



สำนักงานการบินพลเรือนแห่งประเทศไทย
The Civil Aviation Authority of Thailand

TCAR OPS OM-D WORKSHOP

Recurrent Training and Checking: RTC

Flight Operations Standards Department

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Main Regulatory References for RTC

Recurrent Training & Checking: RTC

ORO.GEN.110	Operator responsibilities
ORO.GEN.200	Management System
ORO.FC.115	Crew Resource Management (CRM)
ORO.FC.130 & 230	Recurrent Training and Checking
ORO.FC.135	Pilot Qualification to operate in either pilot's seat
ORO.FC.140	Operation on more than one type or variant
ORO.FC.146	Personnel providing training, checking and assessment
ORO.FC.A.201	In-flight relief of flight crew member (IRFCM)
ORO.FC.330	Recurrent Training and Checking OPC
ORO.FTL.250	Fatigue Management Training
Part-SPA	Operation requiring specific approval (e.g. PBN, MNPS, RVSM, AWOs, EFB)
AMC20-6	ETOPS



Overview of Recurrent Training and Checking

General: *In the constantly **evolving regulatory context**, along with recommendations from **manufacturers** and **authorities**, feedback from the **previous RTC** cycle, and input from the **SMS**, it is expected that Operators will have their program approved each year to incorporate all these factors.*

RTC involves:

- **Ground** course (training + checking);
- **Flight training** (FSTD/Aircraft);
- Operator proficiency check (**OPC**); and
- **Line check**.

Note: *Ground & Flight training shall be conducted **at least every 12 calendar months**.*

Ground Training & Checking (GTC)

Ground Training and Checking (GTC)

The following table groups all GTC training courses, with the associated minimum recurrence.

Type of training	RTC	
	Annual	Triennial
Systems and Procedures Course. AMC1 ORO.FC.220 (a)(1)(i) and (b)		
> Aircraft systems ⁽¹⁾	/	
> Operational procedures including OPS on more than one type or variant	/	
Ground de-icing/Anti-icing	/	
Pilot incapacitation	/	
> Accident/incident and occurrence review	/	
SPA (PBN, MNPS, RVSM, ETOPS, LVO, EFB) if applicable		
> PBN RNP AR APCH AMC1 SPA.PBN.105(b)		
> NAT HLA	/ (3)	
> RVSM AMC2 SPA.RVSM.105 (f)	/ (3)	
> LVO AMC4 SPA.LVO.120(b); AMC6 SPA.LVO.120(b)	/	
> ETOPS AMC 20-6 rev. 2 APPENDIX 6		(6)
> EFB AMC4 SPA.EFB.100(b)(5)		(6)
> RRLD AMC1 CAT.POLA.355(b)(2)(iv); AMC1 CAT.POLA.355(b)(5) and (b)(6) ⁽²⁾	/	(7)
> Steep Approach CAT.POLA.345; CAT.POLA.345		(7)
> Short landing CAT.POLA.350; CAT.POLA.350		(7)
Emergency and Safety Equipment Training and Checking [ESETC]		
> Actual donning of a life-jacket, where fitted	/	
> Actual donning of protective breathing equipment, where fitted	/	
> Actual handling of fire extinguishers of the type used	/	
> Instruction on the location/use of Emer/Safety equipment carried on the ACFT	/	
> Instruction on the location/use of all types of exits	/	
> Security Procedures	/	
> Actual operation of all types of exits		/
> Demonstration of the method used to operate a slide, where fitted		/
> Actual fire-fighting using equipment representative of that carried in the aircraft on an actual or simulated fire ⁽⁴⁾		/
> The effects of smoke in an enclosed area and actual use of all relevant equipment in a simulated smoke-filled environment		/
> Actual handling of pyrotechnics, real or simulated, where applicable		/
> Demonstration in the use of the life-rafts, where fitted		/
> Particularly in the case where no CC is required, First-aid, appropriate to the ACFT type, the kind of OPS and crew complement		/
CRM Training		
• Elements as specified in Table 1 AMC1 ORO.FC.115 Column Annual Recurrent Training ⁽⁵⁾	/	
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.120B.130 ⁽⁵⁾		
UPRT		
Upsert Prevention elements from Table 1 AMC1 ORO.FC.220B.230 ⁽¹⁾	/	
DG Training AMC1 SPA.DG.105(a) and ORO.GEN.110(j)		Every 24 months
Fatigue Management Training FMT ORO.FTL.250	/	(6)
SMS Training AMC1 ORO.GEN.200(a)(4)		(6)
Security Training AMC1 ORO.GEN.110(a) and ACAAT on NCASTP	(6)	/
EWIS EASA AMC 20-22		Every 24 months
Psychoactive substances CAT.GEN.MPA.170(b)		(7)

