

# **EASA**

## **Acceptable Means of Compliance (AMC) and Guidance Material (GM) to Authority, Organisation and Operations Requirements for Aerodromes**

### **AMC1 ADR.AR.B.005(a)(2) Management System**

#### **TRAINING PROGRAMME AND RECURRENT TRAINING**

- (a) The Competent Authority should establish a training programme for its personnel, including its aerodrome inspectors, and a plan for its implementation.
- (b) The training programme should cover the specific needs of the personnel and the Competent Authority.
- (c) The training programme should include, as appropriate to the role, current knowledge, experience and skills of the personnel, at least the following:
  - (1) aviation legislation, organisation, and structure;
  - (2) the Chicago Convention, relevant ICAO Annexes and documents, the applicable requirements of Regulation (EC) No 216/2008, its Implementing Rules and related Acceptable Means of Compliance, certification specifications and Guidance Material, as well as assessment methodology of the alternative means of compliance, and the applicable national legislation;
  - (3) the applicable requirements and procedures;
  - (4) areas of particular interest that include, but are not limited to:
    - (i) management systems, including safety management systems, safety assurance principles, and quality and security management systems as applied to aeronautical data and aeronautical information;
    - (ii) acceptability and auditing of safety managements systems;
    - (iii) change management;
    - (iv) aeronautical studies, safety assessments, and reporting techniques;
    - (iv) human factors principles;
    - (v) aerodrome design;
    - (vi) signs, markings, and lighting;
    - (viii) aerodrome maintenance;

- (ix) aerodrome operations, including:
    - (A) aerodrome safeguarding, including obstacle assessment;
    - (B) rescue and firefighting;
    - (C) emergency planning;
    - (D) disabled aircraft removal;
    - (E) low visibility operations;
    - (F) adverse weather operations;
    - (G) wildlife management;
    - (H) apron management and apron safety management;
    - (I) handling of dangerous goods; and
    - (J) fuel, facilities, storage and handling;
  - (x) evaluation, approval, and review of aerodrome manuals;
  - (xi) other suitable technical training appropriate to the role and tasks of the personnel; and
  - (xii) enforcement measures.
- (5) The training programme and plan should be updated, as needed, to reflect, at least, changes in aviation legislation, and industry.
- (6) The Competent Authority should ensure that its personnel, including its aerodrome inspectors, undergo recurrent training at regular intervals defined by the Competent Authority or whenever deemed necessary, in order to be kept up to date

### **GM3 ADR.AR.B.005(a)(2) Management System**

#### **QUALIFICATION OF PERSONNEL**

The term 'qualified' denotes fitness for the purpose. This may be achieved through fulfilment of the necessary conditions, such as completion of required training, or acquisition of a diploma or degree, or through the gaining of suitable experience. It also includes the ability, capacity, knowledge, or skill that matches or suits an occasion, or makes someone eligible for a duty, office, position, privilege, or status.

Certain posts may by nature be associated with the possession of certain qualifications in a specific field (e.g. rescue and firefighting, civil, mechanical, or electrical engineering, wildlife biology etc.). In such cases, the person occupying such a post is expected to possess the necessary qualifications at a level that is in accordance with the applicable national or European Union legislation.

