TCAR OPS OM-D WORKSHOP

The CAAT, in collaboration with DGAC-France and AIRBUS, conducted the 'New Flight Crew Training Requirements' workshop (OM-D workshop). This initiative is a component of CAAT's Management of Change (MOC) strategy and includes mitigation measures to facilitate the transition and implementation of the new TCAR OPS regulations.

Summary Feedback & Question Lists for Flight Crew Training Programmes

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Executive Summary

The Civil Aviation Authority of Thailand (CAAT), in collaboration with DGAC-France and AIRBUS, has successfully organized the workshop on 'New Flight Crew Training Requirements' (OM-D workshop) from December 6 to 8, 2023, in Bangkok. This workshop, a key component of CAAT's Management of Change (MOC) initiative, aligns with the action plan to facilitate the transition and implementation of the new TCAR OPS regulations.

Program Highlights:

Comprising 15 meticulously designed modules, the workshop focused on addressing the evolving landscape of flight crew training requirements. These modules were delivered through collaborative efforts, bringing together CAAT inspectors (OPS and PEL) and DGAC experts, including Capt. Michel LEVY (PEL Expert) and Capt. Patrick MARGUERIE (OPS Expert). The extensive knowledge and insights shared during the workshop were complemented by the invaluable support of Bernard MACOU and Jean-Michel RESTOUT.

Participant Feedback:

Workshop participants praised the program for effectively addressing the new training requirements. They appreciated the hands-on approach, real-world application of theories, and practical insights from industry experts. The collaboration between CAAT, DGAC-France, and AIRBUS enhanced the learning environment, significantly improving the competence and readiness of flight crews.

Outcomes and Achievements:

The workshop has produced concrete results, aiding in the successful adoption of the new TCAR OPS regulations. Key accomplishments include improved decision-making, enhanced communication procedures, and an overall elevation in the quality of flight operations. These achievements serve as evidence of the program's effectiveness in addressing industry challenges.

Recommendations for Future Initiatives:

To build upon the success of the 'New Flight Crew Training Requirements' workshop, it is essential for future initiatives to maintain collaborative efforts with industry stakeholders. Adjusting content to tackle emerging challenges and integrating feedback from participants and experts will guarantee a lasting positive impact on the aviation community.

Conclusion:

The highly positive feedback from industry professionals underscores the importance of collaborative efforts in aviation education. The success of the 'New Flight Crew Training Requirements' workshop serves as a model for effective cooperation between regulatory bodies and industry experts. As we contemplate these achievements, our commitment remains strong in advancing flight crew training standards and contributing to the safety and success of the global aviation community.

Commitment:

The CAAT will create a **User Guide** to support the implementation and preparation of the FCT program, as requested by stakeholders with in Q1 2024.

1. Introduction

1.1. Preamble

From December 6 to 8, 2023, the CAAT, in collaboration with DGAC-France and AIRBUS, organized the workshop on 'New Flight Crew Training Requirements' (OM-D workshop). This workshop is part of the action plan resulting from CAAT's Management of Change (MOC) and mitigation measures to support the transition and implementation of the new TCAR OPS regulations.

The objectives of workshop, upon completion of the training, participants will be able to:

- Identify and comprehend relevant TCAR Parts associated with FCT programs, OM-D, and their approval processes.
- Understand the key distinctions between TCAR PEL Part FCL and previous regulations, differentiating and recognizing requirements in existing FCT guidelines (ACAAT-FCTP B.E.2559 & AOCR) versus ORO.FC & FCL.
- Recognize and understand the expected content of a CAT Operator's Operations Manual Part D in accordance with ORO.MLR.100.
- Identify pertinent information in OSD (TASE, MDR, ODR) when developing FCT programs for training variants.
- Understand the roles and responsibilities of AOCs and ATOs in the training of pilots, instructors, and examiners.
- Grasp the regulations and principles governing the establishment of Type rating training programs.
- Modify their OM-D and FCT programs to align with TCAR PEL Part FCL requirements.

1.2. Overview of Training Modules

- There are 15 modules that were delivered during the on-site workshop:
- ATOs & AOCs responsibilities;
- Overview of Flight Crew Training in TCAR OPS;
- Flight Crew Training Approval Process;
- Overview of TCAR PEL & Conversion of instructors and examiners;
- Details of Operator Conversion Course: OCC;
- Line Flying Under Supervision: LIFUS;
- Crew Resource Management: CRM;
- Recurrent Training & Checking: RTC;
- Command Course;
- Line Training Captain & Line Check Captain;
- PICUS:
- In-flight relief flight crew member (CPT and Co-pilot);
- RHS (Either seat training and Checking);
- Single/Mixed Fleet Flying; and
- Summarization and Transition Strategy.

