TCAR OPS OM–D WORKSHOP
Operator Conversion Course: OCC

Flight Operations Standards Department

Contents

Main Regulatory References for OCC

Operator Conversion Course: OCC	
ORO.GEN.110	Operator responsibilities
ORO.GEN.200	Management System
CAT.GEN.MPA.170	Psychoactive Substance
CAT.GEN.MPA.175	Endangering Safety
ORO.FC.115	CRM: Crew Resource Management
ORO.FC.120	Operator Conversion Training
ORO.FC.145	Provision of training, checking and assessment
ORO.FC.146	Personnel providing training, checking and assessment
ORO.FC.220	Operator conversion training and checking
ORO.FC.230 (b)	*Operator proficiency check*
ORO.FTL.250	Fatigue Management Training
Part-SPA	Operation requiring specific approval (e.g. PBN, MNPS, RVSM, AWOs, EFB ....)
AMC 20-6 ETOPs	ETOPS

Development of Programme

OCC must be undertaken by each pilot: [ORO.FC.120]

➢ Upon arrival at its first Operator (**Initial OCC**),

➢ With each **change of Operator**, and

➢ Each time the aircraft **type is changed** within the same Operator

Development of Programme

The OCC should contain, in following order:

➢ Ground Training and Checking (**GTC**);

➢ **E**mergency & **S**afety **E**quipment **T**raining;

➢ Flight Training (**FT**) [FSTD/Aircraft];

➢ **O**perator **P**roficiency **C**hecking (**OPC**);

➢ LIFUS;

➢ Line Check.

Development of Programme
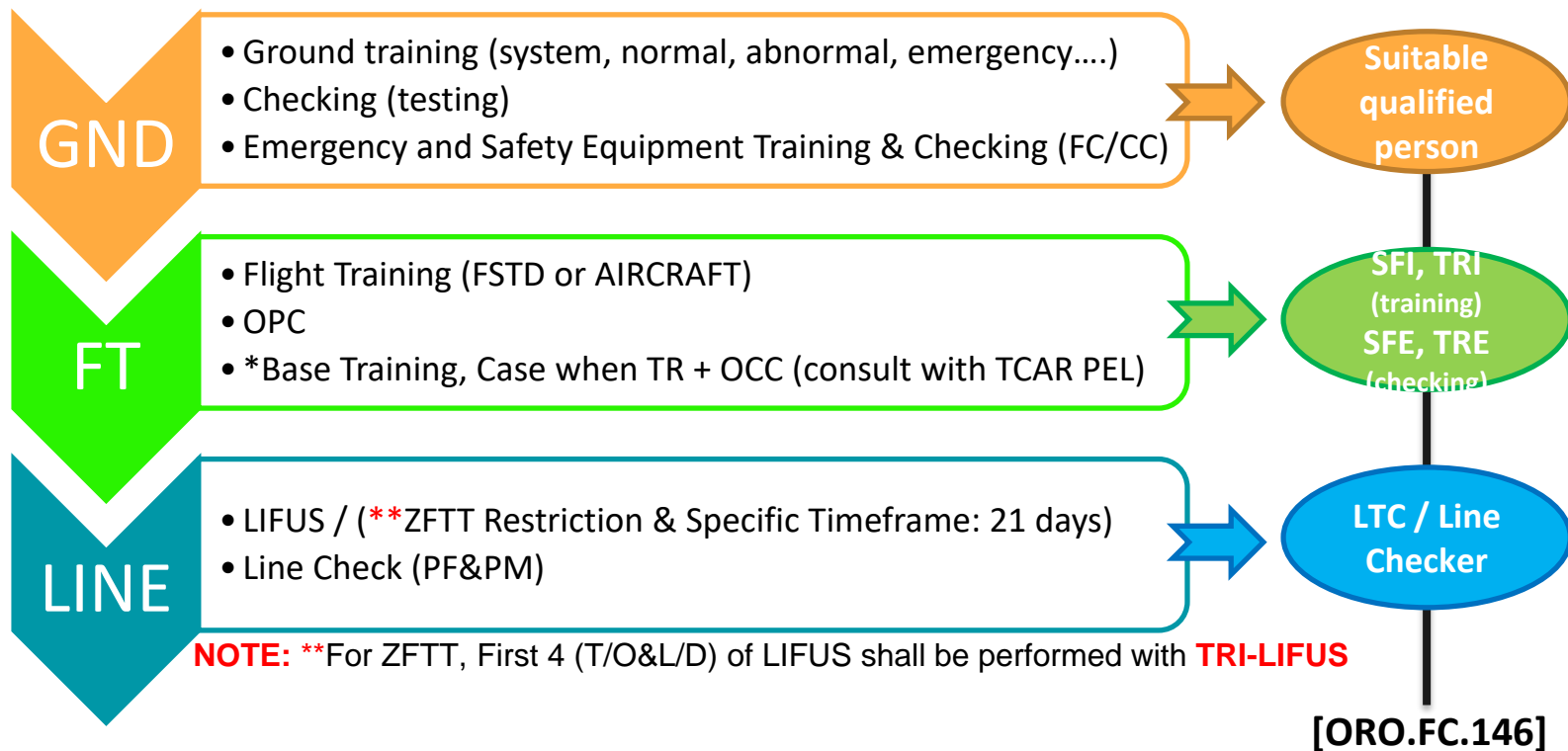
Important notes:

