

# **CIVIL AVIATION PUBLICATION**

# AGA 07

# **AERODROME MANUAL**

INDEX





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# **AERODROME MANUAL**

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## GENERAL

# 1.1 **REQUIREMENTS**

AGA 1, 2 and 3 requires Aerodrome Operators applying for an Aerodrome Certificate or Aerodrome Licence to develop, implement and maintain an Aerodrome Manual. This CAP provides guidance on revising an existing or developing a new Aerodrome Manual.

# 1.2 APPLICABILITY

This CAP applies to all aerodromes and heliports that are required to be certified or licensed under CAR AGA 1, 2 and 3.

# 1.3 **REFERENCES**

- ▷ CAR AGA 1, 2 and 3
- Annex 14 Volume I Aerodromes (Eighth Edition July 2018)
- Annex 14 Volume II Heliports (Fourth Edition July 2013)
- ▶ ICAO Doc 9774 Manual on Certification of Aerodromes (First Edition 2001)
- ▶ ICAO Doc 9981 PANS Aerodromes (Second Edition 2016)
- CAR DEF Definitions
- CAP GEN 01 Safety Management Systems





#### INTRODUCTION

## 2.1 PURPOSE AND SCOPE

The Aerodrome Manual is a fundamental requirement of the certification/licensing process. It contains all the pertinent information concerning the aerodrome site, facilities, services, equipment, operating procedures, organization and management including the Safety Management System (SMS). The information presented in the Aerodrome Manual should demonstrate that the aerodrome conforms to the certification and licensing standards and practices and that there are no apparent shortcomings which would adversely affect the safety of aircraft operations. The Aerodrome Manual is a legal reference document and provides a checklist of aerodrome certification and licensing standards to be maintained and the level of airside services at the aerodrome.

Information provided in the Aerodrome Manual will enable the CAA-B to assess the suitability of the aerodrome for the aircraft operations proposed and to judge an applicant's fitness to hold a certificate or licence. It is a basic reference guide for conducting site inspections for granting an aerodrome certificate/licence and for subsequent safety inspections. The Aerodrome Manual is a document agreed between the Aerodrome Operator and the CAA-B with respect to the standards, conditions and the level of service to be maintained at the aerodrome.

The Aerodrome Manual is the source document describing operational procedures and how they will be managed. It should contain all such information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties. This must include information and instructions on the matters specified in CAR AGA 1, 2 and 3. It should not be simply a statement of the requirements, but be the exposition of the Aerodrome Operator's business for promulgating all procedures and information relating to the safe management of the aerodrome and show how the Aerodrome Operator intends to measure performance against safety targets and objectives. The reader of the Aerodrome Manual should be given a clear and unambiguous statement of how safety is developed, managed and maintained on the aerodrome. All safety policies, operational procedures and instructions should be contained in detail or cross-referenced to other formally accepted or recognized publications.

The principal objective of an Aerodrome Manual is to show how management will discharge its safety responsibilities. The Aerodrome Manual will set out the policy and expected standards of performance and the procedures by which they will be achieved.

An efficient management structure and a systematic approach to aerodrome operations is essential. The Aerodrome Manual should contain all the relevant information to describe this structure satisfactorily.

It is the means by which all aerodromes operating staff are fully informed about their duties and responsibilities with regard to safety. It should describe the aerodrome services and facilities, all operating procedures, and any restrictions on aerodrome availability.

Accountability for safety must start at the very top of any organization.



One of the key elements in establishing safe working practices is for all staff to understand the safety aims of the organization, the chain of command, and their own responsibilities and accountabilities. As safety management principles are applied, the Aerodrome Manual should be expanded to describe clearly how the safety of operations is to be managed at all times.

There should never be any doubt to the user of the manual about who is responsible, who has the authority, who has the expertise and who actually carries out the tasks described in any section.



