

A stylized paper airplane icon in shades of blue is positioned above a dashed grey line that forms a curved flight path across the upper middle section of the cover.

CIVIL AVIATION GUIDANCE MATERIAL – 1405

CERTIFICATION AND SURVEILLANCE OF AERODROME

CIVIL AVIATION AUTHORITY OF MALAYSIA

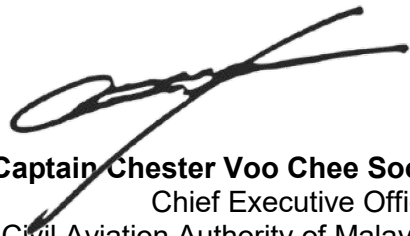
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Introduction

This Civil Aviation Guidance Material 1405 (CAGM – 1405) is issued by the Civil Aviation Authority of Malaysia (CAAM) to provide guidance for Certification and Surveillance of Aerodrome, pursuant to Civil Aviation Directive 1405 – Certification and Surveillance of Aerodrome (CAD 1405).

Organisations may use these guidelines to demonstrate compliance with the provisions of the relevant CAD's issued. Without prejudice to Regulation 204 and Regulation 205 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.

The units of measurement used in this CAGM 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.



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1 Introduction

1.1 Purpose

1.1.1 Introduction of the Guidance

1.1.1.1 This CAGM issued by the CEO, sets out the process for an aerodrome operator/applicant to obtain or retain a Certificate of Aerodrome (CoA), in compliance with the Civil Aviation (Aerodrome Operations) Regulations 2016 concerning aerodromes. This CAGM is based on the Standards stipulated in CAD 14 Vol I – Aerodrome Design and Operations, CAD 14 Vol II – Heliports, CAD 1407 – Water Aerodromes and CAD 1408 – STOLport accordingly.

1.1.1.2 In this regard, this CAGM provides the relevant information on aerodrome certification as follows:

- a) Processes of aerodrome certification;
- b) Contents of Aerodrome Manual; and
- c) Aerodrome audit/inspection/surveillance.

1.2 Definitions

1.2.1 For the definitions of this CAGM, refer to CAD 1405 – Certification and Surveillance of Aerodrome accordingly.



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2 Process of Aerodrome Certification

2.1 Introduction

2.1.1 This chapter describes the processes for the certification of an aerodrome, which includes certification, variation, renewal, suspension and revocation of the Certificate of Aerodrome (CoA).

2.1.2 Application for an initial CoA, variation and renewal must be submitted in softcopies to the aerodrome.standards@caam.gov.my

2.1.3 Hardcopies upon request by the CAAM should be made to at the following address:

Aerodrome Standards Division
Civil Aviation Authority of Malaysia
No. 27, Persiaran Perdana
Presint 4, Aras 1-4, Blok Podium
62618 Putrajaya

2.1.4 For all initial applications and the application for variation, this should normally be submitted no later than hundred twenty (120) days in advance of the planned start of operations. Except in the case of renewal of CoA, this should be submitted no later than sixty (60) days from the date of expiry.

2.2 Certification of Aerodrome

2.2.1 The procedure for the application and granting of an CoA by the CAAM will be organised in phases and will take the following sequence:

- a) pre-application phase;
- b) formal application phase;
- c) document evaluation phase;
- d) demonstration and inspection phase; and
- e) certification phase.

Note. – This is a general flow of the phases of certification, the progress of each phase is very much dependant of the aerodrome operator/applicant completeness of documentation and readiness for demonstration/audit/inspection.

2.2.2 Each of these phases will be outlined in greater detail in the succeeding chapters of this CAGM.

2.3 Variation of a Certificate of Aerodrome

2.3.1 Aerodrome operator/applicant may vary a CoA and shall submit an application form once the requirement for variation is identified. If applicable, any necessary supporting documentation to be provided along with application form.



- 2.3.2 CAAM will advise aerodrome operator/applicant of required information/document. Aerodrome operator/applicant to provide information/document requested (including any changes to facilities, equipment and systems since last audit/inspection).
- 2.3.3 CAAM will make an initial review of the formal application/document and acknowledge receipt of the completeness of document to the aerodrome operator/applicant via electronic mail/letter and the CAAM will arrange the on-site audit/inspection activities(s), if required.
- 2.3.4 If the formal application/document is not completed, CAAM will request specific additional information/amendment/rectification of the deficiencies in the application and the aerodrome operator/applicant must provide additional information/document, make any amendment and/or rectification, and resubmit any change(s) to the approved/accepted manual for evaluation and approval.
- 2.3.5 Once the requirement(s) for variation have been met by the aerodrome operator/applicant, the certificate will be amended (if applicable) and the aerodrome operator/applicant is to prepare and submit all the revised Aerodrome Data information to be published in the AIP and/or NOTAM.
- 2.3.6 However, if the requirements for variation has not been met by the aerodrome operator/applicant:
- a) The CAAM will advise the aerodrome operator/applicant on the shortcomings/deficiencies, and if they have not been corrected, the period for the variation process may be extended;
 - b) The aerodrome operator/applicant may request CAAM for a re-assessment or onsite audit/inspection once all shortcoming/deficiencies have been rectified;
 - c) If the aerodrome operator/applicant is still unable to correct shortcoming/deficiencies within a reasonable time frame as agreed together with CAAM, the CAAM may reject the application.

2.4 Renewal of a Certificate of Aerodrome

- 2.4.1 The aerodrome operator/applicant shall request for renewal of the CoA using the application form.
- 2.4.2 CAAM will arrange with the aerodrome operator/applicant for a suitable time based on the standards certification timeline.
- Note. – For a renewal, the CAAM will evaluate to consider eliminating phase 1 and streamlining parts of phase 2 based on the previous application for the same aerodrome.*
- 2.4.3 If the aerodrome operator has satisfied all the requirements and upheld the standards based on initial certification and there are no outstanding

audit/inspection findings that remain open. The process of renewal will be a seamless one.

- 2.4.4 If the CAAM is satisfied with the aerodrome operator/applicant's capabilities to maintain the CoA, the CAAM may issue a renewal to the aerodrome operator/applicant. However, if the aerodrome operator/applicant has shortcomings/deficiencies, the CAAM may require further demonstration/evaluation prior to the issuance of the renewal.

2.5 Suspension/Revocation of a Certificate of Aerodrome

- 2.5.1 A suspension or revocation of a CoA shall take effect from the date specified in the notice of suspension or revocation.

- 2.5.2 In general, a CoA issued by the CAAM remains valid until:

- a) the CAAM suspends or revokes the certificate;
- b) the CoA holder surrenders the certificate to the CAAM; or
- c) the expiry date, as applicable.

- 2.5.3 CAAM will suspend a CoA in the following cases:

- a) The holder of the CoA is unable to perform the duties as stated in Civil Aviation Act, Civil Aviation (Aerodrome Operations) Regulations 2016 or Civil Aviation Directives and the CAAM has ordered rectification of the operation but the operation cannot be rectified to attain safety within the period of time pursuant to the order, the CAAM shall determine a period of suspension as may be appropriate;
- b) The CAAM has the power to revoke a CoA, if there is a major change concerning the physical characteristics of an aerodrome or areas near the aerodrome, which significantly differ from the time of issuance of the CoA that it causes unsafe condition for the use of such aerodrome.

- 2.5.4 A CoA that has been revoked must be returned to the CAAM within fourteen (14) days from the date of acknowledgement of the order of revocation of the certificate.