2. Training Programme

2.1. Objectives of the workshop

Conditions:	Training **onsite** at Rama Garden Hotel organised by the CAAT For **Presentation part** of the workshop: Two CAAT Trainers from OPS[1] will lead, assisted by: - Two experts in Flight Crew Training from CAAT-DGAC[2] Cooperation team; - One PEL/CAAT trainer; - OPS Inspectors and Support staff. For **Practical part** of the workshop: Two CAAT Trainer will lead, assisted by: - Two experts in Flight Crew Training from CAAT-DGAC Cooperation team; - OPS Inspectors and Support staff (10 Inspectors).
Performances:	Participants will be able to: - Identify and understand relevant TCAR Parts related to FCT programmes, OM-D and for their approval. - Understand main differences between TCAR PEL Part FCL and previous regulations. Differentiate and identify between existing FCT requirements (ACAAT-FCTP B.E.2559 & AOCR) and ORO.FC & FCL. - Identify and understand the expected content of a CAT Operators Operations Manual Part D as per ORO.MLR.100. - Identify the information in OSD (TASE, MDR, ODR) when establishing the FCT programmes for training to variants. - Understand roles and responsibilities of AOCs and ATOs for the training of pilots, instructors, and examiners. - Regulations and Principles to establish Type rating training programmes. - Amend their OM-D and FCT programmes to meet TCAR PEL Part FCL requirements.
Standards: *Reference material:*	TCAR PEL Part-FCL TCAR OPS Part ORO.FC, OM-D Guidance material, OM-D Compliance matrixes.

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[1] Capt.Supamit Songpaisan (FOI), Thapanapat Srimoonsang (FOI)
[2] Michel Lvevy, Partick Marguerie, (Bernard Marcou involve on supporting via virtual meeting)

Modules	Descriptions	Duration

Module-0
ATOs & AOCs
	• Responsibilities of an AOC Holder and applicable regulations
	• Responsibilities of an ATO and applicable regulations
	• Specifics TCAR PEL Training programmes under AOC responsibilities
	    o Training to variants [difference / familiarisation];
	    o Training from SPO to MPO (for other than MPA);
	    o Stand-alone base training [OPS responsible to check OM-D].
	• Arrangements between AOCs and ATOs for FC Training
	    o Type rating inc. Base Training;
	    o ZFTT;
	    o TR & Operator conversion course:
	        ▪ TR approved by PEL
	        ▪ OCC approved by OPS
	    o Instructors' maintenance of competence,
	• AOC Holder manuals regarding Personnel training,
	• ATO Manuals regarding Personnel training
		1.5 Hours
		
		(Day 1)

Module-1: Overview of Flight Crew Training in TCAR OPS	**1.1 Main differences in terminologies**
	
	Introduction to New Standards for FC Training and Checking
	
	Primary training/checking programme;
	
	  – OCC: Operator conversion course;
	  – LIFUS;
	  – CRM;
	  – Recurrent Training & Checking Programme; OPC/LPC; Line Check: LC;
	  – Command course (MPO only, specific requirement (ORO.FC.205 apply to CAT);
	  – Differences / Familiarisation Training;
	  – Line Training Captain: LTC;
	  – In-flight relief FC member;
	  – Route, Area and Aerodrome familiarisation programme;
	  – ATQP/EBT (if able).
	
	Other FC training/checking activities
	
	  – UPRT including flight path management;
	  – RHS (either seat);
	  – S/MFF (single/Mixed fleet flying);
	  – Fatigue Management Training: FMT;
	  – Etc. (SMS, Psychoactive substances, Support program)
	
	1.2 Factors to Consider in Developing Training Programmes:
		1.5 Hrs.
		(Day 1)

| Modules	Descriptions	Duration
	– Applicable regulatory requirements; – OSD (TASE, ODR) requirements; – Recommendations from the AOC SMS; – Specific Equipment (TAWS, TCAS, ROASS, HUD, EFVS, etc.); – OPS Manuals/ Operational procedures (e.g. De-icing/Anti-icing, INCAP);Operations requiring a specific approval to SPA (RVSM, ETOPS, AWOs, EFB, PBN, etc.)	
Module-2: CAAT Approvals	**Approval concept of OM-D, FC Training Courses/Programmes:** 2.1 General Approval concepts (ORO.FC & SPA); 　▪ Definitions (programme, syllabus, Lesson/session plan) 　▪ What needs to be approved and by who? 　▪ What level of detail is to be approved? 2.2 Regulatory requirements, Guidance and Tools for: 　▪ OM-D 　▪ Training Programmes 2.3 Importance of OSD-FC 　▪ Principle and overview of the OSD; 　▪ TASE Information, which is mandatory for establishing the FC training program & syllabus; 　▪ MDR, ODR table (differences level);	0.5 Hrs. **(Day 1)**
Module-3: Overview of TCAR PEL & Conversion of instructors	**Personnel providing training and Checking.** 1.1.1　ORO.FC.146 and TCAR PEL requirements inc. 1.1.2　Requirements to conduct OPC and LPC 1.1.3　Conversion of pilots inc. F/O without a Theoretical ATPL 1.1.4　**TCAR PEL Part-FCL (subpart J & K)** inc. use of non-Thai examiners 1.1.5　Conversion from current Instructor certificate, Check Airmen and DCP to TCAR PEL TRI, TRE certificate. **TCAR PEL Part FCL overview** 1.1.6　General presentation 1.1.7　Requirements for Type rating 1.1.8　Entry condition for TR (ATPL, Advanced UPRT, provision if IR/MEP is not valid).in **Conditions for issue of ATPL inc. concept of PICUS**	1.5 Hrs **(Day 1)**

