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FOCA GM/INFO

Guidance Material / Information

Evidence Based Training

Baseline

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0 Introduction

All Guidance Material/Information (GM/INFO) are intended to assist the organisation/operator in administrative matters. The administrative requirements and processes will facilitate liaising with the Federal Office of Civil Aviation (FOCA). It is to be considered a tool for the organisation/operator in order to ease processes of obtaining required and defined approvals and authorisations issued by FOCA. Using the GM/INFO will be conducive to establishing compliance with FOCA requirements and will lead through the respective certification or variation process in regard to administrative tasks.

0.1 Terms and Conditions

The use of the male **gender** should be understood to include male and female persons.

The most frequent abbreviations used by the EASA are listed here: easa.europa.eu/abbreviations.

When used throughout the GM/INFO the terms such as «shall, must, will, may, should, could, etc.» shall have the meaning as defined in the English Style Guide of the European Commission.

0.2 Legal References

Commission Regulation (EU) No 965/2012:

- ARO.OPS.226
- ORO.FC.146
- ORO.FC.231 / ORO.FC.232
- ORO.FC.240

Commision Regulation (EU) No 1178/2011:

- ARA.GEN.205
- ARA.GEN.315
- FCL Appendix 10

For Info/Guidance:

- EASA Oversight guidance for the transition to Mixed EBT Implementation¹
- EASA Oversight guidance for the transition to EBT Implementation (Baseline)¹
- EASA EBT Manual¹
- ICAO Doc 9995 Manual of Evidence-Based Training
- ICAO Doc 9868 PANS Training
- IATA Evidence-Based Training Implementation Guide
- FOCA GM/INFO Examiner System
- FOCA GM/INFO Examination Guide Aeroplane

0.3 Purpose of this GM/INFO

The following document is intended to assist the operator in applying for approval of an EBT Programme, and the FOCA Flight Operations Inspector in evaluating the application. Furthermore, it contains useful information for future oversight activities of the EBT Operator.

0.4 Scope

This GM/INFO contains some additional information related to the approval of an EBT Programme and is meant to be used alongside with the corresponding Approval Checklist.

¹ https://www.easa.europa.eu/domains/aircrew-and-medical/evidence-based-training-ebt

0.5 Organisation / Operator Responsibilities

Before submitting the application, it is essential for the operator to be familiar with the regulation and to submit the complete documentation in respect to the applicable regulation.

The operator has to ensure that all parts of the operations manual system are revised in a manner as to be compliant with the requirements relevant for an EBT Programme.

1 Background Information

The development of EBT arose from the broad industry consensus that, in order to reduce aircraft accident rates, a strategic review of periodic training and checking for airline pilots was necessary.

Training requirements are based largely on the proven data from first-generation jet loss-of-aircraft accidents and the simple concept that simply repeating an event in a training programme was sufficient to mitigate risk. Over time, there were a multitude of new events whose subsequent inclusion in the training requirements saturated the recurrent training programmes and led to the emergence of an inventory or 'check box approach' to training.

At the same time, aircraft design and reliability improved substantially, leading to a situation where many accidents occurred in aircraft that were operating without malfunction (e.g. CFIT)

It is impossible to predict all plausible accident scenarios, especially in today's aviation system whose complexity and high reliability indicate that the next accident may be something completely unexpected.

EBT addresses this by moving from purely scenario-based instruction to considering the development and assessment of key competencies as a priority, which translates into improved instructional outcomes. The scenarios recommended in an EBT Programme are simply a vehicle and method for assessing and developing competencies. Mastering a limited number of them should enable pilots to handle flight situations unanticipated by the aviation industry for which they have not been specifically trained.

The core competencies determined in the EBT encompass what were previously known as technical and non-technical skills, knowledge and attitudes, thus aligning the content of instruction with the actual competencies needed in the context of contemporary aviation.

Over the past 20 years, the availability of useful data covering both flight operations and instructional activities has substantially improved. Data sources such as flight data monitoring (FDM), flight observation in normal operations (e.g. LOSA), and aviation safety reports provide detailed insight into the threats, errors and risks facing flight operations and their relationship to unintended consequences. Improved analysis of training results demonstrates the existence of significant differences in the training needs of different maneuvers and generations of aircraft. The availability of such data has determined the need to develop the EBT initiative and supported the definition of the training concept and the resulting curriculum.

The IATA Data Report for Evidence-Based Training is a suitable source of data for the development of an EBT Programme, although each operator should supplement it with their own data.

The objective of this programme is to develop and assess the specific competencies required to operate from an operational point of view in a safe, effective and efficient manner in a commercial air transport environment, while addressing the most relevant threats based on proven data (evidence) from accidents, incidents, flight operations and training.

Some explanatory notes in addition to the regulatory documentation are given in the following sections.

2 Application for approval of an EBT Programme

The EBT Programme is an approved programme for CAT aircraft only. Aircraft considered for the application of this method are those with a certified seating capacity of 50 or more passengers in the case of turbojet aircraft, and 30 or more passengers in the case of turboprop aircraft. Helicopters and business jets are not yet in the scope of the EBT Programme. A detailed list of aircraft types by generations can be found in AMC1 ORO.FC.232(b)(3).

2.1 Project guidance for baseline EBT implementation

It is required for the operator to liaise with the assigned inspector to set up a meeting before the start of the application process in order to initiate the implementation and to clarify any questions the applicant may have. Usually, the assigned inspector is already included in the Mixed-EBT process of the operator and the kick-off meeting is a logical consequence of the former activities.