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3 Pre-application (Phase 1)

3.1 Initial inquiry and CAAM response

- 3.1.1 An aerodrome operator/applicant who intends to apply for a Certificate of Aerodrome (CoA) must enter into preliminary discussion with the CAAM and will be provided with complete information concerning the type of operations which may be authorised, the data to be provided by the aerodrome operator/applicant and the procedures which will be followed in the processing of the application. It is essential that the aerodrome operator/applicant has, in this pre-application phase, a clear understanding of the form, content and documents required for the formal application.
- 3.1.2 During this stage, the first meeting between the aerodrome operator/applicant and CAAM takes place, creating the first information exchange on service and guidance regarding the regulations, procedures, responsibilities, aerodrome operations that the prospective aerodrome operator/applicant intends to provide and documentation/data to be submitted.
- 3.1.3 In case of an already functioning aerodrome that needs to be certified, the aerodrome operator/applicant would still need to contact CAAM with his intention to commence the process, identifying the level of operation of the aerodrome and brief CAAM on his capabilities and intentions.
- 3.1.4 A pre-application usually commences when an aerodrome operator/applicant makes his initial inquiries regarding application for a CoA in the form of a letter/electronic mail or a personal visit to the CAAM (using e-temujanji).
- 3.1.5 Upon receiving the initial inquiry, the CAAM will arrange for a pre-application meeting with the meeting date, time and venue to the aerodrome operator/applicant. The communication of the meeting details will be via electronic mail.

3.2 Pre-application meeting

- 3.2.1 The pre-application meeting will be attended by the CAAM Project Manager (PM) who is appointed by the Director of Aerodrome Standards, certification team and the key management personnel of the aerodrome operator/applicant. The aerodrome operator/applicant should be prepared to discuss, in general terms, all aspects of the proposed operations.
- 3.2.2 The aerodrome operator/applicant should thoroughly review the Civil Aviation Directives (CADs) and Civil Aviation Guidance Materials (CAGMs) respective to their application.



- 3.2.3 At this initial stage, Aerodrome Standards Division will provide further guidance and direction with regards to requirements laid down in the respective CADs and best practices laid down in the respective CAGMs.

- 3.2.4 If the aerodrome operator/applicant decided to proceed with CoA application, the aerodrome operator/applicant will be provided with an overview of the certification process and made aware of the requirements to move to the next phase which is the formal application.

4 Formal Application (Phase 2)

4.1 Formal application package

4.1.1 The formal application for certification will be an application letter with attachments containing the information required by the CAAM, comprising a formal application package. The development of the application letter and its attached documents should have been coordinated with the CAAM certification team subsequent to the pre-application meeting. Such coordination, between the personnel of the aerodrome operator/applicant and the CAAM certification team, will improve the quality of the application package and facilitate the later document evaluation process. The fee established for the certification of aerodrome shall be submitted when the operator submits the formal application package in accordance to Civil Aviation (Fees and Charges) Regulations 2016.

4.1.2 The application letter shall be signed by the aerodrome operator/applicant's accountable person and shall contain at least the following information:

- a) a statement that the application serves as a formal application for a CoA;
- b) the name and address of the aerodrome operator/applicant;
- c) the location and address of the aerodrome operator/applicant's principal place of business;
- d) a description of the aerodrome operator/applicant's business organisation and corporate structure, names and addresses of those entities and individuals having a major financial interest;
- e) the name and contact details of the aerodrome operator/applicant's main point of contact;
- f) the identity of key management personnel;
- g) the nature of the proposed operations: the desired date for the operation to commence.

4.1.3 The attachments that need to accompany the formal application letter are:

- a) application form (refer to Appendix 1 for sample of the application form);
- b) the schedule of events in the certification process with appropriate events addressed and target dates;
- c) an initial statement of compliance or detailed description of how the aerodrome operator/applicant intends to show compliance with each provision of the Civil Aviation (Aerodrome Operations) Regulations 2016;
- d) the management structure and key staff members including titles, names, backgrounds, qualifications and experience, with regulatory requirements satisfied;

- e) the details of the SMS;
- f) arrangements personnel training and qualification, facilities and equipment required and available;
- g) Aerodrome Manual (AM);
- h) Aerodrome Emergency Plan (AEP);
- i) Safety Management System (SMS) Manual;
- j) Aerodrome Wildlife Hazard Management Plan (AWHMP);
- k) Aerodrome Disabled Aircraft Removal Plan (ADARP).

4.2 Attachments to the formal application

4.2.1 Schedule of events

4.2.1.1 The schedule of events is a key document that lists items, activities, programmes, aerodrome and facility that will be made ready for inspection by the CAAM before certification. The schedule shall include date(s):

- a) personnel will commence training;
- b) when the aerodrome will be ready for inspection;
- c) when any other facility as part of the aerodrome (if applicable) will be ready for inspection;
- d) when demonstration audit and inspection is planned;
- e) of proposed assessments of training staff and other persons; and
- f) the dates shall be logical in sequence and provide time for review, inspection and approval of each item.

Note 1. – The overall plan is to be kept under constant review and amendment to maintain control of the certification process.

Note 2. – The provision of readiness schedule by operator does not dictate the actual certification timeline.

4.2.2 Initial statement of compliance

4.2.2.1 The initial statement of compliance is a complete list of all CAAM regulations applicable to the proposed operation. Each regulation or sub-part must be accompanied by a brief description or a reference to a manual or other document. The description or reference is to describe the method of compliance in each case. The method of compliance may not be finalised at the time of the formal application, in which case a date shall be given by which the final information will be provided. The purpose of the statement of compliance is to ensure that the aerodrome operator/applicant has addressed all regulatory requirements. It aids the CAAM certification team to assess where

the regulatory requirements have been addressed in the aerodrome operator/applicant's manuals, programmes and procedures.

4.2.3 Management structure and key staff members

4.2.3.1 The details of the aerodrome operator/applicant's basic management positions, the qualifications and relevant management experience of the following positions: Airport Manager, Head of Units, Safety Manager or equivalent, Training Manager, and Quality Manager and etc. The requirement dependent upon the complexity of the proposed operation. Further information includes the names of the individuals involved and their qualifications and relevant management experience that justify their posting.

4.2.4 Safety Management Systems (SMS)

4.2.4.1 The details of the aerodrome operator/applicant's SMS include the safety policy, safety organisation, safety assessments, occurrence reporting, hazard identification, risk assessment and risk management, event investigation and analysis, performance monitoring, safety promotion and safety assurance. The aerodrome operator/applicant shall identify the accountable manager who, irrespective of other functions, has ultimate responsibility and accountability, on behalf of the organisation, for the implementation and maintenance of the SMS.

4.2.5 Personnel training and required facilities

4.2.5.1 Details of the training programme with dates for commencement and completion of the initial programme must be provided. Specific attention should be paid, to company facilities, equipment and procedures indoctrinated; emergency drill(s). All these aspects shall cover both initial and recurrent training.

4.3 Acceptability of the formal application

4.3.1 If the formal application package is incomplete or otherwise unacceptable, the PM will inform the aerodrome operator/applicant in writing, providing details of the deficiencies and advice on the resubmission of the formal application.

4.3.2 If the information in the formal application package is considered acceptable by the certification team, the PM will schedule a formal application meeting with the aerodrome operator/applicant.

