

Training Manual & Operations Manual philosophy

This notice is for information only. It can be used as guidance and/or awareness.

Applicability:

Licencing	Not applicable
Medical	Not applicable
Training organisation	ATO
FSTD	FSTD Operators

Aircraft Category:

Airplane <input checked="" type="checkbox"/>	Helicopter <input checked="" type="checkbox"/>	Sailplane <input type="checkbox"/>	Balloon <input type="checkbox"/>	Airship <input type="checkbox"/>
Microlight <input type="checkbox"/>	Paramotor <input type="checkbox"/>	RPAS <input type="checkbox"/>		

1. References

- Part ORA.GEN.200
- Part ORA.ATO.110
- Part ORA.ATO.210
- Part ORA.ATO.130
- Part ORA.ATO.230
- AMC's and GM's to Part ORA.ATO.230 (a) & (b)

2. Training Manual & Operations Manual philosophy

1. Belgian Civil Aviation Authority (BCAA) has come to the conclusion that, in many cases, Belgian ATO's do not follow the rules and regulations regarding the establishment and operational use of Training and Operations Manuals. It gives the impression that the real purpose of the manuals is being overlooked.

In many cases, BCAA observes that most actual ATO manuals are a composition of texts directly copied from the regulations, rather than a description on how the ATO will give the course in their specific way and at the same time comply with regulations.

2. EASA states that ATO's providing CPL, ATPL, MPL shall establish and maintain a Training Manual and Operations Manual containing information and instructions:
 - to enable personnel to perform their duties and
 - to give guidance to students on how to comply with course requirements
3. The Training Manual (TM) shall state the standards, objectives and training goals for each phase of training that the students are required to comply with.

The Operations Manual (OM) shall provide relevant information to particular groups of personnel, as flight instructors, flight simulation training instructors, theoretical knowledge instructors,...

AMC's in reference above give a detailed listing on how the manuals should be compiled and also their contents. BCAA compliance checklists are drawn up according these descriptions.

Training Manual should be THE Reference Book for a particular course.

The Operations Manual should contain all relevant information for the correct operational approach of the ATO across the courses.

4. The management system of the ATO should ensure that:

- responsibilities are clearly defined;
- overall philosophies and the principles of the organisation are described;
- aviation safety hazards entailed by the activities of the organisation are identified and that actions are taken to mitigate the risks;
- personnel is trained and that they are competent to perform their tasks;
- there is a compliance monitoring system in place and it is used and respected by the operator.

As directly parts of the training programme and supervision, the following nominated persons have a key role.

- The Head of Training (HT) shall ensure that the training provided is in compliance with Part-FCL. (S)he shall ensure satisfactory integration of flight training in aircraft or flight simulator and theoretical knowledge instruction. (S)he shall supervise the progress of each individual student.
- The Chief Flight Instructor (CFI) is responsible for the supervision of flight and flight simulation instructors and for the standardisation of all flight and flight simulation instruction.
- The Chief Theoretical Knowledge Instructor (CTKI) is responsible for the supervision of all theoretical knowledge instructors and for the standardisation of theoretical knowledge instruction.

5. Above paragraphs are a brief summary of items that should be kept in mind when compiling the content of a manual.

6. ATO's have the freedom to provide instruction with their own procedures and programs as long as they comply with the EASA regulations and minimum requirements.

7. Manuals therefore should be written in the philosophy that they should contain sufficient and clear information for each individual - from the HT to student - to let them understand all facets of a specific course or operation. A manual describes as precise as possible how the objectives of the course will be met in all its details.

A manual should be written in the philosophy to be available to, and to be used daily, by all personnel concerned.

A manual should not be written for the authorities, in order to get an approval for a course; a manual should serve as evidence to the competent authority and is meant to be used as the main guidance material by all relevant users, be it HT, CFI, CTKI, flight instructor (FI), theoretical knowledge instructor (TKI), student, support personnel,...

8. The manuals should allow staff personnel to perform their duties.

- The structure of a course, the description of theoretical sessions with content of LO's (learning objectives) and duration, the description of each flight mission with content of exercises and duration should allow the HT to follow up each student in his/her individual file. The HT is responsible for the course structure, its correct execution and the follow-up.
- A detailed description of how to execute each exercise in flight or simulator should allow the CFI to check the standardisation between FI's.
- A well-defined plan containing all aspects of area 100 in the overall theoretical knowledge instruction should allow the CTKI to gather the necessary information from the TKI's and coordinate between them.

9. To summarize:

- Theoretical knowledge instruction: the lesson plans should contain a plan of which LO's will be given in a particular session and how the session will be given, classroom or CBT.
The plan should serve as a guidance for theoretical knowledge instructors to succeed the aim that all LO's will be covered in the scheduled timing. A detailed approach on how, by whom and during which subjects the "area 100" objectives will be integrated, judged and how and when the testing will be organised.
The CTKI and the HT should be able to follow the progress of the course at all times.
- Flight instruction: flight instructors should have a detailed plan of which exercises to demonstrate, instruct and judge during each mission.
A realistic build-up of the different exercises should provide optimum instruction time for the benefit of the student.

The student should always know what to expect, and thus what to prepare for the next mission. Flight instructors should be provided with a plan what could be done as an alternative if things do not work out as planned.

- Using reference manuals from “foreign sources” might not be precise enough for each exercise. The ATO should be clear to which extend the reference book will be followed precisely and describe addendums or a particular alternative way if the ATO elects to instruct an exercise in a different way. Confusion should be avoided; standardisation should be aimed for.

10. The Operations Manual should be written with a flight safety philosophy in mind.

It should not allow to leave all options open. This could lead to dangerous flight situations with individual instructors and students.

An ATO is responsible to mitigate the risks. The OM should be written in this perspective.

As an example, the ATO should estimate the consequences if it intends to follow all legal minimums in regard to flight instruction. It might not be a good idea in specific cases.

Special care should be given to minimum weather conditions for solo students in different stages of the course, also attention should be given to weather minima in IFR for SEP aeroplanes etc.

The OM should cover all ATO operations and should leave no room for interpretation by the students and flight instructors.

11. For the time being, many manuals are not written in above described philosophy.

A refreshed vision demands that ATO's should strive for manuals to fulfil the expectations they are meant for. Manuals will be treated and commented on by the BCAA based on the ideas mentioned above.

The BCAA compliance checklists serve as a tool to fulfil the task, but are written in a general way not always offering the ideal backbone for each individual course. Slight deviations are possible.

Even though rewriting or adjusting a manual is a lot of work, a well-structured manual with sufficient and relevant content is mandatory for the good functioning of an ATO.

Xavier De Rom
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