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**MEMORANDUM CIRCULAR NO.: 04-2020**

**TO : ALL CONCERNED**

**FROM : DIRECTOR GENERAL**

**SUBJECT : AMENDMENT TO THE MANUAL OF STANDARDS FOR AERODROMES**

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**REFERENCE:**

1. Manual of Standards for Aerodromes 2<sup>nd</sup> Edition
2. ICAO Annex 14 Vol. I
3. CAAP Regulations Amendment Procedures
4. Board Resolution No. 2012-054 dated 28 September 2012

Pursuant to the powers vested in me under the Republic Act 9497, otherwise known as the Civil Aviation Authority Act of 2008 and in accordance with the Board Resolution No.: 2012-054 dated 28 September 2012, I hereby approve the incorporation of amendment to the Manual of Standards for Aerodromes.

**ORIGINAL REGULATION SUBJECT FOR REVIEW AND REVISION:**

**MANUAL OF STANDARDS FOR AERODROMES:**

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**CHAPTER 3. Applying for an aerodrome certificate**

**Section 3.1 General**

**3.1.1 Introduction**

3.1.1.1 Under the provisions of CAR-Aerodromes 2.2.005,

~~(a) operators of aerodromes must hold an aerodrome certificate where:~~

(a) An aerodrome shall only be operated by a person who holds a valid certificate issued by CAAP for that aerodrome if it is used for:

~~(i) international air transport operations are conducted; or~~

(i) any international air transport operation; or

~~(ii) domestic air transport operations are conducted using aircraft with more than 30 passenger seats; or~~

(ii) If an aerodrome operator plans to have an international air transport operations, the operator must apply for an aerodrome certificate.

~~(iii) the aerodrome is available for public use and has a published non-precision or precision approach procedure and is not registered; and~~

~~(b) operators of other aerodromes may apply for an aerodrome certificate.~~

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### **3.1.2 Processing an Aerodrome Certificate application**

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3.1.2.3 As part of the certification process, CAAP shall ensure that an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system, is submitted by the applicant for approval/acceptance prior to granting the aerodrome certificate.

*Note: - The intent of a safety management system is to have in place an organized and orderly approach in the management of aerodrome safety by the aerodrome operator. Annex 19 CAR-Safety Management 2<sup>nd</sup> Edition contains the safety management provisions applicable to certified aerodromes. Guidance on harmonized safety management system is given in the Safety Management Manual (SMM) (Doc 9859) and in the Manual on Certification of Aerodromes (Doc 9774). Procedures on the management of change, conduct of safety assessment, reporting and analyses of safety occurrences at aerodromes and continuous monitoring to enforce compliance with applicable specifications so that identified risks are mitigated can be found in the PANS-AERODROMES (Doc 9981).*

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### **3.3.2 Scope of the Aerodrome Manual**

3.3.2.1 The aim and objectives of the aerodrome manual and how it is to be used by operating staff and other stakeholders shall be stated in the manual.

3.3.2.2 The aerodrome manual contains all the relevant information to describe the management and operational structure. It is the means by which all aerodrome operating staff are fully informed as to their duties and responsibilities with regard to safety, including information and instructions related to those matters specified in the applicable regulation. It describes the aerodrome services and facilities, all operating procedures, and any restrictions in place.

### **3.3.23 Format of an Aerodrome Manual**

3.3.23.1 An Aerodrome Manual shall comprise of a document covering all matters that need to be addressed, as well as relevant supporting documents and manuals for aerodrome operations that are referred to in the Aerodrome Manual. MOS Appendix 1, Schedule of particulars to be included in an aerodrome manual, provides the minimum requirement to be included in an aerodrome manual. The Aerodrome Manual may be supplemented by other documents and manuals, airport circulars, notices and instructions issued by the aerodrome operator to his staff and contractors or agents on airport operational matters from time to time. The contents of these supplementary materials shall be incorporated into the main Aerodrome Manual if they are permanent in nature.

3.3.23.2 The Aerodrome Manual is a ‘living document’ and subject to frequent amendment. As such it shall be contained in a binder designed to facilitate easy amendment. The page and paragraph numbering system shall also be designed to allow for easy addition and deletion of information. Information regarding each amendment record, the amendment history and a list of effective pages shall be included in each copy of the Aerodrome Manual.

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3.3.3.4 The aerodrome manual accurately reflects the aerodrome’s SMS and shows, in particular, how the aerodrome intends to measure its performance against safety targets and objectives.

3.3.3.5 All aerodrome safety policies, operational procedures and instructions are contained in detail or cross referenced to other formally accepted or recognized publications.

*Note: - At larger aerodromes, the size and complexity of operations and related procedures may imply that these procedures cannot be included in a single document. For example, the aerodrome operator may develop and maintain an SMS manual to communicate its approach to the management of safety throughout the aerodrome. In such circumstances it is acceptable to identify within the aerodrome manual references to such provisions. It is essential that any referenced information, documentation and procedures be subjected to exactly the same systems of consultation and promulgation as the aerodrome manual. A computerized database containing the referenced procedures and information could be suitable for that purpose. For many smaller aerodromes the aerodrome manual can be both simple and brief as long as it covers procedures essential for safe day-to-day operations.*

### **3.3.4 Contents of the Aerodrome Manual**

*Note: - A list of other possible topics for inclusion in the aerodrome manual is given in MOS Appendix 1.*

3.3.4.1 The aerodrome manual shall contain, as a minimum, the following sections, including some of their requirements:

(a) a table of contents;

(b) a list of the corrigenda/amendments: this section shall log the updates and/or corrections made to the aerodrome manual;

(c) a distribution list;

(d) aerodrome administrative data: an organizational chart shall be provided, as well as the aerodrome operator’s safety responsibilities;

(e) a description of the aerodrome: this includes maps and charts. The physical characteristics of the aerodrome shall be documented, as well as the information regarding the RFF level, ground aids, primary and secondary electrical power systems and main obstacles. Sufficiently detailed charts of the aerodrome shall also be included (showing the aerodrome’s boundaries and different areas (manoeuvring area, apron, etc.). All deviations from the regulatory provisions authorized by the State shall be listed together with their validity and references to the related documents (including any safety assessments);

(f) a description of the intended operations, including:

(i) the critical aeroplanes the aerodrome is intended to serve;

(ii) the category of runway(s) provided (non-instrument, instrument including non-precision and precision);

(iii) the different runways and their associated levels of service;

(iv) the nature of aviation activities (commercial, passenger, air transport, cargo, aerial work, general aviation);

(v) the type of traffic permitted to use the aerodrome (international/national, IFR/VFR, scheduled/nonscheduled); and

(vi) the minimum RVR that aerodrome operations can be permitted.

(g) a description of each of the aerodrome operator's procedures related to the safety of aeronautical operations at the aerodrome. For each procedure:

(i) the responsibilities of the aerodrome operator are clearly described;

(ii) the tasks that are to be achieved by the aerodrome operator or its subcontractors are listed;

(iii) the means and procedures required to complete these tasks are described or appended, together with the necessary details such as the frequency of application and operating modes; and

(h) a description of the operator's SMS

(i) the SMS section of the manual is developed, and the related procedures and documents are enclosed, as well as the safety policy of the aerodrome operator signed by the accountable executive;

(ii) the aerodrome SMS shall be commensurate with the size of the aerodrome and with the level and complexity of the services provided.

*Note: - 1 The complexity and size of the aerodrome may necessitate the SMS to be included in a separate manual.*

*Note: - 2 CAR-Safety Management 2<sup>nd</sup> Edition specifies a framework for the implementation of an SMS at an aerodrome.*

3.3.4.2 Responsibilities attributed to other aerodrome stakeholders shall be clearly identified and listed.

### **3.3.5 Updating of the aerodrome manual**

3.3.5.1 Responsibility for maintaining the accuracy of the aerodrome manual is clearly defined in the manual.

3.3.5.2 The manual is updated using a defined process and includes a record of all amendments, effective dates and amendment approvals.

3.3.5.3 The method of enabling all aerodrome operating staff to have access to the relevant parts of the manual is defined and can be demonstrated and a method of tracking amendments and ensuring their receipt shall be established when using an electronic means of distribution.

3.3.5.4 Any amendments or additions shall be communicated to CAAP in accordance with the continued oversight requirements established by CAAP.

### **3.3.36 Maintenance and Control of Aerodrome Manual**

3.3.36.1 CAR-Aerodromes 2.2.060 requires an aerodrome operator to:

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3.3.36.2 Additional copies of the Aerodrome Manual may be made available so that aerodrome staff and other organizations at the aerodrome may have access to a copy of the manual, or a relevant part of it.

3.3.36.3 When additional copies or sections of the manual are required, the aerodrome manual controller is responsible for distribution to those persons.

### **3.3.4 3.3.7 Issue and distribution and amendment of an Aerodrome Manual**

3.3.4.1 3.3.7.1 The Aerodrome Manual is an important safety document and must be issued under the authority of the aerodrome operator and signed by the senior executive of the organization. Any amendments to the Aerodrome Manual shall be approved by the aerodrome operator, or his delegate, to do so.

3.3.4.2 3.3.7.2 Copies of relevant sections of the Aerodrome Manual shall be made available to each supervisory member of the aerodrome operating staff including those employed by the operator's contractors or agents, where relevant, so that each member of the aerodrome operating staff:

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3.3.4.3 3.3.7.3 For this manual, aerodrome operating staff shall mean all persons, whether or not employed directly by the aerodrome operator, who in the course of their duties are:

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3.3.4.4 3.3.7.4 In addition sufficient copies of the Aerodrome Manual ~~should~~ **shall** be placed at the aerodrome operator's library and at the workplace of other relevant operating staff concerned.

3.3.4.5 3.3.7.5 Apart from submission of the Aerodrome Manual to CAAP and internal distribution of copies to relevant operating staff, copies of the Aerodrome Manual (or relevant parts of it) ~~should~~ **shall** also be made available to other external parties who have a part to play in aerodrome safety procedures. In particular, the airport emergency section of the Aerodrome Manual ~~should~~ **shall** also be extended to all external parties (e.g. Civil Defense, State Police, external Fire Departments or health agencies) involved in the aerodrome emergency plan.

3.3.4.6 3.3.7.6 The Aerodrome Manual shall be a controlled document. An aerodrome operator shall appoint a document controller to be responsible for updating and distributing its

Aerodrome Manual. Each copy of the Aerodrome Manual shall be numbered and a list of their holders maintained by the document controller. Amendments shall be recorded on the amendment page in each copy.

### **3.3.8 Amendment of an Aerodrome Manual**

~~3.3.4.7~~ 3.3.8.1 Each holder of the Aerodrome Manual shall be responsible for ensuring that his copy is kept up to date. For copies intended for common use, a person shall be designated to look after amendment of those copies.

~~3.3.4.8~~ 3.3.8.2 Manuscript amendments by hand to the Aerodrome Manual are not generally acceptable. Changes or additions shall be subject of an additional or replacement page suitably dated. If the amendment affects the action of external parties, an acknowledgement slip shall be requested from each external party concerned when amendments are circulated to confirm that each party concerned has received and taken notice of the amendment.

~~3.3.4.9~~ 3.3.8.3 The aerodrome operator shall make prompt amendments to the Aerodrome Manual when there are updates to any part of the contents of the Aerodrome Manual or, when required by the CAAP upon review of the Aerodrome Manual or any proposed updates or amendments. Such amendments required by the CAAP shall be binding on the aerodrome operator.

### **3.3.5 3.3.9 Initiating NOTAM for a new certified aerodrome**

~~3.3.5.1~~ 3.3.9.1 The CAAP officer or inspector responsible for the certification process will prepare and forward to the NOTAM Office details setting out all the aerodrome information which will be included in AIP, including the date when the aerodrome will be certified.

## **CHAPTER 4. Applying for an Aerodrome Registration Type 1, Aerodrome Registration Type 2 and Permit to Operate (PTO)**

### **Section 4.1 Registered Aerodrome Type 1**

#### **4.1.1 Introduction**

4.1.1.1 Under the provisions of CAR-Aerodromes 2.3.005,

(1) An aerodrome shall only be operated by a person who holds a valid Aerodrome Registration Type 1 issued by CAAP for that aerodrome if it is:

(a) open for public use in domestic operations with an annual aircraft movement above 5,000 and annual passenger movement above 300,000.

4.1.1.2 The applicant shall be the owner of the aerodrome site, or have obtained permission from the owner to use the site as an aerodrome.

4.1.1.3 The CAAP aerodrome registration process only addresses the aviation safety aspects of the aerodrome. It is the responsibility of the applicant to ensure that use of the site as an aerodrome is in compliance with other national, provincial and local statutory requirements. The aerodrome registration does not absolve the applicant from observing such requirements.

4.1.1.4 Before submitting an application, an aerodrome operator (or intending aerodrome operator) must prepare an Aerodrome Manual, in accordance with the requirements set out in CAR-Aerodromes 2.2.065. The standards for compliance with the regulatory requirements are set out in various chapters in this manual. MOS Appendix 1 provides the specification for the format and contents of an aerodrome manual.

4.1.1.5 The initial application must be made on the form attached at MOS Appendix 2. The completed form shall be submitted to the Director General, CAAP Manila, together with a copy of the Aerodrome Manual.

#### **4.1.2 Processing an Aerodrome Registration Type 1 application**

4.1.2.1 Applications shall be submitted in sufficient time to allow for detailed consideration and inspection of the aerodrome before the desired date of issue of the Registration Type 1.

4.1.2.2 Engineering and survey reports of the physical characteristics of the movement area, pavement strength and surface, obstacle limitation surfaces, etc., shall be provided by the applicant as required by CAAP. Further details are contained in Section 5.1.2.

4.1.2.3 As part of the Registration Type 1 process, CAAP shall ensure that an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system, aerodrome emergency plan and maintenance plan is submitted by the applicant for approval/acceptance prior to granting the Aerodrome Registration Type 1.