4.4 Formal application meeting

4.4.1 A formal application meeting will be conducted between the PM, the certification team and all the key management personnel of the aerodrome operator/applicant, with the objective of resolving any questions on the part of either the CAAM, or the aerodrome operator/applicant, to establish a common understanding on the future procedure for the application process.



- 4.4.2 In particular, the formal application meeting shall confirm that the management background information satisfies regulatory requirements; it shall address any errors or omissions in the application package, resolve any scheduling date conflicts and agree on a process for revising event dates, reinforce the communication and working relationships between the CAAM certification team and aerodrome operator/applicant personnel and, finally, determine the acceptability of the formal application package. It shall be understood that acceptance of the formal application package by the PM does not constitute acceptance or approval of any of the attachments which will be subjected to later in-depth review. The identification of significant discrepancies during the in-depth review may require further meetings between appropriate members of the CAAM certification team and the aerodrome operator/applicant personnel.
- 4.4.3 During the formal application meeting, the timeline and mode of audit will be discussed and briefed to the aerodrome operator/applicant. The aerodrome operator/applicant will be introduced to the Compliance Questionnaire (CQ) developed by CAAM.
- 4.4.4 The aerodrome operator/applicant is required to complete the CQ and provide evidence of compliance as required by each CQ sheet. The web-based spreadsheet CQ will be made available to the operator 2 months before the onsite audit/inspection and must be completed 1 months before the onsite audit/inspection.
- 4.4.5 Subsequent to the formal application meeting and subject to successful acceptance of the application package, the PM will provide the aerodrome operator/applicant with a letter acknowledging receipt and acceptance of the formal application.

5 Document Evaluation (Phase 3)

5.1 General

5.1.1 After the formal application has been accepted, the CAAM certification team will commence a thorough evaluation of all the documents and manuals that are required are in compliance with the standards and best practices as specified in the relevant Regulations, CADs and CAGMs and that there are no apparent shortcomings that would adversely affect the safety of aircraft operations.

5.1.2 The CAAM should endeavour to complete these evaluations in accordance with the schedule of events agreed at the formal application meeting. If a document or manual is incomplete or deficient, or if non-compliance with regulations or safe operating practices is detected, the document or manual shall be returned to the aerodrome operator/applicant for corrective action with a detailed list of deficiencies.

5.1.3 Documents or manuals that are satisfactory will be approved or accepted, as required by the regulations. Approval shall be indicated by a signed document. Acceptance of material that does not require formal approval may be confirmed by letter/electronic mail.

Note. – The Aerodrome Manual is a fundamental requirement of the certification process and as a minimum contain information as detailed in CAAM/ASD/AM/1 (Refer Appendix 2).

5.1.4 The complexity of the information that needs to be addressed in the aerodrome operator/applicant's documents and manuals depends upon the complexity of the proposed operation.

5.1.5 Once the Aerodrome Manual and/or associated documents is accepted/approved by CAAM, the prospective aerodrome operator/applicant shall make copies of the manual and distribute them to its stakeholders and other relevant parties in such a manner that all aerodrome operating staff have access to all parts of the manual relevant to each staff member's duties.

5.1.6 The aerodrome operator/applicant must inform CAAM of any changes to the accepted/approved Aerodrome Manual and/or associated documents between the time of application for a certificate and the end of the on-site verification.

5.1.7 CAAM will coordinate the progression to the Demonstration Audit and Inspection Phase upon satisfactory completion of the Document Evaluation Phase.

5.2 Examples of documents and manuals to be evaluated

5.2.1 The following documents make up document system and shall be provided by the applicant:

- a) application form;
- b) the schedule of events in the certification process with appropriate events addressed and target dates;
- c) an initial statement of compliance or detailed description of how the aerodrome operator/applicant intends to show compliance with each provision of the Civil Aviation (Aerodrome Operations) Regulations 2016;
- d) the management structure and key staff members including titles, names, backgrounds, qualifications and experience, with regulatory requirements satisfied;
- e) the details of the SMS;
- f) arrangements personnel training and qualification, facilities and equipment required and available;
- g) Aerodrome Manual (AM) or Heliport Operation Manual;
- h) Aerodrome Emergency Plan (AEP);
- i) Safety Management System (SMS) Manual;
- j) Aerodrome Wildlife Hazard Management Plan (AWHMP);
- k) Aerodrome Disabled Aircraft Removal Plan (ADARP).

5.2.2 All manuals are to be provided with procedures for the development, control and distribution of each manual, the means to keep the manual up-to-date and the means for the publication and distribution of amendments.

5.2.3 Manuals will require appropriate revision and amendment when new requirements, operations or equipment are introduced. Amendment and revision changes must be indicated by marks or signs in text, graphics and diagrams.

5.2.4 A registration sheet for amendments and revisions, including dates of registration and validity and a list of effective pages shall also be included.

6 Demonstration Audit and Inspection (Phase 4)

6.1 General

- 6.1.1 An aerodrome operator/applicant is required to demonstrate the ability to comply with regulations and safe operating practices before beginning revenue operations. These demonstrations will include actual performance of activities and/or operations while being observed by inspectors of the certification team. This will also involve on-site evaluations of the following but not limited to aerodrome equipment, facilities, physical characteristics and support facilities. During these demonstrations audit and inspections, the CAAM evaluates the effectiveness of the policies, methods, procedures, and instructions as described in the manuals and other documents developed by the aerodrome operator/applicant. During this phase, emphasis should be placed on the aerodrome operator/applicant's management effectiveness. Deficiencies shall be brought to the attention of the aerodrome operator/applicant in writing, and corrective action are to be taken before a CoA can be issued.
- 6.1.2 The CAAM will ensure that the aerodrome facilities, operational procedures, Safety Management System (SMS), Aerodrome Emergency Plan (AEP), other related documents and programs for training and directing personnel in the performance of their duties are effective.
- 6.1.3 Due to the wide scope of the certification, the aerodrome inspectors may use the sampling method for verifying subjects and select items for more detailed inspection and verification. The areas of technical inspection may include physical characteristics, visual aids, rescue and fire fighting, operations, and SMS.
- 6.1.4 The audit and inspection of the SMS is normally included at this stage of the initial certification. Depending on the implementation status of the SMS at the aerodrome, a specific verification of the SMS can be conducted separately because the aerodrome operator's SMS may not yet be fully operational. Its effectiveness will be assessed during continued oversight and will constitute an important factor in deciding the continued oversight activities that will be carried out.
- 6.1.5 Similarly, the verification of the AEP may be either staged through modules to a full emergency exercise.
- 6.1.6 The audit and inspection of the SMS focuses explicitly on the components required for granting the certificate and, when applicable, covers all other requirements for the SMS. SMS requirements also apply to the aerodrome operator's subcontractors in the domains within the scope of certification.

