policy and Standards



Facts:

- 40 "CAT-CAMO"
- 22 EU-OPS operators
 - 6 subcontract
- 18 JAR-OPS 3 operators
 - 2 subcontract
- 30 "Standalone" CAMO
- 51 Part-145
- 18 MF





- 9 million Citizens,
wherof 1 million above the river of Dalälven
- 1572 km length
- 500 km wide

JAR-OPS 3 (18 operators)

- 2-12 Helicopters, (average 6)
- 2 operators >10 helicopters

EU-OPS (22 operators)

- 1-17 Aeroplanes, (average 6)
- 55% of operators ≤ 4 aeroplanes





Issue 1:

Subcontracting of CAW tasks by CAT operators

Issue 1: Subcontracting of CAW tasks by CAT operators

1 Use of subcontracting:

a) To what extent:

- A mix of limited tasks to most of the tasks.

Typical tasks:

- There is a mix of tasks such as planning, input of data into the follow-up system, follow-up, monitor AD-issue, AMP-development etc.

c) What instances:

- It's a mix of instances, none specific.

Issue 1: Subcontracting of CAW tasks by CAT operators

1 Use of subcontracting:

b) Advantages:

- To “buy” knowledge, experience and manpower during the start-up phase when introducing a new aircraft type and/or for limited operations.
- Less own employed staff or part-time staff for small operators.
- Access to tailor-made computer systems for a specific aircraft type.

1 Use of subcontracting:

b) Disadvantages:

The operator

- The operator (responsible person) may not take the full responsibility and perform the required involvement to monitor the activities performed by the subcontracted organisation. This may lead to loss of control.
- Subcontracting may lead to dilution of competence for the continuing airworthiness tasks in the responsible organisation.

Issue 1: Subcontracting of CAW tasks by CAT operators

1 Use of subcontracting:

b) Advantages:

1 Use of subcontracting:

b) Disadvantages:

The subcontracted organisation

- If the subcontracted organisation is a CAMO or an AMO and the instructions are unclear, the subcontracted organisation may misunderstand the role and work under their own approval.

Issue 1: Subcontracting of CAW tasks by CAT operators

2 Subcontracted organisations:

a) Typical subcontracted organisations:

- Mostly “independent” CAMOs (approximately 75%)

b) Serving more than one operators:

- No

Issue 1: Subcontracting of CAW tasks by CAT operators

3 Current regulation on subcontracting of continuing airworthiness

a) Shortcomings and burdens of the current regulation:

- Shortcomings as regards the understanding and the observance from the operator and the subcontractor.
- For clarity, it would be desirable that the continuous monitoring of the subcontracted activities are specified in a particular CAME chapter (for example in 3.3 Subcontracted Continuing Airworthiness Task).
- For clarity, it would be desirable that monitoring of the subcontracted activities are specified in CAME Part 2 Quality system as a requirement of its own.

Issue 1: Subcontracting of CAW tasks by CAT operators

3 Current regulation on subcontracting of continuing airworthiness

b) Level of oversight required for the

- **Authority & Operator's CAMO :**
 - The current regulation is reasonable from our point of view.
- **Subcontracted organisation** (if subcontracted by several operators):
 - It may complicate the situation. If we had had the situation of a subcontracted organisation contracted by several operators, we would have evaluated the situation.

c) **Compability of procedures** (between the operator and the subcontractor)

- Through the contract.

Issue 1: Subcontracting of CAW tasks by CAT operators

4 Quality system:

a) The CAT quality system monitoring:

- Only through an annual audit, not sufficiently detailed.



Issue 2:

Contracting of external CAMO by CAT operators

Issue 2: Contracting of external CAMO by CAT operators

1 Use of Contracting:

a) Advantage:

- *Easier to start-up or change the type of operation for:*
 - a new CAT operator.
 - an operator that wants to use a new type of aircraft in its operation.
 - an operator who, instead of training its own staff, wants to have the possibility to “buy” “ready to use” manpower with the proper knowledge and experience.
- Access to tailor-made computer systems for a specific aircraft type.

