CIVIL AVIATION GUIDANCE MATERIAL – 1201

ATC RATING TRAINING

CIVIL AVIATION AUTHORITY OF MALAYSIA

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Introduction

This Civil Aviation Guidance Material 1201 (CAGM – 1201) 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 1201 – ATC Licensing (CAD 1201 – ATC Licensing).

Organisations may use these guidelines to demonstrate compliance with the provisions of the relevant CAD's issued. Without prejudice to Regulation 152 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.

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Chief Executive Officer
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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.

ISS/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 Rating Training Organisation (RTO)

1.1 The Establishment of RTO

1.1.1 RTO shall demonstrate it is staffed, equipped and operated in a manner conducive to achieving the required standards.

1.1.2 RTO shall ensure that the following are established and maintained to the requirement:

a) qualification of OJT Instructors, ATC Examiners and key personnel;

b) facilities including but not limited to classrooms and simulator;

c) training manual; and

d) procedure, manual and documentation.

Note. – Qualification and responsibilities of OJTI, ATCE and RTO Training Manual detail descriptions refer to CAD 1201 – ATC Licensing.

1.1.2.1 Facilities including but not limited to classrooms and simulator

a) The RTO must have facilities appropriate to the size and scope of the intended operations to provide an environment conducive to learning. These include, as a minimum, the following:

1) facilities for instructors;

2) classrooms;

3) suitable demonstration equipment;

4) Information on the procedure, manuals and documentation; and

5) radio-telephony training and testing area (if appropriate).

b) The RTO must have, or have access to, the necessary information, equipment, training devices and material to conduct the courses for which it is approved.

2 Training Objectives

2.1 Aerodrome Control Training

2.1.1 The general objective for Aerodrome Control is that controllers shall apply operational procedures to ensure a safe, orderly and expeditious service to aircraft flying in the vicinity of the aerodrome and the manoeuvring area. Such procedures shall be as specified in MATS and local procedures.

2.1.2 In an aerodrome control environment, controllers shall:

a) demonstrate the ability to manage the workload in the tower control position within the specified aerodrome control area of responsibility;

b) apply operational control and planning techniques and procedures to ensure a safe, orderly and expeditious service to aerodrome traffic; and

c) in aerodrome equipped with ATSM and SMGCS, trainees shall also understand the principles, use and limitations of the equipment used in surveillance control.

2.1.3 The general responsibilities of an aerodrome controller are:

a) check and operate communications equipment;

b) communicate from an aerodrome control unit;

c) correlate flight data into appropriate flight progress strips for display;

d) maintain a representative flight data display for aerodrome control;

e) obtain, interpret and disseminate meteorological information;

f) obtain, interpret and disseminate aeronautical information;

g) select the runway-in-use and appropriate visual aids;

h) manage flights operating in the vicinity of the aerodrome;

i) use aerodrome traffic monitor (where applicable);

j) manage aerodrome surface movements;

k) coordinate with other ATC operational positions;

l) effect liaison with other agencies;

m) manage diversions;

n) work as a team member in the aerodrome control operational position; and

o) manage developed emergencies from the aerodrome control unit.

2.1.4 Specific responsibilities of the aerodrome controller are:

a) manage inbound aircraft, providing appropriate service, from the point at which they are transferred by approach control until touchdown. Utilise arrival routes, as appropriate, and apply appropriate spacing;

b) manage the aerodrome traffic circuit, integrating traffic in the circuit with arriving VFR flights and arriving IFR flights flying a visual approach. When necessary, provide flights with appropriate traffic information;

c) manage departing IFR flights to the point where aircraft are transferred to approach control or area control;

d) manage departing VFR flights to the point where they are clear of the aerodrome control area of responsibility or until they are transferred to approach control;

e) ensure departing flights comply with departure restrictions;

f) manage aircraft transiting through the aerodrome traffic circuit, coordinating with approach control, as appropriate;

g) provide advice and instructions to assist in preventing collisions between aircraft moving on the apron and the manoeuvring area and between aircraft and obstructions on the manoeuvring area; and

h) coordinate with adjacent units as required.