## **AMC1 ADR.AR.C.010 Oversight programme**

### **PROCEDURES FOR OVERSIGHT OF AERODROME OPERATORS AND PROVIDERS OF APRON MANAGEMENT SERVICES**

- (a) The Competent Authority should assign an appropriate focal point for each aerodrome operator, and each provider of apron management services. . Where more than one aerodrome inspector is assigned to an aerodrome operator, one of them should be nominated as having overall responsibility for supervision of, and liaison with the aerodrome operator's management, and be responsible for reporting on compliance with the requirements for its operations as a whole.
- (b) Inspections, audits, and oversight procedures, on a scale and frequency appropriate to the operation, should include, but not be limited to, items from the following list:
- (1) aerodrome infrastructure and equipment;
  - (2) visual aids and aerodrome electrical systems;
  - (3) obstacle restriction and control;
  - (4) aerodrome data reporting;
  - (5) aerodrome emergency planning;
  - (6) rescue and firefighting;
  - (7) removal of disabled aircraft;
  - (8) storage facilities and handling of dangerous goods and fuel, including fuel installations, fuel quality, and fuelling equipment;
  - (9) low visibility operations;
  - (10) winter and adverse weather operations;
  - (11) protection of radar, navigation aids, and other aerodrome equipment;
  - (12) apron management;
  - (13) apron safety management;
  - (14) vehicle control on the movement area;
  - (15) wildlife hazard management;
  - (16) runway excursion and incursion prevention programmes of the aerodrome operator, as part of the Competent Authority's runway safety programme;
  - (17) inspections of the movement area;
  - (18) maintenance of the aerodrome systems and the movement area;
  - (19) aerodrome works;
  - (20) protection against hazardous activities in the aerodrome surroundings;
  - (21) personnel training and records, including review of training programme on runway excursion and incursion prevention and its implementation;
  - (22) aerodrome manuals and documentation;

- (23) operator's management system, including its safety management system and its quality, and security management system for aeronautical data; and
  - (24) operator's oversight of the compliance of the organisations operating, or providing services at the aerodrome (third parties).
- (c) An inspection or an audit should be a 'deep cut' through the items selected, and all findings and observations should be recorded.
  - (d) Aerodrome inspectors should analyse and assess the root cause(s) identified by the aerodrome operator, and be satisfied that the corrective actions taken are adequate to correct the non-compliance, and to prevent reoccurrence.
  - (e) Inspections and audits may be conducted separately or in combination. Inspections and audits may also be coordinated with inspections and audits conducted by the competent authorities responsible for other areas, to address areas of coordination between aerodrome operator and the providers of other services (e.g. ATM/ANS). Joint audits with competent authorities for other areas should also be performed because they are particularly effective to examine the interfaces between different actors at the aerodrome (e.g. airport and ATC), including the prevention of runway excursions and incursions.
  - (f) Inspections may, at the discretion of the Competent Authority, be conducted with or without prior notice to the aerodrome operator, or the provider of apron management services.
  - (g) Where it is apparent to an aerodrome inspector that an aerodrome operator, or a provider of apron management services has permitted a breach of the applicable requirements, with the result that safety has been, or might have been compromised, the inspector should ensure that the responsible person within the Competent Authority is informed without delay.
  - (h) In the first few months of a new operation, physical change of the aerodrome or organisational restructure, aerodrome inspectors should be particularly alert to any irregular procedures, evidence of inadequate facilities or equipment, or indications that management control of the operation may be ineffective.
  - (i) Aerodrome inspectors should take account of any conditions that may indicate a significant deterioration in the operator's financial situation. When any financial difficulties are identified, aerodrome inspectors should increase technical surveillance of the operation with particular emphasis on the upholding of safety standards.
  - (j) The number or the magnitude of the non-compliances identified by the Competent Authority will serve to support the Competent Authority's continuing confidence in the aerodrome operator's, or the of apron management services provider's competence, or, alternatively, may lead to an erosion of that confidence. In the latter case, the Competent Authority will need to review any identifiable shortcomings of the management system, and take appropriate action if required.

## **GM1 ADR. OR.D.015(d) Personnel requirements**

### QUALIFICATION OF PERSONNEL

The term 'qualified' denotes fitness for the purpose. This may be achieved through fulfilment of the necessary conditions such as completion of required training, or acquisition of a diploma or degree, or through the gaining of suitable experience. It, also, includes the ability, capacity, knowledge, or skill that matches or suits an occasion, or makes someone eligible for a duty, office, position, privilege, or status.