- [ORO. FC.220 (b)] For Aeroplanes of **Class A** , once OCC **Flight Training** has **commenced**, the flight crew member <u>shall not</u> be assigned to flight on any other type or class of aircraft until the OCC has been **completed** or finally **terminated**.

- The OM-D could consider and define **conditions for resuming** activity following an <u>interruption of training</u>. It would be appropriate for such recovery programmes to take into account the phase during which the interruption took place, the trainee's history, the complexity of the OCC, the duration of the interruption, etc.

- The **timeline** requirements of OCC training must be met even for pilots who have obtained their Types Ratings in the **ZFTT framework**. [ORO. FC.220 (d) and (e)]

RECAP:

What is a Class A performance Aeroplane: [Answer in Part-DEF]

"performance class A aeroplanes means multi-engined aeroplanes powered by turbo-propeller engines with an MOPSC of more than nine (9) or a maximum take-off mass exceeding 5 700 kg, and all multi-engined turbo-jet powered aeroplanes"

Theme of Operator Conversion Training Course: OCC

GND
- Ground training (system, normal, abnormal, emergency….)
- Checking (testing)
- Emergency and Safety Equipment Training & Checking (FC/CC)

→ Suitable qualified person

FT
- Flight Training (FSTD or AIRCRAFT)
- OPC
- *Base Training, Case when TR + OCC (consult with TCAR PEL)

→ SFI, TRI (training) SFE, TRE (checking)

LINE
- LIFUS / (**ZFTT Restriction & Specific Timeframe: 21 days)
- Line Check (PF&PM)

→ LTC / Line Checker

NOTE: **For ZFTT, First 4 (T/O&L/D) of LIFUS shall be performed with **TRI-LIFUS**

[ORO.FC.146]

Ground Training & Checking (GTC)