2.1.5 Surveillance Degradation/Failure Phase (in aerodrome equipped with ATSM and SMGCS):

a) in addition to the objectives in paragraph 2.1.3, the trainees shall able to contain and manage a safe ATC environment during the degradation of the surveillance system;

b) in addition to the general responsibilities in paragraph 2.1.4, trainees shall provide an air traffic control service during a surveillance system failure until the situation has been managed and contained (i.e. the traffic situation will allow the release of departures); and

c) In addition to the specific responsibilities in paragraph 2.1.5, trainees shall be able to:

1) recognise that the surveillance system is degrading or that a failure has taken place;
2) establish separation and, when practicable, issue essential traffic information; and
3) terminate surveillance services and coordinate with other ATSPs.

2.2 Approach Control Procedural Training

2.2.1 The general objective for Approach Control Procedural is that controllers shall apply operational procedures to ensure a safe, orderly and expeditious service. Such procedures shall be as specified in MATS Vol.1 and local procedures.

2.2.2 In an approach control procedural environment, controllers shall:

a) demonstrate the ability to manage the workload within the specified approach control procedural area of responsibility; and

b) apply operational control and planning techniques and procedures to ensure a safe, orderly and expeditious service to arriving, holding, departing and transiting aircraft.

2.2.3 The general responsibilities of the approach procedural controller are:

a) check and operate communications equipment;

b) communicate from an approach control procedural unit;

c) correlate flight data into appropriate flight progress strips for display, according to requirements specified in MATS and local procedures;

d) maintain an appropriate approach control procedural flight data display, according to requirements specified in MATS and local procedures;

e) obtain, interpret and disseminate meteorological information;

f) obtain, interpret and disseminate aeronautical information;

g) provide approach control procedural service;

h) coordinate with other agencies, according to requirements specified in MATS and local procedures;

i) manage diversions and holding situations;

j) work as a team member on the approach control procedural operational position, according to requirements specified in MATS and local procedures; and

k) manage developed emergencies from the approach control unit.

2.2.4 The specific responsibilities of the approach procedural controller are:

a) manage inbound aircraft approaching from outside controlled airspace, providing an appropriate service;

b) manage inbound aircraft from the release point with the area control unit to touchdown. Utilise arrival routes, STARs and approach procedures, as appropriate, and apply appropriate separation; expect aircraft transferred to be in accordance with the area control unit to approach control unit agreements;

c) manage inbound aircraft established in the appropriate holding area at the initial approach fix. Anticipate the need to hold, use holding levels effectively, establish and co-ordinate the landing interval, calculate and issue EATs when required;

d) manage outbound aircraft from aerodrome control to the point where aircraft are transferred to the area control unit. Utilise published departure routes and/or SIDs to expedite departing aircraft, apply appropriate separation before transferring aircraft to the area control unit;

e) manage aircraft leaving controlled airspace, providing an appropriate service;

f) approve the departure sequence;

g) manage overflying aircraft and provide an appropriate service;

h) apply tactical flow management to arriving/departing aircraft when necessary; and

i) coordinate with adjacent units, as required.

2.3 Approach Control Surveillance Training

2.3.1 The general objective for Approach Control Surveillance is that controllers shall apply operational procedures to ensure a safe, orderly and expeditious service. Such procedures shall be as specified in MATS and local procedures.

2.3.2 As a prerequisite, trainees for Approach Control Surveillance shall possess Approach Control Procedural rating.

2.3.3 Trainees shall also understand the principles, use and limitations of the equipment used in surveillance control.

2.3.4 In an approach control surveillance training, controllers shall:

a) demonstrate the ability to manage the workload within the specified approach control surveillance area of responsibility; and

b) apply operational control and planning techniques and procedures to ensure a safe, orderly and expeditious service to arriving, holding, departing and transiting aircraft.

2.3.5 The general responsibilities of the approach surveillance controller are:

a) check and operate communications equipment;

b) communicate from an approach control surveillance unit;

c) correlate flight data into appropriate flight progress strips and primary and/or secondary radar data for display, according to requirements specified in MATS and local procedures;

d) obtain, interpret and disseminate meteorological information;

e) obtain, interpret and disseminate aeronautical information;

f) select and set up surveillance equipment;

g) use primary radar;

h) use secondary radar;

i) provide approach control service with the use of surveillance equipment;

j) coordinate with other agencies, according to requirements specified in MATS and local procedures;

k) with the aid of surveillance, manage diversions and holding situations;

l) work as a team member on the approach control surveillance operational position, according to requirements specified in MATS and local procedures; and

m) manage developed emergencies from the surveillance-equipped approach control unit.