Certain posts may, by nature, be associated with the possession of certain qualifications in a specific field (e.g. rescue and firefighting, civil, mechanical or electrical engineering, wildlife biology, etc.). In such cases, the person occupying such a post is expected to possess the necessary qualifications at a level that is in accordance with the applicable national or European Union legislation.

## **GM1 ADR.OR.D.027 Safety programmes**

### AERODROME SAFETY COMMITTEES

- (a) Manoeuvring area/Apron Safety Committee
  - (1) The aerodrome operator should establish (a) Manoeuvring area/Apron Safety Committee(s);
  - (2) The Manoeuvring area/Apron Safety Committee(s) should have an advisory role to the aerodrome operator;
- (b) Management of Manoeuvring area /Apron Safety Committee(s)
  - (1) The Manoeuvring area /Apron Safety Committee(s) should be chaired by an aerodrome operator's official, responsible for aerodrome operations; and
  - (2) The aerodrome operator's safety manager should act as the secretary of the Committee(s).
- (c) Composition of Manoeuvring area /Apron Safety Committee(s)

Participation should include, but not limited to representatives of:

  - (1) aerodrome users active in flight operations;
  - (2) aircraft ground handling services providers;
  - (3) aerodrome rescue and firefighting services;
  - (4) aerodrome operations;
  - (5) aerodrome wildlife management;
  - (6) aerodrome maintenance; and
  - (7) air navigation service provider(s).

(d) Tasks

The tasks of the Manoeuvring area /Apron Safety Committee(s) should be:

- (1) to receive and evaluate reports on operational safety issues;
- (2) to receive reports and statistical information on accidents and incidents, and propose solutions;
- (3) to advise on manoeuvring area/apron safety issues such as:
  - (i) promotion of apron safety discipline;
  - (ii) FOD prevention;
  - (iii) developing measures for safe operations;
  - (iv) considering actions to resolve manoeuvring area/apron safety problems;
  - (v) apron equipment issues;
  - (vi) adherence to vehicle traffic issues;
  - (vii) new and/or updated safety instructions;
  - (viii) personal protective clothing/equipment issues;
  - (ix) methods to develop and promote apron safety awareness initiatives,
  - (x) snow and ice clearance issues;
  - (xi) proposed aerodrome works;
  - (xii) proposed changes/developments to the movement area;
  - (xiii) standard operating procedures, etc.

**AMC1 ADR.OR.D.030 Safety reporting system**

**SAFETY REPORTING SYSTEM**

(a) Safety reporting system — General

- (1) An effective safety reporting system should include, apart from aerodrome operator's personnel, aircraft operators, ground handling service providers, air navigation service providers, and any other organisation operating on the aerodrome, or providing services at the aerodrome.
- (2) The safety reporting system should include voluntary reporting possibilities intended for safety hazards identified by the reporter, and that may have potential safety consequences.
- (3) The aerodrome operator should identify which events are mandatory to be reported.
- (4) The aerodrome operator should provide the means and the format for reporting which should be such that meets the existing reporting requirements foreseen in the applicable legislation in terms of time, format, and required information to be reported.
- (5) The safety reporting system should include an acknowledgement to the reporter for the submission of the report.

- (6) The reporting process should be as simple as possible, and well documented, including details as to what, how, where, whom, and when to report;
  - (7) Regardless of the source or method of submission, once the information is received, it should be stored in a manner suitable for easy retrieval and analysis;
  - (8) Access to the submitted reports should be restricted to persons responsible for storing and analysing them;
  - (9) Protection of the identity of the reporter should be ensured, and the procedures established by the aerodrome operator to gather additional information for analyses, or investigations should respect this principle;
  - (10) The safety reporting system should include a feedback system to the reporting person, on the outcome of the occurrence analysis.
- (b) Wildlife hazard reporting
- (1) The aerodrome operator should ensure that its safety reporting system specifically addresses the requirement for all third parties (aircraft operators, aircraft mechanics, air traffic controllers, and other Air Traffic Services personnel, etc.) and all aerodrome personnel, to report to the aerodrome operator wildlife strikes, and relevant identified hazards.
  - (2) The reporting of such third parties should be done irrespectively of any other requirements according to which they have to report to the Competent Authority of the aerodrome, or the state of registry of the aircraft involved, or any other Competent Authority in the context of the national occurrence reporting programme.

