

Guidance Material for Training Program Manual

REF OF THE MANUAL (CAAT-AIR-GM01)

Issue: 02

Revision: 00

Date: 3 MAY 2019



THE CIVIL AVIATION AUTHORITY OF THAILAND



PART 0. ADMINISTRATION



1. TABLE OF CONTENT

PART 0.	ADMINISTRATION	0-1
1.	Table of content	0-2
2.	List of Effective pages	0-3
3.	Record of Revision	0-5
4.	Amendment Transmittal Page	0-6
5.	Distribution List	0-7
6.	Definitions & Acronyms	0-8
7.	General	0-10
PART 1.	TRAINING PROGRAM	1-1
1.	Indoctrination training	1-2
2.	Initial Training	1-2
3.	Recurrent training	1-3
4.	Specialized training	1-4
5.	Remedial training	1-4
6.	Dangerous Goods Training Programme	1-5
PART 2.	TRAINING DOCUMENT	2-1
1.	Training Document Retention	2-2
2.	Curriculum Components	2-2
3	Training Competency And Documentation	2-3



2. LIST OF EFFECTIVE PAGES

The effective pages of this manual are listed in the table below.

Each time a manual is revised; the List of Effective Pages is revised and sent with the new revision.

Part 0

Page	Issue	Rev	Date	Page	Issue	Rev	Date
Cover	02	00	3 MAY 2019	0-8	02	00	3 MAY 2019
0-1	02	00	3 MAY 2019	0-9	02	00	3 MAY 2019
0-2	02	00	3 MAY 2019	0-10	02	00	3 MAY 2019
0-3	02	00	3 MAY 2019	0-11	02	00	3 MAY 2019
0-4	02	00	3 MAY 2019	0-12	02	00	3 MAY 2019
0-5	02	00	3 MAY 2019				
0-6	02	00	3 MAY 2019				
0-7	02	00	3 MAY 2019				9

Part 1

Page	Issue	Rev	Date	Page	Issue	Rev	Date
1-1	02	00	3 MAY 2019	1-5	02	00	3 MAY 2019
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1-3	02	00	3 MAY 2019		×		
1-4	02	00	3 MAY 2019			-	A AVA TION AUTHOR



Part 2

Page	Issue	Rev	Date	Page	Issue	Rev	Date
2-1	02	00	3 MAY 2019				
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2-3	02	00	3 MAY 2019				
2-4	02	00	3 MAY 2019				PA ANA NON AUTHOR

0-5



3. RECORD OF REVISION

The valid pages of this Manual are listed in the List of Effective Pages distributed with every revision.

The table below describes the dates and reason for the different revisions of the current issue of this manual.

Issue	Rev	Date	Rev by	Summarized record of main changes
01	00	6-Oct-2016	Chatchai P	1. Original revision
01	01	15-Sep-2017	Chatchai P.	1. Superseded AC AW-03-TPM issue 1 revision 0 date 6 Oct 2016
02	00	3-May-2019	Dome S.	 Rename from Advisory Circular for TPM to Guidance Material for Training Program Manual by superseded AC AW-03-TPM issue 1 revision 1 date 15 Sep 2017 Revise Abbreviations and Acronyms Rearrange maintenance human factors and dangerous goods training from indoctrination training to initial training and Identify activities for employees who need dangerous goods training Add Safety Management System (SMS) Training in Initial Training Add 2-year period for recurrent human factor and EWIS training Add requirement for continued training of Safety Management System (SMS) Remove table of employee's competencies assessment and Training curriculum approval process from Guidance Material



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To:	All holders	of Name	of the I	Manual

Subject: Manual Transmission

The table below lists pages to insert and remove from the previous version of the manual.

When doing so, users should ensure not to throw away pages that have not been replaced.

Using the List of Effective Pages can help determine the correct content of the manual.