Modules	Descriptions	Duration

Module-4: Details of Operator Conversion Course: OCC	• Applicable Requirement (AIRCREW, AIROPS)
	• Training scheme/roadmap:
	   o Theoretical;
	   o Emergency & Safety equipment training and checking;
	   o Flight training;
	   o UPRT;
	   o ZFTT (Zero flight Time Training) cases;
	   o OPC/LPC;
	   o LIFUS;
	   o LC.
	   o Etc. (CRM, UPRT, DGR, Security, SMS, Psychoactive substances, FMT)
	• How to combine new TR and OCC. (see Module 0.)
		1.0 Hrs.

Module-5: LIFUS	• Regulatory requirement; • Cases where LIFUS is mandatory (e.g. OCC, CC, etc.); • How to consider volume of LIFUS sectors; • ZFTT as part of LIFUS (TRI-LIFUS); • Lift of restriction of the TR (after the LIFUS); • Provision of training if 21 days period overdue (*refresher is required* and define in OM-D). (see Module 0.)	0.5 Hrs.
Module-6: CRM	• Course or Program where a CRM is a mandatory module (e.g. OCC, CC, RTC); o CRM also required to be integrated into UPRT, OPC, Line Check. • CRM skill assessment (when required); • CRM Instructor; • The CBTA approach is suitable for implementing CRM training.	0.5 Hrs.
Module-7: Recurrent Training & Checking: RTC (in-depth);	• Applicable Requirement (AIRCREW, AIROPS) • Training scheme/roadmap (theoretical, flight training, OPC/LPC, LC)	1 Hrs.
Module-8: Command Course	• Applicable Requirement (AIROPS) • Training scheme/roadmap (theoretical, flight training, OPC/LPC, LC)	0.5 Hrs.
Module-9: Line Training Captain	• Applicable Requirement (AIROPS) • Training contents/aspects (e.g. teaching skill, …) • Flexibility provision (new type into their fleet).	0.5 Hrs.
Module-10: PICUS (if able)	• Applicable Requirement (AIRCREW), However this activity normally occurs in CAT Operators;	0.25 Hrs.

Modules	Descriptions	Duration
	• How to nominate or assign qualified Supervised CPT (qualifications). • Recording (documentation) system, best practice for attestation the record.	

Module-11: In-flight relief (CPT and Co-pilot):	• Applicable regulatory requirement (AIRCREW, AIROPS);
	  • FCL.720.A (c);
	  • ORO.FC.201
	  • ORO.FC.235 (procedure, drill training & checking)
		0.25 Hrs.

Module-12: RHS (Either seat training and Checking)	• Additional training and checking session (initial & Recurrent);
	  o Including additional exercises that are depending on characteristics of airplane
	• Maintenance of proficiency:
	  o 1 year cycle (e.g. engine failure after T/O, OEI APP + Go-around, OEI L/D);
	  o 3 year cycle for UPRT
		0.25 Hrs.

Module-13: Single/Mixed Fleet Flying:	• Applicable Requirement (AIROPS, OSD-FC, ODR table) • Limitation for S/MFF (number of type or variant); • Pre-requisite, including consolidated periods; • Recent experience and Recurrent Training and Checking.	0.25 Hrs.
Module Summary of Training	• Details summarisation End of Trainings • Additional questions or clarifications; and • Transition provision of Flight Crew Training.	0.5 Hrs.

3. A Brief Detail for Highlight Modules

3.1. Overview of Flight Crew Training Programmes under TCARs Regulation

This module aims to introduce the new terminology within TCARs related to the requirements of flight crew training programs. Some of the terminology is newly introduced, and some terms differ slightly from existing flight crew training regulations.
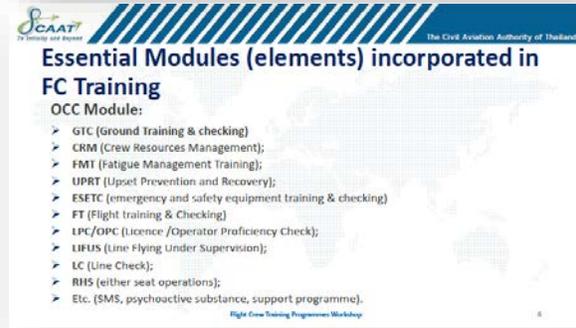

3.2. Operator Conversion Training (OCC)

[ORO.FC.120 & 220]

TCAR OPS conversion course is not equivalent to conversion (transition) training requirement in the existing regulation.

The OCC is required for Flight Crew when:

- Initial TR;
- Change of operator;
- Change TR in the same operator

3.3. Difference or Familiarisation Training

[ORO.FC.125]

- Flight crew members shall complete differences training or familiarisation when required by TCAR PEL part FCL.
- Flight crew members shall complete equipment and procedure training when changing equipment or changing procedures requiring additional knowledge on types or variants currently operated.