### **AMC3 ADR.OR.E.005 Aerodrome manual**

#### **AERODROME MANUAL**

- (a) The aerodrome manual should have the following structure, and include, at least, the following information; if an item is not applicable, the indication 'Not applicable' or 'Intentionally blank' should be inserted, along with the relevant reason:

#### **A. PART A — GENERAL**

0. Administration and control of the aerodrome manual including the following:

0.1. Introduction:

0.1.1 a statement signed by the accountable manager that the aerodrome manual complies with all applicable requirements, and with the terms of the certificate;

0.1.2 a statement signed by the accountable manager that the aerodrome manual contains operational instructions that are to be complied with by the relevant personnel;

- 0.1.3 a list and brief description of the various parts, their contents, applicability, and use;
- 0.1.4 explanations, abbreviations, and definitions of terms needed for the use of the manual;
- 0.2 System of amendment and revision:
  - 0.2.1 details of the person(s) responsible for the issuance and insertion of amendments and revisions;
  - 0.2.2 a record of amendments and revisions with insertion dates, and effective dates;
  - 0.2.3 a statement that handwritten amendments and revisions are not permitted, except in situations requiring immediate amendment, or revision in the interest of safety;
  - 0.2.4 a description of the system for the annotation of pages, or paragraphs and their effective dates;
  - 0.2.5 a list of effective pages or paragraphs;
  - 0.2.6 annotation of changes (in the text and, as far as practicable, on charts and diagrams);
  - 0.2.7 temporary revisions; and
  - 0.2.8 description of the distribution system and a distribution list for the aerodrome manual, its amendments, and revisions.
- 1. General information
  - General information including the following:
    - 1.1 purpose and scope of the aerodrome manual;
    - 1.2 legal requirements for an aerodrome certificate and the aerodrome manual as prescribed in Part-ADR.OR;
    - 1.3 conditions for use of the aerodrome by its users;
    - 1.4 the obligations of the aerodrome operator; rights of the Competent Authority and guidance to staff on how to facilitate audits/inspections by Competent Authority personnel.

## B. PART B — AERODROME MANAGEMENT SYSTEM, QUALIFICATION AND TRAINING REQUIREMENTS

- 2. A description of the management system, including the following:
  - 2.1 Aerodrome organisation and responsibilities including the following: a description of the organisational structure, including the general organogram and other departments' organograms. The organogram should depict the relationship between the departments. Subordination and reporting lines of all levels of organisational structure (Departments, Sections, etc.) related to safety should be shown. Names, authorities, responsibilities, and duties of management and nominated persons; responsibilities and duties of other operational, maintenance personnel, as well of the aerodrome safety committees and the Local Runway Safety Team and their functioning, should also be included.
  - 2.2. A description of the safety management system, including:
    - 2.2.1 scope of the safety management system;



