



PART 3 – Draft Procedure Document for Operational Evaluation Board (OEB) – Cabin Crew Subgroup;

Assessment of Cabin Crew Training Requirements

1 General objective

Within the wider objective of the OEB process – to provide a consistent methodology for the assessment of a new aeroplane type, or a variant to an existing aeroplane type - this document aims to facilitate a National Aviation Authority’s (NAA) approval of Cabin Crew Training syllabi with regard to Conversion and Differences Training and Checking requirements, on the basis of a single assessment, acceptable to all NAAs.

Note: ‘Variant’ means with respect to cabin crew an aeroplane or group of aeroplanes with the same characteristics that have pertinent differences from a base aeroplane. Pertinent differences are those that require different or additional cabin crew knowledge, skills and/or abilities that affect cabin safety.

2 The Objective of the process:

- a) Provide operational determination of a new aeroplane type, by identifying differences and similarities, in terms of aeroplane interior description; equipment and systems; and normal and emergency procedures. (EU-OPS 1.1030)
- b) Provide operational determination of a variant to an existing aeroplane type, by identifying differences and similarities in terms of emergency exit operation; location and type of portable safety equipment; and type specific emergency procedures. (EU-OPS 1. 1030)
- c) Provide recommendation for operational approval of Conversion and differences training syllabi (as per EU-OPS 1.1010), and Checking (as per EU-OPS 1.1025), for aeroplane types and variants (as a result of identifying differences and similarities).
- d) Provide recommendations in respect of special features on both new and existing aeroplane types.

Note: For the purpose of consistency with EU-OPS 1, Subpart “O” terminology, “Conversion and differences training” is used throughout this chapter (i.e. EU-OPS 1.1010).

3 Presentation of the OEB process for Cabin Crew Training Assessment

The Head of Flight Standards with EASA-Certification is responsible for the coordination of the whole process.

3.1 Procedure

- The aeroplane manufacturer will normally submit an application to EASA for an OEB evaluation of cabin crew training requirements and will define the scope of the evaluation.
- EASA will provide a list of specialists to form the OEB Cabin Crew Sub Group and will agree with the manufacturer on the timescales of the evaluation.
- The OEB Cabin Crew Sub Group will request the necessary documentation from the manufacturer. Such documentation will include at least a copy of the manufacturer's proposal for a Cabin Crew Operating Manual for the specific aeroplane type.
- After a review of the manufacturer's documentation, the OEB Cabin Crew Sub Group will agree on a work programme with the manufacturer.
- The OEB Cabin Crew Sub Group complete the draft report that will be sent to the manufacturer for comment (see Appendix 1, OEB Cabin Crew Report).
- The final report is signed by the OEB Cabin Crew Sub Group Chairman, the OEB Chairman, the EASA-Certification Cabin Crew Section Manager. The report will then be published on the JOEB website, as an Appendix to the JOEB Report of the respective operational assessment. The final OEB Report for each project will be approved by the Head of EASA Certification Flight Standards.

3.2 OEB Cabin Crew Sub Group

An OEB Cabin Crew Sub Group will be established, consisting of a minimum of two operational cabin safety specialists from National Aviation Authorities. Additional members may be nominated as required. The size of the Sub Group will depend on the scope of the evaluation.

3.2.1 Actions of the OEB Cabin Crew Sub Group

The actions of the OEB Cabin Crew Sub Group are the following:

- (a) Fulfil the goals of the evaluation:
 - (i) Determine if the candidate aeroplane is a different type or same type or variant of an existing type (based on the Aeroplane Differences Table (ADT) – (see §4.1.2).
 - (ii) Evaluate the proposed Conversion and differences training, in accordance with EU-OPS 1.1010.
- (b) Make recommendations with regard to the training content, where necessary.
- (c) Complete the Cabin Crew Sub Group Report.