Pages to be inserted	Pages to be removed
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Pages to be inserted	Pages to be removed
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I attest that the Hard copy in my possession has been updated according to the instructions above

Name:	Hard Copy N°:	Signature:

This page shall be returned signed to Airworthiness and Aircraft Engineering Department.

Manager of AIR



5. DISTRIBUTION LIST

N°	Holder	Туре
Original	AIR Department	Electronic Copy
01	Manager of QAD	Electronic Copy

Table 1 Distribution List

Issue 02 Revision: 00, 3/MAY/2019 0-7



6. DEFINITIONS & ACRONYMS

6.1. Definitions

The following terminology is specific to this manual and to those portions of air safety, procedure control manuals that pertain to audits and inspections:

TERM	DEFINITION
Applicable	means relevant to any aircraft, component or process specified in the AMO's approval class rating schedule and in any associated capability list.
Authority	means the CAAT unless otherwise specified.
Organization	This refers to an approved maintenance organization, unless otherwise specified.

6.2. Abbreviations and Acronyms

ABBREVIATION OR ACRONYM	MEANING
AC	Advisory circular
ADCA	Announcement of the Department of Civil Aviation
AMC	Acceptable Means of Compliance
AMO	Approved Maintenance Organization
AOCR	Air Operator Certificate Requirements
АТО	Approved Training Organization
CAA	Civil Aviation Authority

Issue 02 Revision: 00, 3/MAY/2019 0-8



CAAT	The Civil Aviation Authority of Thailand
CDCCL	Critical Design Configuration Control Limitation
EASA	European Aviation Safety Agency
EWIS	Electrical Wiring Interconnection Systems
FAA	Federal Aviation Administration (United States)
FTS	Fuel Tank Safety
GM	Guidance Material
ICAO	International Civil Aviation Organization
OJT	On the Job Training
RSQCM	Repair Station and Quality Control Manual
SFAR	Special Federal Aviation Regulation
SMS	Safety Management System

Issue 02 Revision: 00, 3/MAY/2019 0-9



7. GENERAL

7.1. PURPOSE

- 7.1.1 This Guidance Material is issued to provide guidance on the approval process for an AMO Training Program.
- 7.2. STATUS OF THIS GUIDANCE MATERIAL
 - 7.2.1 This document replaces AC AW-03-TPM issue 1 revision 1 previously issued by CAAT on 15 September 2017.
- 7.3. EFFECTIVE DATE
 - 7.3.1 This Guidance Material is effective on August 31, 2019.

7.4. APPLICABILITY

7.4.1 This GM is applicable to any member of the aviation industry, including aircraft maintenance personnel and organizations and manufacturers.

7.5. RELATED REGULATIONS.

- 7.5.1 Announcement of the Department of Civil Aviation (ADCA) on Repair Station Approval
- 7.5.2 Air Operator Certificate Requirements (AOCR) Chapter 8, Section 6.2.4



7.6. RELATED PUBLICATIONS

- 7.6.1 FAA AC 25-27A
- 7.6.2 FAA AC 120-94
- 7.6.3 FAA SFAR 88
- 7.6.4 EASA AMC20-22

7.7. BACKGROUND

- 7.7.1 CAAT announcement on Repair Station Approval requires an AMO to have an employee training program approved by the Authority. The training program should consist of indoctrination, initial, recurrent, specialized and remedial training.
- 7.7.2 The AMO should carry out an assessment of the training needs of its personnel, including certifying personnel, and develop and update its training program based on the tasks associated with its scope of operating authority and capabilities.
- 7.7.3 The training program should ensure that each employee assigned to perform preventive maintenance, or alterations, and inspection functions is capable of performing the assigned task.
- 7.7.4 The AMO is required to document, in a form and manner acceptable to the Authority, the individual employee training required under CAAT announcement on Repair Station Approval and should retain such records for a minimum of two (2) years.
- 7.7.5 Revisions of the training program should be submitted to the Authority for approval.