- 2.2.2 safety policy and objectives;
- 2.2.3 safety responsibilities of key safety personnel;
- 2.2.4 documentation control procedures;
- 2.2.5 safety risk management process, including hazard identification and risk assessment schemes;
- 2.2.6 monitoring of implementation and effectiveness of safety actions, and risk mitigation measures;
- 2.2.7 safety performance monitoring;
- 2.2.8 safety reporting (including hazard reporting) and investigation;
- 2.2.9 emergency response planning;
- 2.2.10 management of change (including organisational changes with regard to safety responsibilities);
- 2.2.11 safety promotion; and
- 2.2.12 safety management system outputs.
- 2.3 A description of the compliance monitoring and related procedures.
- 2.4 A description of the quality management system for aeronautical data and aeronautical information provision activities and related procedures, including those for meeting the relevant safety, and security management objectives.
- 2.5 Procedures for reporting to the Competent Authority including handling, notifying and reporting accidents, serious incidents, and occurrences. This section should include, at least, the following:
  - (a) definition of accident, serious incident and occurrence and of the relevant responsibilities of all persons involved;
  - (b) illustrations of forms to be used (or copies of the forms themselves), instructions on how they are to be completed, the addresses to which they should be sent and the time allowed for this to be done;
  - (c) procedures and arrangements for the preservation of evidence, including recordings, following a reportable event;
- 2.6 Procedures related to the use of alcohol, psychoactive substances and medicines.
- 2.7 Procedures for:
  - 2.7.1 complying with safety directives;
  - 2.7.2 reaction to safety problems; and
  - 2.7.3 handling of safety recommendations issued by Safety Investigation Authorities.
- 2.8 A description of the method and procedures for recording aircraft movements, including movement and aircraft type, dates, and number of passengers.
- 3. Required aerodrome personnel qualifications (see GM1 ADR. OR.D.015 (d)). Moreover, procedures related to:
  - 3.1 the training programme, including the following:

3.1.1 responsibilities, frequencies, syllabi, and the identified training standards for all personnel involved in the operation, rescue and firefighting maintenance and management of the aerodrome, and those persons operating unescorted on the movement area and other operational areas of the aerodrome.

3.1.2 procedures:

3.1.2.1 for training and checking of the trainees;

3.1.2.2 to be applied in the event that personnel do not achieve the required standards.

3.1.3 description of documentation to be stored and storage periods.

3.2 the proficiency check programme, including responsibilities and frequencies;

3.2.1 procedures to be applied in the event that personnel do not achieve the required standards.

3.2.3 description of documentation to be stored and storage periods.

## C. PART C — PARTICULARS OF THE AERODROME SITE

4. A description of the aerodrome site including in particular, the following information:

4.1 a plan showing the distance of the aerodrome from the nearest city, town, or other populous area;

4.2 detailed maps and charts of the aerodrome showing the aerodrome's location (longitude and latitude) and boundaries, major facilities, aerodrome reference point, layout of runways, taxiways and aprons, aerodrome visual and non-visual aids, and wind direction indicators;

4.3 a plan showing the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome;

4.4 description of the physical characteristics of the aerodrome, elevations, visual and non-visual aids, as well as the information regarding the aerodrome reference temperature, strength of pavements, rescue and firefighting level of protection, ground aids and main obstacles;

4.5 description of any cases of exemptions or derogations, equivalent level of safety, special conditions, and operating limitations; and

4.6 description of the types of operations that the aerodrome is approved to conduct.

## D. PART D — PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AERONAUTICAL INFORMATION SERVICE

5. The aeronautical information services available and the procedures for the promulgation of general information, including the following:

5.1 the name of the aerodrome;

5.2 the location of the aerodrome;

5.3 the geographical coordinates of the aerodrome reference point determined in terms of the World Geodetic System — 1984 (WGS-84) reference datum;