3.2.2 Means to achieve the goals of the OEB Cabin Crew Sub Group

The following are seen as the means recommended for the team to achieve its goals:

- Review the manufacturer's documentation (including relevant certification documentation).
- Review the airworthiness requirements (including special conditions, equivalent safety findings, etc.).
- Review interface issues with the EASA Cabin Safety Certification Panel.
- Conduct an operational aeroplane inspection.
- Review the manufacturer's proposed training syllabus.
- Compare documentation and findings resulting from the operational aeroplane inspection.
- Validate differences and similarities identified by the manufacturer in the ADT.
- Determine to what extent the candidate aeroplane is different/similar to the base aeroplane.
- Determine the type of training and checking required for cabin crew to ensure compliance with EU-OPS 1.1010.
- Observe a manufacturer training session.
- Identify the elements of the proposed Conversion and Differences training that are compliant with EU-OPS 1.1010 requirements.
- Identify the requirements of EU-OPS 1.1010 that are still outstanding and need to be addressed by the NAA and the individual operator.

3.3 Documentation

The documentation required by the OEB Cabin Crew Sub Group to carry out its work should include:

- EU-OPS – OPS 1, Subpart O, as the basis for the evaluation.
- EASA Certification Review Items (CRIs).
- Manufacturer's Cabin Crew Operating Manual (MCCOM) for the candidate aeroplane (refer to Appendix 2)
- Aeroplane Differences Table (ADT)
- Proposed Conversion Syllabus as specified in EU-OPS 1.1010 and the related Appendix.
- Proposed Differences Syllabus (for variant) as specified in EU-OPS 1.1010 and the related Appendix.

Note related to confidentiality of documentation:

All documents and information, which are received during the assessment process and which are the property of the Applicant, will be protected from disclosure to third parties or persons, in accordance with national laws and regulations.

4 Difference Levels for Training and Checking

4.1 Basis for Levels and level definition

Different levels apply when a difference with any potential to affect cabin safety exists between candidate aeroplanes.

The difference may also affect the knowledge, skills or performance required of a cabin crew member. If no differences exist, or if differences exist but do not affect knowledge, skills or performance of cabin crew, then difference levels are neither assigned nor applicable to cabin crew training and checking.

When difference levels apply, each difference level, from 1 through 4, is based on a scale of differences in: aeroplane interior description; equipment and systems; and normal and emergency procedures.

Assignment of Type Limitation Requirements. Candidate aeroplanes are considered the *same* type as the base aeroplane if training differences are less than or equal to Level 3. A candidate aeroplane is considered a *different* type when difference training Level 4 is required. The determination of cabin crew type limitations is not an aircraft certification requirement and the issuance of a type certificate is not directly related to the process of making a type limitation assessment.

Difference levels can be characterised by the following distinctions:

Level 1: Applicable to aeroplanes with differences that can adequately be addressed through self-instruction. Level 1 training represents a knowledge requirement such that, once appropriate information is provided, understanding and compliance can be assumed to take place. Compliance with Level 1 training is typically achieved by methods such as issuance of operating manual page revisions, dissemination of cabin crew operating bulletins or differences handouts to describe minor differences between aeroplanes.

Level 1 training is normally limited to situations such as the following:

- The change introduces a different version of a system/component for which the cabin crew member has already shown the ability to understand and use (e.g. an updated version of the entertainment system or cabin lighting controls).
- The change results in minor or no procedural changes and does not result in adverse safety effects if the information is not reviewed or is forgotten (e.g. slight differences in door dimensions, seat pitch or exterior lighting).
- Information highlighting a difference that, once called to the attention of the cabin crew member, is self-evident, inherently obvious and easily understood (e.g. location of the communication system (public address and interphone), location of water and waste indicators or location of circuit breakers).

Level 2: Applicable to aeroplanes with system or procedural differences that can be adequately addressed through aided instruction. At Level 2, aided instruction is appropriate to ensure crew understanding, emphasize issues, provide a standardized method of

presentation of material, or to aid retention of material following training. Level 2 aided instruction typically employs means such as slide/tape presentations, computer based training (CBT), stand-up lectures, or videotapes. Situations not covered under the provisions of Level 1, may require Level 2 or a higher level.