3.4. Recurrent Training and Checking (RTC)

[ORO.FC.130 & 230]

The provision of RTC requires flight crew to complete this program annually. There are two (2) definitions of checking relevant in TCARs regulations:

- LPC: Licence Proficiency Check;
- OPC: Operator Proficiency Check.
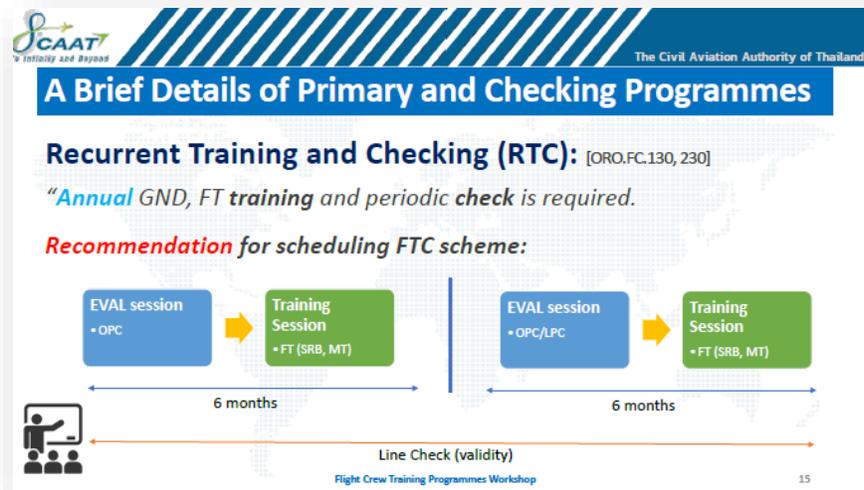
3.5. Commander Course

[ORO.FC.205]

The commander course is required for first promote as commander (P-I-C) in MPO.

3.6. Line Training Captain & Line Check Captain

There is new terminology regarding Line Training Captain and Line Check Captain. The existing regulation has no provision that requires commander designated by the AOC holder to perform LIFUS training (LTC) and Line Check (Line Check Captain) to be trained in teaching and assessment of competency."

3.7. Route Area and Aerodrome qualification

[ORO.FC.105]

This programme is classified as a familiarisation training programme. There are criteria for classifying aerodrome categories outlined in the regulations and associated AMCs. AOC holders can readily adopt these criteria to identify aerodrome categories and specify them in OM-C.
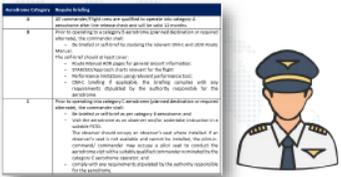
3.8. Pilot qualification to operate in either pilot's seat — aeroplanes

3.9. Operation on more than one type or variant

The concept of Single Fleet Flying and Mixed Fleet Flying was introduced by this provision. The Original Equipment Manufacturer's documentation (OSD) plays a crucial role in establishing the S/MFF training programme.
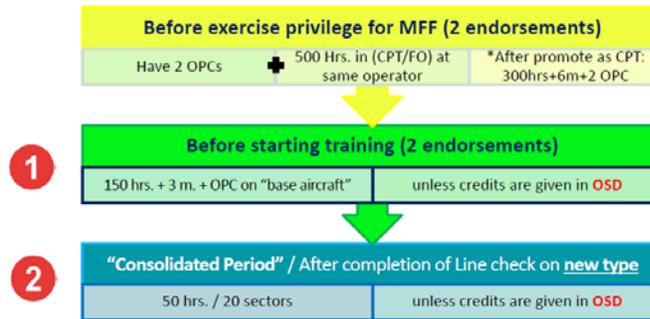
Appendix 1 - Survey Feedback and Outcome of Flight Crew Training (OM-D) Workshop

1. Organisation of participant who provided the feedback:

There are 37 comments and feedback submissions from participants who completed the workshop feedback survey form:
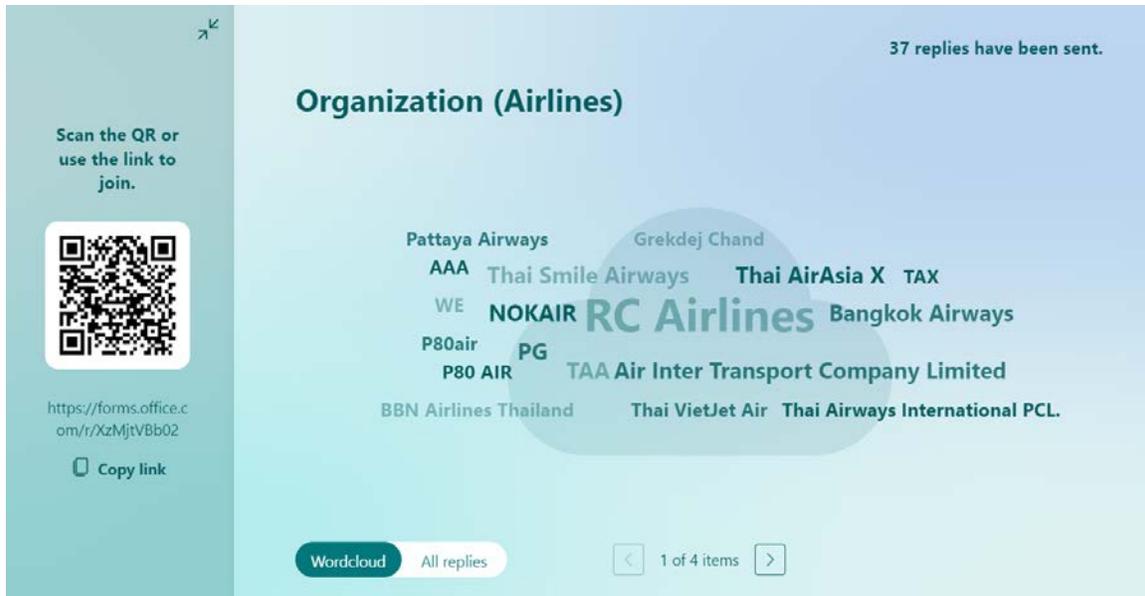
2. Opinions regarding the training materials provided during the workshop