6.2 Audit and inspection protocols

- 6.2.1 Aerodrome operator/applicant should coordinate with CAAM on the program for the on-site demonstration audit, and verification activities, including, but not limited to:
- a) venue, time and attendance of an opening meeting;
 - b) allocation of aerodrome inspectors to the audit/inspection and verification tasks to a planned timetable;
 - c) facilitation of transport;
 - d) execution of the on-site audit; and
 - e) closing meeting.
- 6.2.2 The aerodrome operator/applicant shall ensure that access is granted to CAAM Inspector for the purpose of ensuring safety at an aerodrome, to:
- a) inspect and carry out tests on the aerodrome facilities, equipment or services;
 - b) inspect the aerodrome operator's documents and records; or
 - c) verify the aerodrome's safety management system.
- the aerodrome operator shall also co-operate in facilitating the above activities.
- 6.2.3 The aerodrome operator/applicant should note that the failure to provide evidence is considered a non-compliance and may result in a finding. During the audit/inspection closing meeting, a preliminary list of findings (if any) is given to the aerodrome operator/applicant. An audit report is also sent to the aerodrome operator/applicant 7 working days after the closing meeting.
- 6.2.4 In case of finding(s), the aerodrome operator/applicant is required to develop a Corrective Action Plan (CAP) proposing ways to eliminate or mitigate the findings, with deadlines for each subsequent action.
- 6.2.5 CAAM may impose immediate appropriate measures on the aerodrome operator/applicant, if necessary, until actions have been taken to remove or mitigate the findings, including aeronautical study (if applicable), in order to ensure an acceptable level of safety.

7 Certification phase (Phase 5)

7.1 Final preparation for the issuance of CoA

7.1.1 When there is no finding or once the corrective action plans are accepted and mitigation measures are agreed upon, the CAAM will grant the CoA to the aerodrome operator/applicant.

Note. – A CoA will not be issued until the CAAM is satisfied that the aerodrome operator/applicant has demonstrated compliance to all the applicable requirements stated in relevant regulations and CADs.

7.2 Issuance of an CoA

7.2.1 The PM will notify the aerodrome operator/applicant in writing, on the successful application and the granting of the CoA.

7.2.2 The CAAM will state the granting condition(s)/limitation(s) (if any) and the validity duration of the certificate.

7.2.3 The essential conditions prevailing at the aerodrome to be specified in certificate, which may include but not limited to:

- a) aerodrome type;
- b) aerodrome classification;
- c) aerodrome reference code elements – element one (aeroplane reference field length) and element two (wing span);
- d) types of approaches;
- e) critical aeroplane type(s);
- f) operational conditions for the accommodation of critical aeroplanes for which the facility is provided;
- g) Rescue and Fire Fighting (RFF) category; and
- h) operational restrictions at the aerodrome.

Note. – The details of aerodrome shall be listed in the certificate by referring to Appendix 5.

7.2.4 Aerodrome operators shall ensure that the Conditions/Limitations, if any, are brought to the attention of their managerial and operating staff, and strictly complied with. A copy of the CoA, Conditions/Limitations, if any, shall be included in the aerodrome operator's Aerodrome Manual that is distributed to its stakeholders and other relevant parties.



7.2.5 A CoA is granted on the condition that the aerodrome operator will, at all times, be in compliance with the applicable regulations and mandatory requirements.

Note. – The example of the CoA that will be granted may refer to Appendix 5.

7.2.6 An aerodrome operator/applicant should coordinate with the AIS provider to promulgate the aerodrome data and information, and the certification status of the aerodrome in the Aeronautical Information Publications (AIP).

7.2.7 If the CAAM refuses to grant the CoA to the aerodrome operator/applicant, a written notice of the refusal will be provided to the aerodrome operator/applicant, stating the reasons for the refusal.

7.3 Forms

7.3.1 All forms relevant to a CoA process are provided in Appendices Chapter 10.

8 Aerodrome Manual

8.1 Format of an Aerodrome Manual

8.1.1 The aerodrome operator must include the following particulars in an aerodrome manual, under the following parts:

a) Part 1.

General information set out in Part 1 on the purpose and scope of the aerodrome manual; the legal requirement for an aerodrome certificate and an aerodrome manual as prescribed in the Regulations 6, CA(AO)R 2016; conditions for use of the aerodrome; the aeronautical information services available and the procedures for their promulgation; the system for recording aircraft movements and the obligations of the aerodrome operator.

b) Part 2.

Particulars of the aerodrome site as set out in Part 2.

c) Part 3.

Particulars of the aerodrome required to be reported to the aeronautical information service as set out in Part 3.

d) Part 4.

The aerodrome operating procedures and safety measures as set out in Part 4 of the schedule of these regulations. This may include references to air traffic procedures such as those relevant to low visibility operations. Air traffic management procedures are normally published in the air traffic services manual with a cross-reference to the aerodrome manual.

e) Part 5.

Details of the aerodrome administration and the safety management system as set out in Part 5.

Note 1.— Refer to Appendix 3 for the particulars to be included in an Aerodrome Manual.

Note 2.— Refer to Appendix 4 for the particulars to be included in an Aerodrome Manual (Heliport Operation Manual).

8.1.2 The aerodrome manual:

a) The aerodrome manual is subject to amendment in order to ensure that it provides current and accurate information.

b) The aerodrome certificate holder should therefore be made responsible for the amendment of the manual and for notifying the CAAM of any such amendments. The content of an aerodrome manual should be treated with due respect to the confidentiality requirements.

- 8.1.3 A signed copy of Aerodrome Manual shall be submitted to the CAAM in a print form.

8.2 Maintenance and control of an Aerodrome Manual

- 8.2.1 The aerodrome operator must provide the CAAM with a complete and current copy of the aerodrome manual.
- 8.2.2 The aerodrome operator must keep at least one complete and current copy of the aerodrome manual at the aerodrome and one copy at the operator's principal place of business if other than the aerodrome.
- 8.2.3 The aerodrome operator must ensure that the appropriate portions of the Aerodrome Manual are readily accessible to aerodrome operating personnel for reference on day-to-day activities.

8.3 Issue, distribution and amendment of an Aerodrome Manual

- 8.3.1 The aerodrome operator shall make such amendment or addition to the aerodrome manual, whenever necessary, in order to:
- a) maintain the accuracy of the information in the manual.
 - b) ensuring the safe and efficient operation of aircraft at the aerodrome; or
 - c) ensuring the safety of air navigation.
- 8.3.2 The aerodrome operator must notify the CAAM, as soon as practicable, of any amendment made to the aerodrome manual.
- 8.3.3 Any proposed amendment to the Aerodrome Manual shall be submitted to the CAAM at least 30 working days before the proposed effective date unless a shorter filing period is accepted by the CAAM. The relevant portion only of the amendments, to be made in the Aerodrome Manual, needs to be submitted.
- 8.3.4 The revised pages shall be appended with the Aerodrome Manual once the amendments are accepted/approved by the CAAM.

8.4 CAAM acceptance/approval of the aerodrome manual

- 8.4.1 Aerodrome operators, intend to apply for certification, shall develop and submit the Aerodrome Manual for acceptance/approval by the CAAM.
- 8.4.2 All reference relevant to an Aerodrome Manual preparedness are provided in Chapter 10 of this CAGM.

9 Aerodrome Audit/Inspection and Surveillance

9.1 Audit/Inspection Types

9.1.1 Initial Certification Audit/Inspection

9.1.1.1 For initial certification audit/inspection, CAAM will carry out an audit/inspection or testing of any aspect of the aerodrome or require substantiation of any information provided by applicant. However, it should be clearly understood that the CAAM sample checking process does not absolve the aerodrome operator/applicant from the responsibility to provide accurate data and information.

9.1.1.2 Special assessment may be necessary if there are aerodrome facilities that are not in full compliance with the applicable standards and requirements contained in the Civil Aviation (Aerodrome Operations) Regulations 2016, CAD 14 Vol I, CAD 14 Vol II, CAD 1407 and CAD 1408. This may involve more time and resources and may result in the application being refused or restrictions being imposed on aircraft operations.