*Note: - 1 CAAP staff or other authorized persons may carry out audits, surveys, inspections, checks or tests of any aspect of the aerodrome or require substantiation of any information provided by the applicant. However, it shall be clearly understood that the CAAP inspection or testing procedures must use a sampling process. CAAP activity does not absolve the applicant from the responsibility to provide accurate information.*

*Note: - 2 The intent of a safety management system is to have in place an organized and orderly approach in the management of aerodrome safety by the aerodrome operator. CAR-Safety Management 2<sup>nd</sup> Edition contains the safety management provisions applicable to certified aerodromes. Guidance on harmonized safety management system is given in the Safety Management Manual (SMM) (Doc 9859) and in the Manual on Certification of Aerodromes (Doc 9774). Procedures on the management of change, conduct of safety assessment, reporting and analyses of safety occurrences at aerodromes and continuous monitoring to enforce compliance with applicable specifications so that identified risks are mitigated can be found in the PANS-AERODROMES (Doc 9981).*

*Note: - 3 Details of SMS assessment is contained in Aerodrome SMS Requirements for Aerodrome Operators (SMSRAO), and Aerodrome SMS Acceptance and Surveillance Program (SMSASP).*

4.1.2.4 Special assessments may be necessary if there are aerodrome facilities that do not comply with the applicable standards. This may involve more time and resources and may result in restrictions being imposed on aircraft operations.

4.1.2.5 Aerodrome Registration Type 1 process is detailed in MOS 4.1.8.

### **4.1.3 Granting of an Aerodrome Registration Type 1**

4.1.3.1 Before an Aerodrome Registration Type 1 is granted, CAAP must be satisfied that:

(a) the aerodrome's physical characteristics, facilities, services and equipment are in accordance with the standards specified for a Registration Type 1 aerodrome;

(b) an acceptable aerodrome manual has been prepared for the aerodrome in accordance with CAR-Aerodromes 2.2.065 and 2.2.070;

(c) the aerodrome's operating procedures set out in the aerodrome manual make satisfactory provision for the safety of aircraft;

(d) there are sufficient experienced competent personnel to conduct the safety functions of the aerodrome;

(e) the applicant would, if the certificate is granted, be able properly to operate and maintain the aerodrome;

(f) an acceptable aerodrome safety management system has been developed, documented and implemented; and

(g) a full-scale test of the aerodrome emergency plan has been conducted.

4.1.3.2 Aerodrome Registration Type 1 is granted on the condition that the aerodrome and the aerodrome operator will, at all times, be and remain in compliance with applicable regulations and standards. CAR-Aerodromes 2.3.025 empowers CAAP, if considered necessary in the interests of aviation safety, to attach additional conditions to an Aerodrome Registration Type 1 to account for particular circumstances.

4.1.3.3 Once granted, an Aerodrome Registration Type 1 (issued 'in perpetuity') will remain in force unless it is suspended or cancelled. A temporary Aerodrome Registration Type 1 has a finite term (not more than 6 months) and will become invalid on the specified date, unless it is suspended or cancelled prior to that date.

4.1.3.4 When an aerodrome operator is granted an Aerodrome Registration Type 1, it signifies to aircraft operators and other organizations operating on the aerodrome that, at the time of certification, the aerodrome meets the specifications regarding the facility and its operation, and that it has, according to CAAP, the capability to maintain these specifications. The registration process also establishes the baseline for continuing monitoring of compliance with the specifications.

### **4.1.4 Aerodrome operator organization (See MOS 3.1.4)**

### **4.1.5 Amendment of an Aerodrome Registration Type 1**

4.1.5.1 The CAAP shall, provided that the requirements of regulations MOS 4.1.3.1, 4.1.3.1(e), and 3.3.5 have been met, in accordance with CAR- 2.3.050 amend an aerodrome registration when:

(a) there is a change in the use or operation of the aerodrome;

(b) there is a change in the boundaries of the aerodrome; or

(c) the holder of the Aerodrome Registration Type 1 certificate requests an amendment.

#### **4.1.6 Transfer of an Aerodrome Registration Type 1**

4.1.6.1 In case of change in ownership or management of the aerodrome, the new aerodrome operator or manager shall apply for a transfer of the Aerodrome Registration Type 1 in accordance with CAR Aerodromes 2.3.060.

#### **4.1.7 Continued validity of an Aerodrome Registration Type 1**

4.1.7.1 For Aerodrome Registered Type 1 airports, validation must include assessment of the effective implementation of aerodrome operator's SMS in terms of monitoring and analyzing safety occurrences and trends and taking appropriate action in a timely manner.

4.1.7.2 SMS effective implementation is part of a continued validity requirements for Registered Type 1 airports which is covered in the surveillance program and where all aspects of the aerodrome registration and operation are taken into account (See Appendix E: Checklist in the ARCID Surveillance Policy Procedures and Programme).

4.1.7.3 An overall assessment of the continued validity of the aerodrome Registered Type 1 must be indicated in the surveillance report laying out the complied conditions/requirement as per CAR-Aerodromes: 2.3.015, MOS: 3.1.3 and also described in updated ARCID Certification Program: Section 5.

#### **4.1.8 Aerodrome Registration Type 1 process**

The Aerodrome Registration Type 1 process shall be conducted in a phased approach comprising of the following phases (details of the process is included in the CAAP Manual of Aerodrome Regulatory Procedures – MARP):

##### **4.1.8.1 Phase 1: Initial Registration Type 1**

a) Application for Aerodrome Registration Type 1.

b) Assessment of application and attachments, development of aerodrome manual, and conduct of technical inspection.

*Note: - Attachments will include but not limited to legal requirements, organizational competence, liaising/agreement with relevant authorities, and aerodrome manual (if already available).*

##### **4.1.8.2 Phase 2: Aerodrome Manual Review and Acceptance**

a) Analysis of the aerodrome manual and acceptance:

b) CAAP and Operator plan the time and date, and prepare for on-site verification audit.

#### 4.1.8.3 Phase 3: On-Site Verification

a) Conduct of on-site verification;

b) Submission of Corrective Action Plans (CAPs); and

c) Analysis and validation of CAPs implementation.

#### 4.1.8.4 Phase 4: Issuance of Aerodrome Registration Type 1

a) Granting of Interim (Temporary) or Final Aerodrome Registration Type 1.

#### 4.1.8.5 Phase 5: Initial Surveillance

a) Within six (6) months after the issuance of temporary Aerodrome Registration Type 1 and 1 (one) month prior to the expiration of the Registration Type 1, AAI will conduct the surveillance inspection to determine progress on all CAPs and to assess whether the Aerodrome operator maybe granted a permanent Aerodrome Registration Type 1.

(i) When an aerodrome's corrective action plan does not ensure that appropriate corrective action has been taken within acceptable timelines, and after coordination with the operator, increased oversight of the operator is necessary. The scope of increased oversight may cover specific subjects or be all-encompassing.

(ii) The AAI should notify the aerodrome operator in writing:

- that it is being placed under increased oversight and outline the subjects concerned and from which date;
- the reasons for the increased oversight and what it consists of; and
- what actions are required by the aerodrome.

(iii) When an aerodrome is placed under increased oversight, CAAP should:

- carry out appropriate oversight actions on the subjects concerned;
- follow very carefully the implementation of the corrective actions plan; and
- allocate sufficient time/resources to the oversight of the concerned aerodrome.

(iv) The oversight actions carried out under increased oversight are the same as those carried out normally, but are more exhaustive and address all the subjects concerned.

(v) When increased oversight is concluded on an aerodrome for a specific subject, the AAI shall advise the aerodrome operator in writing, stating the end of the procedure and the reason.

(vi) The aerodrome certificate can be amended, suspended or revoked according to the outcome of the increased oversight.

### 4.1.9 Aerodrome Manual

#### 4.1.9.1 General

As part of the process for the Aerodrome Registration Type 1 process, an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system, must be submitted by the applicant for approval/acceptance prior to granting the Aerodrome Registration Type 1.

*Note: - Contents of an aerodrome manual, including procedures for its submission and approval/acceptance, verification of compliance and granting of aerodrome certificate, are also available in the PANS-AERODROMES (Doc 9981).*

#### 4.1.9.2 Scope of the Aerodrome Manual

The scope of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.2.

#### 4.1.9.3 Format of an Aerodrome Manual

The format of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.3.

#### 4.1.9.4 Contents of the Aerodrome Manual

The contents of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.4.

#### 4.1.9.5 Updating of the Aerodrome Manual

Updating of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.5.

#### 4.1.9.6 Maintenance and Control of Aerodrome Manual

Maintenance and control of aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.6.

#### 4.1.9.7 Issue and distribution of an Aerodrome Manual

Issue and distribution of an aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.7.

#### 4.1.9.8 Amendment of an Aerodrome Manual

Amendment of an aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.8.

#### 4.1.9.9 Initiating NOTAM for a new registered Type 1 aerodrome

The CAAP officer or inspector responsible for the Aerodrome Registration Type 1 will prepare and forward to the NOTAM Office details setting out all the aerodrome information which will be included in AIP, including the date when the aerodrome will be registered Type 1.

## **Section 4.1 4.2 Registered Aerodrome Type 2**

### **4.1.1 4.2.1 Introduction**

4.2.1.1 Under the provisions of CAR-Aerodromes 2.3.095,

An aerodrome shall only be operated by a person who holds a valid Aerodrome Registration Type 2 issued by CAAP for that aerodrome if it is:

(a) an aerodrome open for public or private use in domestic operations with an annual aircraft movement of 5,000 and below, or annual passenger movement of 300,000 and below, or

(b) a heliport using aircraft with 10 or more passenger seats; or

(c) an aerodrome not covered by the PTO requirements.

~~4.1.1.1 4.2.1.2 Pursuant to CAR Aerodromes, operators of uncertified aerodromes may apply to have their aerodromes registered by CAAP. A~~ An Aerodrome Registration Type 2 will have aerodrome information published in AIP, and changes to aerodrome information or conditions affecting aircraft operations can be notified through the NOTAM system.

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~~4.1.1.2 4.2.1.3~~ The applicant for Aerodrome Registration Type 2 must be the owner of the aerodrome site, or have obtained permission from the owner to use the site as an aerodrome.

~~4.1.1.3 4.2.1.4~~ The CAAP Aerodrome Registration Type 2 process only addresses the aviation safety aspect of the aerodrome. It is the responsibility of the applicant to ensure that use of the site as an aerodrome is in compliance with other requirements. The holder of an Aerodrome Registration Type 2 does not absolve the applicant from observing such requirements.

~~4.1.1.4 4.2.1.5~~ An aerodrome manual is not required for a registered Type 2 aerodrome, but the application must be accompanied by;

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### **4.1.2 4.2.2 Approving an Aerodrome Registration Type 2 application to register**

~~4.1.2.1 4.2.2.1~~ An Aerodrome Registration Type 2 is approved on the condition that:

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~~4.1.2.2 4.2.2.2~~ When the Aerodrome Registration Type 2 application is approved, CAAP will prepare and forward to the NOTAM Office a permanent NOTAM setting out all the aerodrome information which will be included in AIP. CAAP will also confirm, to the applicant, in writing, that the aerodrome is or will be registered issued an Aerodrome Registration Type 2, together with a copy of the NOTAM message.

### **4.1.3 4.2.3 Maintenance of an Aerodrome Registration Type 2**

~~4.1.3.1 4.2.3.1~~ Registered Aerodromes issued with an Aerodrome Registration Type 2 will be included in the CAAP aerodrome surveillance program. A scheduled visit by an aerodrome inspector can be expected periodically. Appropriate notice of the scheduled visit will be given. Unscheduled visits may occur at any time, such as when prompted by reported safety concerns.

~~4.1.3.2 4.2.3.2~~ An Aerodrome Registration Type 2 will remain in force until it is suspended or cancelled.

~~4.1.3.3 4.2.3.3~~ An Aerodrome Registration Type 2 may be suspended if CAAP is not satisfied with:

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*Note: - 2. Standards for ongoing operations and maintenance of ~~registered~~ Aerodrome Registration Type 2 are specified in Chapter 12.*

~~4.1.3.4~~ ~~4.2.3.4~~ An Aerodrome Registration Type 2 may be cancelled:

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(b) by CAAP after the Aerodrome Registration Type 2 was suspended and the identified safety concerns are not corrected to the satisfaction of CAAP, within an acceptable period.

#### ~~4.1.4~~ ~~4.2.4~~ Aerodrome Safety Inspection Report

~~4.1.4.1~~ ~~4.2.4.1~~ Operators of ~~registered aerodromes~~ with Aerodrome Registration Type 2 are required to have an Aerodrome Safety Inspection Report prepared by a CAAP inspector or an approved person as specified in the regulations. This inspection and report must be done either annually, or at a longer interval as agreed by CAAP.

### ~~Section 4.2~~ ~~4.3~~ Permit to operate (PTO)

#### ~~4.2.1~~ ~~4.3.1~~ Introduction

~~4.2.1.1~~ ~~4.3.1.1~~ Pursuant to CAR-Aerodromes 2.4, operators of airstrips and/or heliports conducting air transport operations or private operations including utility operations using aircraft with less than 10 passenger seats are required to secure Permit to Operate.

~~4.2.1.2~~ ~~4.3.1.2~~ The Permit to Operate for aerodromes and heliports is granted as privilege by CAAP to applicants/operators of aerodrome and heliport who meet the minimum standards and requirements prescribed in this Manual.

#### ~~4.2.2~~ ~~4.3.2~~ Approving an application for a PTO:

~~4.2.2.1~~ ~~4.3.2.1~~ The aerodrome meets the applicable standards specified in the MOS 4.2.4 for non-certificated or registered aerodromes;

~~4.2.2.2~~ ~~4.3.2.2~~ The airstrip or heliport operating procedures make satisfactory provision (MOS 4.2.5) for the safety of aircraft; and

~~4.2.2.3~~ ~~4.3.2.3~~ The applicant would, if the PTO is issued, be able to properly operate and maintain the aerodrome.

#### ~~4.2.3~~ ~~4.3.3~~ Conditions on Permit to Operate:

~~4.2.3.1~~ ~~4.3.3.1~~ An aerodrome shall only be operated by a person who holds a valid PTO issued by the CAAP for that aerodrome subject to the following conditions:

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#### ~~4.2.4~~ ~~4.3.4~~ Technical specifications and operating standards

~~4.2.4.1~~ ~~4.3.4.1~~ Physical specifications, obstacle environment, visual aids and RFFS

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#### ~~4.2.5~~ ~~4.3.5~~ Operating Procedures

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## **CHAPTER 10. Operating standards for certified aerodromes and Aerodrome Registration Type 1.**

### **Section 10.1 General**

#### **10.1.1 Introduction**

10.1.1.1 This chapter sets out the standards to be incorporated in operating procedures at certified aerodromes and Aerodrome Registration Type 1, including those procedures to be documented in the aerodrome manual.