#### AERODROME MANUAL STRUCTURE

# 3.1 FORMAT

For the purpose of uniformity and to facilitate the CAA-B's review and approval, the structure and content of the Aerodrome Manual shall comply with CAR AGA 1, 2 and 3 requirements. The content of the Aerodrome Manual should be accurate, clear, and address directly CAR AGA 1, 2 and 3 requirements. An Aerodrome Manual that provides clear instructions but avoids excessive detail will help ensure that personnel understand how the Aerodrome Operator will attain regulatory compliance at the aerodrome and leave the aerodrome with the flexibility necessary to address unforeseen circumstances.

The content of CAR AGA 1, 2 and 3 requirements should be treated with due respect to the confidentiality requirements of the information contained therein.

The applicant for an aerodrome certificate/licence or the Aerodrome Operator of a certificated/licenced aerodrome is entirely responsible for the accuracy of the information provided in the Aerodrome Manual.

The Aerodrome Manual must include references, where applicable, to the appropriate section of CAR AGA 1, 2 and 3.

The Aerodrome Manual is a key document both for the Certificate/Licence holder and the CAA-B. It is the safety assurance document for the CAA-B's certification/licensing process, and a management tool for industry.

CAR AGA 1, 2 and 3 prescribes the general format of the Aerodrome Manual. The Aerodrome Manual is subject to amendment to ensure that it is maintained up to date with current and accurate information. It must therefore, be in a form easy to revise and must contain a system which allows users to determine the current revision status. The numbering of pages and paragraphs should be orderly and systematic to facilitate ease of reference. Each page must have a date of the last revision.

The Aerodrome Manual can be maintained in either hard format (paper based) or soft format (electronic) form. The Aerodrome Manual must have a quality control measure in place to ensure currency and accuracy.





## AMENDMENTS AND DISTRIBUTION

## 4.1 AMENDMENTS

Amendments to the Aerodrome Manual will be needed either because the document requires to be brought up to date or in response to a request by the CAA-B. Any amendment or addition must be submitted to the CAA-B for the approval, including any change in the key personnel of the aerodrome in order to ensure both initial and continuing organizational competence.

The Aerodrome Manual is the primary safety assurance document to assess both initial and continuing organizational competence. Therefore, it must include the names of the key operational and maintenance personnel referenced in CAR AGA 1, 2 and 3. Any change in key personnel must be by prior approval of the CAA-B followed by an amendment to the AOM.

The Aerodrome Manual is not intended to provide complete instructions for all jobs or operational procedures, but it should provide instructions for any critical tasks that are necessary for compliance with CAR AGA 1, 2 and 3.

The Aerodrome Operator must assign a nominated person within the organization to be responsible for the Aerodrome Manual who must ensure that: -

- (a) A record is kept of the persons who hold copies of the whole or part of the Aerodrome Manual;
- (b) Amendments or information for the Aerodrome Manual is distributed to persons who require such information.

Prior to issuing an Aerodrome Certificate/Licence, the CAA-B must approve an Aerodrome Operator's Aerodrome Manual. Once the CAA-B approves the Aerodrome Manual, the Aerodrome Operator must ensure that the aerodrome is operated in accordance with the policy and procedures contained within the Aerodrome Manual. Any unapproved deviation from the approved manual is liable to enforcement action.

# 4.2 DISTRIBUTION

The Aerodrome Operator must distribute applicable portions of the Aerodrome Manual to the aerodrome personnel who are responsible for their implementation.





#### AERODROME MANUAL OVERVIEW

#### 5.1 Required Contents

As a general rule, the Aerodrome Manual must contain operating procedures, equipment descriptions, safety accountabilities, responsibility assignments, and any other information needed by aerodrome personnel to comply with CAR AGA 1, 2 and 3.

## 5.2 Limitations

The CAA-B may on occasion impose limitations on certificated/licenced aerodromes. These limitations can cover a range of regulatory provisions. Generally, they deal with unusual operational characteristics at an aerodrome, such as a need to restrict an operator from using certain areas of the aerodrome or; to specify aircraft rescue and firefighting staging locations. The Aerodrome Manual must contain reference to any limitation placed on the aerodrome by the CAA-B. Sections of the Aerodrome Manual that discuss related provisions of CAR AGA 1, 2 and 3, must refer to applicable limitations.