GROUND TRAINING AND CHECKING: GTC

Type of training	OCC Operator change Initial*	OCC Operator change	Change type
Systems and Procedures Course. AMC1 ORO.FC.220 (a)(1)(i) and (b)			
➤ Aircraft systems	/ (1)	/ (1)	/ (1)
➤ Normal (including operational), Abnormal and Emergency procedures	/	/	/
SPA (PBN, MNPS, RVSM, ETOPS, LVO, EFB) if applicable			
➤ PBN RNP AR APCH AMC1 SPA.PBN.105(b)	/	/	/
➤ MNPS	/	/	/ (2)
➤ RVSM AMC2 SPA.RVSM.105 (f)	/	/	/ (2)
➤ LVO AMC1 SPA.LVO.120(b); AMC2 SPA.LVO.120(b); AMC3 SPA.LVO.120(b)	/	/	/
➤ ETOPS AMC 20-6 rev. 2 APPENDIX 6	/	/	/ (2)
➤ EFB AMC4 SPA.EFB.100(3)	/	/	/ (2)
➤ RRLD AMC1 CAT.POL.A.255(b)(2)(iv) ; AMC1 CAT.POL.A.355(b)(5) and (b)(6)	/	/	/ (2)
➤ Steep Approach AMC1 CAT.POL.A.245 ; CAT.POL.A.345	/	/	/ (2)
➤ Short landing CAT.POL.A.250 ; CAT.POL.A.350	/	/	/ (2)
Flight Path Management (MAN or AUT) during Unreliable Airspeed indication and other failures at high ALT in aeroplanes with MAX CRZ ALT > FL300			
➤ Elements as specified in Table AMC1 ORO.FC.120&130	/	/	/
UPRT			
➤ AMC1 ORO.FC.220&230	/	/	/
Emergency and Safety Equipment Training and Checking (ESETC)			
➤ First-aid in general	/		/
➤ First-aid as relevant to the ACFT type of operation and crew complement			/
➤ Aero-medical topics			/ (2)
➤ Smoke			/
➤ Actual Fire Fighting			/
➤ Operational procedures of security, rescue and emergency services			/ (2)
➤ Survival Training			/
➤ Ditching procedures and actual use of corresponding equipment			/
➤ Wet-drill Training			/
➤ Location/use of Emer/Safety equipment and associated procedures/drills			/
➤ PAX handling for OPS where no cabin crew is required			/
➤ Discipline and responsibilities for OPS where no CC is required			/
➤ PAX briefing/safety demonstrations, for OPS where no CC is required			/
CRM Training			
• Elements as specified in Table 1 AMC1 ORO.FC.115 Column 1	/		/
• Elements as specified in Table 1 AMC1 ORO.FC.115 Column 2			
• Elements as specified in Table 1 AMC1 ORO.FC.115 Column 3		/	
DG Training AMC1 SPA.DG.105(a) and ORO.GEN.110(j)	/	/	/ (2)
Fatigue Management Training FMT ORO.FTL.250	/	/	/ (2)
SMS Training			
➤ Training and Communication on Safety AMC1 ORO.GEN.200(a)(4)	/	/	
➤ Compliance monitoring AMC1 ORO.GEN.200(a)(6)(e)(3)	/	/	
Security Training AMC1 ORO.GEN.110(a)	/	/	/ (2)
EWIS EASA AMC 20-22	/ (3)	/ (3)	/ (3)
Psychoactive substances and endangering safety CAT.GEN.MPA.170(b), CAT.GEN.MPA.175	/		
Global Reporting Format (GRF) AMC1 CAT.OP.MPA.303 & CAT.OP.MPA.311	/	/	/ (2)
Ground checking AMC1 ORO.FC.220 (b)(2)	/	/	/

*First OCC of a CAT pilot

(1) Not applicable if covered by the TR

(2) If applicable due to the change in type of holding

(3) If applicable

- ✈ **Aircraft system and Procedures course;**
- ✈ **SPA;**
- ✈ **Flight Path Management;**
- ✈ **UPRT;**
- ✈ **Emergency and Safety Equipment;**
- ✈ **CRM;**
- ✈ **DG Training;**
- ✈ **Security Training;**
- ✈ **Psychoactive substances and endangering safety;**
- ✈ **GRF [CAT.OP.MPA.303, 311];**

Self-learning, CBT can be legally used for training, with supervision required

Systems, procedures and SPA training courses

Aircraft Systems:

- ATA chapters

Normal Procedures:

- Flight planning;
- Ground handling;
- Performance;
- M&B;
- Fuel scheme (policy);
- Selection of alternate aerodrome;
- Ground de-icing/anti-icing;

Abnormal Procedures:

- Including pilot INCAP;

Other relevant subjects:

- Difference between variant (ODR);
- MEL;
- Procedures related SPA
- TAWS (EGPWS);
- ACAS;
- State Laws, Regulations & Procedures (OM-A, B)

Flight Path Management & UPRT

Flight Path Management: (applicable to OCC & RTC) For unreliable A/S indicator & other failure at high altitude **[AMC1 ORO.FC.120&130]**

- **Ground** and **Practical** training **elements** are detailed on AMC1….;

- There are some _common items/elements_ between FPM and UPRT (e.g. aerodynamic, Mach tuck, high altitude stall, degradation of FBW…), **Cross reference matrix** could help to avoid redundancy.

- **CRM** (startle effect/resilience, call-out, workload management) is needed.

Note: This requirement applicable to all CMPA and Non-CMPA.

Flight Path Management & UPRT

UPRT: **[AMC1 and AMC2 ORO. FC.220&230]**

Note: **UPRT** is required only **CMPA**,

- **Prevention:** ground training + FSTD*; (training elements are in table 1)*
  - ○ **SRB + MAN;**

- **Recovery:** Ground training & qualified FFS *(table 2 – provide elements)*

  - ○ **MAN***;*
  - ○ **FFS** (on **each seat**, *therefore these practices will link to RHS*);

  NOTE: FFS must be qualified in acc with **CS-FSTD**

Emergency and Safety Equipment Training & Check

ESETC: should be a **combined training** program for FC/CC. For the Initial OCC, trainees are required to undergo <u>general first-aid</u> & <u>water landing</u>.