0-12



7.8. GUIDANCE AND PROCEDURES

7.8.1 AMO is required to establish a training program for his/her maintenance and certifying staff which can be included in the Repair Station and Quality Control Manual (RSQCM) or a separate document and submit it for approval by the Authority.

This program will include the curriculum and standards for training, as well as the pre-qualification standards for the personnel that will attend the training.

- 7.8.2 The program should specify the level of training required for each individual as a function of his/her experience and address the work he/she is expected or authorized to perform. In many cases the work may be complex and require the use of specialized equipment. In such cases, required training may range from on-the-job training (OJT) to formal classroom training and appropriate examinations. In every case, the program should provide sufficient training for each individual to enable him to competently perform the work he is authorized to perform.
- 7.8.3 An AMO is required to have a training program for all maintenance and inspection personnel; however, a small organization would not be expected to duplicate all of the facilities provided by a large AMO. Training of the certifying staff may be performed by the AMO or an aviation training organization (ATO).



PART 1. TRAINING PROGRAM



1. INDOCTRINATION TRAINING

An AMO's training program shall provide indoctrination training for employees that includes at least 40 hours of instruction at least the following subjects

- 1.1. Regulations which associated with AMO's maintenance functions and authority as reflected on the certificate and operations specifications
- 1.2. Company Policies, procedures and practices
- 1.3. Company manuals including quality control processes, particularly those associated with ensuring compliance with maintenance (including inspection), preventive maintenance, and established alteration procedures
- 1.4. Computer systems and software as applicable to the repair station's maintenance (including inspection, preventive maintenance and alteration systems and procedures)
- 1.5. Facility security, which shall include company security objectives, specific security procedures, employee responsibilities, actions to take in the event of a security breach, and the organizational security structure.

2. INITIAL TRAINING

An AMO is required to provide initial training for employees that includes at least 80 hours of instruction in at least the following subjects consistent with the specific employee position and assigned job activities General review;

- 2.1. General review which is related to each specific position including roles, tasks, and responsibilities.
- 2.2. Specific job or task training
- 2.3. Shop safety
- 2.4. Records and record keeping
- 2.5. Materials and parts
- 2.6. Test equipment, including ground support equipment
- 2.7. Tools



- 2.8. Maintenance human factors with the elements focusing on aviation maintenance, and safety related issues
- 2.9. Safety Management System (SMS)
- 2.10. Electrical Wiring Interconnection System (EWIS) and Fuel Tank Safety (FTS)

Where an AMO is maintaining large aircraft, its maintenance personnel should undergo additional training in EWIS and FTS as well as associated inspection standards, and maintenance procedures should be required for maintenance organization's technical personnel, especially technical personnel involved in the compliance of Critical Design Configuration Control Limitation (CDCCL) tasks. (Note: FAA AC 25-27A, AC 120-94, and EASA AMC20-22 address EWIS, while FAA SFAR 88 addresses FTS)

2.11. Dangerous goods

For maintenance personnel who perform activities under paragraph 6.1

3. RECURRENT TRAINING

An AMO is required to provide recurrent training for employees shall include at least eight hours of instruction in the following subjects

- 3.1. Refresher of subjects covered in initial training shall be recurrent.
- 3.2. AMO must ensure that all maintenance personnel receive sufficient continuation training in each 2-year period to ensure that such maintenance personnel have up-to-date knowledge of relevent technology organisation procedures and human factors issues.
- 3.3. Refresher training should be conducted in a period not exceed two years. It could consist of a review of previously covered material plus any new material or revisions to publications. Refresher training will follow the EWIS minimum Initial Training programe.
- 3.4. AMO shall develop and maintain Safety Management System training programme to ensures that personnel are trained and competent to perform their SMS duties.