Level 3: Applicable to aeroplanes with differences that can only be accomplished through use of devices capable of systems training (i.e. hands-on-training). It is applicable to aeroplanes having "part task" differences that affect skills or abilities, as well as knowledge. Training objectives focus on mastering individual systems, procedures, or tasks. Level 3 may also require self-instruction or aided instruction of a crewmember, but cannot be adequately addressed by a knowledge requirement alone. Training devices are required to supplement instruction to ensure attainment or retention of cabin crew skills and abilities to accomplish the more complex tasks, usually related to operation of particular aeroplane systems. Typical training devices for Level 3 would include emergency evacuation procedures trainers, wet drill trainers, fire and smoke trainers, cabin crew panel trainers, etc. When dedicated training devices are not available, Level 3 would require hands-on-training using the aeroplane.

Examples of devices acceptable for Level 3 training include:

- Door/exit training devices;
- Cabin training devices;
- Slides, slide/rafts, rafts; or
- A static aeroplane.

Note: "Part task" training refers to gradually introducing the trainee to the full complexity of the role or function – e.g. working through part-tasks of increasing complexity until exposed to the full role, or the "full task". In order to obtain the necessary intensive hands-on training, the value and applicability of part task trainers has been recognized. These devices include a high fidelity simulation of a particular system (or even the actual piece of equipment), which allows the trainee to concentrate on it without the extra load and distractions that might be imposed by a full cabin simulator or the actual aircraft. They are less elaborate, and can range from large photographs that emulate the area around the simulated system, to sophisticated computer assisted training devices. Part task trainers can be highly cost-effective in developing the skills required for efficient system operation.

Level 4: Applicable to candidate aeroplanes having "full task" differences that cannot be adequately addressed by separate acquisition of a series of knowledge areas or skills and that requires an Aircraft Type Specific training course(as per EU-OPS 1.1010 - Conversion and differences training), or equivalent to attain the knowledge, skills or abilities to meet the training objectives. Where Level 4 training is assigned, a different type limitation is applicable to that aeroplane type or variant, for the purpose of EU-OPS 1.1030 - Operation on more than one type or variant. Level 4 would always require hands-on training utilising either appropriate emergency evacuations procedures trainers or the aeroplane and appropriate aided instruction.

4.1.2 Methodology – Use of Aeroplane Difference Tables

When assessing differences between aeroplanes, in order to determine the number of types and variants that cabin crew members may operate, one aeroplane is to be nominated as the base aeroplane from which to show differences from the subsequent aeroplane type or variant.

These differences are compiled in an Aeroplane Differences Table, and consideration for comparison should be given to the following:

- (a) Aeroplane interior description
- (b) Safety Equipment – type and location
- (c) Systems Operation
- (d) Normal Procedures
- (e) Emergency Procedures

The Aeroplane Differences Table should preferably be presented in a tabular format, and an example is given in Appendix 3

4.2 Criteria for classification of an aeroplane as a variant or a type for cabin crew

The above mentioned Aeroplane Differences Table (ADT) serves two purposes: one to determine if the candidate aeroplane can be classified as a variant or a new type for cabin crew, in accordance with EU-OPS 1.1030, the other to determine what differences training may be required (if applicable).

Criteria for determining similarity of exit operation and similarity of location of type and portable safety equipment are identified in ACJ OPS 1.1030 to JAR-OPS 1.1030 – Operation on more than one type or variant - and are included in Appendix 4 of this document, for reference.

4.3 Difference Levels Summary

Difference Levels are summarised in the table below for Training and Checking.