Emergency and Safety Equipment Training and Checking (ESETC)	Operator change		Change type
	Initial*		
➢ First-aid in general	/		/
➢ First-aid as relevant to the ACFT type of operation and crew complement			/
➢ Aero-medical topics			/ (2)
➢ Smoke			/
➢ Actual Fire Fighting			/
➢ Operational procedures of security, rescue and emergency services			/
➢ Survival Training			/ (2)
➢ Ditching procedures and actual use of corresponding equipment			/
➢ Wet-drill Training			/
➢ Location/use of Emer/Safety equipment and associated procedures/drills			/
➢ PAX handling for OPS where no cabin crew is required			/

Other relevant subjects

/i\ "These subjects will be detailed in subsequence modules"

General subjects/modules related to OCC as detailed in regulation:

- CRM;
- Dangerous Good: DG;
- **Fatigue Management Training (FMT);**
- SMS training;
- Security;
- **Psychoactive substances and endangering safety;**
- GRF [CAT.OP.MPA.303, 311]

Flight Training-FT (FSTD/AIRCRAFT)

Objectives:

The purpose of flight training is to train and consolidate the crew member in the **Operator's operating procedures** *including for* **specific operations** *(PBN, NAT HLA, RVSM, LVO, ETOPS, RRLD, EFB, steep approach, short landing, etc.), for which* **"additional training of Type Rating training"** **must be provided by** *ATO or AOC holder.*

Flight Training-FT (FSTD/AIRCRAFT)

Content of the sessions:

The training programme must contain the **mandatory** guidelines contained in the **OSDs** and should consider their instructions "**non-mandatories**" as well.

It should contain a **LOFT** and exercises to:

- The development of **CRM**;

- Assessment and development of **technical** and **non-technical skills**; and

- To practice handling **pilot incapacitation**.

*Note: Training **contents** **and** **volumes** should remain balanced between F/O and CPT and PF and PM functions.*

Flight Training-FT (FSTD/AIRCRAFT)

Case when **TR base training** perform under operator**:**

[TCAR FCL Appendix 9, (A)(17) (b)]

- In the case of a TR base training performed by an operator, the operator must detail the programme conforming to AMC2 ORA.ATO.125 (k)(1) in the OM-D. (programme is approved by the CAAT).

- Training is delivered by a **TRI-'LT'**

- A **certificate of completion** produced by the operator will be provided to the candidate for the endorsement of the TR on his license.

/i\ **NOTE [FCL 725 (c)]**: Specific timeframe between Skill test & Base training is **6** months.

Flight Training-FT (FSTD/AIRCRAFT)

Specific Timeframe for Type rating training: [FCL720 (c)]

- 6 months from beginning of the TR training to Skill test;

- 6 months between Skill test and Licence Endorsement.
  (Base training will be conducted during this period)

/i\ **Note**: Beginning of TR training is Ground training.

Operator Proficiency Check: OPC

Checking Objectives:

The objective of the OPC is to confirm that, in **the specific operating environment of an Operator** and within a standard crew, pilots demonstrate the level of **skills** required to start (OCC, Command Course) or continue (RTC) the safe and efficient conduct of flights.

OPC generally includes the evaluation of a wider field of competence and the ability to exercise these **skills** in compliance with the methods, **procedures** and **instructions specific to the Operator**.

Operator Proficiency Check: OPC

OPC normally focus on:

➤ The policy of regarding **use of automation**;

➤ Compliance with **procedures** and **crew coordination** (division of tasks, technical announcements, checklists, etc.);

➤ The implementation of the **TEM** and the efficient use of the **CRM** principles;

➤ The structured treatment of operational situations, including the use of a methodology for **decision-making** and **managerial skills** for the effective management of normal, abnormal and emergency situations;

➤ The knowledge and **know-how** related to the **special operations** of the Operator (PBN, NAT-HLA, RVSM, LVO, ETOPS, EFB and installed applications).