9.1.1.3 Refer to Chapter 2 of this CAGM for the process of an Aerodrome Certification.

9.1.2 Safety/Surveillance Audit/Inspection

9.1.2.1 A safety/surveillance audit/inspection is conducted to holder of a CoA to ensure that the certificate holder meet their obligations under the terms of the certificate as set out in conditions/limitations and certification requirements. This will normally take place as per CAAM's audit plan, following initial certification inspection/audit.

9.1.2.2 The CAAM will conduct continuing surveillance of the operator to continuously determine that the aerodrome operator/applicant maintains the standards as per the CoA and is in compliance with the applicable regulations and mandatory requirements.

9.1.2.3 These tasks and responsibilities include:

- a) periodic or special on-site audits of the aerodrome safety management system including any verification of the aerodrome, and data published in the AIP and inspection of the aerodrome facilities, equipment and operating procedures; and
- b) review of the aerodrome operator's daily self-inspection and safety reports and actions thereon.

Note. – An aerodrome audit programme should operate on the principle that the CoA holder's self-assessment is of primary importance and that the CAAM's audit(s) are conducted to review and evaluate that programme and, in addition, to independently check and verify the particulars of the aerodrome notified in

the AIP, as well as the aerodrome operating procedures, safety measures, facilities and equipment.

- 9.1.2.4 Periodic inspections are therefore required to ensure that CoA holders meet their obligations under the terms of the certificate, as set out in regulations, and the requirements of the accepted/approved aerodrome manual.
- 9.1.2.5 The frequency of such inspections may correspond to the class of the aerodrome.
- 9.1.2.6 This safety/surveillance audit/inspection is consisting of two (2) phases as follows, but not limited to:
- a) Document Evaluation Phase;
 - b) Demonstration Audit and Inspection Phase.
- 9.1.2.7 Refer to Chapter 5 and chapter 6 of this CAGM for the process of the Document Evaluation phase and Demonstration Audit and Inspection phase.

9.2 Aerodrome Audit/Inspection Activities

- 9.2.1 Off-site Verification Activities
- 9.2.1.1 Off-site verification can be conducted during both Document Evaluation Phase and Demonstration Audit and Inspection Phase.
- 9.2.1.2 During Document Evaluation phase, the Aerodrome Manual and any other required documents provided by an aerodrome operator/applicant will be assessed to ensure the intention to full comply with the Civil Aviation (Aerodrome Operations) Regulations 2016, CAD 14 Vol I, CAD 14 Vol II, CAD 1407 and CAD 1408 as applicable to the scale of the proposed aerodrome operation. Any non-compliance, deficiency or deviation from the Civil Aviation (Aerodrome Operations) Regulations 2016, CAD 14 Vol I, CAD 14 Vol II, CAD 1407 and CAD 1408 as applicable should be discussed with the aerodrome operator/applicant and the rectification within the specify period is required in order to proceed to the next certification phase.
- 9.2.1.3 During Demonstration Audit and Inspection phase, an off-site verification activity, a subject matter expert assesses Corrective Action Plans (CAPs) and/or corrective actions implemented by an aerodrome operator/applicant to address certain findings without an on-site visit to the aerodrome by validating submitted supporting evidence. This type of activity is limited to eligible findings of non-compliance that do not require on-site verification, i.e. mainly those related to the establishment of policies, procedures and records.

9.2.2 On-site Verification Activities

9.2.2.1 The on-site verification can be conducted during Demonstration Audit and Inspection Phase.

9.2.2.2 An on-site verification of initial certification is an on-site activity during which a certification team of subject matter experts determines an aerodrome operator's/applicant's capability for the scale of the proposed aerodrome operation with regard to safety at the aerodrome by verifying that the aerodrome operations are carried out effectively in accordance with the Civil Aviation (Aerodrome Operations) Regulations 2016, CAD 14 Vol I, CAD 14 Vol II, CAD 1407 and CAD 1408 as applicable and procedures described in the accepted/approved Aerodrome Manual.

9.2.2.3 An on-site verification in this phase, also includes the on-site activity during which a certification team of subject matter experts collects and assesses evidences provided by the aerodrome operator/applicant demonstrating that the aerodrome operator/applicant has implemented corrective actions or mitigating measures as agreed in the Corrective Action Plans (CAPs).

9.2.2.4 If the aerodrome operator/applicant is not directly responsible for some of the activities within the scope of certification, the on-site verification ensures that there is appropriate coordination between the aerodrome operator/applicant and the other users/stakeholders.



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10 Appendices

10.1 Appendix 1 – Application Form for Certificate of Aerodrome

- 10.1.1 The aerodrome operator/applicant is to obtain the up-to-date application form (CAAM/ASD/COA/1) in CAAM website www.caam.gov.my



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10.2 Appendix 2 – Checklist of the Components of an Aerodrome Manual

- 10.2.1 The aerodrome operator/applicant is to obtain the up-to-date checklist of the components of an aerodrome manual (CAAM/ASD/AM/1) in CAAM website www.caam.gov.my



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10.3 Appendix 3 – Particulars to be included in an Aerodrome Manual

10.3.1 The aerodrome operator/applicant is to refer the components of Aerodrome Manual as follows:

a) Part 1 - General

1) General information, including the following:

- i) purpose and scope of the aerodrome manual;
- ii) the legal requirement for an aerodrome certificate and an aerodrome manual as prescribed in the national regulations;
- iii) conditions for use of the aerodrome — a statement to indicate that the aerodrome shall at all times, when it is available for the take-off and landing of aircraft, be so available to all persons on equal terms and conditions;
- iv) the available aeronautical information system and procedures for its promulgation;
- v) the system for recording aircraft movements; and
- vi) obligations of the aerodrome operator.

b) Part 2 - Particulars of the Aerodrome Site

1) General information, including the following:

- i) a plan of the aerodrome showing the main aerodrome facilities for the operation of the aerodrome including, particularly, the location of each wind direction indicator;
- ii) a plan of the aerodrome showing the aerodrome boundaries;
- iii) a plan showing the distance of the aerodrome from the nearest city, town or other populous area, and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome; and
- iv) particulars of the title of the aerodrome site. If the boundaries of the aerodrome are not defined in the title documents particulars of the title to, or interest in, the property on which the aerodrome is located and a plan showing the boundaries and position of the aerodrome.

c) Part 3 - Particulars of the Aerodrome Required to be Reported to the Aeronautical Information Service (AIS)

- 1) General Information;
- 2) the name of the aerodrome;
- 3) the location of the aerodrome;
- 4) the geographical coordinates of the aerodrome reference point determined in terms of the World Geodetic System — 1984 (WGS-84) reference datum;
- 5) the aerodrome elevation and geoid undulation;
- 6) the elevation of each threshold and geoid undulation, the elevation of the runway end and any significant high and low points along the runway, and