- 5.4 the aerodrome elevation and geoid undulation;
- 5.5 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;
- 5.6 the aerodrome reference temperature;
- 5.7 details of the aerodrome beacon; and
- 5.8 the name of the aerodrome operator and contact details (including telephone numbers) of the aerodrome operator at which may be contacted at all times.
- 6. Aerodrome dimensions and related information, including the following:
  - 6.1 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;
  - 6.2 length, width and surface type of strip, runway end safety areas, stopways; length, width and surface type of taxiways; apron surface type and aircraft stands; clearway length and ground profile;
  - 6.3 visual aids for approach procedures, approach lighting type and visual approach slope indicator system; marking and lighting of runways, taxiways, and aprons; other visual guidance and control aids on taxiways and aprons, location and type of visual docking guidance system; availability of standby power for lighting;
  - 6.4 the location and radio frequency of VOR aerodrome checkpoints;
  - 6.5 the location and designation of standard taxi routes;
  - 6.6 the geographical coordinates of each threshold, appropriate taxiway centre line points, and aircraft stands;
  - 6.7 the geographical coordinates, and the top elevation of significant obstacles in the approach and take-off areas, in the circling area and in the surroundings of the aerodrome (in the form of charts);
  - 6.8 pavement surface type and bearing strength using the Aircraft Classification Number — Pavement Classification Number (ACN-PCN) method;
  - 6.9 pre-flight altimeter check locations established and their elevation;
  - 6.10 declared distances;
  - 6.11 contact details (telephone/telex/fax numbers and e-mail address) of the aerodrome coordinator for the removal of disabled aircraft, and information on the capability to remove disabled aircraft, expressed in terms of the largest aircraft type;
  - 6.12 rescue and firefighting level of protection; types and amounts of extinguishing agents normally available at the aerodrome; and
  - 6.13 exemptions or derogations from the applicable requirements, cases of equivalent level of safety, special conditions, and limitations.

## **AMC1 ADR.OPS.B.015 Monitoring and Inspection of movement area and related facilities**

### GENERAL

- (a) The aerodrome operator should establish a monitoring and inspection program of the movement area which is commensurate with the traffic expected at the aerodrome in order to identify any default or potential hazards to the safety of aircraft or aerodrome operations.
- (b) Inspections of the movement area covering items such as the presence of FOD, the status of visual aids, wildlife and current surface conditions, should be carried out each day, at least, once where the code number is 1 or 2, and, at least, twice where the code number is 3 or 4.
- (c) Inspections covering other items such as other lighting systems required for the safety of aerodrome operations, pavements and adjacent ground surfaces, drainage and storm water collection systems, fencing and other access control devices, the movement area environment inside the aerodrome boundary and outside the aerodrome boundary within line of sight, should be carried out, at least, weekly.
- (d) The aerodrome operator, during excessive weather events (excessive heat, freeze and thaw periods, following a significant storm, etc.) should be conducting extra inspections of paved areas to check for pavement blow-ups and debris that could damage aircraft, or cause pilots to lose directional control.
- (e) The aerodrome operator should keep a log for all routine and non-routine inspections of the movement area and related facilities.

## **GM1 ADR.OPS.B.015 Monitoring and inspection of movement area and related facilities**

### PAVEMENTS AND ADJACENT GROUND SURFACES INSPECTION

#### (a) Paved Areas Inspection

The following should be observed during an inspection of paved areas:

- (1) general cleanliness with particular attention to material which could cause engine ingestion damage. This may include debris from runway maintenance operations, or excessive grit remaining after runway gritting;
- (2) presence of contaminants such as snow, slush, ice, wet ice, wet snow on ice or frost, water, anti-icing or de-icing chemicals, mud, dust, sand, volcanic ash, oil, rubber deposits which may impair the runway surface friction characteristics; particular attention should be given to the simultaneous presence of snow, slush, ice, wet ice, wet snow on ice with anti-icing or de-icing chemicals;
- (3) signs of damage to the pavement surface including cracking and spall of concrete, condition of joint sealing, cracking and looseness of aggregate in asphalt surfaces, or break-up of friction courses;

- (4) after rain, flooded areas should be identified and marked, if possible, to facilitate later resurfacing;
  - (5) damage of light fittings;
  - (6) cleanliness of runway markings;
  - (7) the condition and fit of pit covers; and
  - (8) the extremities of the runway should be inspected for early touchdown marks; blast damage to approach lights, marker cones and threshold lights; cleanliness and obstacles in the runway end safety area.
- (b) Adjacent ground surfaces inspection
- The following may be observed during the inspection:
- (1) the general state of ground cover vegetation ensuring, in particular, that excessive length is not obscuring lights, signs, markers, etc.;
  - (2) any developing depressions should be noted and plotted;
  - (3) any unreported aircraft wheel tracks should be carefully plotted and reported;
  - (4) the condition of signs and markers;
  - (5) the general bearing strength of grass areas, particularly those close to aircraft pavement surface;
  - (6) waterlogged grass areas; and
  - (7) FOD and wildlife.