# 5.3 Specific Elements of Compliance

CAR AGA 1, 2 and 3 details specific elements that all Aerodrome Manuals must include. In most cases, Aerodrome Manuals address these mandatory elements by including them in the detailed narratives for the related regulatory requirement. However, some special elements better lend themselves to other forms of presentation, such as tables and charts.

For example, the Aerodrome Operators might fulfil the requirement to explain lines of succession for aerodrome operational responsibility by including an organizational chart and a table of the lines of succession, which can be referred to repeatedly throughout the Aerodrome Manual.

# 5.4 Clarification and Responsibility for Tasks

In each section, the Aerodrome Manual should answer the following questions: -

- (a) **WHO** will perform the task?
- (b) WHAT does the task consist of?
- (c) **HOW** is it to be to be performed?
- (d) **WHEN** should it be performed?

**WHO, WHAT, HOW**, and **WHEN** are often closely associated, and most instructions will need to address all of them.



# 5.4.1 WHO

The instructions in the Aerodrome Manual should be clear to staff who routinely perform the tasks described as well as to staff required to act when the usual chain of responsibility and authority is temporarily interrupted.

The Aerodrome Manual must explain what is required from a regulatory standpoint and clearly state WHO (functional position) is primarily responsible for carrying out each function.

Since a substitute might not normally perform (or directly oversee) a required task, the Aerodrome Manual should provide specific instructions about critical aspects of the job, including whom to contact if problems arise.

# 5.4.2 WHAT and HOW

The WHAT and HOW of Aerodrome Manual instructions refer to the tasks assigned to various individuals or departments charged with achieving compliance with CAR AGA 1, 2 and 3. Unless all personnel assigned to the task are fully familiar with the regulatory requirement, the Aerodrome Manual must provide guidance appropriate to the training and experience of the personnel. For example, an instruction in the Aerodrome Manual to the ground maintenance crew to maintain all safety areas in accordance with the CAR AGA 1, 2 and 3 is not useful unless the crew has sufficient knowledge of the CAR AGA requirements. A better approach is to identify the physical boundaries of the safety areas and to state clearly how surface conditions are to be maintained.

#### 5.4.3 WHEN

The timing of tasks will often be triggered by circumstances, such as flooding caused by heavy rainfall etc. The Aerodrome Manual must clearly define the circumstances that trigger action. It must also address the frequency of tasks that occur on a regular basis.

#### 5.5 Exemptions

The CAA-B may exempt in writing an Aerodrome Operator from complying with specific provisions of the regulations. An exemption is a legal document granting an Aerodrome Operator relief from a requirement of CAR AGA 1, 2 and 3. An exemption will be subject to any condition or procedures specified by the CAA-B in the Aerodrome Certificate/Licence as being necessary in the interest of safety.

The Aerodrome Manual must include copies of all current exemptions for the aerodrome, including any that pertain to the Rescue and Fire Fighting (RFF) requirements.

#### 5.6 Deviations

Where an Aerodrome Operator wishes to deviate from the procedures contained within the Aerodrome Manual, an application to the CAA-B for approval must be made before any implementation takes place.



# 5.7 Violations

Violations are very serious and can result in an amendment, suspension or revocation of the Aerodrome Operator's Certificate/Licence. Aerodrome Operators that do not fully understand the ramifications of violating CAR's should contact the CAA-B for clarification.





#### AERODROME MANUAL CONTENT

# 6.1 GENERAL

CAR AGA 1, 2 and 3 describes the items which should be included in the Aerodrome Manual. It is, however, recognized that the need to include all items will vary depending on the nature and scale of operations at a particular aerodrome. It may not be necessary for all operational procedures in the Regulations to be included in the Aerodrome Manual. If a particular item from the Regulations is not included in the Aerodrome Manual because it is not applicable to the aerodrome, the Aerodrome Operator must state the reason for non-applicability of the particular item. However, where an item is not included in the Aerodrome Manual because it does not apply to the aerodrome, but the item is relevant to achievement of policy, its location should be clearly referenced.