10.1.1.2 This chapter also contains information on aerodrome Safety Management System (SMS). As prescribed in CAR-Aerodromes, an acceptable SMS shall be provided at certified aerodromes and aerodrome requiring Aerodrome Registration Type 1. Other aerodrome operators are encouraged to adopt SMS.

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#### **10.1.2 Aerodrome Manual and Aerodrome operating procedures**

10.1.2.1 As an integral part of the certification and registration (Type 1) process, an aerodrome manual must be prepared for aerodromes to be certified and aerodromes requiring Aerodrome Registration Type 1 ~~when the aerodrome is used for international operations or for domestic operations by aircraft with a seating capacity greater than 30.~~ The manual is the mechanism used for setting out a range of information and operating procedures as specified in CAR-Aerodromes. ~~Although the certification process does not involve a separate approval process for the aerodrome manual, the information contained in the manual must be acceptable to CAAP.~~

10.1.2.2 The aerodrome manual ~~must~~ shall be in a format that can be readily updated.

...

10.1.3.2 ~~With regard to aerodrome certification,~~ CAAP is primarily concerned with the competency of persons involved with aerodrome safety functions. Essential competencies will include:

- (a) inspecting and reporting on the physical characteristics and conditions of the aerodrome;
- (b) inspecting and reporting on aerodrome lighting systems;
- (c) inspecting and reporting on the OLS;
- ...
- (e) ~~use~~ utilizing of radio telephony (R/T) equipment, and
- (f) supervising the safety of aerodrome works.

...

#### **10.1.4 Aerodrome Safety Management System (SMS)**

*Note: ~~Include specific provision in MOS SMS regulation to require aerodrome operators to ensure that organizations performing activities at the aerodrome comply with the aerodrome safety requirement included in CAAP MC 19-16: SMS Requirements for Aerodrome Operators (SMSRAO).~~*

~~10.1.4.1 A certified aerodrome shall implement a safety management system that is acceptable to CAAP. A safety management system (SMS) is a systematic approach to managing safety at an aerodrome that must include the organizational structures, accountabilities, policies, procedures and documentation required by this section to manage safety in a continuous and systematic way.~~

~~10.1.4.2 As a minimum, a SMS will be acceptable if it demonstrates that~~ The SMS shall be one that permeates throughout the aerodrome operator organization, and be implemented through a continuing safety program based on a coherent policy that leads to well-designed work procedures. The SMS shall also extend to include interfaces between the aerodrome operator and its suppliers, sub-contractors, agents, business partners and other relevant external service providers.

~~(a) safety hazards are identified;~~

~~(b) remedial action is taken to maintain an agreed safety performance;~~

~~(c) continuous monitoring and regular assessment of the safety performance is provided; and~~

~~(d) it aims at a continuous improvement of the performance of the safety management system.~~

~~10.1.4.3 A safety management system shall clearly define lines of safety accountability throughout a certified aerodrome, including a direct accountability for safety on the part of senior management. The SMS shall focus principally on the hazards associated with the operation of the aerodrome and their effects upon those activities critical to safety. Active monitoring and auditing processes shall be applied to validate that the necessary controls identified through the hazard management process are effectively put in place so as to ensure continuing active commitment to safety and to achieve continuous improvement in safety performance.~~

~~10.1.4.4 The SMS requirements should complement the procedures set out in the aerodrome manual. The safety management system required under CAR-Aerodrome sections 2.2.225 and 2.3.015 in respect of an applicant for, or a holder of, an airport certificate and Aerodrome Registration type 1.~~

*Note: - Further guidance is available through CAAP Advisory Circular (AC) AC SMS-MNL-01: Development of an SMS Manual, as existing from time to time and freely available on the CAAP website.*

## **10.1.5 Framework for Aerodrome Safety Management System**

~~10.1.5.1 The framework for an aerodrome SMS includes four components and twelve elements representing the minimum requirements for SMS implementation. The implementation of the framework shall be commensurate with the size of the organization and the complexity of services provided. The components and elements are:~~ An aerodrome operator shall implement a SMS frame

work which commensurate with the size of the airport and the complexity of the services provided. The SMS framework shall include, as a minimum, the following twelve elements:

...

A-1 Management commitment and responsibility

(a) An aerodrome operator shall define its safety policy. The safety policy shall:

i) reflect organizational commitment regarding safety, including the promotion of a positive safety culture;

ii) include a clear statement about the provision of the necessary resources for the implementation of the safety policy;

iii) include safety reporting procedures;

iv) clearly indicate which types of behaviors are unacceptable related to the aerodrome operator's activities and include the circumstances under which disciplinary action would not apply;

v) be signed by the accountable executive;

vi) be communicated, with visible endorsement, throughout the organization; and

vii) be periodically reviewed to ensure it remains relevant and appropriate to the aerodrome operator.

(b) Taking due account of its safety policy, an aerodrome operator shall define its safety objectives. The safety objectives shall:

i) form the basis for safety performance monitoring and measurement;

ii) reflect the aerodrome operator's commitment to continuously improve the effectiveness of the SMS;

iii) be communicated and promoted throughout the organization; and

iv) be periodically reviewed to ensure the objectives remain relevant and appropriate to the operator.

## A-2 Safety accountabilitys and responsibilities

An aerodrome operator shall:

a) identify the accountable manager who, irrespective of other functions, has ultimate responsibility and accountability, on behalf of the aerodrome, for the implementation and maintenance of the SMS;

b) clearly define lines of safety accountability throughout the organization, including a direct accountability for safety on the part of senior management;

c) identify the accountabilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the SMS; and

d) document and communicate safety responsibilities, accountabilities and authorities throughout the organization.

### A-3 Appointment of key safety personnel

An aerodrome operator shall appoint a safety manager who is responsible for the implementation and maintenance of an effective SMS.

*Note: - Depending on the size of the aerodrome and the complexity of its operations or services, responsibility for implementation and maintenance of the SMS may be assigned to one or more persons. The role of safety manager could be a sole function, or a function combined with other duties provided the other duties did not result in a conflict of interest or adversely affect the performance of safety duties.*

### A-4 Coordination of emergency response planning

The aerodrome operator shall develop, coordinate and maintain an emergency response plan that addresses accidents and incidents in aircraft operations and other aviation emergencies.

An aerodrome operator shall ensure that the emergency response plan is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its services.

### A-5 SMS documentation

An aerodrome operator shall develop an SMS implementation plan, formally endorsed by senior management of the airport that defines the airport's approach to the management of safety in a manner that meets the airport's safety objectives.

An aerodrome operator shall develop and maintain SMS manual that describes the following:

a) safety policy and objectives;

b) SMS requirements;

c) SMS processes and procedures;

d) accountabilities, responsibilities and authorities for SMS;

e) processes and procedures; and

f) the minimum skills and knowledge required for the primary person responsible for the SMS.

An aerodrome operator shall develop and maintain SMS operational records as part of its SMS documentation.

*Note: - 1 Depending on the size of the aerodrome and the complexity of its aviation services, the SMS manual may be a stand-alone document or may be integrated with aerodrome manual.*

*Note: - 2 Relevant SMS operational records would include records, reviews, reports, assessments, analyses, verifications, investigations, training and communication programs, risk and hazard registers, safety cases, and details of persons who are or have been the primary persons responsible for the SMS.*

## B. Safety risk management

### B-1 Hazard identification

a) An aerodrome operator shall develop and maintain a process for effectively collecting, recording, acting on and generating feedback about hazards associated with aerodrome operations; and

b) Hazard identification shall be based on a combination of reactive, proactive and predictive methods of safety data collection.

### B-2 Safety risk assessment and mitigation

An aerodrome operator shall develop and maintain a process that ensures analysis, assessment and control of the safety risks associated with identified hazards.

## C. Safety assurance

### C-1 Safety performance monitoring and measurement risk assessment and mitigation

An aerodrome operator shall develop procedures to:

a) verify the safety performance of the airport compared to the safety policy and objectives, and to validate the effectiveness of safety risk controls.

b) ensure that aerodrome operator's safety performance is verified in reference to the safety performance indicators and safety performance targets of the SMS.

The SMS must include the aerodrome operator's procedures for internal audits conducted by persons or departments independent of the functions being audited, including procedures to:

a) to assess the effectiveness of the SMS and identify areas for potential improvement;

b) to ensure compliance with the state regulations;

c) to ensure that any safety risk controls are effectively implemented and monitored; and

d) The causes and contributing factors have been investigated and analyzed where non-conformances and other issues are identified.

### C-2 The management of change

An aerodrome operator shall develop and maintain a formal process to:

a) identify changes within the organization which may affect established processes and services;

b) to describe the arrangements to ensure safety performance before implementing changes; and

c) to eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment.

### C-3 Continuous improvement of the SMS

An aerodrome operator shall develop and maintain a process to identify the causes of sub-standard performance of the SMS, determine the implications of sub-standard performance in operations, and eliminate such causes.

## D. Safety promotion

### D-1 Training and education

An aerodrome operator shall develop, maintain and deliver a safety training programme to ensures that:

a) the personnel are trained and competent to perform their SMS duties; and

b) the scope of the safety training programme is appropriate to each individual's involvement in the SMS.

### D-2 Safety communication

An aerodrome operator shall develop and maintain a formal means for safety communication that:

a) ensures personnel are aware of the SMS to a degree commensurate with their positions;

b) conveys safety-critical information;

c) communicates safety accountabilities, responsibilities and authorities throughout the operator's organization;

d) explains why particular safety actions are taken; and

e) explains why safety procedures are introduced or changed.

~~10.1.5.2 Within the framework of an aerodrome SMS, each element shall conform to at least the following requirements:~~

#### ~~A. Safety policy and objectives~~

~~A-1 A certified aerodrome shall define the organizational safety policy which shall be in accordance with national requirements and which is to be signed by the accountable executive of the organization. The safety policy shall:~~

- ~~i. reflect organizational commitments regarding safety;~~
- ~~ii. include a clear statement about the necessary resources for implementing safety policy;~~
- ~~iii. be communicated, with visible endorsement, throughout the organization;~~
- ~~iv. include safety reporting procedures;~~
- ~~v. clearly indicate unacceptable organizational behaviour;~~
- ~~vi. include the conditions where disciplinary action would not be applied; and~~
- ~~vii. be reviewed periodically to ensure it remains relevant and appropriate to the organization.~~

~~A-2 The certified aerodrome shall identify the accountable executive who, irrespective of other functions, shall have ultimate responsibility and accountability, on behalf of the certified aerodrome, for the implementation and maintenance of the SMS. The certified aerodrome shall also identify the accountabilities of all members of management as well as employees with respect to the safety performance of the SMS. The safety accountabilities, responsibilities and authorities shall:~~

- ~~i. be documented and communicated throughout the organization; and~~
- ~~ii. include a definition of the levels of management with authority to make decisions regarding safety risk tolerability.~~

~~A-3 The certified aerodrome shall identify a safety manager to be the responsible individual and focal point for the implementation and maintenance of an effective SMS.~~

~~A-4 The certified aerodrome shall ensure that an emergency response plan is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its services. An emergency response plan must provide for the orderly and efficient transition from normal to emergency operations and return to normal operations.~~

~~A-5 The certified aerodrome shall develop an SMS implementation plan that defines the organization's approach to management of safety in a manner that meets the organization's safety objectives. The SMS implementation plan shall be endorsed by senior management of the organization. The organization shall develop and maintain SMS documentation that describes:~~

- ~~i. safety policy and objectives;~~
- ~~ii. the SMS requirements;~~
- ~~iii. the SMS processes and procedures;~~

- iv. the accountabilities, responsibilities and authorities for processes and procedures; and
- v. the SMS outputs.

~~As part of the SMS documentation, a SMS manual shall be developed and maintained to communicate the organizational approach to the management of safety throughout the organization.~~

#### ~~B Safety risk management~~

~~B-1 The certified aerodrome shall develop and maintain a formal process to ensure hazards in operations are identified. Hazard identification shall be based on reactive, proactive and predictive methods of safety data collection.~~

~~B-2 The certified aerodrome shall develop and maintain a formal process to ensure analysis, assessment and control of the safety risks in aerodrome operations.~~

#### ~~C Safety assurance~~

~~C-1 The certified aerodrome shall develop and maintain the means to verify the safety performance of the organization, and to validate the effectiveness of safety risk controls. The safety performance of the organization shall be verified with reference to the safety performance indicators and safety performance targets of the SMS.~~

~~C-2 The certified aerodrome shall develop and maintain a formal process to:~~

- ~~i. identify changes within the organization which may affect established processes and services;~~
- ~~ii. describe the arrangements to ensure safety performance before implementing changes; and~~
- ~~iii. eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment.~~

~~C-3 The certified aerodrome shall develop and maintain a formal process to identify the causes of substandard performance of the SMS, determine the implications of substandard performance of the SMS in operations, and eliminate or mitigate such causes.~~

#### ~~D Safety promotion~~

~~D-1 The certified aerodrome shall develop and maintain a safety training programme that ensures that personnel are trained and competent to perform SMS duties. The scope of safety training shall be appropriate to each individual's involvement in the SMS.~~

~~D-2 The certified aerodrome shall develop and maintain formal means for safety communication that ensures all personnel are fully aware of the SMS, conveys safety critical information and explains why particular safety actions are taken and why safety procedures are introduced or changed.~~

### ~~10.1.6 Aerodrome accident/incident reporting and investigation procedures~~ **Safety Reporting System**

~~10.1.6.1 Aerodrome occurrence reporting~~ The objective of safety reporting system is to contribute to the improvement of the safety at aerodromes by ensuring that relevant information on safety is reported, collected, investigated, analyzed, stored, protected and disseminated.

~~a) This section prescribes the requirements for reporting the occurrence or detection of defects, failures or malfunctions at an aerodrome, its components or equipment, which could jeopardize the safe operation of the aerodrome or cause it to become a danger to persons or property. These do not override the requirements in PCAR Part 13 — Accident and Incident Reporting and Investigation, concerning the mandatory reporting of certain types of accidents/serious incidents and the responsibilities of the various parties involved.~~

~~(b) The objectives of the Aerodrome Occurrence Report are:~~

~~(i) To ensure that knowledge of these occurrences is disseminated so that other persons and organizations may learn from them.~~

~~(ii) To enable an assessment to be made by those concerned (whether internal or external to the aerodrome operator) of the safety implications of each occurrence, both in itself and in relation to previous similar occurrences, so that they may take or initiate any necessary action.~~

~~10.1.6.2 Reportable occurrences and reporting procedures~~ Without prejudice to PCAR Part 13 — Accident and Incident Reporting and Investigation, an aerodrome operator shall establish procedures for the notification, investigation, and reporting of any accident, serious incident and occurrence as defined in MOS 1.4, and in accordance with this regulation.