2.3.6 The specific responsibilities of the approach surveillance controller are:

a) manage inbound aircraft approaching from outside controlled airspace, providing an appropriate service;

b) manage inbound aircraft from the release point with the area control unit to touchdown. Utilise arrival routes, STARs and approach control surveillance procedures, as appropriate. Apply appropriate separation. Aircraft transferred will be in accordance with area control and approach control unit agreements;

c) manage inbound aircraft established in the appropriate holding area at the initial approach fix. Anticipate the need to hold, use holding levels effectively, establish and co-ordinate the landing interval, calculate and issue EATs when required;

d) manage outbound aircraft from aerodrome control to the point where aircraft are transferred to the area control unit. Utilise published departure routes, SIDs and/or surveillance techniques to expedite departing aircraft, apply appropriate separation before transferring aircraft to the area control unit;

e) manage aircraft leaving controlled airspace, providing an appropriate service;

f) approve the departure sequence;

g) manage overflying aircraft and provide an appropriate service;

h) provide appropriate services to aircraft operating outside controlled airspace; and

i) coordinate with adjacent units, as required.

2.3.7 Surveillance Degradation/Failure Phase

a) In addition to the objectives in 3.3, the trainees shall able to contain and manage a safe ATC environment during the degradation of the surveillance system;

b) In addition to the general responsibilities in 3.4, trainees shall provide an air traffic control service during a surveillance system failure until the situation has been managed and contained (i.e the traffic situation will allow the release of departures);

c) In addition to the specific responsibilities in 3.5, trainees shall be able to:

1) recognise that the surveillance system is degrading or that a failure has taken place;

2) establish separation and, when practicable, issue essential traffic information;
3) restrict departures and issues EATs to arriving aircraft; and
4) terminate surveillance services and coordinate with other ATSPs.

2.4 Area Control Procedural Training

2.4.1 The general objective for Area Control Procedural is that controllers shall apply operational procedures to ensure a safe, orderly and expeditious service. Such procedures shall be as specified in MATS and local procedures.

2.4.2 In an area control procedural environment, controllers shall:

a) demonstrate the ability to manage the workload within the specified approach control procedural area of responsibility; and

b) apply operational control and planning techniques and procedures to ensure a safe, orderly and expeditious service to arriving, holding, departing and transiting aircraft.

2.4.3 The general responsibilities of the area procedural controller are:

a) check and operate communications equipment;

b) communicate from an area control procedural unit;

c) correlate flight data into appropriate flight progress strips for display, according to requirements specified in MATS and local procedures;

d) maintain an appropriate area control procedural flight data display, according to requirements specified in MATS and local procedures;

e) obtain, interpret and disseminate meteorological information including the relay of significant weather phenomena or SIGMET to aircraft in flight:

f) relay of special air reports to the meteorological watch office;

g) obtain, interpret and disseminate aeronautical information;

h) provide area control procedural service;

i) coordinate with other agencies, according to requirements specified in MATS and local procedures;

j) manage diversions and holding situations;

k) work as a team member on the area control procedural operational position, according to requirements specified in MATS and local procedures; and

l) manage developed emergencies from the area control unit.

2.4.4 The specific responsibilities of the area procedural controller are:

a) manage en route aircraft and provide an appropriate service;

b) manage aircraft joining, leaving or crossing controlled airspace and provide an appropriate service;

c) manage inbound aircraft approaching from outside controlled airspace, providing an appropriate service;

d) manage arriving aircraft, providing appropriate service, until the release point with the appropriate approach control unit. Utilise arrival routes, STARs, as appropriate, and apply appropriate separation; expect aircraft transferred to be in accordance with the area control unit to approach control unit agreements;

e) manage outbound aircraft from aerodrome control or approach control to the point where aircraft are transferred to another control unit. Utilise published departure routes and/or SIDs to expedite departing aircraft, apply appropriate separation before transferring aircraft to the adjacent sector in accordance with sector agreements unit;

f) apply tactical flow management to arriving/departing aircraft when necessary; and

g) coordinate with adjacent units, as required.