Issue 2: Contracting of external CAMO by CAT operators

1 Use of Contracting:

a) Advantage:

- *Financial benefits*
 - During the start-up phase, when introducing a new aircraft type and/or for limited operation.
 - Instead of training its own staff, the operator may “buy” “ready to use” manpower with the proper knowledge and experience.
 - Less own employed staff or part-time staff for small operators.
 - Access to tailor-made computer systems for specific aircraft type.

Issue 2: Contracting of external CAMO by CAT operators

1 Use of Contracting:

a) Disadvantage:

Operators view:

- May not give the contracted CAMO necessary prerequisites.
- There may be a lack of communication and understanding from the part of the operator.
- The operator may forget its responsibility.
- The operator may lose control.

Issue 2: Contracting of external CAMO by CAT operators

1 Use of Contracting: a) Disadvantage:

NAA view:

- If the authority surveillance will be wide spread amongst several MS, the overall responsibility will be unclear. For example:
 - The NAA for the CAMO is satisfied that the requirements are met, but the NAA of the operator is not satisfied.
- The continuing oversight may be very complicated for all NAAs involved. For example:
 - the operator's NAA is in one MS, whereas
 - the operator has contracted several CAMOs (in other MS), and
 - the CAMOs (in other MS) has subcontracted CAW tasks to an organisation (in yet another MS or even a third country).

As a whole, it sums up to a complex solution where the responsibilities at hand may be diluted.

Issue 2: Contracting of external CAMO by CAT operators

1 Use of Contracting:

b) Conditions that should need to be established:

- A clear and detailed contract with a procedure manual as attachment.
- An appointed person from the CAMO would be required to participate in the operators management meetings in addition to the "daily" contact for the operation.
- The appointed person may have to be nominated by the operator and accepted by the operator NAA.

Issue 2: Contracting of external CAMO by CAT operators

2 Contracted CAMO:

a) Should the regulation establish limitations:

- **Privileges:**
 - The CAMO shall have full responsibility and no additional limitations.
 - The CAMO must have a quality system (not organisational review).
- **Relationship:**
 - The interaction must be secured between the operator and CAMO.
 - An appointed person from the CAMO shall be nominated by the operator and accepted by the operator NAA in accordance with national procedures.
 - The appointed person from the CAMO shall participate in the operators management meetings in addition to the "daily" contact for the operation.

Issue 2: Contracting of external CAMO by CAT operators

2 Contracted CAMO: a) Should the regulation establish limitations:

- **Geographical location:**

- No restrictions regarding the location of the CAMO if the regulation is clear on which MS has the overall responsibility when the MS for the operator and the MS for the CAMO are different.

- **Number of CAT operators served:**

- No limitation, as long as the CAMO fulfils the regulations.

But:

- The human factor issues may be addressed in type of solution.
 - How should the CAMO act and plan the resources if it has contracted more than one operator?
 - Which operator will have priority?
 - Where should the CAMO have the loyalty?

For example: If 2 contracted operators have an AOG situation.

Issue 2: Contracting of external CAMO by CAT operators

3 CAT operator that has contracted an external CAMO:

a) Operator's organisational requirements:

- A clear and detailed contract with a procedure manual as attachment.
- An appointed person from the CAMO shall be nominated by the operator and accepted by the operator NAA in accordance with national procedures.
- The appointed person from the CAMO shall participate in the operators management meetings in addition to the "daily" contact for the operation.
- The operator shall audit the contracted CAMO and sub-contractor if applicable.
- The MEL system shall be specified in the contract.
- The Techlog system shall be specified in the contract.
- The occurrence reporting system shall be specified in the contract.
- The operator shall regulate in the contract if the CAMO is allowed to sub-contract.

Issue 2: Contracting of external CAMO by CAT operators

3 CAT operator that has contracted an external CAMO:

b) Should the regulation establish limitations in terms of

- **Aircraft operated:**
 - No
- **Number of CAMO:**
 - Max one per type/fleet.
- **Relationship:**
 - An appointed person from the CAMO shall be nominated by the operator and accepted by the operator NAA in accordance with national procedures.
 - The appointed person from the CAMO shall participate in the operators management meetings in addition to the "daily" contact for the operation.



Thanks