~~(a) An aerodrome operator shall, upon becoming aware of an accident, serious incident or incident involving an aircraft operating at his aerodrome, notify CAAP immediately through the most expeditious means available.~~

~~(b) An aerodrome operator shall report to the Aerodrome Registration, Certification and Inspection Division (ARCID) of any aircraft accident, serious incident or serious injury occurring at his aerodrome within 24 hours of the occurrence.~~

~~(c) An aerodrome operator shall report to the ARCID of any aircraft incident occurring at his aerodrome as soon as reasonably practicable but not more than 48 hours of the occurrence.~~

~~(d) Aircraft accident, serious incident, incident and serious injury are defined in MOS 1.4. Examples are:~~

~~(i) A near collision requiring an avoidance maneuver to avoid a collision or an unsafe situation or where an avoidance action would have been appropriate.~~

~~(ii) A controlled flight into terrain only marginally avoided.~~

~~(iii) An aborted take off on a closed or engaged runway.~~

~~(iv) A take off from a closed or engaged runway with marginal separation from an obstacle.~~

~~(v) A landing or attempted landing on a closed or engaged runway.~~

~~(vi) A take-off or landing incident such as undershooting, overrunning or running off the side of runways;~~

~~(vii) A major failure of any navigation aid when a runway is in use.~~

~~(e) An aerodrome operator shall report to the ARCID of the following occurrences at the airside not more than 1 week from the date of the occurrence which include, but are not limited to, the following:~~

~~(i) FOD found;~~

~~(ii) Wildlife sighted;~~

~~(iii) Confirmed and suspected FOD incidents;~~

~~(iv) Any aircraft taxiing errors made by aircraft during taxiing such as aircraft failing to enter the correct bay, aircraft undershooting or overshooting the correct stop bar by more than the tolerable distance of 0.5m during docking; aircraft roll back at parking stands ; or miscommunication between ATC and pilots in the movement area that are made known to the aerodrome operator;~~

~~(v) Towed aircraft not adhering to ATC instructions or pushback standard operating procedures (SOPs);~~

~~(vi) Vehicles failing to give way to aircraft;~~

~~(vii) Infringement of vehicles into unauthorized areas;~~

~~(viii) Fires on, or adjacent to, the aircraft movement area;~~

~~(ix) Spillage or leakage of Hydraulic/Fuel/Petroleum, Oil, hazardous material and Lubricant; Vehicle accidents;~~

~~(x) Malfunction/failure of the following ground systems at the airside:~~

~~● Aircraft Docking Guidance system;~~

~~● Passenger Loading Bridges;~~

~~● Apron floodlights;~~

~~● Fuel hydrant system; and~~

~~● Airfield lighting system~~

~~(f) An aerodrome operator shall submit safety data every three (3) months in a manner acceptable to the CAAP for the following:~~

- ~~(i) Aircraft related occurrences such as runway incursion, runway excursion, landing or take-off on a taxiway; undershoot, ground collision, apron or taxiway incursions/excursions;~~
- ~~(ii) Foreign object debris (FOD) occurrences;~~
- ~~(iii) Wildlife occurrences;~~
- ~~(iv) Airfield lighting system availability;~~
- ~~(v) Runway friction values;~~
- ~~(vi) RFFS actual response time (if applicable) and response time exercises;~~
- ~~(vii) Passenger loading bridge malfunctions/failures;~~
- ~~(viii) Advanced or Visual Docking Guidance System malfunctions/failures; and~~
- ~~(ix) Vehicles failing to give way to aircraft.~~

*Note: For items (i), (ii) and (iii), information to be provided shall be in accordance with MOS Attachment B.*

~~(g) Information to be provided in the reporting and notification of an aircraft accident, serious incident, incident or serious injury shall at least include, as far as possible, the following:~~

- ~~(i) the date and local time of occurrence;~~
- ~~(ii) the exact location of the occurrence with reference to some easily defined geographical point;~~
- ~~(iii) detailed particulars of the parties involved, including the owner, operator, manufacturer, nationality, registration marks, serial numbers, assigned identities of aircraft and equipment;~~
- ~~(iv) a detailed description of the sequence of events leading up to the incident;~~
- ~~(v) the physical characteristics, environment or circumstances of the area in which the incident occurred and an indication of the access difficulties or special requirements to reach the site;~~
- ~~(vi) in the case of an aircraft accident, the number of crew members, passengers or other persons respectively killed or seriously injured as a result of the accident; and~~
- ~~(vii) a description of the follow up action being taken after the incident has occurred.~~

10.1.6.3 Aerodrome occurrence records The reports shall be made in a form and manner established by the CAAP and contain all pertinent information about the condition known to the aerodrome.

~~(a) An aerodrome operator shall establish and maintain Aerodrome Occurrence Reports for any accident, serious incident, incident, serious injury or any occurrence or event that has a bearing on the safety of aerodrome operations.~~

~~(b) Aerodrome Occurrence Reports shall be used by an aerodrome operator to monitor and improve the level of operational safety, including reviews of safety standards required.~~

~~(c) The aerodrome operator shall, when required by the ARCID produce and provide information contained in the Aerodrome Occurrence Report relating to any safety occurrence or event.~~

~~10.1.6.4 Aerodrome accident/incident investigations Reports shall be made as soon as practicable, but in any case, within 48 hours of the aerodrome operator identifying the condition to which the report relates, unless exceptional circumstances prevent this.~~

~~(a) In the event of an accident or serious incident, an aerodrome operator shall carry out its own investigations. In addition, the aerodrome operator shall, when required by the ARCID, carry out investigations for any other incidents.~~

~~(b) The investigator, or team of investigators, shall be technically competent and shall either possess or have access to the background information, so that the facts and events are interpreted accurately. The investigations shall be a search to understand how the accident/incident happened, why it occurred, including organizational contributing factors, and to recommend action to prevent a recurrence, and shall not be intended to apportion blame.~~

~~(c) The lesson learnt derived from an aerodrome incident/accident investigation shall be disseminated to staff to provide feedback for safety improvement.~~

~~(d) The aerodrome operator shall submit the aerodrome accident/incident investigation report to the ARCID one month of the occurrence of the aerodrome accident/incident. In the event that the investigation report cannot be completed in one month, an interim report with immediate actions taken to address safety concerns shall be prepared and submitted, and a full report shall be submitted at such time as determined by the ARCID.~~

~~(e) The aerodrome operator shall inspect his aerodrome, as circumstances require, to ensure safety as soon as practicable after any aircraft accident or incident.~~

~~10.1.6.5 The procedures referred to in 10.1.6.2 shall include the means for immediate notification of any accident, serious incident and occurrence to the Aerodrome Registration, Certification and Inspection Division (ARCID).~~

~~10.1.6.6 The system referred to in 10.1.6.1 shall include the following as a minimum:~~

~~(a) Description of the reporting mechanism, including reporting forms, means, and deadlines;~~

~~(b) Contain a list of occurrences that shall be immediately notified to the CAAP;~~

~~(c) Personnel responsible for reporting;~~

~~(d) Description of mechanism and personnel responsibilities for identifying root causes, and the actions that may be needed to be taken to prevent similar occurrences in the future, as appropriate;~~

- (e) Ensure concerned personnel are educated to meet the immediate notification requirement;
- (f) Ensure their personnel of how to report an actual or potential safety deficiency through the voluntary reporting system;
- (g) Refrain from attribution of blame; and
- (h) Be documented in the aerodrome's applicable manuals.

*Note: - 1 Further guidance can be found in the associated Advisory Circular, as existing from time to time and freely available on the CAAP website.*

*Note: - 2 Further guidance on critical data related to safety occurrences can be found in attachment B in this MOS.*

#### 10.1.6.7 Aerodrome Record Keeping

- (a) The aerodrome operator shall establish a system of record keeping for all occurrence, investigation, and analysis reports.
- (b) The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organized in a way that ensures traceability and retrievability throughout the required retention period.
- (c) Records should be kept in paper form, or in electronic format, or a combination of both media.

#### 10.1.6.8 Aerodrome accident/incident investigations

- (a) Incorporating into the safety management system, a procedure shall be developed to ensure, that investigations are effectively performed to find occurrences' root causes and issue targeted and feasible recommendations to implement corrective actions on due time.
- (b) In addition to the requirements in 10.1.6.2, the aerodrome operator shall produce a follow-up report to provide details of actions it intends to take to prevent similar occurrences in the future, as soon as these actions have been identified. This report shall be reported to ARCID and produced in a form and manner established by the CAAP.
- (c) The lesson learnt derived from an aerodrome incident/accident investigation shall be disseminated to staff to provide feedback for safety improvement.

### Section 10.2 Inspecting and Reporting Aerodrome Serviceability

#### 10.2.1 General

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10.2.1.2 The operator of a certified aerodrome and Aerodrome Registration Type 1 is are required to arrange for aerodrome serviceability inspections to be carried out at least 2 times each day including one inspection during hours of darkness, and additionally after natural phenomena such as severe wind or rain storm, earthquake, or when requested by air traffic control or by CAAP.

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## 10.2.2 Significant objects Foreign Object Debris (FOD)

10.2.2.1 Any significant object FOD found in the course of the inspection, including parts which may have fallen from aircraft, or the remains of birds which may have been struck by an aircraft, must be reported immediately to Air Traffic Control, where appropriate, and to the CAAP.

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## Section 10.7 Aerodrome Emergency Planning

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10.7.1.1 An aerodrome emergency plan (AEP) shall be established at an aerodrome. The AEP shall be commensurate with the aircraft operations and other activity conducted at the aerodrome.

*Note: - Provision relating to Aerodrome emergency exercise are contained in MOS-Aerodromes 10.8.4.*

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## 10.9.2 Aerodrome Vehicle Operations

*Note: — 1 Guidance on aerodrome vehicle operations is contained in Attachment A, Section 19, and on traffic rules and regulations for vehicles in the Manual of Surface Movement Guidance and Control Systems (SMGCS) (Doc 9476).*

*Note: — 2 It is intended that roads located on the movement area be restricted to the exclusive use of aerodrome personnel and other authorized persons, and that access to the public buildings by an unauthorized person will not require use of such roads.*

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## 10.13.3 Apron Safety Management

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10.13.3.3 If apron operational activities are undertaken by organization(s) other than the aerodrome operator, then the aerodrome operator must ensure the apron safety management procedures are followed.

*Note: — The USA National Fire Protection Association (NFPA) standards for fire extinguishers at aircraft parking positions may be reviewed at <http://www.nfpa.org/catalog/home/index.asp>.*

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## 10.13.4 Apron management service

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10.13.4.2 When the aerodrome control tower does not participate in the apron management service, procedures shall be established to facilitate the orderly transition of aircraft between the apron management unit and the aerodrome control tower.

*Note: - Additional guidance on an apron management service is also given in AC 139-AMGT-01 (Guidance in Operational Procedures and principles for Apron management), the Airport Services Manual (Doc 9137), Part 8, and in the Manual of Surface Movement Guidance and Control Systems (SMGCS) (Doc 9476).*

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## CHAPTER 12. Operating standards for registered aerodromes Aerodrome Registration Type 2.

## Section 12.1 General

### 12.1.1 Introduction

12.1.1.1 The aerodrome operating procedures for ~~registered aerodromes used by aircraft with 10 to 30 passenger seats on domestic air transport operations~~ Aerodrome Registration Type 2 are less stringent than those required for a certified aerodrome or Aerodrome Registration Type 1.

12.1.1.2 The operator of ~~having an registered aerodrome~~ Aerodrome Registration Type 2 is required to:

...

12.1.1.4 To be able to promptly advise changes, operators of ~~having an registered aerodrome~~ Aerodrome Registration Type 2 need to have personnel and procedures to conduct timely serviceability inspections, identify changed circumstances and make reports.

12.1.1.5 Although formal documentation of all facets of aerodrome operations is not required, it is in the interest of the operator of ~~having an registered aerodrome~~ Aerodrome Registration Type 2 to be able to demonstrate ~~that he or she is discharging the~~ discharge of duty of care in providing a safe facility for aircraft operations. To avoid confusion and misunderstanding, all arrangements regarding aerodrome safety functions must be in writing.

12.1.1.6 If a ~~registered aerodrome~~ an operator having an Aerodrome Registration Type 2 fails to meet safety requirements, CAAP may suspend or cancel the registration. CAAP staff may conduct scheduled or unscheduled inspections of the aerodrome to assess whether a ~~registered aerodrome~~ it still meets safety requirements.

12.1.1.7 The standards and procedures of this chapter are intended to assist the operator of ~~having an registered aerodrome~~ Aerodrome Registration Type 2 to meet on-going aerodrome safety requirements.

### 12.1.2 Aerodrome Reporting Officer

12.1.2.1 The operator of ~~having an registered aerodrome~~ Aerodrome Registration Type 2 must have in place experienced or appropriately trained persons, known as reporting officers, to carry out the aerodrome safety functions. Attributes required include:

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### 12.1.5 Record of inspections and remedial actions

12.1.5.1 The operator of ~~having an registered aerodrome~~ Aerodrome Registration Type 2 must maintain an inspection logbook to demonstrate that inspections have been carried out. Besides recording the inspections, the logbook should also record significant aerodrome upgrading or remedial works.

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### 12.1.7 Aerodrome Works

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12.1.7.3 Where aerodrome works are carried out without closing the aerodrome, the aerodrome works safety procedures specified in MOS 10.7 for certified aerodromes are equally applicable to ~~operators registered aerodromes~~ having an Aerodrome Registration Type 1 and 2.

### 12.1.8 Safety Inspection Report

12.1.8.1 CAR-Aerodromes ~~2.3.070~~ 2.3.155 requires the operator having an registered aerodrome Aerodrome Registration Type 2 ~~used by aircraft with 10 to 30 passenger seats~~ to prepare and submit to CAAP annually, or at another agreed period, a safety inspection of the aerodrome. Matters to be addressed in the report are also prescribed in the regulations.

...

12.1.8.3 For ~~aerodromes used by aircraft with less than 10 passenger seats~~ an Aerodrome Registration Type 2, the approach and take-off area would still need to be checked on a regular basis for vegetation growth or new tall objects. Where another obstacle may become the critical obstacle and affect the published take-off gradient or the threshold location, the checking shall be conducted by a person with appropriate technical expertise.