The Aerodrome Manual should be structured to include the following 6 Parts: -

- (a) Part 1 General;
- (b) Part 2 Organisation;
- (c) Part 3 Particulars of the Aerodrome Site;
- (d) Part 4 Particulars of the Aerodrome Required to be reported In the AIS;
- (e) Part 5 Particulars of the Aerodrome Operating Procedures and Safety Measures;
- (f) Part 6 Aerodrome Safety Management System.
- Note: Each of the 6 parts starts with a "general" section, which can be considered as an introduction to that Part.

A description of the contents of the Aerodrome Manual can also be found in CAR AGA 1, 2 and 3 respectively.

# 6.2 PART 1 - GENERAL

# 6.2.1 General Aerodrome Information

General information, including the following:

- (a) Purpose and scope of the Aerodrome Manual;
- (b) The legal requirement for an Aerodrome Certificate or Licence and an Aerodrome Manual as prescribed in CAR AGA 1, 2 and 3;



- (c) Conditions for use of the aerodrome a statement to indicate that the aerodrome shall at all times when it is available for the take-off and landing of aircraft, be so available to all persons on equal terms and conditions;
- (d) The available aeronautical information services and procedures for timely and accurate effecting promulgation of AIP Amendment, AIP Supplement or NOTAM
- (e) The system for recording aircraft movements;
- (f) Obligations of the Aerodrome Operator;
- (g) A table to indicate the aerodrome and Aerodrome Operator's compliance status with each clause of CAR AGA 1, 2 and 3 requirements;
- (h) Service Level Agreements between the Aerodrome Operator and ATS on areas of coordination such as Aerodrome Emergency Planning, aerodrome condition reporting, aerodrome vehicle operations etc.; and
- (i) A foreword, list of effective pages, revision record, distribution list.

# 6.3 PART 2 - ORGANISATION

- (a) An aerodrome organisational chart showing the names and positions of management personnel.
- (b) Functions and responsibilities of management personnel.
- (c) Airport committees, including Safety and Facilitation, Fauna, Emergency, and any other committee established by the aerodrome operator to ensure aerodrome safety and operation.

# 6.4 PART 3 - PARTICULARS OF THE AERODROME SITE

General information, including the following:

- (a) A plan of the aerodrome showing the main aerodrome facilities for the operation of the aerodrome including the location of each wind direction indicator;
- (b) A plan of the aerodrome showing the aerodrome boundaries;
- (c) A plan showing the distance of the aerodrome from the city or other populous area, and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome; and
- (d) Particulars of the title of the aerodrome site. If the boundaries of the aerodrome are not defined in the title documents particulars of the title to, or interest in, the property on which the aerodrome is located and a plan showing the boundaries and position of the aerodrome.



## 6.5 PART 4 - PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AIS

#### 6.5.1 General

General information, including the following:

- (a) The name of the aerodrome;
- (b) The location of the aerodrome;
- (c) The geographical coordinates of the aerodrome reference point determine in terms of the World Geodetic System 1984 (WGS-84) reference datum;
- (d) The aerodrome elevation and geoid undulation;
- (e) The elevation of each threshold and geoid undulation, the elevation of the runway end and any significant high and low points along the runway, and the highest elevation of the touchdown zone of a precision approach runway;
- (f) The aerodrome reference temperature;
- (g) Details of the aerodrome beacon; and
- (h) The name of the Aerodrome Operator and the address and telephone number at which the Aerodrome Operator may be contacted at all times.