Most participants agree that the training materials provided during the workshop fulfill the objectives of the workshop:
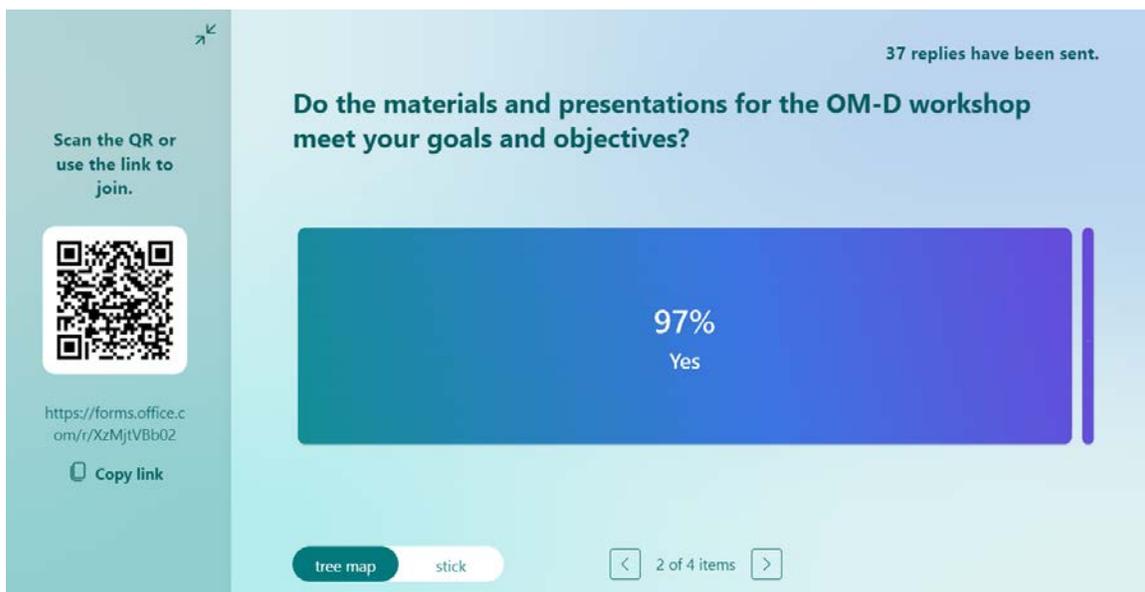
3. Feedbacks from participant via Survey Form

The feedback from all participants is overwhelmingly positive; they are all satisfied with the workshop event and agree that this workshop has helped them gain a better understanding of the 'Flight Crew Training' area under TCAR OPS and certain sections of TCAR PEL Part FCL regulations.

The information below provides a summary of all feedback:

| No.	Feedback and details
1	Worth to join this event
2	Very good TCAR OPS OM-D Workshop
3	Good presentation and very glad to join the meeting
4	Thank you, CAAT, and the organizers for hosting the OM-D Workshop so well.
5	Need more materials or document for **AOCR and TCAR comparison**
6	Over all understand new regulations
7	Very Good Workshop. This activity is very helpful for airlines. Thank you CAAT for establish this event.
8	Good clearly information for airlines.
9	Good presentation
10	Overall, everything is good and beneficial for the operator
11	Excellent to have this workshop
12	Good. AOC can raise any concerns and got feedback.
13	Excellent presentation
14	Please make session like this more often due to very sensitive content and more steps together to go.
15	The speaker has comprehensive knowledge of the objectives of participating in the workshop.
16	It is good to provide guidance and clarify how to do OMD part.
17	Received highly beneficial information for improving training documentation in the future
18	I would like **CAAT to establish guidelines for various OM parts**, allowing each airline to have a framework for operations

/i\ NOTE: There are two (2) of the feedback from participant that require additional support from the CAAT to consider:

