CIVIL AVIATION GUIDANCE MATERIAL – 1102

AIR TRAFFIC SERVICES TRAINING APPROVAL

CIVIL AVIATION AUTHORITY OF MALAYSIA

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Introduction

This Civil Aviation Guidance Material 1102 (CAGM – 1102) is issued by the Civil Aviation Authority of Malaysia (CAAM) to provide guidance for Air Traffic Services providers and personnel, pursuant to Civil Aviation Directive 11 – Air Traffic Services (CAD 11 – ATS).

Organisations may use these guidelines to demonstrate compliance with the provisions of the relevant CAD's issued. Without prejudice to Regulation 76 and 156 of the Malaysian Civil Aviation Regulations 2016 (MCAR 2016), when the CAGMs issued by the CAAM are used, the related requirements of the CAD's are considered as met, and further demonstration may not be required.

(Datuk Captain Chester Voo Chee Soon)
Chief Executive Officer
Civil Aviation Authority of Malaysia

Civil Aviation Guidance Material Components and Editorial practices

This Civil Aviation Guidance Material is made up of the following components and are defined as follows:

Standards: Usually preceded by words such as “shall” or “must”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where uniform application is necessary for the safety or regularity of air navigation and to which Operators must conform. In the event of impossibility of compliance, notification to the CAAM is compulsory.

Recommended Practices: Usually preceded by the words such as “should” or “may”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where the uniform application is desirable in the interest of safety, regularity or efficiency of air navigation, and to which Operators will endeavour to conform.

Appendices: Material grouped separately for convenience but forms part of the Standards and Recommended Practices stipulated by the CAAM.

Definitions: Terms used in the Standards and Recommended Practices which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have an independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.

Tables and Figures: These add to or illustrate a Standard or Recommended Practice and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

Notes: Included in the text, where appropriate, Notes give factual information or references bearing on the Standards or Recommended Practices in question but not constituting part of the Standards or Recommended Practices;

Attachments: Material supplementary to the Standards and Recommended Practices or included as a guide to their application.

It is to be noted that some Standards in this Civil Aviation Guidance Material incorporates, by reference, other specifications having the status of Recommended Practices. In such cases, the text of the Recommended Practice becomes part of the Standard.

The units of measurement used in this document are in accordance with the International System of Units (SI) as specified in CAD 5. Where CAD 5 permits the use of non-SI alternative units, these are shown in parentheses following the basic units. Where two sets of units are quoted it must not be assumed that the pairs of values are equal and interchangeable. It may, however, be inferred that an equivalent level of safety is achieved when either set of units is used exclusively.

Any reference to a portion of this document, which is identified by a number and/or title, includes all subdivisions of that portion.

Throughout this Civil Aviation Guidance Material, the use of the male gender should be understood to include male and female persons.

Record of Revisions

Revisions to this CAGM shall be made by authorised personnel only. After inserting the revision, enter the required data in the revision sheet below. The *'Initials'* has to be signed off by the personnel responsible for the change.

Rev No.	Revision Date	Revision Details	Initials

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Summary of Changes

ISS/REV No.	Item No.	Revision Details

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1 Initiating the Approval Process

1.1 As required in CAD 11 ATS, the air traffic service provider is required to develop a training programme for air traffic service personnel. The service provider may also need to revise its training programme when purchasing new equipment, operating in a new environment, obtaining new authorisations, or when new regulatory requirements are specified. The service provider must obtain the Authority's approval of curriculums used for training air traffic controllers. The service provider is responsible for ensuring that its training programme is complete, current and in compliance with the Authority guidance.

1.2 The training approval process can be initiated by either, as follows:

1.2.1 Service provider initiated. The service provider informs the Authority of the plan to establish a new training curriculum or to change an existing curriculum; and

1.2.2 CAAM initiated. CAAM informs the service provider that revisions to the existing training programme are required based on recently acquired information relative to training techniques, aviation technology, service provider performance, or regulatory changes.

2 Initial Establishment of Training Programme

2.1 Early in the process, the service provider should establish an understanding of both the regulatory training requirements and the direction and guidance established. The service provider must ensure that any training necessitated by operational requirements, authorisations, or limitations (such as those in the operations specifications, deviations, and exemptions), is included in the service provider's training curricula.

2.2 The training programme is the area most affected by operational changes. The service provider should review all general requirements in the regulations and directives that apply to the proposed operation. The service provider shall establish the sequence and timing of events, which occur in the development, and the timeline for the final approval of a training curriculum.

2.3 If the training proposal involves complex operations, the service provider should also determine whether assistance from other appropriate experts is necessary.

2.4 The training proposal should include the following:

2.4.1 The general format and content of curricula, curriculum segments, training modules and procedures documents;

2.4.2 Qualifications of instructor personnel; and

2.4.3 Other areas of the service provider's proposed training programme.

3 Establishment of Training Curriculum

3.1 Each service provider must prepare specific curriculum segment outlines appropriate for the type of operations. These outlines may differ from one service provider to another and from one category of training to another in terms of format, detail, and presentation. Each curriculum should be easy to revise and should contain a method for controlling revisions, such as a revision numbering system. Each curriculum and curriculum segment outline must include the following information:

3.1.1 Service provider's name;

3.1.2 Title of curriculum and/or curriculum segment including the category of training;

3.1.3 Page revision control dates and revision numbers;

3.1.4 Each curriculum and curriculum segment must also include the following items, as appropriate:

a) Statements of objectives of the entire curriculum and a statement of the objective of each curriculum segment;

b) An outline of each training module within each curriculum segment; and

c) Training hours which will be applied to each curriculum segment and the total curriculum.