- the highest elevation of the touchdown zone of a precision approach runway;
- 7) the aerodrome reference temperature;
 - 8) details of the aerodrome beacon; and
 - 9) the name of the aerodrome operator and the address and telephone numbers at which the aerodrome operator may be contacted at all times.
- d) Aerodrome Dimensions and Related Information
- 1) General information, including the following:
 - i) runway — true bearing, designation number, length, width, displaced threshold location, slope, surface type, type of runway and, for a precision approach runway, the existence of an obstacle free zone;
 - ii) length, width and surface type of strip, runway end safety areas, stopways;
 - iii) length, width and surface type of taxiways;
 - iv) apron surface type and aircraft stands;
 - v) clearway length and ground profile;
 - vi) visual aids for approach procedures, viz. approach lighting type and visual approach slope indicator system (PAPI/APAPI and T-VASIS/AT-VASIS); marking and lighting of runways, taxiways, and aprons; other visual guidance and control aids on taxiways (including runway holding positions, intermediate holding positions and stop bars) and aprons, location and type of visual docking guidance system; availability of standby power for lighting;
 - vii) the location and radio frequency of VOR aerodrome checkpoints;
 - viii) the location and designation of standard taxi routes;
 - ix) the geographical coordinates of each threshold;
 - x) the geographical coordinates of appropriate taxiway centre line points;
 - xi) the geographical coordinates of each aircraft stand;
 - xii) the geographical coordinates and the top elevation of significant obstacles in the approach and take-off areas, in the circling area and in the vicinity of the aerodrome. (This information may best be shown in the form of charts such as those required for the preparation of aeronautical information publications, as specified in CAD 4 and 15);
 - xiii) pavement surface type and bearing strength using the Aircraft Classification Number — Pavement Classification Number (ACN-PCN) method;
 - xiv) one or more pre-flight altimeter check locations established on an apron and their elevation;
 - xv) declared distances: take-off run available (TORA), take-off distance available (TODA), accelerate-stop distance available (ASDA), landing distance available (LDA);
 - xvi) disabled aircraft removal plan: the telephone/telex/facsimile numbers and e-mail address of the aerodrome coordinator for the removal of

a disabled aircraft on or adjacent to the movement area, information on the capability to remove a disabled aircraft, expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove; and

- xvii) rescue and fire-fighting: the level of protection provided, expressed in terms of the category of the rescue and fire-fighting services, which should be in accordance with the longest aeroplane normally using the aerodrome and the type and amounts of extinguishing agents normally available at the aerodrome.

Note. – The accuracy of the information in Part 3 is critical to aircraft safety. Information requiring engineering survey and assessment should be gathered or verified by qualified technical persons.

e) Part 4 - Particulars of the Aerodrome Operating Procedures and Safety Measures

1) Aerodrome Data and Reporting.

Particulars of the procedures for reporting any changes to the aerodrome information set out in the AIP and procedures for requesting the issue of NOTAMs, including the following:

- i) arrangements for reporting any changes to the CAAM and recording the reporting of changes during and outside the normal hours of aerodrome operations;
- ii) the names and roles of persons responsible for notifying the changes, and their telephone numbers during and outside the normal hours of aerodrome operations; and
- iii) the address and telephone numbers, as provided by the CAAM, of the place where changes are to be reported to the CAAM.

2) Control of Airside Access.

Particulars of the procedures that have been developed and are to be followed in coordination with the agency responsible for preventing unlawful interference in civil aviation at the aerodrome and for preventing unauthorised entry of persons, vehicles, equipment, animals or other things into the movement area, including the following:

- i) the role of the aerodrome operator, the aircraft operator, aerodrome fixed-base operators, the aerodrome security entity, the CAAM and other government departments, as applicable; and
- ii) the names and roles of the personnel responsible for controlling access to the aerodrome, and the telephone numbers for contacting them during and after working hours.

3) Aerodrome Emergency Plan.

Particulars of the aerodrome emergency plan, including the following:

- i) plans for dealing with emergencies occurring at the aerodrome or in its vicinity, including the malfunction of aircraft in flight; structural

- fires; sabotage, including bomb threats (aircraft or structure); unlawful seizure of aircraft; and incidents on the airport covering “during the emergency” and “after the emergency” considerations;
- ii) details of tests for aerodrome facilities and equipment to be used in emergencies, including the frequency of those tests;
- iii) details of exercises to test emergency plans, including the frequency of those exercises;
- iv) a list of organisations, agencies and persons of authority, both on- and off-airport, for site roles; their telephone and facsimile numbers, e-mail and SITA addresses and the radio frequencies of their offices;
- v) the establishment of an aerodrome emergency committee to organise training and other preparations for dealing with emergencies; and
- vi) the appointment of an on-scene commander for the overall emergency operation.

4) Rescue and Fire-Fighting.

Particulars of the facilities, equipment, personnel and procedures for meeting the rescue and fire-fighting requirements, including the names and roles of the persons responsible for dealing with the rescue and fire-fighting services at the aerodrome.

Note.— This subject should also be covered in appropriate detail in the AEP.

5) Inspection of Movement Area and Obstacle Limitation Surface.

Particulars of the procedures for the inspection of the aerodrome movement area and obstacle limitation surfaces, including the following:

- i) arrangements for carrying out inspections, including runway friction and water-depth measurements on runways and taxiways, during and outside the normal hours of aerodrome operations;
- ii) arrangements and means of communicating with air traffic control during an inspection;
- iii) arrangements for keeping an inspection logbook, and the location of the logbook;
- iv) details of inspection intervals and times;
- v) inspection checklist;
- vi) arrangements for reporting the results of inspections and for taking prompt follow-up actions to ensure correction of unsafe conditions; and
- vii) the names and roles of persons responsible for carrying out inspections, and their telephone numbers during and after working hours.

6) Movement Area Maintenance.

Particulars of the facilities and procedures for the maintenance of the movement area, including:

- i) arrangements for maintaining the paved areas;

- ii) arrangements for maintaining the unpaved runways and taxiways;
 - iii) arrangements for maintaining the runway and taxiway strips; and
 - iv) arrangements for the maintenance of aerodrome drainage.
- 7) Hazardous Meteorological Condition.
- Particulars of the procedures for the prevention and mitigation of harmful consequences of adverse weather conditions, such as freezing rain, strong winds, rain, fog and low visibility. The particulars include:
- i) procedures and criteria for suspension of runway operations; and
 - ii) coordination with the meteorological service provider in order to be advised of any significant meteorological conditions.
- 8) Visual Aids and Aerodrome Electrical Systems.
- Particulars of the procedures for the inspection and maintenance of aeronautical lights (including obstacle lighting), signs, markers and aerodrome electrical systems, including the following:
- i) arrangements for carrying out inspections during and outside the normal hours of aerodrome operation, and the checklist for such inspections;
 - ii) arrangements for recording the result of inspections and for taking follow-up action to correct deficiencies;
 - iii) arrangements for carrying out routine maintenance and emergency maintenance;
 - iv) arrangements for secondary power supplies, if any, and, if applicable, the particulars of any other method of dealing with partial or total system failure; and
 - v) the names and roles of the persons responsible for the inspection and maintenance of the lighting, and the telephone numbers for contacting those persons during and after working hours.
- 9) Aerodrome Works Safety.
- Particulars of the procedures for planning and carrying out construction and maintenance work safely (including work that may have to be carried out at short notice) on or in the vicinity of the movement area which may extend above an obstacle limitation surface, including the following:
- i) arrangements for communicating with air traffic control during the progress of such work;
 - ii) the names, telephone numbers and roles of the persons and organisations responsible for planning and carrying out the work, and arrangements for contacting those persons and organisations at all times;
 - iii) the names and telephone numbers, during and after working hours, of the aerodrome fixed-base operators, ground handling agents and aircraft operators who are to be notified of the work;
 - iv) a distribution list for work plans, if required.

10) Apron Management.

Particulars of the apron management procedures, including the following:

- i) arrangements between air traffic control and the apron management unit;
- ii) arrangements for allocating aircraft parking positions;
- iii) arrangements for initiating engine start and ensuring clearance of aircraft push-back;
- iv) marshalling service; and
- v) leader (van) service.