DIFFERENCE LEVELS

Difference level	Training	Checking
1	Self Instruction (Written information)	Not applicable
2	Aided Instruction (CBT, Video.)	Applicable as required
3	Hands-on Training (Training Device, or Aeroplane)	Applicable
4	Aided Instruction and Hands-on Training (Training Device, or Aeroplane)	Applicable

GLOSSARY of TERMS

Base aeroplane: An aeroplane or a group of aeroplanes, designated by the applicant, used as a reference to compare differences with another aeroplane.

Candidate aeroplane: The aeroplane that will be subject to the operational evaluation process outlined in this document.

Conversion training: As per EU-OPS 1.1010(a)(1), Conversion training refers to the training that must be completed by each cabin crew member before being:

- (i) First assigned by the operator to operate as cabin crew members; or
- (ii) Assigned to operate another aeroplane type.

Difference Levels: Formally designated levels of training methods or devices and checking methods, which satisfy differences requirements or conversion requirements pertinent to the Operating Rules. Difference levels specify requirements proportionate to and corresponding with increasing differences between groups of variants or aeroplanes. A range of four difference levels in order of increasing requirements, identified as 1 through 4, are each specified for training and checking of cabin crew.

Differences training: As per EU-OPS 1.1010(a)(2), Differences training refers to the training that must be completed by each cabin crew member before operating:

- (i) On a variant of an aeroplane type currently operated; or
- (ii) With different safety equipment, safety equipment location, or normal and emergency procedures on currently operated types or variants.

Different type: Aeroplanes for which cabin crew difference training Level 4 is required.

“Part Task” training and “Full Task”: “Part Task” training refers to gradually introducing the trainee to the full complexity of the role or function - e.g. working through part-task of increasing complexity until exposed to the full role, or the “full-task”.

Same type: Aeroplanes for which cabin crew training differences are less than, or equal to Level 3.

Variant: ‘Variant’ means, with respect to cabin crew, an aeroplane or group of aeroplanes with the same characteristics that have pertinent differences from a base aeroplane. Pertinent differences are those that require different or additional cabin crew knowledge, skills and/or abilities that affect cabin safety.

APPENDIX 1

OEB Cabin Crew Subgroup Report

The OEB Cabin Crew recommendations are formulated in the OEB Cabin Crew Subgroup Report. Typically this Report would include:

OEB Cabin Crew Subgroup - composition of the Team

Preamble

Executive Summary

Purpose and applicability (objectives of the evaluation)

Aeroplane Differences Table

Specification for Training

- Conversion Training
- Differences Training

Criteria for Checking

Operation on more than one type or variant

Additional information

Conclusions

APPENDIX 2

Outline for a typical CCOM

Manufacturer Cabin Crew Operating Manual (MCCOM)

The following topics should be addressed by the content of the MCCOM:

(a) General presentation of the aeroplane:

- narrow bodied and wide bodied
- range of operation
- main statistics
- un-pressurised areas
- location of cargo compartments
- number and composition of crew

(b) Flight deck and Cabin presentation

(i) Flight deck

- flight deck door and monitoring system
- number of crew
- description of and operation of seats and harnesses including the observer's seat
- emergency equipment
- exits (windows) and escape devices
- operation of the flight deck door and monitoring systems, as well as associated procedures, if applicable.

(ii) Cabin

- configuration and layout
- exits and their environment
- required cabin crew seats – location and equipment
- non-required cabin crew seats – location and equipment
- lavatories/ galleys – location and equipment
- crew rest areas (if installed) – location and equipment
- cargo areas accessible during flight

(c) Controls and indications – presentation of the following:

- interphone and public address system
- control panels
- calls and signs system
- evacuation and alarm system
- general lighting system
- emergency lighting system
- flight deck seats/ harness system