(1) All items are covered over a period not exceeding 3 years

(2) Except that, with Halon extinguishers, an alternative extinguisher may be used;

(3) Reminders on important points and new elements if necessary

(4) The periodicity of the elements to be covered will have to be defined in the OM-D of the operator

(5) Normally not necessary if EFB functions are used regularly in online OPS

(6) As specified by the operator's safety training programme

(7) No specified periodicity

-  Aircraft system and Procedures course;
-  SPA;
-  Flight Path Management;
-  UPRT;
-  Emergency and Safety Equipment;
-  CRM;
-  DG Training;
-  Fatigue management training: FMT
-  SMS
-  Security Training;
-  Psychoactive substances.

Aircraft systems and Operational procedures [G]



Aircraft systems: [AMC1 ORO.FC.230 (a)(1) (i) (A)]

- **Annual** review of Aircraft system is required;
- Recommendation to separate it to be completed over **3-year period**, *OM-D must be defined/described.*

Operational Procedures: [AMC1 ORO.FC.230 (a)(1) (i) (A)]

- Programme should cover *all operational procedures* and regulations defined in each part of the *OMs* (including those related to its **SPA**) with acceptable recurrence.
- To **prioritize** procedures and regulations for review, the Operator should use its SMS to identify key areas of interest, challenges, and innovations, whether for **annual** or **triennial** assessments.



Operational procedures [G]

Operational Procedures: [AMC1 ORO.FC.230 (a)(1) (i) (A)]

- *Deicing/anti-icing: valid for 12 months;*
- *Pilot Incapacitation: valid for 12 months.*

Operations requiring specific approval: *should be addressed annually:*

- *MNPS (NAT-HLA) “useful resources are detail in [DOC 007](#)”*
- *RVSM “AMC2 SPA.RVSM.105 (f)”*
- *LVO “SPA.LVO.120”*
- *ETOPS “AMC20-6, App-6&7”*
- *DG [CBTA applied, **every 2 years**]*
- *EFB “AMC4 SPA. EFB.100(b)(3) (d)”*

/i\ Data link operations (ADS, CPDLC, PBCS) also need to undergo recurrent annually, due to revolution of the airspace rules (OM-C).



Ground Training and Checking (GTC)

Emergency and Safety Equipment Training and Checking: Periodicity

- Annually concerning AMC1 ORO. FC.230(a)(2)(ii);
- 3 Years concerning AMC1 ORO. FC.230(a)(2)(iii).

*Note: ESETC should be a **combined FC/CC training**, equipment used should be **representative** of that **available on board** the aircraft.*

Crew resources management (CRM) : See AMC1 ORO.FC.115 (g) Table 1

CRM training elements	Annual recurrent training	General principles
		Relevant to the individual flight crew member
		Relevant to the flight crew
		Relevant to the entire aircraft crew
		Relevant to the operator and the organisation
		Case studies



Ground Training and Checking (GTC)

Flight Patch Management: [AMC1 ORO. FC.120&130]

- **Annually** review, all the elements of the table of the AMC1 ORO. FC.120&130 should be reviewed over a rolling period of **three (3) years**.