The applicant shall use the respective FOCA EBT Approval Checklist and follow the EASA Checklist² in oder to facilitate the process. Knowledge of regulations and of programme suitability is essential to apply the checklists.

2.2 Documentation

To process the application for an EBT Programme, any or all of the following documentation are required:

- Management of Change and EBT Implementation Plan
- Safety Risk Assessment
- GAP analysis (Mixed EBT → Baseline EBT)
- All relevant revised parts of the Operations Manual
- Form 44.20 & Compliance List AOC Aeroplane

2.3 Minimum Mixed-EBT experience for Baseline EBT

- 3 years of Mixed EBT (= 6 EBT Modules)³
- 2 years of Instructor Concordance Assurance Programme (ICAP)
- 1 year equivalance of malfunctions (= 2 EBT modules)
- 1 year of integration of inner loop training data (= 2 EBT modules)
- One verification of the grading system (after 3 years of Mixed EBT)

3 EBT Instructor

In addition to the requirements outlined in ORO.FC.146, it is important that the EBT operator considers the previous function (e.g. Commander vs. First Officer) and experience (e.g. years of service as instructor and pilot) of the future EBT instructor in order to foster the maturity level and acceptance of the EBT assessment and grading system.

4 EBT Manager & Licensing

General information and prerequisites of the EBT Manager as well as the function specific duties can be found in chapter 2.6 of the FOCA GM/INFO Examiner System.

Specific information about revalidation of a Multi-Pilot Aeroplane Type Rating under EBT can be found in chapter 7.4.1 of the FOCA GM/INFO Examination Guide Aeroplane. A new Form 60.538, has been issued according to FCL Appendix 10. This form has to be used and completed according to the licensing procedure outlined.

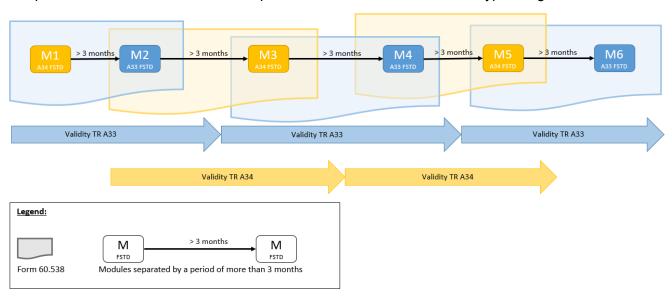
² Guidance material in chapter 0.2

³ In general, the Mixed-EBT period starts when FOCA has approved the respective OM-D revision (effective date).

4.1 Operation on more than one type or variant

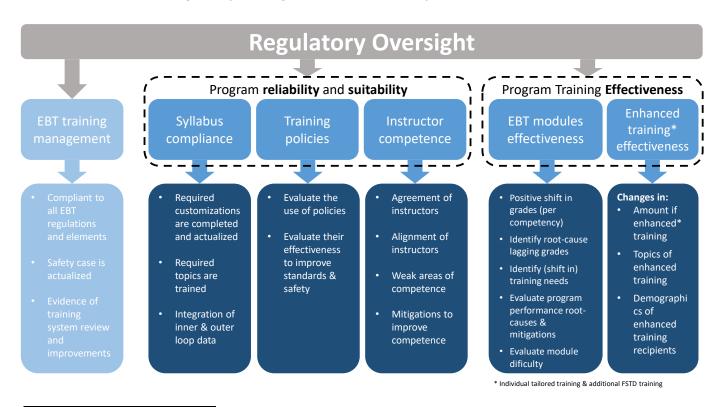
Information about the operation on more than one type or variant under the EBT programme can be found in AMC1 ORO.FC.240(a)(4)(vii)(A) and (B). It is key that the requirements (e.g. module separation, assessment & training topics, OSD) as well as alternation of EBT modules between types are strictly fulfilled. Rostering departments have to be aware of restrictions like module separation and other planning issues related to the EBT programme.

A separate Form 60.538 has to be completed for the revalidation of each typerating.



5 Oversight

The EASA checklist⁴ should be used for oversight activities without exception. The following graph illustrates the areas of regulatory oversight and can be used by operators and FOCA:



⁴ https://www.easa.europa.eu/domains/aircrew-and-medical/evidence-based-training-ebt

5/6

5.1 Training delivery in the FSTD & Grading system

Both days of an EBT module must be considered during an inspection in order to be able to assess how the individual tailored training is conducted, or how the results of the first day are evaluated and integrated into the second day. It must be ensured that the training is tailored to the individual participants. The focus is on the quality of the competency assessment and the evaluation of the results, and the handling of the grading system.

Another focus should be put on the workload and the tools for the competency assessment, that are available to the EBT instructor. The aim is to prevent a TRI from being too absorbed by the handling of the new tools.

When conducting training under EBT, much more commitment and effort is required from the TRI than when conducting training and testing under FCL Appendix 9. Especially in the area of competency assessment.

During the audit of the OM-D, a special focus should be put on the grading system methodology and on the contingency procedures for unexpected circumstances which may affect the delivery of the EBT module. The following questions should be asked:

- How much additional FSTD training time is scheduled in case a participant still needs training in addition to the requirements of tailored training?
- How long will a flight crew member be grounded if a competency is graded below the minimum acceptable level of performance, or more than four competencies are graded with 2 in a single simulator session of the EBT module?
- What are the procedures in case of technical problems with the FSTD?

5.2 Feedback process

The operator needs a process for collecting, evaluating, and analyzing assessment and training data (evidence) from all resources (inner and outer loops) to be integrated into the EBT Programme. Particular attention should be paid to how this process is applied in daily operations.