3.5. New items introduced in the approved maintenance organization since completion of initial training

4. SPECIALIZED TRAINING

The AMO should have procedures to identify job assignments that will require special skills or have complexity that would require the development of specialized training to ensure capabilities. Some areas that may require specialized training include special inspection or test techniques, special machining operations, aircraft inspection techniques, or complex assembly operations.

5. REMEDIAL TRAINING

An AMO is also required to provide remedial training to rectify an employee's demonstrated lack of knowledge or skill by providing information as soon as possible.



6. DANGEROUS GOODS TRAINING PROGRAMME

- 6.1. An AMO should have a dangerous goods training program for its employees, whether full time, part time, or temporary or contracted who are engaged in the following activities
 - 6.1.1 Loading, unloading or handling of dangerous goods;
 - 6.1.2 Design, manufacture, fabrication, inspection, marking, maintenance, reconditions, repairs or tests of a package, container or packaging component that is represented, marked, certified, or sold as qualified for use in transporting dangerous goods;
 - 6.1.3 Preparation of hazardous materials for transport;
 - 6.1.4 Responsibility for the safety of transportation of dangerous goods;
 - 6.1.5 Operation of a vehicle used to transport dangerous goods; or
 - 6.1.6 Supervision of any of the above listed items.
- 6.2. An AMO employee should not perform or directly supervise an activity under paragraph 6.1 unless he or she has received the approved dangerous goods training.
- 6.3. The AMO training program should ensure that its dangerous goods training
 - 6.3.1 Ensures that each employee performing or directly supervising any of the activities specified at paragraph 6.1 is trained to comply with all applicable procedures; and,
 - 6.3.2 Enables the trained person to recognize items that contain, or may contain, dangerous goods regulated under the Civil Aviation Regulations.



PART 2. TRAINING DOCUMENT



1. TRAINING DOCUMENT RETENTION

1.1. An AMO shall document, in a form and manner acceptable to the Authority, the individual employee training required and shall retain these records for minimum of two (2) years

2. CURRICULUM COMPONENTS

- 2.1. An acceptable curriculum will consist of at least the following elements:
 - 2.1.1 Subjects, appropriate ratings requested;
 - 2.1.2 Course content, appropriate to ratings requested;
 - 2.1.3 Objective testing and grading criteria;
 - 2.1.4 Theoretical/practical knowledge appropriate to ratings requested;
 - 2.1.5 Total number of hours required for successful completion;
 - 2.1.6 A schedule of required tests, which indicates the sequence of examinations for each subject in the curriculum;
 - 2.1.7 The order of instruction for each subject element; and
 - 2.1.8 Name of instructor(s).
- 2.2. If there is any change to the curriculum, the AMO will be required to have such change approved by the Authority.



3. TRAINING COMPETENCY AND DOCUMENTATION

- 3.1. An AMO is required to assess the competency of each employee for performing his or her assigned duties after completion of initial, recurrent, specialized and remedial training. The assessment of competency should be appropriately documented in the employee's training records by any of the following methods, depending upon the size of the AMO, its capabilities and experience of its employees
 - 3.1.1 Written test;
 - 3.1.2 Completion of a training course;
 - 3.1.3 Skill test;
 - 3.1.4 Group exercise;
 - 3.1.5 On the job assessment; and,
 - 3.1.6 Oral examination in the working environment.



- 3.2. Competence assessment procedure
 - 3.2.1 The AMO should develop a procedure describing the process of competence assessment of personnel. The procedure should specify:
 - I. Persons responsible for this process;
 - II. When the assessment should take place;
 - III. Credits from previous assessment;
 - IV. Validation of qualification records;
 - V. Means and methods for the assessment:
 - VI. Means and methods for the continuous control of competence including feedback on personnel performance;
 - VII. Competences to be observed during the assessment in relation with each job function;
 - VIII. Actions to be taken when assessment is not satisfactory; and,
 - IX. Recording of assessment results.
- 3.3. For example, according to the job functions and the scope, size and complexity of the organization, the assessment may consider the following though not exhaustive.