11) Apron Safety.

Procedures to ensure apron safety, including:

- i) protection from jet blasts;
- ii) enforcement of safety precautions during aircraft refuelling operations;
- iii) apron sweeping;
- iv) apron cleaning;
- v) arrangements for reporting incidents and accidents on an apron; and
- vi) arrangements for auditing the safety compliance of all personnel working on the apron.

12) Airside Vehicle Control.

Particulars of the procedure for the control of surface vehicles operating on or in the vicinity of the movement area, including the following:

- i) details of the applicable traffic rules (including speed limits and the means of enforcing the rules); and
- ii) the method of issuing driving permits for operating vehicles in the movement area.

13) Wildlife Hazard Management.

Particulars of the procedures to deal with the danger posed to aircraft operations by the presence of birds or mammals in the aerodrome flight pattern or movement area, including the following:

- i) arrangements for assessing wildlife hazards;
- ii) arrangements for implementing wildlife control programmes; and
- iii) the names and roles of the persons responsible for dealing with wildlife hazards, and their telephone numbers during and after working hours.

14) Obstacle Control.

Particulars setting out the procedures for:

- i) monitoring the obstacle limitation surfaces and Type A Chart for obstacles in the take-off surface;
- ii) controlling obstacles within the authority of the operator;

- iii) monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces;
 - iv) controlling new developments in the vicinity of aerodromes; and
 - v) notifying the CAAM of the nature and location of obstacles and any subsequent addition or removal of obstacles for action as necessary, including amendment of the AIS publications.
- 15) Removal of Disabled Aircraft.
Particulars of the procedures for removing a disabled aircraft on or adjacent to the movement area, including the following:
- i) the roles of the aerodrome operator and the holder of the aircraft certificate of registration;
 - ii) arrangements for notifying the holder of the certificate of registration;
 - iii) arrangements for liaising with the air traffic control unit;
 - iv) arrangements for obtaining equipment and personnel to remove the disabled aircraft; and
 - v) the names, role and telephone numbers of persons responsible for arranging for the removal of disabled aircraft.
- 16) Low-Visibility Operations.
Particulars of procedures to be introduced for low-visibility operations, including the measurement and reporting of runway visual range as and when required, and the names and telephone numbers, during and after working hours, of the persons responsible for measuring the runway visual range.
- 17) Handling of Hazardous Materials.
Particulars of the procedures for the safe handling and storage of hazardous materials on the aerodrome, including the following:
- i) arrangements for special areas on the aerodrome to be set up for the storage of inflammable liquids (including aviation fuels) and any other hazardous materials; and
 - ii) the method to be followed for the delivery, storage, dispensing and handling of hazardous materials.
- Note.— Hazardous materials include inflammable liquids and solids, corrosive liquids, compressed gases and magnetised or radioactive materials. Arrangements for dealing with the accidental spillage of hazardous materials should be included in the aerodrome emergency plan.*
- 18) Protection of Sites for Radar and Navigational Aids.
Particulars of the procedures for the protection of sites for radar and radio navigational aids located on the aerodrome to ensure that their performance will not be degraded, including the following:
- i) arrangements for the control of activities in the vicinity of radar and nav aids installations;

- ii) arrangements for ground maintenance in the vicinity of these installations; and
- iii) arrangements for the supply and installation of signs warning of hazardous microwave radiation.

Note 1.— In writing the procedures for each category, clear and precise information should be included on:

— when, or in what circumstances, an operating procedure is to be activated;

— how an operating procedure is to be activated;

— actions to be taken;

— the persons who are to carry out the actions; and

— the equipment necessary for carrying out the actions, and access to such equipment

Note 2.— If any of the procedures specified above are not relevant or applicable, the reason should be given.

19) Reporting of Runway Surface Conditions.

Particulars of the procedures to comply with the new global reporting format for runway surface conditions in compliance with PANS-Aerodromes (Doc 9981).

f) Part 5 - Aerodrome Administration and Safety Management System

1) Aerodrome administration.

Particulars of the aerodrome administration, including the following:

- i) an aerodrome organisational chart showing the names and positions of key personnel, including their responsibilities;
- ii) the name, position and telephone number of the person who has overall responsibility for aerodrome safety; and
- iii) airport committees.

2) Safety management system (SMS).

Particulars of the safety management system established for ensuring compliance with all safety requirements and achieving continuous improvement in safety performance, the essential features being:

- i) the safety policy, insofar as applicable, on the safety management process and its relation to the operational and maintenance process; the structure or organisation of the SMS, including staffing and the assignment of individual and group responsibilities for safety issues;
- ii) SMS strategy and planning, such as setting safety performance targets, allocating priorities for implementing safety initiatives and providing a framework for controlling the risks to as low a level as is reasonably practicable keeping always in view the requirements of CAD 14 Vol I and the national regulations, standards, rules or orders;

- iii) SMS implementation, including facilities, methods and procedures for the effective communication of safety messages and the enforcement of safety requirements;
- iv) a system for the implementation of, and action on, critical safety areas which require a higher level of safety management integrity (safety measures programme);
- v) measures for safety promotion and accident prevention and a system for risk control involving analysis and handling of accidents, incidents, complaints, defects, faults, discrepancies and failures, and continuing safety monitoring;
- vi) the internal safety audit and review system detailing the systems and programmes for quality control of safety;
- vii) the system for documenting all safety-related airport facilities as well as airport operational and maintenance records, including information on the design and construction of aircraft pavements and aerodrome lighting. The system should enable easy retrieval of records including charts;
- viii) staff training and competency, including the review and evaluation of the adequacy of training provided to staff on safety-related duties and of the certification system for testing their competency; and
- ix) the incorporation and enforcement of safety-related clauses in the contracts for construction work at the aerodrome.



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10.4 Appendix 4 – The Components of an Aerodrome Manual (Heliport Operation Manual)

10.4.1 The aerodrome operator/applicant is to refer the components of Aerodrome Manual (Heliport Operation Manual) as follows:

a) Part 1: General

1) General information, including the following –

- i) name of heliport owner/operator, and address and telephone number[s] at which the owner/operator can be contacted at all times;
- ii) purpose and scope of the aerodrome manual;
- iii) the condition for use of the heliport, including operational limitation and restriction;
- iv) the system for recording aircraft movements; and
- v) obligations of the heliport owner/operator.

b) Part 2: Particulars of the Heliport Site

1) General information, including the following –

- i) a layout plan of the heliport showing the main heliport facilities, including visual aids and non-visual aids provided;
- ii) a layout plan showing the approach surfaces and take-off surfaces, and obstacles, within 1000 m radius of the heliport; and
- iii) a layout plan showing the position of the heliport in relation to other infrastructure and terrain within 5000 m radius of the heliport.

c) Part 3: Particulars of the Heliport

1) General Information

- i) the name of the heliport;
- ii) the type of the heliport;
- iii) the location of the heliport from the nearest town and nearest aerodrome;
- iv) the geographical coordinates of the heliport reference point [WGS-84];
- v) the elevation of the heliport; and
- vi) details of heliport beacon [if provided].

2) Heliport Dimensions

- i) FATO – type, dimension, true bearing and designation number;
- ii) TLOF – type, dimension, slope and bearing strength in tonnes;
- iii) safety area – type and dimension;
- iv) clearway – dimension and ground profile;
- v) ground taxiway, air taxiway and air transit route – designation, width and surface type (if applicable);
- vi) apron – surface type and helicopter stand (if applicable).