4 In-Depth Review of Curricula/ Module

4.1 The service provider must ensure that the following internal evaluations are accomplished:

4.1.1 A side-by-side examination of the curriculum outline/module with the appropriate regulations and directives. This examination is to ensure that training will be given in at least the required subjects;

4.1.2 The training hours specified in each curriculum segment/module outline must be evaluated. These times should be realistic in terms of the complexity of the individual training modules. The number of training hours for any particular curriculum segment depends upon many factors. Some of the primary factors are as follows:

a) Regulatory requirements;

b) Complexity of the type of operation;

c) Amount of detail that needs to be covered;

d) The experience and knowledge level of the trainee; and

e) Efficiency and sophistication of the service provider's entire training programme (including items such as instructor proficiency, training aids and facilities).

5 Elements for Evaluating Training and Granting Approval

5.1 The service provider shall prepare the required following elements used by the authority in assessing the training programme:

5.1.1 Curriculum Segment/Module Outlines - Curriculum segment/module outlines contain the specific training modules and the amount of time allocated for the curriculum segment. The modules must be consistent with regulatory requirements and safe operating practices;

5.1.2 Instructional Delivery Methods and Training Environment - Instructional delivery methods are used to convey information to the trainee. The training environment should be conducive to effective learning;

5.1.3 Assessment and evaluation - assessment and evaluation is a method for determining whether learning has occurred. Assessment and evaluation standards are used to determine that the desired level of knowledge and skill has been acquired.

6 Training Programme Documentation

6.1 The following should be the contents of the Training Programme documentation:

6.1.1 Training programme information

a) Cover Page (with service provider name and logo, and full training programme/course name)

b) Task List

c) Task Description

d) Course Description and Objectives

e) Course Content

f) Curriculum Segment/Module Outlines

g) Instructor’s Timetable

h) Facilities, Material, Equipment

6.1.2 Instructor Material

a) Instructor Guide

b) Module Plans

c) PowerPoint Presentations

d) Progress Tests (where applicable)

e) Mastery Tests

f) Exercises (where applicable)

g) Model Answers

h) OJT Guidance Materials (where applicable)

6.1.3 Trainee Material

a) Trainee Manual (where applicable)

b) PowerPoint Presentation

c) Handouts (where applicable)

6.2 Instructor Material

6.2.1 It is important that the instructor be provided with all of the guidance required to ensure that the course is effectively conveyed.

a) Instructor Guide

1) Complete set of Module Plans
2) Any additional instructions or directions prepared for the instructor.

6.2.2 When operational examples are included, adequate instructions on the use of these examples should be included in the Instructor Material and in the Trainee Material as required. These should be attached to the appropriate Module Plans.

a) Assessment/Evaluation and Exercises

1) Progress and mastery tests.
2) Exercises.
3) Correction guides, model answers, etc., for each.
4) On-the-Job Guidance Materials

6.2.3 Where on-the-job training is required to meet the training objective, guidelines for both trainees and field supervisors must be part of the training programme documents to ensure that both fully understand what is required of them. These should contain a clear statement of the objective(s) of the on-the-job training, along with any necessary guidance materials, checklists, workbooks, etc.

Note. — Some of this material will also have to be provided in the trainee material.

6.3 Trainee Material

6.3.1 The trainee should leave the course with a folder of handy and concise reference material, job aids, etc., which have been extracted from the source documents. These will assist the trainee to apply what has been learned in the course.

6.3.2 Even when a textbook is issued to each trainee, handouts are still useful as a supplement. Particularly when technical manuals or manufacturers' handbooks are referred to in class, it is important that key job aids (diagrams, checklists, etc.) from these documents be provided to the trainees, as it is unlikely they will always have access to those source documents.

6.4 PowerPoint Presentations and Audio-Visual Aids

6.4.1 Good clear paper copies of each PowerPoint presentation, audio-visual aid or electronic file, which can be easily reproduced, should be included.

6.4.2 Copies of any PowerPoint presentations or other audio or video materials should be prepared for the course. Include transcripts of any verbal messages, to assist in translations.

7 Application for ATS Training Programme Approval

7.1 Obtaining Approval

7.1.1 An application using Form CAAM/BPUA/ATS/02 shall be submitted to the Authority by any organisation intending to conduct ATS-related training. The form is available to download from the CAAM website:

https://www.caam.gov.my/e-services-forms/air-navigation-services-aerodrome/

7.1.2 The application shall be submitted along with a copy of the proposed ATS training which include curriculum segment/module outlines, instructor material and trainee materials.

7.1.3 The application shall be submitted to:

Director of Air Navigation Services and Aerodrome Division
Civil Aviation Authority of Malaysia
Level 1, Block Podium B, Lot 4G4
No. 27, Persiaran Perdana, Precinct 4
62618 Putrajaya
Malaysia.

7.1.4 For new and renewed approvals, application turnaround time starts from the submission of fully completed documents and information. Issuance of new and renew approval is within 30 days.

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