- Conducting gaps analysis between existing regulation and TCAR OPS;
- Providing guidance materials/user guide to supplement the implementation to TCAR OPS.
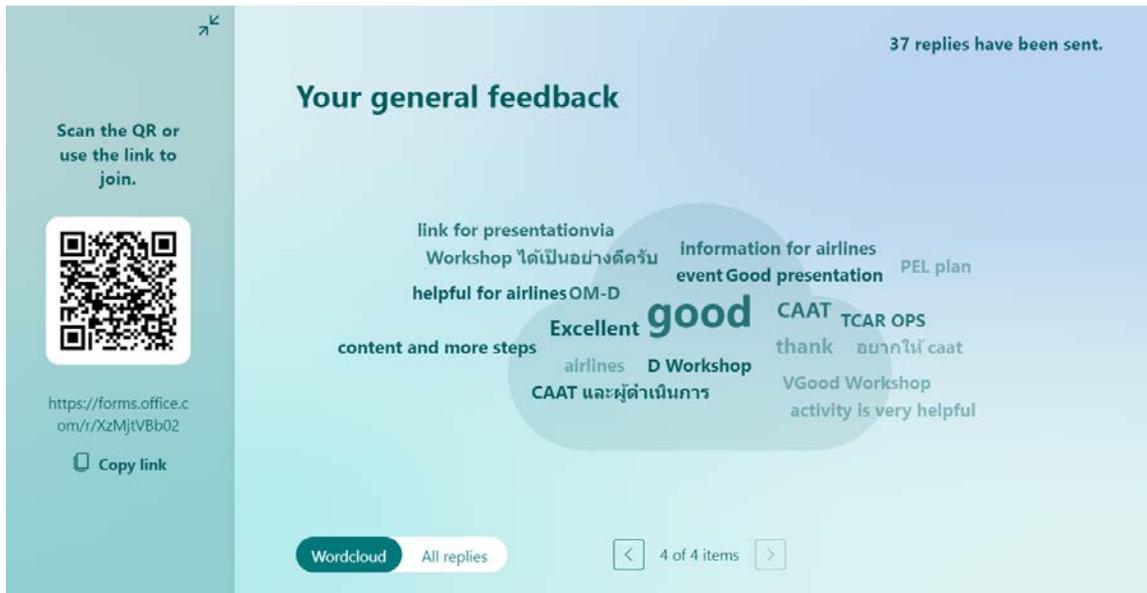
COMMITMENT: The CAAT will create a user guide to support the implementation and preparation of the FCT program, as requested by stakeholders.

Appendix 2 - List of the questions for Flight Crew Training (OM-D) Workshop

Section I: Question from Survey Form

1.	Q: I would like to have a template or checklist for creating manuals as a guideline for airlines.

A: In general, the guidance and information required to establish relevant Operations Manuals (OMs) for **CAT operators** are detailed in **AMC3 ORO.MLR.100**.

The CAAT encourages AOC holders to establish OMs based on the information described in AMC.

However, the regulations do not prevent operators from creating additional materials as part of the OM to demonstrate compliance with TCAR OPS regulations.

NOTE: The follow-up workshops for each domain will continue to be conducted in 2024 to support the implementation of TCAR OPS.

2.	Q: How to train flight (TRI, SFI) instructor for new AOC

A: Under TCAR regulation, flight crew instructor requirement is detailed in **TCAR PEL Part FCL Subpart –J**. The training program for SFI and TRI must be conducted by an ATO.

NOTE1: The GI in accordance with ADCA as no equivalent to TKI under TCAR.

In TCAR PEL Part-ORA, there is a provisions for TKI (Theoretical knowledge instructor) detailed in ORA.ATO.110 & 210 and associated AMCs. The AOC holder may consider to apply this provisions to be a qualification of appropriately qualified personnel (in AOC holder) as mentioned in ORO.FC.146.

Benefits arise when an AOC holder considers applying this provision: These personnel can act as a Type/Class Rating Instructor (TKI) within the ATO of the AOC to provide Type/Class rating training.

NOTE2: In principal, TKI fall under the responsibility of the ATO (organization) of AOC.

How to train flight (TRI, SFI) instructor for new AOC

CAAT believe that a new AOC should not be created with new instructors, in general, new AOCs hire experienced inspectors. CAAT understood the issue is that the instructor's certificate is attached to an AOC (which is not the case anymore with TCARs) and that to move to a new AOC, these instructors need a new certificate.

During the transition, FC instructor can continue to be trained under ADCA-Approval of AOC holder Instructor B.E. 2559 and can continue to obtain a certificate from the CAAT. Existing instructors may also be granted a certificate under another AOC or ATO as applicable.

However, all instructors shall obtain a TCAR PEL Certificate from the CAAT to continue to exercise their instructors' privileges within two (2) years after publication of TCAR PEL Cover Regulation.

Such certificate will be issued to instructors when they comply with the **conditions for conversion** that are laid down in TCAR PEL Part FCL.

Beyond the applicability date mentioned above (2 years after publication of TCAR PEL Cove Regulation), all instructors training as required by TCAR PEL Subpart J shall be delivered by an appropriately certified ATO.

In the new system, an instructor certificate is granted to an individual without considering his relation with an AOC or an ATO.