*Note: Cross-matrix between the **AMC1 ORO table. FC.120&130** and **Table 1** of the **AMC1 ORO. FC.220&230** to identify and select common elements would meet the AMCs GTC requirements for FPM and UPRT **is strongly recommended**.*

UPRT: [AMC1 and 2 ORO. FC.220&230]



Ground Training and Checking (GTC)

Dangerous goods: [CAT. GEN. MPA.200; ORO. GEN.110(j) and AMC1 SPA. DG.105(a)]

- whether authorised to transport dangerous goods (DG) or not, must provide a specific dangerous goods training programme to its personnel. The recurrent training programme must be carried out at intervals not exceeding 2 years.

Fatigue Management Training: [AMC1 ORO.FTL.250] “for syllabus”

- To ensure that FC are familiar with the content of OM-A Ch.7, including through the Operator's Fatigue Risk Management (FRM) Policy.



Ground Training and Checking (GTC)

Security: [AMC1 ORO.GEN.110(a)]

- CAAT announcement on National Civil Aviation Security Training Programme: NCASTP;

SMS Training: [ORO.GEN.200 (a)(1)(iv)]

- Operator must establish a programme to ensure that its personnel are trained on the functioning and updates of its Safety Management System (SMS) and that they remain up to date.

Psychoactive substances: [AMC1 CAT. GEN. MPA.170(b)]

- During recurrent training programmes, the Operator may remind its staff of the arrangements for access to a psychological support programme (CAT. GEN. MPA.215).



Checking of Knowledge

- ❖ Where a knowledge test is required by regulatory requirements, the conditions for carrying out such checks should be described.
- ❖ The minimum required pass criteria and the handling of failure should be determined and specified in the OM-D.

Note: *The content of the assessment and the result demonstrating the pilot's competence must be **documented** and **recorded** [AMC1 ORO.MLR.115].*

Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Sessions:

*We distinguish two (2) types of sessions in RTC: **training sessions** and **checking sessions**.*

Recommendation:

Before the start of the RTC cycle, the Operator should practically verify the compatibility of the planned exercises with the simulator session duration by conducting specific **validation sessions**. These sessions should be calibrated considering a crew performance representative of the pilot population





Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Sessions Placement:

*ORO.FC does not dictate **the placement of the Flight Training (FT) session** within the RTC cycle, except for the requirement to maintain its validity within one year.*