### Section 12.2 Sample ~~Aerodrome~~ Report Form for Aerodrome Registration Type 2

<b>Aerodrome Registration Type 2 Report Form</b>		
<b>Notification of Changes to Serviceability of Registered Aerodrome Registration Type 2</b>		
To: NOTAM Office	Phone	Fax
AERODROME: .....		
Date ..... / ..... / 20 .....	TIME (UTC preferred) UTC	Local
Purpose of Report      PROVIDE NEW INFORMATION DETAILED BELOW CANCEL PREVIOUS ADVICE (NOTAM No ..... ) <input type="checkbox"/> <input type="checkbox"/> Date: ..... EXTEND PREVIOUS ADVICE (NOTAM No ..... ) <input type="checkbox"/> <input type="checkbox"/> Date: .....		
Period of Validity <b>Permanent/Temporary NOTAM</b> ( <i>Delete one</i> ) FROM (date/time) ..... TO (date/time) .....Estimated <input type="checkbox"/> <input type="checkbox"/> (if finish time uncertain) ( <i>temporary NOTAM only</i> ) <b>Note:</b> If time estimated, contact NOTAM OFFICE at least 2 hours before estimated duration time and advise if NOTAM is to be extended or cancelled. Daily duration or time schedule ( <i>if applicable</i> ) FROM (date/time) ..... TO (date/time) .....		
Text ( <i>For example of text see Section 10.5</i> )		

Please fax copy of NOTAM to originator Fax No. ....			
This report confirms previous telephone advice. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		Contact Numbers	Ph .....
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Signed .....	Date/Time .....	Reporting Officer (Print Name) .....	
DGCA Office advised by:	Phone <input type="checkbox"/> <input type="checkbox"/>	Fax <input type="checkbox"/> <input type="checkbox"/>	E-mail <input type="checkbox"/> <input type="checkbox"/> Not advised <input type="checkbox"/>

  

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## CHAPTER 13. Standards for **small** aerodromes used for light aircraft operations

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### Section 13.2 Part A - Aerodromes used for air transport, private or flying training activity

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13.2.1.4 **Clearways and stopways.** If a clearway or stopway is provided to it ~~must~~ **shall** be provided in accordance with the standards for clearways and stopways specified in Chapter 6.

#### 13.2.2 Aerodrome Markings

13.2.1.1 Aerodrome markings or markers ~~must~~ **shall** be provided. Sealed surfaces are normally marked by painted white markings and unsealed surfaces by white markers. Instead of markers, flush markings painted white may be installed. Markers ~~must~~ **shall** be frangible. Flush markings ~~must~~ **shall** be maintained so as to provide adequate conspicuity.

...

13.2.2.2 For a sealed runway, the runway thresholds ~~must~~ **shall** be marked in accordance with MOS 8.3.9. A runway centerline marking is not required on runways that are 18 m wide or less. White painted runway side stripe markings, 0.3 m wide, shall be provided if there is a lack of contrast between the runway surface and the surrounding area.

13.2.2.3 On unsealed runways, where the runway strip is not maintained to normal grading standards, the runway ~~must~~ **shall** be marked using edge markers. If the full width of the runway strip is maintained so as to be suitable for **aeroplane aircraft** operations, the runway edge markers may be omitted and the runway strip is to be marked using strip markers. Where the runway is not provided with edge markers, the threshold locations need to be marked.

13.2.2.4 For both sealed and unsealed runways, **when operationally required** the runway strip shall also be marked by using cones, gable markers, tires, or 200 liter drums cut in half along their length and placed with the open side down, or something similar. These runway strip markers shall be white in color.

*Note:*— 13.2.2.5 Runway cone markers should have a 0.4 m base diameter and be 0.3 m in height. Runway strip cone markers should have a 0.75 m base diameter and be 0.5 m in height. Gable markers should be 3 m in length.

~~13.2.2.5~~ 13.2.2.6 Cone or similar size markers need to be spaced not more than 90 m apart. Gable or similar size markers need to be spaced not more than 180 m apart.

~~13.2.2.6~~ 13.2.2.7 Where the edges of unsealed taxiways or aprons may not be visually clear to pilots, markers may be provided in accordance with MOS 8.2.

### 13.2.3 Aerodrome Lighting

13.2.3.1 Where a runway is intended for night operations, the runway ~~must~~ shall be provided with runway edge lighting, spaced laterally at 30 m apart, and longitudinally at approximately 90 m apart. The edge lights on each side ~~must~~ shall present two parallel straight rows equidistance from the runway centerline. The lights indicating runway ends ~~must~~ shall be at right angles to the centerline.

...

### 13.2.4 Wind Direction Indicator

13.2.4.1 ~~The standard~~ It is required for small aerodrome operations to provide a wind direction indicator (WDI). ~~is a tapering fabric sleeve (wind sock), 3.65 m long and white in color. It must be located such that it is clearly visible from the air.~~ It ~~must~~ shall also be located clear of the 1:5 (20%) transitional surface.

13.2.4.2 If the aerodrome is intended for night operations, the wind direction indicator ~~must~~ shall be provided with illumination.

13.2.4.3 To enhance direction indication, the WDI ~~must~~ shall be located within a circular area 15 m in diameter, the surface of which is appropriately blackened or provided with a contrasting color, and bounded by 15 equally spaced white markers.

### 13.2.5 Landing Direction Indicator

...

13.2.5.3 ~~The shape and minimum dimensions of a landing "T" shall be as shown in MOS Figure 43.1-5.~~ The color of the landing "T" shall be either white or orange, the choice being dependent on the color that contrasts ~~between~~ or with the background against which the indicator will be viewed. Where required for use at night the landing "T" shall either be illuminated or outlined by white lights.

...

### 13.2.7 Ground Signal and Signal Area

13.2.7.1 A ground signal area ~~detailed in MOS 8.8; consisting of a circle, blackened or provided with a contrasting color, 9 meters in diameter and marked by 6 equally spaced white markers~~ ~~must~~ shall be provided near the wind direction indicator for the purpose of displaying ground signals to pilots.

13.2.7.2 When an aerodrome is totally unserviceable, a white cross with each arm 6 m in length and 0.9 m in width ~~must~~ shall be displayed on the signal circle indicating to pilots that the aerodrome is closed to aircraft operations.

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### 13.2.8 Runway and Runway Strip Conditions

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13.2.8.2 The surface of the unsealed runway ~~must~~ shall not have irregularities, which will adversely affect the take-off and landing of an aircraft.

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### 13.2.10 Safety Inspection Report

13.2.10.1 The report ~~must~~ shall provide a true picture of the state of the aerodrome in its compliance with applicable standards. Where corrective action or necessary improvements are identified, the aerodrome operator ~~must~~ shall provide a statement of how the corrective action or improvements are to be addressed.

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### **Section 13.3 Part B - Aerodromes used for aerial agricultural activity**

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#### **13.3.2 Aerodrome Markings**

13.3.2.1 Runway markings and/or markers ~~must~~ shall be provided if directed by CAAP. Paved/sealed runway surfaces shall be marked if there is insufficient contrast between the runway and surrounding runway strip surfaces. Where insufficient contrast exists to define the runway surface, runway markings and/or markers shall be installed. Markings or markers shall conform to the specifications of Part A of this chapter. Where runway markers are provided which are not flush with a surface, they shall be constructed of a material which is not likely to damage an aircraft.

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#### **13.3.7 Aerodrome Serviceability Reporting**

Details of aerodromes used for agricultural operations are not published in the AIP. These aerodromes are provided for the specific purpose of facilitating aerial agricultural activity and are not generally available for public use. Each pilot operating to or from such a place shall be responsible for determining the suitability of the place for take-off or landing safely.

— END —

### **AMENDED / NEW REGULATIONS AFTER REVISION:**

### **MANUAL OF STANDARDS FOR AERODROMES:**

...

#### **CHAPTER 3. Applying for an aerodrome certificate**

3.1.1.1 Under the provisions of CAR-Aerodromes 2.2.005,

(a) An aerodrome shall only be operated by a person who holds a valid certificate issued by CAAP for that aerodrome if it is used for:

(i) any international air transport operation; or

(ii) If an aerodrome operator plans to have an international air transport operations, the operator must apply for an aerodrome certificate.

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#### **3.1.2 Processing an Aerodrome Certificate application**

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3.1.2.3 As part of the certification process, CAAP shall ensure that an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system, is submitted by the applicant for approval/acceptance prior to granting the aerodrome certificate.

*Note: - The intent of a safety management system is to have in place an organized and orderly approach in the management of aerodrome safety by the aerodrome operator. CAR-Safety Management 2<sup>nd</sup> Edition contains the safety management provisions applicable to certified aerodromes. Guidance on harmonized safety management system is given in the Safety Management Manual (SMM) (Doc 9859) and in the Manual on Certification of Aerodromes (Doc 9774). Procedures on the management of change, conduct of safety assessment, reporting and analyses of safety occurrences at aerodromes and continuous monitoring to enforce compliance with applicable specifications so that identified risks are mitigated can be found in the PANS-AERODROMES (Doc 9981).*

...

### **3.3.2 Scope of the Aerodrome Manual**

3.3.2.1 The aim and objectives of the aerodrome manual and how it is to be used by operating staff and other stakeholders shall be stated in the manual.

3.3.2.2 The aerodrome manual contains all the relevant information to describe the management and operational structure. It is the means by which all aerodrome operating staff are fully informed as to their duties and responsibilities with regard to safety, including information and instructions related to those matters specified in the applicable regulation. It describes the aerodrome services and facilities, all operating procedures, and any restrictions in place.

### **3.3.3 Format of an Aerodrome Manual**

3.3.3.1 An Aerodrome Manual shall comprise of a document covering all matters that need to be addressed, as well as relevant supporting documents and manuals for aerodrome operations that are referred to in the Aerodrome Manual. MOS Appendix 1, Schedule of particulars to be included in an aerodrome manual, provides the minimum requirement to be included in an aerodrome manual. The Aerodrome Manual may be supplemented by other documents and manuals, airport circulars, notices and instructions issued by the aerodrome operator to his staff and contractors or agents on airport operational matters from time to time. The contents of these supplementary materials shall be incorporated into the main Aerodrome Manual if they are permanent in nature.

3.3.3.2 The Aerodrome Manual is a 'living document' and subject to frequent amendment. As such it shall be contained in a binder designed to facilitate easy amendment. The page and paragraph numbering system shall also be designed to allow for easy addition and deletion of information. Information regarding each amendment record, the amendment history and a list of effective pages shall be included in each copy of the Aerodrome Manual.

...

3.3.3.4 The aerodrome manual accurately reflects the aerodrome's SMS and shows, in particular, how the aerodrome intends to measure its performance against safety targets and objectives.

3.3.3.5 All aerodrome safety policies, operational procedures and instructions are contained in detail or cross referenced to other formally accepted or recognized publications.

*Note: - At larger aerodromes, the size and complexity of operations and related procedures may imply that these procedures cannot be included in a single document. For example, the aerodrome operator may develop and maintain an SMS manual to communicate its approach to the management of safety throughout the aerodrome. In such circumstances it is acceptable*

*to identify within the aerodrome manual references to such provisions. It is essential that any referenced information, documentation and procedures be subjected to exactly the same systems of consultation and promulgation as the aerodrome manual. A computerized database containing the referenced procedures and information could be suitable for that purpose. For many smaller aerodromes the aerodrome manual can be both simple and brief as long as it covers procedures essential for safe day-to-day operations.*

### **3.3.4 Contents of the Aerodrome Manual**

*Note: - A list of other possible topics for inclusion in the aerodrome manual is given in MOS Appendix 1.*

3.3.4.1 The aerodrome manual shall contain, as a minimum, the following sections, including some of their requirements:

- (a) a table of contents;
- (b) a list of the corrigenda/amendments: this section shall log the updates and/or corrections made to the aerodrome manual;
- (c) a distribution list;
- (d) aerodrome administrative data: an organizational chart shall be provided, as well as the aerodrome operator's safety responsibilities;
- (e) a description of the aerodrome: this includes maps and charts. The physical characteristics of the aerodrome shall be documented, as well as the information regarding the RFF level, ground aids, primary and secondary electrical power systems and main obstacles. Sufficiently detailed charts of the aerodrome shall also be included (showing the aerodrome's boundaries and different areas (manoeuvring area, apron, etc.)). All deviations from the regulatory provisions authorized by the State shall be listed together with their validity and references to the related documents (including any safety assessments);
- (f) a description of the intended operations, including:
  - (i) the critical aeroplanes the aerodrome is intended to serve;
  - (ii) the category of runway(s) provided (non-instrument, instrument including non-precision and precision);
  - (iii) the different runways and their associated levels of service;
  - (iv) the nature of aviation activities (commercial, passenger, air transport, cargo, aerial work, general aviation);
  - (v) the type of traffic permitted to use the aerodrome (international/national, IFR/VFR, scheduled/nonscheduled); and
  - (vi) the minimum RVR that aerodrome operations can be permitted.

(g) a description of each of the aerodrome operator's procedures related to the safety of aeronautical operations at the aerodrome. For each procedure:

(i) the responsibilities of the aerodrome operator are clearly described;

(ii) the tasks that are to be achieved by the aerodrome operator or its subcontractors are listed;

(iii) the means and procedures required to complete these tasks are described or appended, together with the necessary details such as the frequency of application and operating modes; and

(h) a description of the operator's SMS

(i) the SMS section of the manual is developed, and the related procedures and documents are enclosed, as well as the safety policy of the aerodrome operator signed by the accountable executive;

(ii) the aerodrome SMS shall be commensurate with the size of the aerodrome and with the level and complexity of the services provided.

*Note: - 1 The complexity and size of the aerodrome may necessitate the SMS to be included in a separate manual.*

*Note: - 2 CAR-Safety Management 2<sup>nd</sup> Edition specifies a framework for the implementation of an SMS at an aerodrome.*

3.3.4.2 Responsibilities attributed to other aerodrome stakeholders shall be clearly identified and listed.

### **3.3.5 Updating of the aerodrome manual**

3.3.5.1 Responsibility for maintaining the accuracy of the aerodrome manual is clearly defined in the manual.

3.3.5.2 The manual is updated using a defined process and includes a record of all amendments, effective dates and amendment approvals.

3.3.5.3 The method of enabling all aerodrome operating staff to have access to the relevant parts of the manual is defined and can be demonstrated and a method of tracking amendments and ensuring their receipt shall be established when using an electronic means of distribution.