- 3) Declared Distances
 - i) take-off distance available;
 - ii) rejected take-off distance available; and
 - iii) landing distance available.
 - 4) Visual Aids
 - i) visual aids viz. markings and lighting
 - ii) wind direction indicator;
 - 5) Rescue and Fire Fighting
 - i) level of protection.
 - ii) List of rescue equipment available.
- d) Part 4: Heliport Operations Procedures
- 1) ATC Coordination Procedures
 - i) Particulars of procedures for coordination with Air Traffic Services Unit[s], including
 - procedures for arrivals;
 - procedures for departures; and
 - communication facilities provided.
 - 2) Heliport Reporting Procedures
 - i) Particulars of procedures for notifying any changes to the infrastructure, facilities and operational procedures, including –
 - arrangement for reporting changes; and
 - recording of changes.
 - 3) Access to Heliport Area
 - i) Procedure for the preventing of the unauthorised entry of person[s], vehicles or others into the heliport area including facilities provided to prevent such occurrence.
 - 4) Heliport Emergency Plan
 - i) Particulars of the heliport emergency plan, including the following –
 - plans for dealing with emergencies occurring at the heliport or in its vicinity;
 - details of test for equipment to be used in emergencies, including frequency of those tests; and
 - details of exercise to test the emergency plan, including the frequency of those exercises.
 - 5) Rescue and Fire Fighting
 - i) Particulars of facilities, equipment, personnel and procedures for meeting the rescue and firefighting requirements.

- 6) Inspection of Heliport
 - i) Particulars of procedures for the inspection of the heliport area and obstacle limitation surfaces, including –
 - details of inspection intervals and times;
 - inspection checklist and logbook; and
 - reporting of inspection findings and correction of unsafe conditions.
- 7) Visual Aids and Electrical Systems
 - i) Particulars of procedures for the inspection and maintenance, aeronautical lights [including obstacle lights], signs, markers and electrical systems –
 - arrangements for inspection;
 - reporting and recording of inspection findings;
 - correction of deficiencies;
 - arrangements for routine maintenance; and
 - arrangements secondary power supply.
- 8) Maintenance of Heliport Area
 - i) Particulars of procedures for the inspection and maintenance of heliport area –
 - arrangements for inspection;
 - maintenance of paved areas;
 - maintenance of unpaved areas;
 - maintenance of markings; and
 - maintenance of drainage.
- 9) Heliport Safety Management
 - i) Particulars of procedures to ensure safety during heliport operations -
 - helicopter arrival procedures [including engine shut-down];
 - helicopter departing procedure [including engine-start];
 - fuelling procedures and safety precautions;
 - protection from rotor downwash;
 - apron sweeping and cleaning;
 - arrangements for reporting incidents and accidents; and
 - personnel safety procedures.
- 10) Obstacle Control
 - i) Particulars setting out the procedures for -
 - controlling obstacles within the authority of owner;
 - monitoring development within the obstacle limitation surfaces; and

- coordination for controlling new developments in vicinity of the heliport.

11) Removal of Disabled Aircraft

- i) Particulars of the procedures for removing of a disabled aircraft, including -
 - role of heliport owner and holder of the aircraft certificate of registration;
 - arrangements for notifying holder of the aircraft certificate of registration; and
 - arrangements for obtaining equipment and personnel to remove aircraft.

e) Part 5: Heliport Administration

- 1) Particulars of the heliport administration, including –
 - i) the heliport organisational chart showing the name and position of key personnel;
 - ii) the duty-list and responsibilities of key personnel, in particular the Heliport Manager and Heliport Duty Officer; and
 - iii) the name and telephone number of the Heliport Manager.

10.5 Appendix 5 – Sample Certificate of Aerodrome**10.5.1 Sample of CoA**

**PIHAK BERKUASA PENERBANGAN AWAM
MALAYSIA
CIVIL AVIATION AUTHORITY OF MALAYSIA**

CERTIFICATE OF AERODROME

CAD14 Vol I/CERT/.....

.....
NAME OF AERODROME

.....
NAME OF AERODROME OPERATOR

.....
VALIDITY PERIOD

This Certificate of Aerodrome is issued pursuant to Civil Aviation (Aerodrome Operations) Regulations 2016 and Civil Aviation Directive (CAD) 14 Volume I by the Civil Aviation Authority of Malaysia to certify that the Aerodrome Operator **(Name of Aerodrome Operator)** has complied with the requirements of Civil Aviation (Aerodrome Operations) Regulations 2016 and CAD 14 Vol I.

The Civil Aviation Authority of Malaysia may suspend, revoke or vary this Certificate of Aerodrome at any time if the Aerodrome Operator fails to comply with the requirements of Civil Aviation (Aerodrome Operations) Regulations 2016 and CAD 14 Vol I.

.....
CHIEF EXECUTIVE OFFICER

.....
Date of Issue

AERODROME OPERATIONAL CONDITIONS

- | | | | |
|-----|-------------------------------------|---|--|
| 1. | AERODROME CLASSIFICATION | : | |
| 2. | AERODROME TYPE | : | |
| 3. | ICAO LOCATION INDICATOR | : | |
| 4. | AERODROME REFERENCE CODE | : | |
| 5. | TYPES OF APPROACHES | : | |
| 6. | OPERATIONAL HOURS | : | |
| 7. | CONDITION TO OPERATE | : | |
| 8. | FLIGHT RESTRICTIONS | : | |
| | [i] FLIGHT RULES | : | |
| | [ii] HEAVIEST AIRCRAFT TYPE | : | |
| | [iii] MAXIMUM TAKE-OFF WEIGHT [kg.] | : | |
| 9. | ARP COORDINATES | : | |
| 10. | RUNWAY | : | |
| | [i] ORIENTATION | : | |
| | [ii] SURFACE TYPE | : | |
| | [iii] LENGTH [meters] | : | |
| | [iv] WIDTH [meters] | : | |
| | [v] DESIGNATOR | : | |
| | [vi] TORA | : | |
| | [vii] TODA | : | |
| | [viii] ASDA | : | |
| | [ix] LDA | : | |
| 11. | PHYSICAL CHARACTERISTICS | : | |
| | [HELIPORTS ONLY] | : | |
| | [i] FATO / TLOF [meters] | : | |
| | [ii] SAFETY AREA [meters] | : | |
| | [iii] TOUCHDOWN/LIFT-OFF AREA | : | |
| 12. | AERODROME LIGHTING | : | |
| 13. | AFRS CATEGORY | : | |
| 14. | MEDICAL SERVICES | : | |
| 15. | AIR-GROUND COMMUNICATION | : | |
| 16. | OPERATOR ADDRESS | : | |
| | TELEPHONE | : | |
| | FAX | : | |
| | E-MAIL | : | |
| | | : | |

CONDITIONS OF CERTIFICATION

- i. The aerodrome use shall be limited to heaviest aircraft type defined in this Certificate.
- ii. No aircraft shall take-off or land at the aerodrome unless such fire-fighting and rescue services, medical services and other services detailed in this Certificate are available and subject to pilot after being informed of the unavailability.
- iii. The Aerodrome Operator shall notify the Civil Aviation Authority of Malaysia of any changes to the landing area, facilities, equipment or services detailed in this Certificate.
- iv. The Aerodrome Operator shall notify the Civil Aviation Authority of Malaysia of any change in the obstruction characteristics of the approach, take-off or transitional areas of the aerodrome.