3.	Q: Is it possible to apply the new TCAR OM-D immediately after publication of TCAR OPS?

A: The implementation of TCAR OPS regulations is provided with a transition period of 3 years. The CAAT has stipulated the requirements for transitioning to TCAR OPS in the 'Cover Regulation.' The timeline for the submission of Operations Manual Part-D is also detailed.

However, the CAAT recognizes that some organizations may wish to accelerate the process to implement TCAR OPS and obtain a new certificate under TCAR before the deadline. Therefore, in Article 9 of the TCAR OPS cover regulation, the CAAT provides flexibility to AOC holders to consider implementing TCAR OPS before each timeline, and the plan of the AOC holder shall be formally agreed upon by the CAAT

IMPORTANT NOTE: Before implementing the new FC training program under TCAR OPS the personnel providing training and checking must follow the timeframe for conversion to TCAR PEL License and certificate as required by ORO.FC.146 (b).

4.	Q: To be very great to have standard template for all operation manual during initial

A: see answer in 1 above.

5.	Q: During transition period of OMD 15 months, if any amendment of OMD which are not violate to AOCR and TCAR, can AOC update and send to CAAT for approval?

A: Yes, the AOC holder can submit any amendment or revision of OM-D (approved under ACAAT-FCT B.E.2559) to CAAT to obtain approval during the transition period to TCAR OPS. The approval process and legal basis are under ACAAT-FCT B.E.2559 and AOCR.

However, according to the provisions detailed in the TCAR OPS COVER regulation, the AOC holder shall specify the deadline for commencing implementation of TCAR OPS regulations, including the domain related to the Flight Crew Training program, in the operator's implementation plan to obtain AOC certification under TCAR OPS regulations. Once the implementation of TCAR OPS in TVJ commences, we can imply that TVJ's documentation is based on TCAR OPS regulations, and the approval process shall be based on TCARs regulation.

NOTE: All OMs in the organization can be amended or revised at any time during the transition; however, the legal basis for granting authorization will be based on the legal basis (AOCR or TCAR) for each documentation-related company transition plan required in the COVER regulation.

NOTE: As mention in TCAR OPS cover regulation, Article 9 - Equivalence of regulations, when AOC holder demonstrate compliance with TCAR OPS regulation, it deems equivalent to the AOCR (old requirement).

6.	**Q: Regarding recurrent TCAS training according to Doc 8168, if conducted in a simulator, it is valid for 4 years, but if using interactive CBT, it is valid for 2 years. On the 2nd, we discussed recurrent training within the 2-year timeframe**

As mentioned in TCAR OPS, "**GM1 CAT.OP.MPA.295 Use of airborne collision avoidance system (ACAS)**" § (j):

ACAS recurrent training

(1) ACAS recurrent training ensures that flight crew members maintain the appropriate ACAS knowledge and skills. ACAS recurrent training should be integrated into and/or conducted in conjunction with other established recurrent training programmes. An essential item of recurrent training is the discussion of any significant issues and operational concerns that have been identified by the operator. Recurrent training should also address changes to ACAS logic, parameters or procedures and to any unique ACAS characteristics which flight crew members should be made aware of.

(2) It is recommended that the operator's recurrent training programmes using full flight simulators include encounters with conflicting traffic when these simulators are equipped with ACAS. The full range of likely scenarios may be spread over a 2-year period. If a full flight simulator, as described above, is not available, use should be made of interactive CBT that is capable of presenting scenarios to which pilot responses should be made in real time.

The statement in TCAR OPS slightly difference with ICAO DOC 8168 Vol:3 as mentioned:

5. ACAS RECURRENT TRAINING

5.1 ACAS recurrent training ensures that pilots maintain the appropriate ACAS knowledge and skills. ACAS recurrent training should be integrated into and/or conducted in conjunction with other established recurrent training programmes. An essential item of recurrent training is the discussion of any significant issues and operational concerns that have been identified by the operator.

5.2 ACAS monitoring programmes periodically publish findings from their analyses of ACAS events. The results of these analyses typically discuss technical and operational issues related to the use and operation of ACAS.

This information is available from ICAO or directly from the monitoring programmes. ACAS recurrent training programmes should address the results of monitoring programmes in both the academic and simulator portions of recurrent training visits.

Note.— ACAS monitoring programmes are carried out by some States and international organizations including the United States' Federal Aviation Administration (FAA) and the European Organisation for the Safety of Air Navigation (EUROCONTROL).

5.3 Recurrent training should include both academic and manoeuvre training and address any significant issues identified by line operating experience, system changes, procedural changes, or unique characteristics such as the introduction of new aircraft/ display systems or operations in airspace where high numbers of TAs and RAs have been reported.

*5.4 **Pilots should fly all scenarios once every four years**.*

*5.5 **Pilots should complete all scenarios once every two years if CBT is used**.*

Additional Clarification:

The "GM" level under TCAR OPS is a recommendation and serves as a level of encouragement. The operator may choose to apply this recommendation or consider another recommendation at its discretion.