3.3.5.4 Any amendments or additions shall be communicated to CAAP in accordance with the continued oversight requirements established by CAAP.

### **3.3.6 Maintenance and Control of Aerodrome Manual**

#### **3.3.6.1 CAR-Aerodromes 2.2.060 requires an aerodrome operator to:**

...

3.3.6.2 Additional copies of the Aerodrome Manual may be made available so that aerodrome staff and other organizations at the aerodrome may have access to a copy of the manual, or a relevant part of it.

3.3.6.3 When additional copies or sections of the manual are required, the aerodrome manual controller is responsible for distribution to those persons.

### **3.3.7 Issue and distribution of an Aerodrome Manual**

3.3.7.1 The Aerodrome Manual is an important safety document and must be issued under the authority of the aerodrome operator and signed by the senior executive of the organization. Any amendments to the Aerodrome Manual shall be approved by the aerodrome operator, or his delegate, to do so.

3.3.7.2 Copies of relevant sections of the Aerodrome Manual shall be made available to each supervisory member of the aerodrome operating staff including those employed by the operator's contractors or agents, where relevant, so that each member of the aerodrome operating staff:

...

3.3.7.3 For this manual, aerodrome operating staff shall mean all persons, whether or not employed directly by the aerodrome operator, who in the course of their duties are:

...

3.3.7.4 In addition sufficient copies of the Aerodrome Manual shall be placed at the aerodrome operator's library and at the workplace of other relevant operating staff concerned.

3.3.7.5 Apart from submission of the Aerodrome Manual to CAAP and internal distribution of copies to relevant operating staff, copies of the Aerodrome Manual (or relevant parts of it) shall also be made available to other external parties who have a part to play in aerodrome safety procedures. In particular, the airport emergency section of the Aerodrome Manual shall also be extended to all external parties (e.g. Civil Defense, State Police, external Fire Departments or health agencies) involved in the aerodrome emergency plan.

3.3.7.6 The Aerodrome Manual shall be a controlled document. An aerodrome operator shall appoint a document controller to be responsible for updating and distributing its Aerodrome Manual. Each copy of the Aerodrome Manual shall be numbered and a list of their holders maintained by the document controller. Amendments shall be recorded on the amendment page in each copy.

### **3.3.8 Amendment of an Aerodrome Manual**

3.3.8.1 Each holder of the Aerodrome Manual shall be responsible for ensuring that his copy is kept up to date. For copies intended for common use, a person shall be designated to look after amendment of those copies.

3.3.8.2 Manuscript amendments by hand to the Aerodrome Manual are not generally acceptable. Changes or additions shall be subject of an additional or replacement page suitably dated. If the amendment affects the action of external parties, an acknowledgement slip shall be requested from each external party concerned when amendments are circulated to confirm that each party concerned has received and taken notice of the amendment.

3.3.8.3 The aerodrome operator shall make prompt amendments to the Aerodrome Manual when there are updates to any part of the contents of the Aerodrome Manual or, when required by the CAAP upon review of the Aerodrome Manual or any proposed updates or amendments. Such amendments required by the CAAP shall be binding on the aerodrome operator.

### **3.3.9 Initiating NOTAM for a new certified aerodrome**

3.3.9.1 The CAAP officer or inspector responsible for the certification process will prepare and forward to the NOTAM Office details setting out all the aerodrome information which will be included in AIP, including the date when the aerodrome will be certified.

## **CHAPTER 4. Applying for an Aerodrome Registration Type 1, Aerodrome Registration Type 2 and Permit to Operate (PTO)**

### **Section 4.1 Registered Aerodrome Type 1**

#### **4.1.1 Introduction**

4.1.1.1 Under the provisions of CAR-Aerodromes 2.3.005,

(1) An aerodrome shall only be operated by a person who holds a valid Aerodrome Registration Type 1 issued by CAAP for that aerodrome if it is:

(a) open for public use in domestic operations with an annual aircraft movement above 5,000 and annual passenger movement above 300,000.

4.1.1.2 The applicant shall be the owner of the aerodrome site, or have obtained permission from the owner to use the site as an aerodrome.

4.1.1.3 The CAAP aerodrome registration process only addresses the aviation safety aspects of the aerodrome. It is the responsibility of the applicant to ensure that use of the site as an aerodrome is in compliance with other national, provincial and local statutory requirements. The aerodrome registration does not absolve the applicant from observing such requirements.

4.1.1.4 Before submitting an application, an aerodrome operator (or intending aerodrome operator) must prepare an Aerodrome Manual, in accordance with the requirements set out in CAR-Aerodromes 2.2.065. The standards for compliance with the regulatory requirements are set out in various chapters in this manual. MOS Appendix 1 provides the specification for the format and contents of an aerodrome manual.

4.1.1.5 The initial application must be made on the form attached at MOS Appendix 2. The completed form shall be submitted to the Director General, CAAP Manila, together with a copy of the Aerodrome Manual.

#### **4.1.2 Processing an Aerodrome Registration Type 1 application**

4.1.2.1 Applications shall be submitted in sufficient time to allow for detailed consideration and inspection of the aerodrome before the desired date of issue of the Registration Type 1.

4.1.2.2 Engineering and survey reports of the physical characteristics of the movement area, pavement strength and surface, obstacle limitation surfaces, etc., shall be provided by the applicant as required by CAAP. Further details are contained in Section 5.1.2.

4.1.2.3 As part of the Registration Type 1 process, CAAP shall ensure that an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services,

equipment, operating procedures, organization and management including a safety management system, aerodrome emergency plan and maintenance plan is submitted by the applicant for approval/acceptance prior to granting the Aerodrome Registration Type 1.

*Note: - 1 CAAP staff or other authorized persons may carry out audits, surveys, inspections, checks or tests of any aspect of the aerodrome or require substantiation of any information provided by the applicant. However, it shall be clearly understood that the CAAP inspection or testing procedures must use a sampling process. CAAP activity does not absolve the applicant from the responsibility to provide accurate information.*

*Note: - 2 The intent of a safety management system is to have in place an organized and orderly approach in the management of aerodrome safety by the aerodrome operator. CAR-Safety Management 2<sup>nd</sup> Edition contains the safety management provisions applicable to certified aerodromes. Guidance on harmonized safety management system is given in the Safety Management Manual (SMM) (Doc 9859) and in the Manual on Certification of Aerodromes (Doc 9774). Procedures on the management of change, conduct of safety assessment, reporting and analyses of safety occurrences at aerodromes and continuous monitoring to enforce compliance with applicable specifications so that identified risks are mitigated can be found in the PANS-AERODROMES (Doc 9981).*

*Note: - 3 Details of SMS assessment is contained in Aerodrome SMS Requirements for Aerodrome Operators (SMSRAO), and Aerodrome SMS Acceptance and Surveillance Program (SMSASP).*

4.1.2.4 Special assessments may be necessary if there are aerodrome facilities that do not comply with the applicable standards. This may involve more time and resources and may result in restrictions being imposed on aircraft operations.

4.1.2.5 Aerodrome Registration Type 1 process is detailed in MOS 4.1.8.

### **4.1.3 Granting of an Aerodrome Registration Type 1**

4.1.3.1 Before an Aerodrome Registration Type 1 is granted, CAAP must be satisfied that:

(a) the aerodrome's physical characteristics, facilities, services and equipment are in accordance with the standards specified for a Registered Type 1 aerodrome;

(b) an acceptable aerodrome manual has been prepared for the aerodrome in accordance with CAR-Aerodromes 2.2.065 and 2.2.070;

(c) the aerodrome's operating procedures set out in the aerodrome manual make satisfactory provision for the safety of aircraft;

(d) there are sufficient experienced competent personnel to conduct the safety functions of the aerodrome;

(e) the applicant would, if the certificate is granted, be able properly to operate and maintain the aerodrome;

(f) an acceptable aerodrome safety management system has been developed, documented and implemented; and

(g) a full-scale test of the aerodrome emergency plan has been conducted.

4.1.3.2 Aerodrome Registration Type 1 is granted on the condition that the aerodrome and the aerodrome operator will, at all times, be and remain in compliance with applicable regulations and standards. CAR-Aerodromes 2.3.025 empowers CAAP, if considered necessary in the interests of aviation safety, to attach additional conditions to an Aerodrome Registration Type 1 to account for particular circumstances.

4.1.3.3 Once granted, an Aerodrome Registration Type 1 (issued ‘in perpetuity’) will remain in force unless it is suspended or cancelled. A temporary Aerodrome Registration Type 1 has a finite term (not more than 6 months) and will become invalid on the specified date, unless it is suspended or cancelled prior to that date.

4.1.3.4 When an aerodrome operator is granted an Aerodrome Registration Type 1, it signifies to aircraft operators and other organizations operating on the aerodrome that, at the time of certification, the aerodrome meets the specifications regarding the facility and its operation, and that it has, according to CAAP, the capability to maintain these specifications. The registration process also establishes the baseline for continuing monitoring of compliance with the specifications.

#### **4.1.4 Aerodrome operator organization (See MOS 3.1.4)**

#### **4.1.5 Amendment of an Aerodrome Registration Type 1**

4.1.5.1 The CAAP shall, provided that the requirements of regulations MOS 4.1.3.1, 4.1.3.1(e), and 3.3.5 have been met, in accordance with CAR 2.3.050 amend an aerodrome registration when:

(a) there is a change in the use or operation of the aerodrome;

(b) there is a change in the boundaries of the aerodrome; or

(c) the holder of the Aerodrome Registration Type 1 certificate requests an amendment.

#### **4.1.6 Transfer of an Aerodrome Registration Type 1**

4.1.6.1 In case of change in ownership or management of the aerodrome, the new aerodrome operator or manager shall apply for a transfer of the Aerodrome Registration Type 1 in accordance with CAR Aerodromes 2.3.060.

#### **4.1.7 Continued validity of an Aerodrome Registration Type 1**

4.1.7.1 For Aerodrome Registered Type 1 airports, validation must include assessment of the effective implementation of aerodrome operator’s SMS in terms of monitoring and analyzing safety occurrences and trends and taking appropriate action in a timely manner.

4.1.7.2 SMS effective implementation is part of a continued validity requirements for Registered Type 1 airports which is covered in the surveillance program and where all aspects of the aerodrome registration and operation are taken into account (See Appendix E: Checklist in the ARCID Surveillance Policy Procedures and Programme).

4.1.7.3 An overall assessment of the continued validity of the aerodrome Registered Type 1 must be indicated in the surveillance report laying out the complied conditions/requirement as per CAR-Aerodromes: 2.3.015, MOS: 3.1.3 and also described in updated ARCID Certification Program: Section 5.

#### **4.1.8 Aerodrome Registration Type 1 process**

The Aerodrome Registration Type 1 process shall be conducted in a phased approach comprising of the following phases (details of the process is included in the CAAP Manual of Aerodrome Regulatory Procedures – MARP):

##### 4.1.8.1 Phase 1: Initial Registration Type 1

- a) Application for Aerodrome Registration Type 1.
- b) Assessment of application and attachments, development of aerodrome manual, and conduct of technical inspection.

*Note: - Attachments will include but not limited to legal requirements, organizational competence, liaising/agreement with relevant authorities, and aerodrome manual (if already available).*

##### 4.1.8.2 Phase 2: Aerodrome Manual Review and Acceptance

- a) Analysis of the aerodrome manual and acceptance:
- b) CAAP and Operator plan the time and date, and prepare for on-site verification audit.

##### 4.1.8.3 Phase 3: On-Site Verification

- a) Conduct of on-site verification;
- b) Submission of Corrective Action Plans (CAPs); and
- c) Analysis and validation of CAPs implementation.

##### 4.1.8.4 Phase 4: Issuance of Aerodrome Registration Type 1

- a) Granting of Interim (Temporary) or Final Aerodrome Registration Type 1.

##### 4.1.8.5 Phase 5: Initial Surveillance

a) Within six (6) months after the issuance of temporary Aerodrome Registration Type 1 and 1 (one) month prior to the expiration of the Registration Type 1, AAI will conduct the surveillance inspection to determine progress on all CAPs and to assess whether the Aerodrome operator maybe granted a permanent Aerodrome Registration Type 1.

(i) When an aerodrome's corrective action plan does not ensure that appropriate corrective action has been taken within acceptable timelines, and after coordination with the operator, increased oversight of the operator is necessary. The scope of increased oversight may cover specific subjects or be all-encompassing.

(ii) The AAI should notify the aerodrome operator in writing:

- that it is being placed under increased oversight and outline the subjects concerned and from which date;
- the reasons for the increased oversight and what it consists of; and
- what actions are required by the aerodrome.

(iii) When an aerodrome is placed under increased oversight, CAAP should:

- carry out appropriate oversight actions on the subjects concerned;
- follow very carefully the implementation of the corrective actions plan; and
- allocate sufficient time/resources to the oversight of the concerned aerodrome.

(iv) The oversight actions carried out under increased oversight are the same as those carried out normally, but are more exhaustive and address all the subjects concerned.

(v) When increased oversight is concluded on an aerodrome for a specific subject, the AAI shall advise the aerodrome operator in writing, stating the end of the procedure and the reason.

(vi) The aerodrome certificate can be amended, suspended or revoked according to the outcome of the increased oversight.

#### **4.1.9 Aerodrome Manual**

##### **4.1.9.1 General**

As part of the process for the Aerodrome Registration Type 1 process, an aerodrome manual which will include all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organization and management including a safety management system, must be submitted by the applicant for approval/acceptance prior to granting the Aerodrome Registration Type 1.

*Note: - Contents of an aerodrome manual, including procedures for its submission and approval/acceptance, verification of compliance and granting of aerodrome certificate, are also available in the PANS-AERODROMES (Doc 9981).*

##### **4.1.9.2 Scope of the Aerodrome Manual**

The scope of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.2.

##### **4.1.9.3 Format of an Aerodrome Manual**

The format of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.3.

##### **4.1.9.4 Contents of the Aerodrome Manual**

The contents of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.4.

#### 4.1.9.5 Updating of the Aerodrome Manual

Updating of the aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.5.

#### 4.1.9.6 Maintenance and Control of Aerodrome Manual

Maintenance and control of aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.6.

#### 4.1.9.7 Issue and distribution of an Aerodrome Manual

Issue and distribution of an aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.7.

#### 4.1.9.8 Amendment of an Aerodrome Manual

Amendment of an aerodrome manual for Aerodrome Registration Type 1 are detailed in MOS 3.3.8.