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- flight deck fixed oxygen system
 - passengers compartment drop down oxygen
 - galley/ lavatory electric systems and circuit breaker panels
 - smoke detection system
 - toilet fire extinguishers
 - water and waste system
 - temperature adjusting system
 - air conditioning system
 - electrically operated passenger seats
 - any other system installed
- (d) Exits including flight deck windows
- use in “normal”/ “emergency” mode(including power assist failure where fitted – pre-flight and post landing checks)
 - arming and disarming of slides
- (e) Emergency equipment – location/ presentation/ use
- slides/ rafts and associated equipment
 - life jackets/ infant lift jackets/ flotation cots
 - dropout oxygen/ first aid oxygen
 - fire extinguishers and protective breathing equipment (PBE)
 - fire axe/ crow bar
 - emergency lights and torches
 - first aid kits/ emergency medical kits
 - emergency locator transmitters (ELTs)
 - megaphones
 - survival equipment - pyrotechnics
 - other cabin safety equipment
- (f) Normal procedures
- galleys and toilet compartments
 - electrical supplies and circuit breaker panels
 - entertainment system operation – in-seat power supply systems
 - lighting systems
 - temperature controls
 - water indicators and controls
 - check of smoke detector system
 - intercom system, PA
- (g) Abnormal procedures – presentation of
- flight deck oxygen system
 - call from flight deck (emergency)
 - call from cabin (emergency) e.g. hi-jack
 - operation of flight deck seats – use of harness
 - cease of water supply
 - lower lobe incapacitation (procedure)
 - system to inform the flight deck in case of hijack (from cabin to flight deck)

(h) Emergency procedures – presentation of

- flight deck evacuation – use of DV windows or hatches and escape devices
- emergency evacuation on land
- ditching
- rapid decompression
- fire fighting procedures
- bomb on board
- LRP(least risk bomb) location/procedure
- lavatory smoke detection and fire extinguishers
- cabin/lower lobe smoke detector - presentation

APPENDIX 3-A

Example of Aeroplane Differences Table **(ADT)**

Sample format for an ADT

BASE AEROPLANE CANDIDATE AEROPLANE			COMPLIANCE METHOD
Description	Differences	PROC CHNG	Training & Checking
General description of: <ul style="list-style-type: none"> • aeroplane interior • safety equipment • systems operation • normal procedures • emergency procedures 	Identification of the relevant differences between the Base Aeroplane and the Candidate Aeroplane	Impact on Procedures (YES or NO)	Assessment of the differences levels

Appendix 3-B

Detailed information **for** **compilation of ADT**

(a) Aeroplane interior description refers to:

- exit location and environment
- cabin crew stations
 - location
 - visibility outside/ inside the cabin (direct view)
 - access to: emergency equipment, emergency lighting system, interphone
- galley/ toilet compartment – location
- crew rest areas (if installed) – location/ equipment
- flight deck seats/ harness/ oxygen system
- cargo areas accessible during flight

(b) Safety Equipment refers to type and location of the following:

- slides/rafts and survival kits
- life jackets/ infant life jackets/ flotation cots
- dropout oxygen/ first aid oxygen
- fire extinguishers
- fire axe/ crow bar
- emergency lights and torches
- emergency locator transmitters (fixed/ portable) – ELTs
- protective breathing equipment (PBE)
- first aid kits/ emergency medical kits
- megaphones
- pyrotechnics (if applicable)
- other cabin safety equipment

(c) Systems Operation – refers to indications and operation of control panels of the following:

- interphone and public address system
- general and emergency lighting system
- evacuation alarm system
- calls signs system
- smoke detection system
- flight deck seats and harness system
- flight deck fixed oxygen system
- galley/ lavatory electric systems and circuit breaker panels

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- water and waste system
- temperature control system
- air conditioning system
- any other systems available

(d) Normal Procedures refer to:

- exit operation in “normal” mode
- operation of galley/ lavatory electrical supplies and breaker panels
- operation of arming and disarming systems
- operation of panels for water/ waste system
- operation of entertainment system – in-seat power supply – passenger electrically operated seats
- passenger briefing (safety demonstration)

(e) Emergency Procedures refer to:

- location/ removal/ use of emergency equipment
- emergency training related to aeroplane type
- fire fighting
- portable breathing equipment (PBE) in smoke filled environment
- operation of exits in “emergency” mode
- recognition of planned/ unplanned evacuation
- recognition of usable/ unusable exits
- severe turbulence
- sudden decompression/ donning of oxygen
- use of therapeutic oxygen
- pilot incapacitation (seat mechanism and harness/ oxygen system/ use of checklist)
- passenger emergency briefing

Note:

The ADT is compiled by the manufacturer and would only be able to assess differences or similarities between the aircraft they supply, in their standard format. Therefore the following items would not be relevant in that assessment as they are operator specific or fitted by external organisations.