Operator Proficiency Check: OPC

Minimum maneuver as PF to be checked on OPC [A]:
[AMC1 ORO.FC.230 (b)]

- Rejected take-off (when an FSTD is available);

- Take-off with engine failure between V1 and V2 (above V2 + 400 ft AAL, when perform on A/C) ;

- 3D (OEI to minima);

- 2D to minima;

- PBN APCH (3D or 2D);

- Missed APCH (OEI);

- OEI L/D

MULTI-PILOT AEROPLANES AND SINGLE-PILOT HIGH-PERFORMANCE COMPLEX AEROPLANES		PRACTICAL TRAINING			ATPL/MPL/TYPE RATING SKILL TEST OR PROF. CHECK	
Manoeuvres/Procedures		FSTD	A	Instructor initials when training completed	Tested or checked in FSTD or A	Examiner initials when test or check completed
	simulate the engine failure shortly after reaching V2)					
2.5.2*	between V1 and V2	P	X		M FFS only	
2.6	Rejected take-off at a reasonable speed before reaching V1	P---->	---->		M	

Line flying under supervision (LIFUS)

After the completion of Flight Training (FT) and checking, the trainee must achieve the minimum Line Flying Under Supervision (**LIFUS**) as specified in OM-D, with a commander nominated by the operator (**LTC**).

Note: Except first 4 (T/O&L/D) of ZFTT, TRI-LIFUS required.

The volume of LIFUS should be based on the following factors:

> ➢ Position, Previous experience;
> ➢ Complexity of the aircraft;
> ➢ Type and area of operations.

Note: *Class B performance, volume of LIFUS based on complexity of operations*

Regulatory requirement for LIFUS

The training volumes, defined in terms of the number of flight sectors or flight hours, the programme of which is set out in the OM, should include at least:

- **First OCC (initial):** [GM1 ORO. FC.220(d)]
  - Have completed a minimum of 100 flight hours or 40 sectors.

- **OCC following a change of Operator:** [ORO. FC.220 (c), AMC1 ORO. FC.220 (f) (2)]
  - The Operator shall define the number of sectors or flight hours according to the standards of **qualification** and **experience** defined in the OM-D, taking into account the qualifications and experience of the trainee.

- **OCC change of aircraft type within the same Operator:** [AMC1 ORO. FC.220 (f)(2)]
  - Possibly defined by the **OSD** of the aircraft type considered.

Volume of LIFUS [current practice in EU]

As an indication, the following number of sectors reflects the current practices of the EU Operators.

	F/O		CPT	
	S/MH	LH	S/MH	LH
1st OCC (regulatory minimum)	100h/40 sectors			
Nth OCC Change of Operator	10	8 (14)	10	8 (14)
Nth OCC Change of type and Operator	20	10 (16)	20	10 (16)
Command Course without Type Rating (TR) experience			20	16 (22)
Command Course with TR experience			20	10 (16)
OCC CPT without TR experience			20	14 (20)
OCC CPT with TR experience			10	8 (14)

/i\ see more details in LIFUS module

Table legend:

- LH: Long haul
- S/MH: Short/Medium Haul
- (The values in parentheses refer to the first long-haul adaptation)

Line Check (LC)

Objectives:

- In general (**MPO**), checking requires in both functions for **PF** & **PM**.

- The **chosen route** should allow for the verification of **all typical tasks** of a pilot during normal operations, as well as the crew's competency in CRM.

Line Checker: [**ORO.FC.146**, list of line checker must be communicated with CAAT]

- Line check may be conducted by a suitably **qualified commander nominated by the operator**;

- When conduct checking, Line checker should occupy an **observer's seat** (where installed)

Specific Conversion Course for Line Checker

Operational Circumstance Cases: [AMC1 ORO.FC.200 (f)]

- New AOC Applicant;

- New aircraft type/class into the fleet.

The "**temporary**" Line checker will be assigned to conduct line checks, the *Specific OCC* shall be provided for those personnel.

Restriction on temporary line checker:

- Not exercise control of A/C;
- Only conduct recurrent line checks of pilots whose previous line check has not expired.
- 6 months validity.

Specific Conversion Course for Line Checker

Specific OCC must be included:

- **Normal procedures**

- **Abnormal and Emergency procedures**
  - Including pilot incap.

- **Familiarization with:**
  - Operating **procedures**, use of **checklist**;
  - Installed **Emergency & Safety Equipment**.

- Flight planning;
- Ground handling;
- Performance;
- M&B;
- Fuel scheme (policy);
- Selection of alternate aerodrome;
- Ground de-icing/anti-icing;