#### 4.1.9.9 Initiating NOTAM for a new registered Type 1 aerodrome

The CAAP officer or inspector responsible for the Aerodrome Registration Type 1 will prepare and forward to the NOTAM Office details setting out all the aerodrome information which will be included in AIP, including the date when the aerodrome will be registered Type 1.

### **Section 4.2 Registered Aerodrome Type 2**

#### **4.2.1 Introduction**

##### 4.2.1.1 Under the provisions of CAR-Aerodromes 2.3.095,

An aerodrome shall only be operated by a person who holds a valid Aerodrome Registration Type 2 issued by CAAP for the aerodromes if it is:

- (a) an aerodrome open for public or private use in domestic operations with annual aircraft movement of 5,000 and below, or annual passenger movement of 300,000 and below, or
- (b) a heliport using aircraft with 10 or more passenger seats; or
- (c) an aerodrome not covered by the PTO requirements.

4.2.1.2 An Aerodrome Registration Type 2 will have aerodrome information published in AIP, and changes to aerodrome information or conditions affecting aircraft operations can be notified through the NOTAM system.

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4.2.1.3 The applicant for Aerodrome Registration Type 2 must be the owner of the aerodrome site, or have obtained permission from the owner to use the site as an aerodrome.

4.2.1.4 The CAAP Aerodrome Registration Type 2 process only addresses the aviation safety aspect of the aerodrome. It is the responsibility of the applicant to ensure that use of the site as an aerodrome is in compliance with other requirements. The holder of an Aerodrome Registration Type 2 does not absolve the applicant from observing such requirements.

4.2.1.5 An aerodrome manual is not required for a registered Type 2 aerodrome, but the application must be accompanied by;

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## **4.2.2 Approving an Aerodrome Registration Type 2 application**

4.2.2.1 An Aerodrome Registration Type 2 is approved

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4.2.2.2 When the Aerodrome Registration Type 2 application is approved, CAAP will prepare and forward to the NOTAM Office a permanent NOTAM setting out all the aerodrome information which will be included in AIP. CAAP will also confirm, to the applicant, in writing, that the aerodrome is or will be issued an Aerodrome Registration Type 2, together with a copy of the NOTAM message.

## **4.2.3 Maintenance of an Aerodrome Registration Type 2**

4.2.3.1 Aerodromes issued with an Aerodrome Registration Type 2 will be included in the CAAP aerodrome surveillance program. A scheduled visit by an aerodrome inspector can be expected periodically. Appropriate notice of the scheduled visit will be given. Unscheduled visits may occur at any time, such as when prompted by reported safety concerns.

4.2.3.2 An Aerodrome Registration Type 2 will remain in force until it is suspended or cancelled.

4.2.3.3 An Aerodrome Registration Type 2 may be suspended if CAAP is not satisfied with:

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*Note: - 2. Standards for ongoing operations and maintenance of Aerodrome Registration Type 2 are specified in Chapter 12.*

4.2.3.4 An Aerodrome Registration Type 2 may be cancelled:

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(b) by CAAP after the Aerodrome Registration Type 2 was suspended and the identified safety concerns are not corrected to the satisfaction of CAAP, within an acceptable period.

## **4.2.4 Aerodrome Safety Inspection Report**

4.2.4.1 Operators with Aerodrome Registration Type 2 are required to have an Aerodrome Safety Inspection Report prepared by a CAAP inspector or an approved person as specified in the regulations. This inspection and report must be done either annually, or at a longer interval as agreed by CAAP.

## **Section 4.3 Permit to operate (PTO)**

### **4.3.1 Introduction**

4.3.1.1 Pursuant to CAR-Aerodromes 2.4, operators of airstrips and/or heliports conducting air transport operations or private operations including utility operations using aircraft with less than 10 passenger seats are required to secure Permit to Operate.

4.3.1.2 The Permit to Operate for aerodromes and heliports is granted as privilege by CAAP to applicants/operators of aerodrome and heliport who meet the minimum standards and requirements prescribed in this Manual.

### **4.3.2 Approving an application for a PTO:**

4.3.2.1 The aerodrome meets the applicable standards specified in the MOS 4.2.4 for non-certificated or registered aerodromes;

4.3.2.2 The airstrip or heliport operating procedures make satisfactory provision (MOS 4.2.5) for the safety of aircraft; and

4.3.2.3 The applicant would, if the PTO is issued, be able to properly operate and maintain the aerodrome.

#### **4.3.3 Conditions on Permit to Operate:**

4.3.3.1 An aerodrome shall only be operated by a person who holds a valid PTO issued by the CAAP for that aerodrome subject to the following conditions:

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#### **4.3.4 Technical specifications and operating standards**

4.3.4.1 Physical specifications, obstacle environment, visual aids and RFFS

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#### **4.3.5 Operating Procedures**

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### **CHAPTER 10. Operating standards for certified aerodromes and Aerodrome Registration Type 1.**

#### **Section 10.1 General**

##### **10.1.1 Introduction**

10.1.1.1 This chapter sets out the standards to be incorporated in operating procedures at certified aerodromes and Aerodrome Registration Type 1, including those procedures to be documented in the aerodrome manual.

10.1.1.2 This chapter also contains information on aerodrome Safety Management System (SMS). As prescribed in CAR-Aerodromes, an acceptable SMS shall be provided at certified aerodromes and aerodromes requiring Aerodrome Registration Type 1. Other aerodrome operators are encouraged to adopt SMS.

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##### **10.1.2 Aerodrome Manual and Aerodrome operating procedures**

10.1.2.1 As an integral part of the certification and registration (Type 1) process, an aerodrome manual must be prepared for aerodromes to be certified and aerodromes requiring Aerodrome Registration Type 1. The manual is the mechanism used for setting out a range of information and operating procedures as specified in CAR-Aerodromes.

10.1.2.2 The aerodrome manual shall be in a format that can be readily updated.

...

10.1.3.2 CAAP is primarily concerned with the competency of persons involved with aerodrome safety functions. Essential competencies will include:

(a) inspecting and reporting on the physical characteristics and conditions of the aerodrome;

(b) inspecting and reporting on aerodrome lighting systems;

(c) inspecting and reporting on the OLS;

...

(e) utilizing radio telephony (R/T) equipment, and

(f) supervising the safety of aerodrome works.

...

#### **10.1.4 Aerodrome Safety Management System (SMS)**

10.1.4.1 A safety management system (SMS) is a systematic approach to managing safety at an aerodrome that must include the organizational structures, accountabilities, policies, procedures and documentation required by this section to manage safety in a continuous and systematic way.

10.1.4.2 The SMS shall be one that permeates throughout the aerodrome operator organization, and be implemented through a continuing safety program based on a coherent policy that leads to well-designed work procedures. The SMS shall also extend to include interfaces between the aerodrome operator and its suppliers, sub-contractors, agents, business partners and other relevant external service providers.

10.1.4.3 The SMS shall focus principally on the hazards associated with the operation of the aerodrome and their effects upon those activities critical to safety. Active monitoring and auditing processes shall be applied to validate that the necessary controls identified through the hazard management process are effectively put in place so as to ensure continuing active commitment to safety and to achieve continuous improvement in safety performance.

10.1.4.4 The safety management system required under CAR-Aerodrome sections 2.2.225 and 2.3.015 in respect of an applicant for, or a holder of, an airport certificate and Aerodrome Registration type 1.

*Note: - Further guidance is available through CAAP Advisory Circular (AC) AC SMS-MNL-01: Development of an SMS Manual, as existing from time to time and freely available on the CAAP website.*

#### **10.1.5 Framework for Aerodrome Safety Management System**

10.1.5.1 An aerodrome operator shall implement a SMS framework which commensurate with the size of the airport and the complexity of the services provided. The SMS framework shall include, as a minimum, the following twelve elements:

##### **A. Safety policy and objectives**

A-1 Management commitment and responsibility

(a) An aerodrome operator shall define its safety policy. The safety policy shall:

i) reflect organizational commitment regarding safety, including the promotion of a positive safety culture;

ii) include a clear statement about the provision of the necessary resources for the implementation of the safety policy;

- iii) include safety reporting procedures;
- iv) clearly indicate which types of behaviors are unacceptable related to the aerodrome operator's activities and include the circumstances under which disciplinary action would not apply;
- v) be signed by the accountable executive;
- vi) be communicated, with visible endorsement, throughout the organization; and
- vii) be periodically reviewed to ensure it remains relevant and appropriate to the aerodrome operator.

(b) Taking due account of its safety policy, an aerodrome operator shall define its safety objectives. The safety objectives shall:

- i) form the basis for safety performance monitoring and measurement;
- ii) reflect the aerodrome operator's commitment to continuously improve the effectiveness of the SMS;
- iii) be communicated and promoted throughout the organization; and
- iv) be periodically reviewed to ensure the objectives remain relevant and appropriate to the operator.

#### A-2 Safety accountabilities

An aerodrome operator shall:

- a) identify the accountable manager who, irrespective of other functions, has ultimate responsibility and accountability, on behalf of the aerodrome, for the implementation and maintenance of the SMS;
- b) clearly define lines of safety accountability throughout the organization, including a direct accountability for safety on the part of senior management;
- c) identify the accountabilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the SMS; and
- d) document and communicate safety responsibilities, accountabilities and authorities throughout the organization.

#### A-3 Appointment of key safety personnel

An aerodrome operator shall appoint a safety manager who is responsible for the implementation and maintenance of an effective SMS.

*Note: - Depending on the size of the aerodrome and the complexity of its operations or services, responsibility for implementation and maintenance of the SMS may be assigned to one or more*

*persons. The role of safety manager could be a sole function, or a function combined with other duties provided the other duties did not result in a conflict of interest or adversely affect the performance of safety duties.*

#### A-4 Coordination of emergency response planning

The aerodrome operator shall develop, coordinate and maintain an emergency response plan that addresses accidents and incidents in aircraft operations and other aviation emergencies.

An aerodrome operator shall ensure that the emergency response plan is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its services.

#### A-5 SMS documentation

An aerodrome operator shall develop an SMS implementation plan, formally endorsed by senior management of the airport that defines the airport's approach to the management of safety in a manner that meets the airport's safety objectives.

An aerodrome operator shall develop and maintain SMS manual that describes the following:

- a) safety policy and objectives;
- b) SMS requirements;
- c) SMS processes and procedures;
- d) accountabilities, responsibilities and authorities for SMS;
- e) processes and procedures; and
- f) the minimum skills and knowledge required for the primary person responsible for the SMS.

An aerodrome operator shall develop and maintain SMS operational records as part of its SMS documentation.

*Note: - 1 Depending on the size of the aerodrome and the complexity of its aviation services, the SMS manual may be a stand-alone document or may be integrated with aerodrome manual.*

*Note: - 2 Relevant SMS operational records would include records, reviews, reports, assessments, analyses, verifications, investigations, training and communication programs, risk and hazard registers, safety cases, and details of persons who are or have been the primary persons responsible for the SMS.*

### B. Safety risk management

#### B-1 Hazard identification

- a) An aerodrome operator shall develop and maintain a process for effectively collecting, recording, acting on and generating feedback about hazards associated with aerodrome operations; and

b) Hazard identification shall be based on a combination of reactive, proactive and predictive methods of safety data collection.

#### B-2 Safety risk assessment and mitigation

An aerodrome operator shall develop and maintain a process that ensures analysis, assessment and control of the safety risks associated with identified hazards.

#### C. Safety assurance

##### C-1 Safety risk assessment and mitigation

An aerodrome operator shall develop procedures to:

- a) verify the safety performance of the airport compared to the safety policy and objectives, and to validate the effectiveness of safety risk controls.
- b) ensure that aerodrome operator's safety performance is verified in reference to the safety performance indicators and safety performance targets of the SMS.

The SMS must include the aerodrome operator's procedures for internal audits conducted by persons or departments independent of the functions being audited, including procedures to:

- a) to assess the effectiveness of the SMS and identify areas for potential improvement;
- b) to ensure compliance with the state regulations;
- c) to ensure that any safety risk controls are effectively implemented and monitored; and
- d) The causes and contributing factors have been investigated and analyzed where non-conformances and other issues are identified.

##### C-2 The management of change

An aerodrome operator shall develop and maintain a formal process to:

- a) identify changes within the organization which may affect established processes and services;
- b) to describe the arrangements to ensure safety performance before implementing changes; and
- c) to eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment.

##### C-3 Continuous improvement of the SMS

An aerodrome operator shall develop and maintain a process to identify the causes of sub-standard performance of the SMS, determine the implications of sub-standard performance in operations, and eliminate such causes.

## D. Safety promotion

### D-1 Training and education

An aerodrome operator shall develop, maintain and deliver a safety training programme to ensures that:

- a) the personnel are trained and competent to perform their SMS duties; and
- b) the scope of the safety training programme is appropriate to each individual's involvement in the SMS.

### D-2 Safety communication

An aerodrome operator shall develop and maintain a formal means for safety communication that:

- a) ensures personnel are aware of the SMS to a degree commensurate with their positions;
- b) conveys safety-critical information;
- c) communicates safety accountabilities, responsibilities and authorities throughout the operator's organization;
- d) explains why particular safety actions are taken; and
- e) explains why safety procedures are introduced or changed.

## **10.1.6 Safety Reporting System**

10.1.6.1 The objective of safety reporting system is to contribute to the improvement of the safety at aerodromes by ensuring that relevant information on safety is reported, collected, investigated, analyzed, stored, protected and disseminated.

10.1.6.2 Without prejudice to PCAR Part 13 — Accident and Incident Reporting and Investigation, an aerodrome operator shall establish procedures for the notification, investigation, and reporting of any accident, serious incident and occurrence as defined in MOS 1.4, and in accordance with this regulation.

10.1.6.3 The reports shall be made in a form and manner established by the CAAP and contain all pertinent information about the condition known to the aerodrome.

10.1.6.4 Reports shall be made as soon as practicable, but in any case, within 48 hours of the aerodrome operator identifying the condition to which the report relates, unless exceptional circumstances prevent this.

10.1.6.5 The procedures referred to in 10.1.6.2 shall include the means for immediate notification of any accident, serious incident and occurrence to the Aerodrome Registration, Certification and Inspection Division (ARCID).