# 6.5.2 Aerodrome dimensions and related information

General information, including the following:

- (a) Runway true bearing, designation number, length, width, displaced threshold location, slope, surface type, type of runway and, for a precision approach runway, the existence of an obstacle free zone;
- (b) Length, width and surface type of strip, runway end safety areas stop-ways;
- (c) Length, width and surface type of taxiways;
- (d) Apron surface type and aircraft stands;
- (e) Clearway length and ground profile;
- (f) visual aids for approach procedures, *via*, approach lighting type and visual approach slope indicator system (PAPI/APAPI and T-VASIS/AT-VASIS); marking and lighting of runways, taxiways, and aprons; other visual guidance and control aids on taxiways (including runway holding positions, intermediate holding positions and stop bars) and aprons, location and type of visual docking guidance system; availability of standby power for lighting.



- (g) The location and radio frequency of VOR aerodrome checkpoints;
- (h) The location and designation of standard taxi routes;
- (i) The geographical coordinates of each threshold;
- (j) The geographical coordinates of appropriate taxiway centre line points;
- (k) The geographical coordinates of each aircraft stand;
- (I) The geographical coordinates and the top elevation of significant obstacles in the approach and take-off areas, in the circling area and in the vicinity of the aerodrome. (This information may best be shown in the form of charts such as those required for the preparation of aeronautical information publications, as specified in Annexes 4 and 15 to the Convention);
- (m) Pavement surface type and bearing strength using the Aircraft Classification Number Pavement Classification Number (ACN-PCN) method;
- (n) One or more pre-flight altimeter check locations established on and apron and their elevation;
- (o) Declared distances: take-off run available (TORA), take-off distance available (TODA), accelerate-stop distance available (ASDA), landing distance available (LDA);
- (p) disabled aircraft removal plan: the telephone/telex/facsimile numbers and email address of the aerodrome coordinator for the removal of a disabled aircraft on or adjacent to the movement area, information on the capability to remove a disabled aircraft, expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove; and
- (q) rescue and fire-fighting: the level of protection provided, expressed in terms of the category of the rescue and fire-fighting services, which should be in accordance with the longest aeroplane normally using the aerodrome and the type and amounts of extinguishing agents and rescue and fire-fighting vehicles normally available at the aerodrome.
  - Note: The accuracy of the information above is critical to aircraft safety. Information requiring engineering survey and assessment should be gathered or verified by qualified technical persons.

# 6.6 PART 5 - AERODROME OPERATING PROCEDURES AND SAFETY MEASURES

#### 6.6.1 Aerodrome Reporting

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

(a) Arrangement for reporting any changes to the CAA-B and recording the reporting of changes during and outside the normal hours of aerodrome operations;



- (b) The names and roles of persons responsible for notifying the changes, and their telephone numbers during and outside the normal hours of aerodrome operations; and
- (c) The address and telephone numbers, as provided by the CAA-B, of the office where changes are to be reported to the CAA-B.

# 6.6.2 Access to the Aerodrome Movement Area

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

- (a) the role of the Aerodrome Operator, the aircraft operator, aerodrome fixed base operators, the aerodrome security entity, the CAA-B and other government departments, as applicable; and
- (b) The names and roles of the personnel responsible for controlling access to the aerodrome, and the telephone numbers for contacting them during and after working hours.

# 6.6.3 Aerodrome Emergency Plan

Particulars of the aerodrome emergency plan, including the following:

- (a) plans for dealing with emergencies occurring at the aerodrome or in its vicinity, including the malfunction of aircraft in flight; structural fires; sabotage, including bomb threats (aircraft or structure); unlawful seizure of aircraft; and incidents on the airport covering "during the emergency" and "after the emergency" considerations;
- (b) Details of test for aerodrome facilities and equipment to be used in emergencies, including the frequency of those tests;
- (c) Details of exercises to test emergency plans, including the frequency of those exercises;
- (d) a list of organizations, agencies and persons of authority, both on- and off airport, for site roles; their telephone and facsimile numbers, e-mail addresses and the radio frequencies of their offices;
- (e) The establishment of an aerodrome emergency committee to organize training and other preparations for dealing with emergencies; and
- (f) The appointment of an on-scene commander for the overall emergency operation.