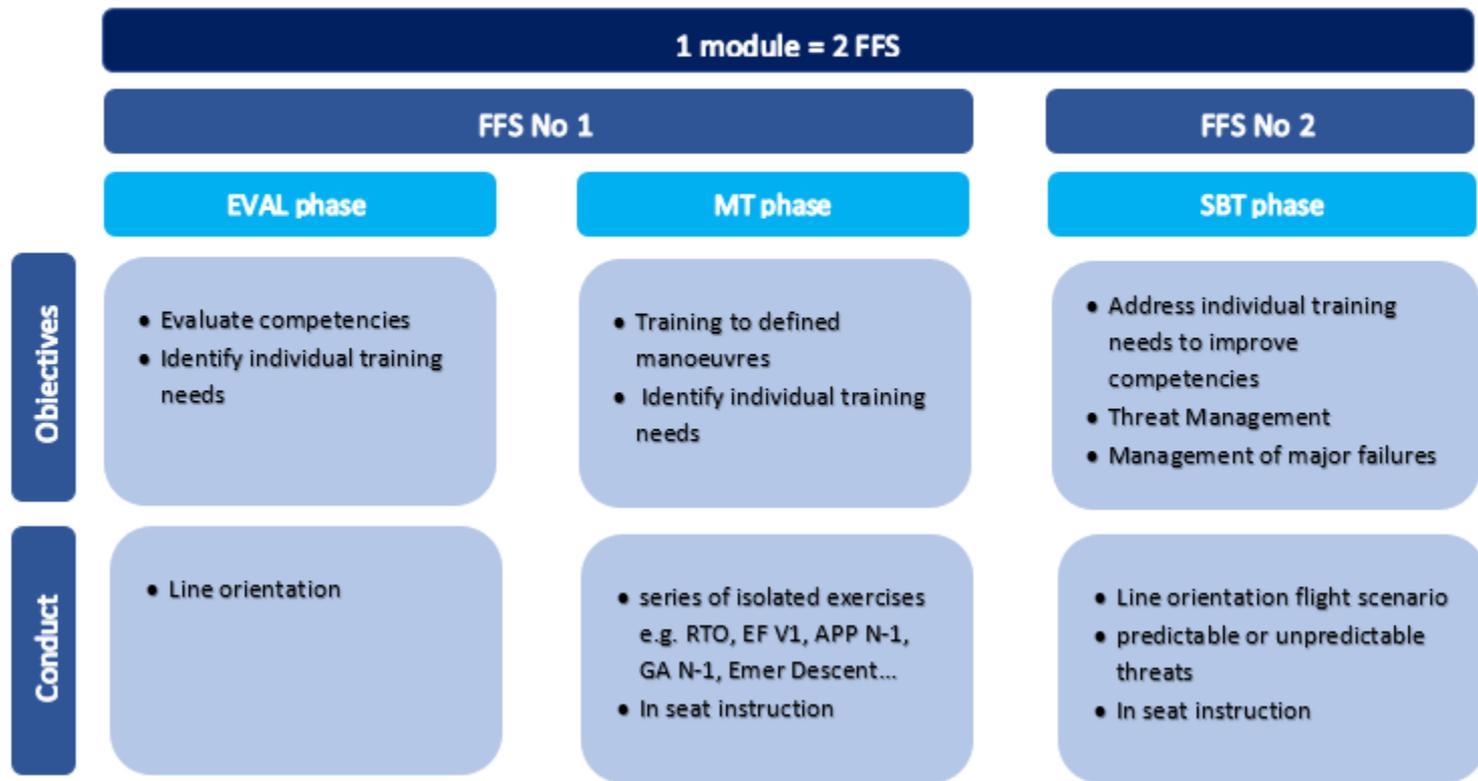
*Conducting the **FT session before the OPC/LPC check** has the undesirable effect of limiting it to preparation for the check, which is not the intended purpose.*

Recommendation:

Positioning the check session followed by training offers the advantage of better crew availability for FT and more relevant content. It is also in line with the principles of Evidence-Based Training (EBT), where crew needs are evaluated before offering tailored training. This sequence also allows the completion of the check session in case of interruption, avoiding any undesirable effects of TR validity expiration.

Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Example of a module and its contents:





Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Number of Sessions & Time Allocation:

- Beyond the regulatory minimum, the **number of sessions** and the **time allocation** to them must be determined by Operator and for each type of aircraft according to the programmes to be covered resulting from operational specificities and the field of operation.

*Note: CAAT encourages Operators to organize annual programme in such a way as to allow the realization of **two (2) FTs** and to prepare its ability to evolve towards the EBT.*

Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Contents of FT session:

FT session is not dedicated to preparing for the check but rather for recurrent training. It should include the review of **major system failures**, as well as:

- Original exercises that may never have been seen by the flight crew, including initial training (interrupted approach in level or descent, etc.);
- Exercises targeted by the **Operator's SMS** (manual control, X-wind, short or narrow RWY);
- Exercises in response to **various recommendations** (safety cases, etc.);
- Triennial practical program for **UPRT & FPM**;
- Etc.



Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Review of Major Failure: [AMC1 ORO. FC.230 (a)(4) (i) (A)]

*"The aircraft/FSTD training programme should be established in such a way that **all major aircraft system failures** and associated procedures are covered over a **rolling period of 3 years.**"*

Therefore, necessary for the Operator to determine "major" failures by aircraft type. To do this, the following procedures should at least be considered by the Operator:

- *Procedures involving **memory items**;*
- *Procedures **requiring immediate action** (identified as red or related to Master Warnings);*
- *Abnormal procedures identified by the Operator as **complex or potentially having serious consequences**.*



Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Pilot Incapacitation Handling: [AMC1 ORO.FC.230(c)(2)]

- If a simulator is available, practical training by pilots should be conducted at intervals not exceeding 3 years;
- The selection of scenarios and the degree of incapacitation should be relevant, taking into account specific task distribution cases (e.g., the case of Captain incapacitation during takeoff should be considered)

ACAS/TAWS [CAT.OP.MPA 290/295]

- GM1 CAT.OP.MPA.295 (j) recommends regular ACAS system **knowledge and skills** maintenance, covering all scenarios within **two years**;
- GM1 CAT.OP.MPA.290 (c)(5) recommends the maintenance of **knowledge and skills** relating to the use and procedures associated with the TAWS **system on a recurring basis**

Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Crew Composition:

- Training sessions are preferably conducted with a standard crew;

We **recommend** conducting sessions with a crew composition in accordance with the Operations Manual:

- Non-pairing 2 (two) **inexperienced pilots** [ORO.FC.200 (a)];
- If a non-standard crew consists of two First Officers, one of them should hold the right-seat **Captain qualification**.



Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Special Case: training to recover the conditions of recent experience: [FCL.060]

*“According to paragraph (c)(1) of FCL.060, to regain recent experience conditions within 90 days, the pilot **may** continue **Line Flying Under Supervision** of an instructor (or examiner) provided that they have completed 3 takeoffs, 3 approaches, and 3 landings as Pilot Flying (PF) within the preceding 120 days.”*

“**Instructor**” should be understood as:

- TRI-LIFUS;
- TRI-LT.

***Note:** LTC is not considered as instructor under this provision.*



Recurrent Flight Training-FT (FSTD/AIRCRAFT)

Either Seat **Training and Checking (RHS)**: **validity of 12 months**

[ORO.FC.235, AMC1 ORO.FC220&230]

To maintain of ESTC proficiency, the minimum exercises required for training and checking must be carried out in **PF**:

- **Once a year**, those defined in ORO.FC.235 (b) and including at least:
 - An engine failure on takeoff;
 - An approach and a go-around with one engine inoperative; and
 - A landing with one engine inoperative.
- **Over a three-year cycle**, according to AMC1.ORO.FC 220&230 (b) table 2:
 - Upset recovery exercises.
Note: complete within period of 3 years.

Recurrent Checking (FSTD/AIRCRAFT)

Operator Proficiency Check: OPC

- Validity period of 6 months [AMC1 ORO.FC.230 (b)(1)(i)].
- Performed by SFE/TRE [ORO.FC.146 (b)]

Line Check: (LC)