In addition, **operators can also refer to ICAO DOC 8168 Vol:** 3 to consider establishing ACAS recurrent training, **as it is also mentioned at the beginning of §(a) (1)** of GM1 CAT.OP.MPA.295, regarding the use of airborne collision avoidance systems (ACAS).

"GM1 CAT.OP.MPA.295 Use of airborne collision avoidance system (ACAS)

GENERAL

(a) The ACAS operational procedures and training programmes established by the operator should take into account this GM. It incorporates advice contained in:

(1) ICAO Doc 8168 (PANS-OPS), Volume III Aircraft Operating Procedures, Chapter 3 and Attachment A (ACAS training guidelines for pilots) and Attachment B (ACAS high vertical rate (HVR) encounters) to Section 4, Chapter 3; and

(2) ICAO PANS-ATM2 Chapters 12 and 15 phraseology requirements;

(3) ICAO Annex 10, Volume IV;

(4) ICAO PANS-ATM."

Section II: Question during delivering the training modules

1.	**Q: Can to TR be combined with the OCC training?**
	A: Yes, type rating training by ATO can be combined with the OCC training. The training course must clearly identify which subjects rely on TR and which subjects rely on OCC.
	NOTE: some contents in TR and OCC may be a common subject (e.g. systems, SOP, equipment, etc..)
	In addition, regarding TCAR PEL regulation there are some elements of TR which cannot be completed by ATO, such as Aircraft (Base) Training, this training can be conducted by the AOC holder. In this case, the Aircraft (Base) Training component should be outlined in the OM-D of the AOC holder and approved by the CAAT.
2.	**Q: Can the AOC holder contract some of the training subjects or modules of OCC to another organization?** **Is it required to only be conducted by an ATO?**
	A: Yes, the AOC holder can subcontract with other organizations to provide training to flight crew; the requirement under **ORO.GEN.205** is applicable.
	There are some flight crew training programmes that shall be delivered by an ATO, such as Type/Class rating, SFI, TRI, etc., is detailed in TCAR PEL Part FCL.
3.	**Q: Does the TCAR OPS stipulate the requirement for TKIs providing training to flight crew?**
	A: According to ORO.FC.146 § (a), all training, checking, and assessments required in TCAR OPS ORO.FC shall be conducted by appropriately qualified personnel. It is the responsibility of the AOC holder to establish the qualifications and criteria for personnel providing flight crew training (TKI).
	Furthermore, as per AMC1 ORO.FC.146:
	Ground and refresher training, including ESETC, should be provided by suitably qualified personnel.
	NOTE1: TCAR has provided qualifications and requirements only for flight crew/cabin crew CRM instructors.
	NOTE2: See more details (best practice) in Section I: Question from Survey Form, Question 2.
4.	**Q: Are there any recency requirements to maintain the competency of Line Training Captain (LTC) as same as to TRI?**
	A: The relevant requirements for LTC are detailed in ORO.FC.146 §(g), ORO.FC.220 §(f), and associated AMCs and GMs. TCAR OPS <u>does not</u> specify specific recency requirements for maintaining the competency of LTC.
	However, based on the Management System of the AOC holder, they may choose to establish conditions for maintaining the competency of LTC within their own organization.

5.	**Q: What are the qualifications of personnel who provide Psychoactive substance training for flight crew?**
	A: Psychoactive substance training is a requirement in TCAR OPS § CAT.GEN.MPA.170 and § CAT.GEN.MPA210. This provision is classified as a new requirement in the Kingdom of Thailand, which has a transition period of five (5) years, as specified in the TCAR OPS Cover regulation.
	During the initial stages of TCAR OPS implementation, operators may consider establishing and complying with these requirements (optional).
	Additionally, qualifications and training syllabus criteria are not currently specified. This means that the AOC holder can establish their own criteria for selecting and providing this programme to flight crew.
6.	**Q: Are there specific training volume and total training hours related to the Flight Crew Training Programmes?**
	A: According to the establishment of the flight crew training program based on TCAR OPS ORO.FC, there are no specific volume and total training hours mentioned in the regulation, except for some specific numbers of LIFUS sectors and LIFUS of ZFTT related to OCC training and Commander Course in 'GM1 ORO.FC.220(d)' and 'ORO.FC.205'.
	There are currently no prescribed volume and total hours of training as per current requirements (AOCR and ACAAT-FCT B.E.2559).
	The factors that must be taken into consideration when establishing training programs include:
	• Applicable Regulatory Requirements (AIRCREW & AIROPS) • Recommendations from the safety management system • Specific equipment • Operational procedures • List of specific approvals • Safety information (external sources)
	It is the responsibility of the AOC holder to establish a training program, including a syllabus, that addresses these factors.
7.	**Q: What are the appropriate means to record flight hours for the purpose of PICUS?**
	A: It is at the discretion of the AOC holder; there are various methodologies for recording PICUS flight hours, including:
	• Paper logbook; • Digital format; • Etc.
	However, the AOC holder should establish policies and procedures for recording and validating these flight hours, documenting them in OM-D.

Appendix 3 – Training Resources from the Workshop

Passcode to access the shared folder: caatomdworkshop