10.1.6.6 The system referred to in 10.1.6.1 shall include the following as a minimum:

- (a) Description of the reporting mechanism, including reporting forms, means, and deadlines;
- (b) Contain a list of occurrences that shall be immediately notified to the CAAP;
- (c) Personnel responsible for reporting;
- (d) Description of mechanism and personnel responsibilities for identifying root causes, and the actions that may be needed to be taken to prevent similar occurrences in the future, as appropriate;
- (e) Ensure concerned personnel are educated to meet the immediate notification requirement;
- (f) Ensure their personnel of how to report an actual or potential safety deficiency through the voluntary reporting system;
- (g) Refrain from attribution of blame; and
- (h) Be documented in the aerodrome's applicable manuals.

*Note: - 1 Further guidance can be found in the associated Advisory Circular, as existing from time to time and freely available on the CAAP website.*

*Note: - 2 Further guidance on critical data related to safety occurrences can be found in attachment B in this MOS.*

#### 10.1.6.7 Aerodrome Record Keeping

- (a) The aerodrome operator shall establish a system of record keeping for all occurrence, investigation, and analysis reports.
- (b) The record-keeping system should ensure that all records are accessible whenever needed within a reasonable time. These records should be organized in a way that ensures traceability and retrievability throughout the required retention period.
- (c) Records should be kept in paper form, or in electronic format, or a combination of both media.

#### 10.1.6.8 Aerodrome accident/incident investigations

- (a) Incorporating into the safety management system, a procedure shall be developed to ensure, that investigations are effectively performed to find occurrences' root causes and issue targeted and feasible recommendations to implement corrective actions on due time.
- (b) In addition to the requirements in 10.1.6.2, the aerodrome operator shall produce a follow-up report to provide details of actions it intends to take to prevent similar occurrences in the future, as soon as these actions have been identified. This report shall be reported to ARCID and produced in a form and manner established by the CAAP.

(c) The lesson learnt derived from an aerodrome incident/accident investigation shall be disseminated to staff to provide feedback for safety improvement.

## **Section 10.2 Inspecting and Reporting Aerodrome Serviceability**

### **10.2.1 General**

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10.2.1.2 The operator of a certified aerodrome and Aerodrome Registration Type 1 are required to arrange for aerodrome serviceability inspections to be carried out at least 2 times each day including one inspection during hours of darkness, and additionally after natural phenomena such as severe wind or rain storm, earthquake, or when requested by air traffic control or by CAAP.

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### **10.2.2 Foreign Object Debris (FOD)**

10.2.2.1 Any FOD found in the course of the inspection, including parts which may have fallen from aircraft, or the remains of birds which may have been struck by an aircraft, must be reported immediately to Air Traffic Control, where appropriate, and to the CAAP.

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## **Section 10.7 Aerodrome Emergency Planning**

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10.7.1.1 An aerodrome emergency plan (AEP) shall be established at an aerodrome. The AEP shall be commensurate with the aircraft operations and other activity conducted at the aerodrome.

*Note: - Provision relating to Aerodrome emergency exercise are contained in MOS-Aerodromes 10.8.4.*

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### **10.9.2 Aerodrome Vehicle Operations**

*Note: — 1 Guidance on aerodrome vehicle operations is contained in Attachment A, Section 19, and on traffic rules and regulations for vehicles in the Manual of Surface Movement Guidance and Control Systems (SMGCS) (Doc 9476).*

*Note: — 2 It is intended that roads located on the movement area be restricted to the exclusive use of aerodrome personnel and other authorized persons, and that access to the public buildings by an unauthorized person will not require use of such roads.*

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### **10.13.4 Apron management service**

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10.13.4.2 When the aerodrome control tower does not participate in the apron management service, procedures shall be established to facilitate the orderly transition of aircraft between the apron management unit and the aerodrome control tower.

*Note: - Additional guidance on an apron management service is also given in AC 139-AMGT-01 (Guidance in Operational Procedures and principles for Apron management), Airport Services Manual (Doc 9137), Part 8, and in the Manual of Surface Movement Guidance and Control Systems (SMGCS) (Doc 9476).*

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## **CHAPTER 12. Operating standards for Aerodrome Registration Type 2**

## **Section 12.1 General**

### **12.1.1 Introduction**

12.1.1.1 The aerodrome operating procedures for Aerodrome Registration Type 2 are less stringent than those required for a certified aerodrome or Aerodrome Registration Type 1.

12.1.1.2 The operator having an Aerodrome Registration Type 2 is required to:

...

12.1.1.4 To be able to promptly advise changes, operators having an Aerodrome Registration Type 2 need to have personnel and procedures to conduct timely serviceability inspections, identify changed circumstances and make reports.

12.1.1.5 Although formal documentation of all facets of aerodrome operations is not required, it is in the interest of the operator having an Aerodrome Registration Type 2 to be able to demonstrate the discharge of duty of care in providing a safe facility for aircraft operations. To avoid confusion and misunderstanding, all arrangements regarding aerodrome safety functions must be in writing.

12.1.1.6 if an operator having an Aerodrome Registration Type 2 fails to meet safety requirements, CAAP may suspend or cancel the registration. CAAP staff may conduct scheduled or unscheduled inspections of the aerodrome to assess whether it still meets safety requirements.

12.1.1.7 The standards and procedures of this chapter are intended to assist the operator having an Aerodrome Registration Type 2 to meet on-going aerodrome safety requirements.

### **12.1.2 Aerodrome Reporting Officer**

12.1.2.1 The operator having an Aerodrome Registration Type 2 must have in place experienced or appropriately trained persons, known as reporting officers, to carry out the aerodrome safety functions. Attributes required include:

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### **12.1.5 Record of inspections and remedial actions**

12.1.5.1 The operator having an Aerodrome Registration Type 2 must maintain an inspection logbook to demonstrate that inspections have been carried out. Besides recording the inspections, the logbook should also record significant aerodrome upgrading or remedial works.

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### **12.1.7 Aerodrome Works**

12.1.7.3 Where aerodrome works are carried out without closing the aerodrome, the aerodrome works safety procedures specified in MOS 10.7 for certified aerodromes are equally applicable to operators having an Aerodrome Registration Type 1 and 2.

### **12.1.8 Safety Inspection Report**

12.1.8.1 CAR-Aerodromes 2.3.155 requires the operator having an Aerodrome Registration Type 2 to prepare and submit to CAAP annually, or at another agreed period, a safety inspection of the aerodrome. Matters to be addressed in the report are also prescribed.

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12.1.8.3 For an Aerodrome Registration Type 2, the approach and take-off area would still need to be checked on a regular basis for vegetation growth or new tall objects. Where another obstacle may become the critical obstacle and affect the published take-off gradient or the threshold location, the checking shall be conducted by a person with appropriate technical expertise.

### Section 12.2 Sample Report Form for Aerodrome Registration Type 2

<b>Aerodrome Registration Type 2 Report Form</b>		
<b>Notification of Changes to Serviceability of Aerodrome Registration Type 2</b>		
To: NOTAM Office	Phone	Fax
AERODROME: .....		
Date ..... / ..... / 20 .....	TIME (UTC preferred) UTC	Local
Purpose of Report      PROVIDE NEW INFORMATION DETAILED BELOW		
CANCEL PREVIOUS ADVICE (NOTAM No ..... ) <input type="checkbox"/> <input type="checkbox"/> Date: .....		
EXTEND PREVIOUS ADVICE (NOTAM No ..... ) <input type="checkbox"/> <input type="checkbox"/> Date: .....		
Period of Validity <b>Permanent/Temporary NOTAM</b> ( <i>Delete one</i> )		
FROM (date/time) ..... TO (date/time) ..... Estimated <input type="checkbox"/> <input type="checkbox"/> (if finish time uncertain)		
<i>(temporary NOTAM only)</i>		
<b>Note:</b> If time estimated, contact NOTAM OFFICE at least 2 hours before estimated duration time and advise if NOTAM is to be extended or cancelled.		
Daily duration or time schedule ( <i>if applicable</i> )		
FROM (date/time) ..... TO (date/time) .....		
Text ( <i>For example of text see Section 10.5</i> )		
Please fax copy of NOTAM to originator Fax No. ....		
This report confirms previous telephone advice. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Contact Numbers    Ph .....		
Fax .....		
Signed .....	Date/Time .....	Reporting Officer (Print Name) .....
DGCA Office advised by:    Phone <input type="checkbox"/> <input type="checkbox"/> Fax <input type="checkbox"/> <input type="checkbox"/> E-mail <input type="checkbox"/> <input type="checkbox"/> Not advised <input type="checkbox"/>		
For NOTAM Office only:		
NOTAM No. C .....	Initials .....	date/time .....

### CHAPTER 13. Standards for small aerodromes used for light aircraft operations.

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#### Section 13.2 Part A - Aerodromes used for air transport, private or flying training activity

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13.2.1.4 Clearways and stopways. If a clearway or stopway is provided to it shall be provided in accordance with the standards for clearways and stopways specified in Chapter 6.

### **13.2.2 Aerodrome Markings**

13.2.2.1 Aerodrome markings or markers shall be provided. Sealed surfaces are normally marked by painted white markings and unsealed surfaces by white markers. Instead of markers, flush markings painted white may be installed. Markers shall be frangible. Flush markings shall be maintained so as to provide adequate conspicuity.

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13.2.2.2 For a sealed runway, the runway thresholds shall be marked in accordance with MOS 8.3.9. A runway centerline marking is not required on runways that are 18 m wide or less. White painted runway side stripe markings, 0.3 m wide, shall be provided if there is a lack of contrast between the runway surface and the surrounding area.

13.2.2.3 On unsealed runways, where the runway strip is not maintained to normal grading standards, the runway shall be marked using edge markers. If the full width of the runway strip is maintained so as to be suitable for aircraft operations, the runway edge markers may be omitted and the runway strip is to be marked using strip markers. Where the runway is not provided with edge markers, the threshold locations need to be marked.

13.2.2.4 For both sealed and unsealed runways, when operationally required the runway strip shall also be marked by using cones, gable markers, tires, or 200 liter drums cut in half along their length and placed with the open side down, or something similar. These runway strip markers shall be white in color.

13.2.2.5 Runway cone markers should have a 0.4 m base diameter and be 0.3 m in height. Runway strip cone markers should have a 0.75 m base diameter and be 0.5 m in height. Gable markers should be 3 m in length.

13.2.2.6 Cone or similar size markers need to be spaced not more than 90 m apart. Gable or similar size markers need to be spaced not more than 180 m apart.

13.2.2.7 Where the edges of unsealed taxiways or aprons may not be visually clear to pilots, markers may be provided in accordance with MOS 8.2.

### **13.2.3 Aerodrome Lighting**

13.2.3.1 Where a runway is intended for night operations, the runway shall be provided with runway edge lighting, spaced laterally at 30 m apart, and longitudinally at approximately 90 m apart. The edge lights on each side shall present two parallel straight rows equidistance from the runway centerline. The lights indicating runway ends shall be at right angles to the centerline.

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### **13.2.4 Wind Direction Indicator**

13.2.4.1 It is required for small aerodrome operations to provide a wind direction indicator (WDI). It shall be located clear of the 1:5 (20%) transitional surface.

13.2.4.2 If the aerodrome is intended for night operations, the wind direction indicator shall be provided with illumination.

13.2.4.3 To enhance direction indication, the WDI shall be located within a circular area 15 m in diameter, the surface of which is appropriately blackened or provided with a contrasting color, and bounded by 15 equally spaced white markers.

### **13.2.5 Landing Direction Indicator**

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13.2.5.3 The color of the landing “T” shall be either white or orange, the choice being dependent on the color that contrasts between or with the background against which the indicator will be viewed. Where required for use at night the landing “T” shall either be illuminated or outlined by white lights.

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### **13.2.7 Ground Signal and Signal Area**

13.2.7.1 A ground signal area detailed in MOS 8.8 shall be provided near the wind direction indicator for the purpose of displaying ground signals to pilots.

13.2.7.2 When an aerodrome is totally unserviceable, a white cross with each arm 6 m in length and 0.9 m in width shall be displayed on the signal circle indicating to pilots that the aerodrome is closed to aircraft operations.

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### **13.2.8 Runway and Runway Strip Conditions**

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13.2.8.2 The surface of the unsealed runway shall not have irregularities, which will adversely affect the take-off and landing of an aircraft.

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### **13.2.10 Safety Inspection Report**

13.2.10.1 The report shall provide a true picture of the state of the aerodrome in its compliance with applicable standards. Where corrective action or necessary improvements are identified, the aerodrome operator shall provide a statement of how the corrective action or improvements are to be addressed.

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## **Section 13.3 Part B - Aerodromes used for aerial agricultural activity**

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### **13.3.2 Aerodrome Markings**

13.3.2.1 Runway markings and/or markers shall be provided if directed by CAAP. Paved/sealed runway surfaces shall be marked if there is insufficient contrast between the runway and surrounding runway strip surfaces. Where insufficient contrast exists to define the runway surface, runway markings and/or markers shall be installed. Markings or markers shall conform to the specifications of Part A of this chapter. Where runway markers are provided which are not flush with a surface, they shall be constructed of a material which is not likely to damage an aircraft.

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### **13.3.7 Aerodrome Serviceability Reporting**

Details of aerodromes used for agricultural operations are not published in the AIP. These aerodromes are provided for the specific purpose of facilitating aerial agricultural activity and are not generally available for public use. Each pilot operating to or from such a place shall be responsible for determining the suitability of the place for take-off or landing safely.

- i. **Separability Clause.** - If, for any reason, any provision of this Memorandum Circular is declared invalid or unconstitutional, the other part or parts thereof which are not affected thereby shall continue to be in full force and effect.
- ii. **Repealing Clause.** - All orders, rules, regulations and issuances, or parts thereof which are inconsistent with this Memorandum Circular are hereby repealed, superseded or modified accordingly.
- iii. **Determination of changes.** – To highlight the amendments and/or revisions in the Memorandum Circular, the deleted text shall be shown with strikethrough and the new inserted text shall be highlighted with grey shading, as illustrated below:
  1. Text deleted: ~~Text to be deleted is shown with a line through it.~~
  2. New text inserted: **New text is highlighted with grey shading.**
  3. New text replacing existing text: ~~Text to be deleted is shown with a line through it~~ followed by the replacement text which is highlighted with grey shading.
- iv. **Effectivity Clause.** - This Memorandum Circular shall take effect after fifteen (15) days following the completion of the publication in a requisite single newspaper of general circulation or the Official Gazette and a copy filed with the U.P. Law Center - Office of the National Administrative Register.

So Ordered. Signed this 06 day of FEBRUARY 2020, at the Civil Aviation Authority of the Philippines, MIA Road, Pasay City, Metro Manila, 1301.

  
CAPTAIN JIM C. SYDIONGCO