# 6.6.4 Rescue and Firefighting

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



Note: This subject should also be covered in appropriate detail in the aerodrome emergency plan.

## 6.6.5 Inspection of the Aerodrome Movement Area and Obstacle Limitation Surface

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

- (a) Arrangement for carrying out inspections, including runway friction and water-depth measurements on runways and taxiways, during and outside the normal hours of aerodrome operations;
- (b) Arrangement and means of communicating with the aerodrome air traffic control unit during an inspection;
- (c) Arrangements for keeping an inspection logbook, and the location of the logbook;
- (d) Details of inspection intervals and times;
- (e) Inspection checklists;
- (f) Arrangement for reporting the results of inspections and for taking prompt follow-up actions to ensure correction of unsafe conditions; and
- (g) The names and roles of persons responsible for carrying out inspections, and their telephone number during and after working hours.
- (h) Procedures to monitor and report the condition of movement areas.
- (i) Procedures to report the presence of water on runway.
- (j) Procedures to report slippery runway condition

#### 6.6.6 Visual Aids and Aerodrome Electrical Systems

Particulars of the procedures for the inspection and maintenance of aeronautical lights (including obstacle lighting), signs, markers and aerodrome electrical systems, including the following:

- (a) Arrangement for carrying out inspections during and outside the normal hours of aerodrome operation, and the checklist for such inspection;
- (b) Arrangements for recording the results of inspections and for taking follow up action to correct deficiencies;
- (c) Arrangements for carrying out routine maintenance and emergency maintenance;
- (d) Arrangements for secondary power supplies, if any, and, if applicable, the particulars of any other method of dealing with partial or total system failure; and



- (e) The names and roles of the persons responsible for the inspection and maintenance of the lighting, and the telephone numbers for contacting those persons during and after working hours.
- (f) Submission of a signage and SMGCS plan.
- (g) Procedure to prevent aircraft from entering permanently closed runways and taxiways.

# 6.6.7 Maintenance of the Movement Area

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

- (a) Arrangements for maintaining the paved areas;
- (b) Arrangements for maintaining the unpaved runways and taxiways;
- (c) Arrangements for maintaining the runway and taxiway strips; and
- (d) Arrangements for the maintenance of aerodrome drainage.

# 6.6.8 Aerodrome Work Safety

Particulars of the procedures for planning and carrying out construction and maintenance work safely (including work that may have to be carried out at short notice) on or in the vicinity of the movement area which may extend above an obstacle limitation surface, including the following:

- (a) Arrangements for communicating with the aerodrome air traffic control unit during the progress of such work;
- (b) The names, telephone numbers and roles of the persons and organizations responsible for planning and carrying out the work, and arrangements for contacting those persons and organizations at all times;
- (c) The names and telephone numbers, during and after working hours, of the aerodrome fixed-based operators, ground handling agents and aircraft operators who are to be notified of the work.
- (d) A distribution list for work plans, if required.
- (e) Procedure to return a runway to operational status after pavement overlay

# 6.6.9 Apron Management

Particulars of the apron management procedures, including the following:

- (a) Arrangements between air traffic control and the apron management units;
- (b) Arrangements for allocating aircraft parking positions;



- (c) Arrangements for initiating engine start and ensuring clearance of aircraft push-back; and
- (d) Marshalling service.

## 6.6.10 Apron Safety Management

Procedures to ensure apron safety, including:

- (a) Protection from jet blasts;
- (b) Enforcement of safety precautions during aircraft refuelling operations;
- (c) Apron sweeping;
- (d) Apron cleaning;
- (e) Arrangements for reporting incidents/accidents on an apron; and
- (f) arrangements for auditing the safety compliance of all personnel working on the apron.