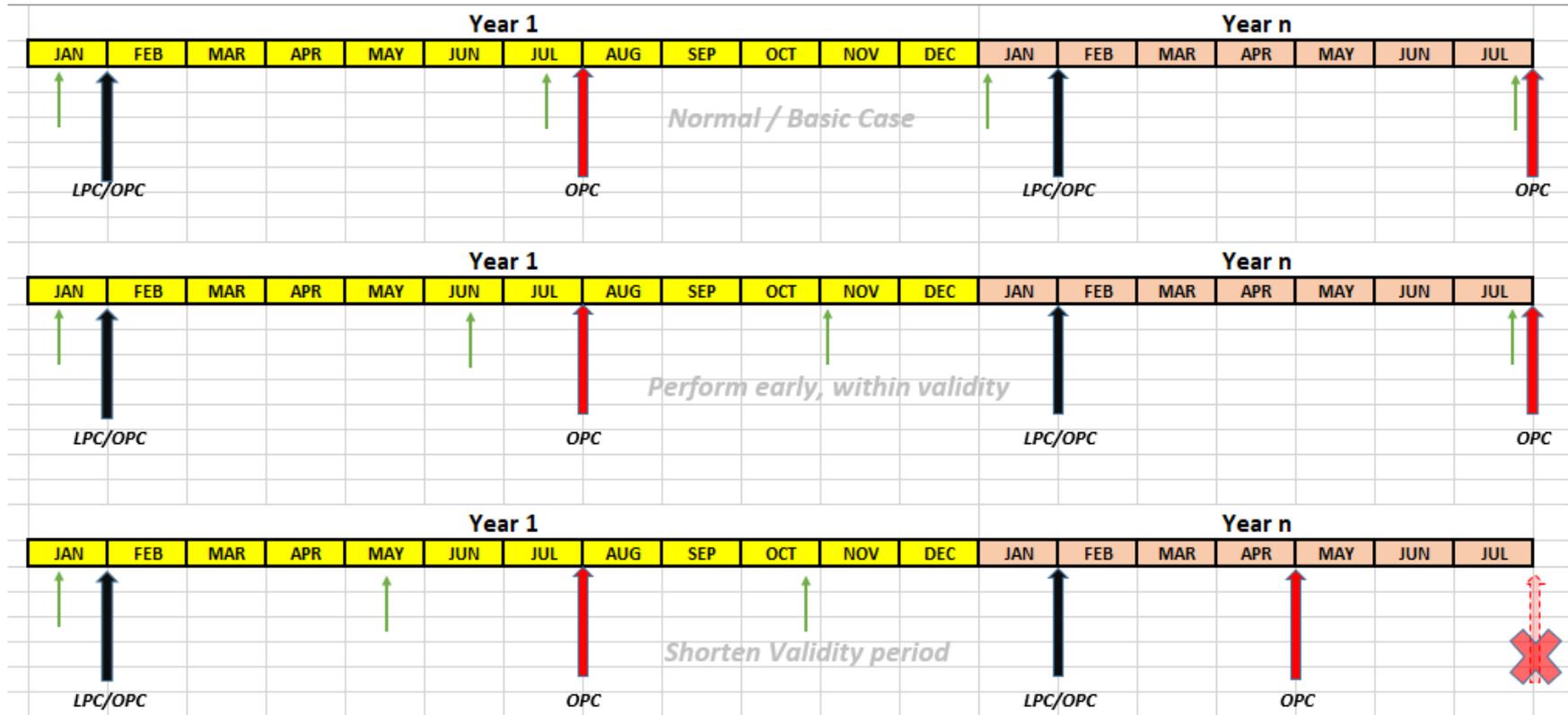
- Validity period of 12 months [AMC1 ORO.FC.230 (b)(2)].
- Both functions as PF & PM;
- Conducted by Line Checker [ORO.FC.146(g)]

Validity of Type/Class rating [FCL 740, FCL 740.A]

- **Type rating** validity period is 12 months, The **Proficiency check (periodic)** in accordance **with Appendix 9** under AOC holder shall be at least equivalent to the LPC [LPC/OPC], checking can be performed within **the 3 months** immediately preceding the expiry date of the rating; And
- Completed with the following conditions:
 - 10 route sectors; or
 - 1 route sector as pilot of the relevant class or type of aeroplane or FFS, flown with an examiner
- The individual shall obtain **LPC endorsement** by the CAAT (after completion of LPC/OPC).

Note: Validity period always counted at the end of month

Highlight Changes in ORO.FC



Recent Experience of Route Area and Aerodrome

[AMC1 ORO.FC.105(b)(2);(c)]

- Area & Route knowledge **Familiarization Training**;
- Aerodrome knowledge **Familiarization Training** :
 - Cat-A
 - Cat-B
 - Cat-C
- **Recent Experiences:** 12 months validity periods (last day of the month), counted from:
 - Familiarization training was undertaken; or
 - Lasted operations on Route, Area and Aerodrome