2.5 Area Control Surveillance Training

2.5.1 The general objective for Area Control Surveillance is that controllers shall apply operational procedures to ensure a safe, orderly and expeditious service. Such procedures shall be as specified in MATS and local procedures.

2.5.2 As a prerequisite, trainees for Area Control Surveillance training shall possess Area Control Procedural rating.

2.5.3 Controllers shall also understand the principles, use and limitations of the equipment used in surveillance control.

2.5.4 In an area control surveillance environment, controllers shall:

a) demonstrate the ability to manage the workload within the specified area control surveillance area of responsibility; and

b) apply operational control and planning techniques and procedures to ensure a safe, orderly and expeditious service to arriving, holding, departing and transiting aircraft.

2.5.5 The general responsibilities of the area surveillance controller are:

a) check and operate communications equipment;

b) communicate from an area control surveillance unit;

c) correlate flight data into appropriate flight progress strips and primary and/or secondary radar data for display, according to requirements specified in MATS and local procedures;

d) obtain, interpret and disseminate meteorological information including the relay of significant weather phenomena or SIGMET to aircraft in flight;

e) relay of special air reports to the meteorological watch office;

f) obtain, interpret and disseminate aeronautical information;

g) select and set up surveillance equipment;

h) use primary radar;

i) use secondary radar;

j) provide area control service with the use of surveillance equipment;

k) coordinate with other agencies, according to requirements specified in MATS and local procedures;

l) with the aid of surveillance equipment, manage diversions and holding situations;

m) work as a team member on the area control surveillance operational position, according to requirements specified in MATS and local procedures; and

n) manage developed emergencies from the surveillance-equipped area control unit.

2.5.6 The specific responsibilities of the area surveillance controller are:

a) manage en-route aircraft and provide an appropriate service;

b) manage aircraft joining, leaving or crossing controlled airspace and provide an appropriate service;

c) manage inbound aircraft approaching from outside controlled airspace, providing an appropriate service;

d) manage arriving aircraft, providing appropriate service, until the release point with the appropriate approach control unit. Utilise arrival routes, STARs, as appropriate, and apply appropriate separation; expect aircraft transferred to be in accordance with the area control unit to approach control unit agreements;

e) manage outbound aircraft from aerodrome control or approach control to the point where aircraft are transferred to another control unit. Utilise published departure routes and/or SIDs to expedite departing aircraft, apply appropriate separation before transferring aircraft to the adjacent sector in accordance with sector agreements unit;

f) apply tactical flow management to arriving/departing aircraft when necessary; and

g) coordinate with adjacent units, as required.

2.5.7 Surveillance Degradation/Failure Phase

a) in addition to the objectives in paragraph 2.5.3, the trainees shall able to contain and manage a safe ATC environment during the degradation of the surveillance system;

b) in addition to the general responsibilities in paragraph 2.5.4, trainees shall provide an air traffic control service during a surveillance system failure until the situation has been managed and contained (i.e the traffic situation will allow the release of departures);

c) in addition to the specific responsibilities in 2.5.6 e), trainees shall be able to:

1) recognise that the surveillance system is degrading or that a failure has taken place;
2) establish separation and, when practicable, issue essential traffic information;
3) restrict departures and issues EATs to arriving aircraft; and
4) terminate surveillance services and coordinate with other ATSPs.

3 Nomination for OJTI

3.1 General Guidelines

3.1.1 Nomination for new or replacement of OJTI shall be submitted to ANSA as soon as possible. Re-nomination for OJTI shall be submitted to ANSA at least two (2) months before the expiry date of the appointment.

3.1.2 ATSP shall submit the nomination using the nomination format to ANSA with a recommendation from the ATSP head office.

3.2 Nomination Format

3.2.1 Format for On-The-Job Training Instructor (OJTI) nomination is as follows:

No	Name	ATC Licence No	Number of Years as ATCO	ELP	Current Ratings	Current Ratings Duration	Last ATC Exam on Current Rating	ATC Examiner Nominated For
1	Ray	L0001	39 years	Level 6	1. Aerodrome Control 2. Approach Control Procedural	1. 10 years 2. 5 years	1.xx/xx/2019 2.xx/xx/2019	1. Aerodrome Control 2. Approach Control Procedural