# 6.6.11 Airside Vehicle Control

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

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

# 6.6.12 Wildlife Hazard Management

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

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

# 6.6.13 Obstacle Control

Particulars setting out the procedures for:

(a) monitoring the obstacle limitation surfaces and Type A Chart for obstacle in the take-off surface;



- (b) controlling obstacles within the authority of the operator;
- (c) monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces;
- (d) controlling new developments in the vicinity of aerodromes; and
- (e) notifying the CAA-B of the nature and location of obstacles and any subsequent addition or removal of obstacles for action as necessary, including amendment of the AIS publications.

# 6.6.14 Removal of Disabled Aircraft

Particulars of the procedures for removing a disabled aircraft on or adjacent to the movement area, including the following:

- (a) the role of the Aerodrome Operator and the holder of the aircraft certificate of registration;
- (b) arrangements for notifying the holder of the certificate of registration;
- (c) arrangements for liaising with the aerodrome air traffic control unit;
- (d) arrangements for obtaining equipment and personnel to remove the disabled aircraft;
- (e) the names, role and telephone numbers of persons responsible for arranging for the removal of disabled aircraft

#### 6.6.15 Handling of Hazardous Materials

Particulars of the procedures for the safe handling and storage of hazardous material on the aerodrome, including the following:

- (a) arrangements for special areas on the aerodrome to be set up for the storage of inflammable liquids (including aviation fuels) and any other hazardous materials; and
- (b) the method to be followed for the delivery, storage, dispensing and handling of hazardous materials.
- Note: Hazardous materials include inflammable liquids and solid, corrosive liquids, compressed gases and magnetized or radioactive materials. Arrangements for dealing with the accidental spillage of hazardous materials should be included in the aerodrome emergency plan.

## 6.6.16 Low-visibility Operations

Particulars of procedures to be introduced for low-visibility operations, including the measurement and reporting of runway visual range as and when required, and the names and telephone numbers, during and after working hours, of the persons responsible for measuring the runway visual range.



# 6.6.17 Protection of sites for Radar and Navigational Aids

Particulars of the procedures for the protection of sites for radar and radio navigational aids located on the aerodrome to ensure that their performance will not be degraded, including the following:

- (a) arrangements for the control of activities in the vicinity of radar and navaid installations;
- (b) arrangements for ground maintenance in the vicinity of these installations; and
- (c) arrangements for the supply and installation of signs warning hazardous microwave radiation.
- Note 1: In writing the procedures for each category, clear and precise information should be included on:
  - when, or in what circumstances, an operating procedure is to be activated
  - how an operating procedure is to be activated;
  - actions to be taken;
  - the person/s who are to carry out the actions; and
  - the equipment necessary for carrying out the actions, and access to such equipment.

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

# 6.7 PART 6 - AERODROME ADMINISTRATION AND SAFETY MANAGEMENT SYSTEM

# 6.7.1 Aerodrome Administration

Particulars of the aerodrome administration, including the following:

- (a) an aerodrome organizational chart showing the names and positions of key personnel, including their responsibilities;
- (b) the name, position and telephone number of the person who has overall responsibility for aerodrome safety;
- (c) airport committees; and
- (d) particulars of staff training and competency, including the specifications of staff qualifications and experience, training and programme for upgrading of skills provided to staff on safety-related duties, and where necessary, the certification system for testing their competency.



# 6.7.2 Safety Management System (SMS)

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

- (a) the safety policy, insofar as applicable, on the safety management process and its relation to the operational and maintenance process;
- (b) the structure or organization of the SMS, including staffing and the assignment of individual and group responsibilities for safety issues;
- (c) SMS strategy and planning, such as setting safety performance targets, allocating priorities for implementing safety initiatives and providing a framework for controlling the risks to as low a level as is reasonably practicable keeping always in view the requirements of the Standards and Recommended Practices in Volume I of Annex 14 to the Convention on International Civil Aviation, and the national regulations, standards, rules or orders.
- (d) SMS implementation, including facilities, methods and procedures for the effective communication of safety messages and the enforcement of safety requirements;
- (e) a system for the implementation of, and action on, critical safety areas which require a higher level of safety management integrity (safety measures programmes);
- (f) measures for safety promotion and accident prevention and a system for risk control involving analysis and handling of accidents, incidents, complaints, defects, faults, discrepancies and failures, and continuing safety monitoring;
- (g) The internal safety audit and review system detailing the systems and programmes for quality control of safety;
- (h) The system for documenting all safety-related airport facilities as well as airport operational and maintenance records, including information on the design and construction of aircraft pavements and aerodrome lighting. The system should enable easy retrieval of record including charts; and
- (i) The incorporation and enforcement of safety-related clauses in the contracts for construction work at the aerodrome.