These items are relevant however to an operator when they are assessing whether a new aircraft in their fleet is a new type or a variant for the purposes of EU-OPS 1.1030.

- Galley location
- Crew rest areas
- Most safety equipment with reference to quantity, locations and type
- Entertainment system
- Customized Passenger briefing – safety demonstration
- Emergency procedures are also operator specific

APPENDIX 4

EU-OPS 1.1030/JAR-OPS 1.1030 & ACJ-OPS 1.1030

INTRODUCTION:

EU-OPS 1.1030 and JAR-OPS 1.1030 have an identical content.

As EU-OPS 1 does not contain guidance material, and since ACJ-OPS 1.1030 from “Section 2” of JAR-OPS 1 furnishes valuable information for identifying aeroplane types and variants for cabin crew operation and training, ACJ –OPS 1.1030 is provided below, for reference.

EU-OPS 1.1030 – Operation on more than one type or variant

and

JAR–OPS 1.1030 Operation on more than one type or variant (See ACJ OPS 1.1030)

(a) An operator shall ensure that each cabin crew member does not operate on more than three aeroplane types except that, with the approval of the Authority, the cabin crew member may operate on four aeroplane types, provided that for at least two of the types:

- (1) Non-type specific normal and emergency procedures are identical; and
- (2) Safety equipment and type specific normal and emergency procedures are similar.

(b) For the purposes of sub-paragraph (a) above, variants of an aeroplane type are considered to be different types if they are not similar in each of the following aspects:

- (1) Emergency exit operation;
- (2) Location and type of portable safety equipment; and
- (3) Type specific emergency procedures.

[Amdt. 3, 01.12.01]

ACJ OPS 1.1030

Operation on more than one type or variant

See JAR-OPS 1.1030

1 For the purposes of JAR-OPS 1.1030(b)(1), when determining similarity of exit operation the following factors should be assessed to justify the finding of similarity:

- a. Exit arming/disarming;
- b. Direction of movement of the operating handle;
- c. Direction of exit opening;
- d. Power assist mechanisms;
- e. Assist means, e.g. evacuation slides.

Self-help exits, for example Type III and Type IV exits, need not be included in this assessment.

2 For the purposes of JAR-OPS 1.1030(a)(2) and (b)(2), when determining similarity of location and type of portable safety equipment the following factors should be assessed to justify the finding of similarity:

- a. All portable safety equipment is stowed in the same, or in exceptional circumstances, in substantially the same location;
- b. All portable safety equipment requires the same method of operation;
- c. Portable safety equipment includes:
 - i. Fire fighting equipment;
 - ii. Protective Breathing Equipment (PBE);
 - iii. Oxygen equipment;
 - iv. Crew lifejackets;
 - v. Torches;
 - vi. Megaphones;
 - vii. First aid equipment;
 - viii. Survival equipment and signalling equipment;
 - ix. Other safety equipment where applicable.

3 For the purposes of sub-paragraph of JAR-OPS 1.1030(a)(2) and (b)(3), type specific emergency procedures include, but are not limited, to the following:

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- a. Land and water evacuation;
- b. In-flight fire;
- c. Decompression;
- d. Pilot incapacitation.

4 When changing aeroplane type or variant during a series of flights, the cabin crew safety briefing required by AMC OPS 1.210(a), should include a representative sample of type specific normal and emergency procedures and safety equipment applicable to the actual aeroplane type to be operated.

[Amdt. 3, 01.12.01]

-end-