*Note: Refer to CAP GEN 01 – Safety Management Systems for more guidance.* 

# 6.7.3 Service Level Agreements with Designated Service Providers

To ensure the safety of aircraft operations at the aerodrome and in the associated airspace, the applicant will be required to coordinate with designated service providers and arrange for the provision of aeronautical information services, air traffic control services, rescue and fire-fighting services and aviation security services.



The applicant is therefore required to enter into a technical agreement with the entities or agencies responsible for providing air traffic control, aeronautical information, aviation rescue and fire-fighting services and security services as may be applicable at the aerodrome

In this connection, the applicant should submit to CAA-B:

- (a) A copy of the Service Level Agreement signed between the applicant and the prospective aviation security service provider at the aerodrome, and a copy of the approved airport security programme detailing the arrangement in place at the airport to ensure optimum implementation of aviation security measures.
- (b) A copy of Service Level Agreement signed between the applicant and prospective air traffic service provider at the aerodrome setting out the technical terms under which the services are to be provided.
- (c) A copy of the Service Level Agreement signed between the applicant and the prospective aeronautical information service provider at the aerodrome to ensure accurate, up-todate and timely information of aerodrome related safety condition is provided to aviation service users.
- (d) A copy of the Service Level Agreement signed between the applicant and the prospective rescue and firefighting service provider at the aerodrome to ensure an effective and efficient rescue and firefighting service is provided in accordance with CAA-B requirements during the hours of airport operation.

# 6.8 **REVIEW OF THE AERODROME MANUAL**

An Aerodrome Manual must be kept current at all times. The Aerodrome Operator should identify who will review various parts of the Aerodrome Manual and when these reviews will take place. Staggering the review schedule for each section of the aerodrome manual will ensure that reviewers do not face significant workload increases at any one time.

Periodic reviews should make revision of the Aerodrome Manual easier, but the Aerodrome Operator must be prepared to break with the schedule and update the Aerodrome Manual immediately if any procedure or condition on the aerodrome changes.

The Aerodrome Operator must document the process for review and revision of the Aerodrome Manual, including how to amend it to respond to changing situations at the aerodrome. Using the WHO, WHAT, HOW, and WHEN guidelines will help ensure that all necessary elements are addressed with clarity. The Aerodrome Operator should make sure that everyone involved in the review and revision of the Aerodrome Manual is aware of this process.

The Aerodrome Operator must submit an Aerodrome Manual amendment to the CAA-B at least 30 days before its effective date. However, Aerodrome Operators should try to submit amendments as far in advance as possible to allow enough time for CAA-B review and approval. If timing issues arise, the Aerodrome Operator must contact the assigned Aerodrome Safety Inspector (ASI). The ASI will work with aerodrome management to prepare the change as expeditiously as possible and assist in keeping the aerodrome in compliance with CAR AGA 1, 2 and 3.



In the case of lengthy or complicated changes, the Aerodrome Operator should discuss with the ASI the possibility of providing a draft for early review and consideration.

The sign and marking plan is part of the aerodrome manual. The Aerodrome Operator should submit a copy of the plan as far in advance as possible to ensure CAA-B approval before the design and procurement phase of related development projects. Aerodrome sign and marking plans must receive CAA-B approval before they are implemented.

When a revision to the Aerodrome Manual becomes effective, the Aerodrome Operator must place special emphasis on any affected areas of aerodrome operations to ensure personnel are aware of changes and understand how the changes might impact operations.