## **GM5 ADR.OPS.B.015 Monitoring and inspection of movement area and related facilities**

### **FOLLOW-UP OF INSPECTIONS**

Arrangements should exist for reporting the results of inspections, and for taking prompt follow-up actions to ensure correction of unsafe conditions. These arrangements could include, depending on the result or observation, notification to air traffic services and aeronautical information services, removal of FODs, wildlife control, recording of events for further analysis according to the aerodrome operator's SMS requirements, etc.

## **AMC1 ADR.OPS.B.020 Wildlife strike hazard reduction**

### **GENERAL**

The aerodrome operator should:

- (a) participate in the national wildlife strike hazard reduction programme;
- (b) establish procedures to record and report to the appropriate authority wildlife strikes to aircraft occurred at the aerodrome, in close cooperation with organisations operating, or providing services at the aerodrome;
- (c) ensure that wildlife hazard assessments are made by competent personnel; and

- (d) establish, implement and maintain a wildlife risk management programme.

### **GM1 ADR.OPS.B.020 Wildlife strike hazard reduction**

#### **WILDLIFE RISK ASSESSMENT**

- (a) The aerodrome operator should:
  - (1) conduct a risk assessment using strike data for each species, as well as information on the presence of species, the number of individuals, and their biology, and update this regularly;
  - (2) take into account the number of strikes for each species and the severity of damage arising from those strikes; and
  - (3) target actions on those species which are present with the highest frequency and create the greatest damage.
- (b) Wildlife risk assessments should be made by qualified personnel.

### **GM2 ADR.OPS.B.020 Wildlife strike hazard reduction**

#### **WILDLIFE RISK MANAGEMENT PROGRAMME**

The wildlife risk management programme may cover an area of approximately 13 km (7 NM) from the aerodrome reference point, and should include, at least, the following elements:

- (a) assignment of personnel:
  - (1) a person who is accountable for developing and implementing the wildlife risk programme;
  - (2) a person who oversees the daily wildlife control activities, and analyses the collected data and carries out risk assessments in order to develop and implement the wildlife risk management programme; and
  - (3) trained and qualified staff who detect and record the birds/wildlife, and assess the bird/wildlife hazard, and expel hazardous birds/wildlife;
- (b) a process to report, collect, and record data of struck and living birds/wildlife;
- (c) a process to analyse the data and to assess the bird/wildlife hazard to develop mitigation, proactive, and reactive measures. This should include a risk assessment methodology;
- (d) a process of habitat and land management both on, and in its surroundings, whenever possible, in order to reduce the attractiveness of the area to birds/wildlife;
- (e) a process to remove hazardous birds/wildlife;
- (f) a process for liaison with non-aerodrome agencies and local landowners, etc. to ensure the aerodrome is aware of developments that may contribute to creating additional bird hazards

within the surrounding of the aerodrome's infrastructure, vegetation, land use and activities (for example crop harvesting, seed planting, ploughing, establishment of land or water features, hunting, etc. that might attract birds/wildlife).

### **GM3 ADR.OPS.B.020 Wildlife strike hazard reduction**

#### **TRAINING FOR WILDLIFE CONTROL**

- (a) The aerodrome wildlife control personnel should receive formal training prior to their initial engagement as wildlife controllers.
- (b) Training for aerodrome wildlife control should be documented and records of it should be retained to satisfy periodic reviews, audits, and competence checks;
- (c) Training of aerodrome wildlife control personnel should be conducted by qualified aerodrome wildlife control personnel, or specialists with proven experience in this field.
- (d) Wildlife control initial training should, at least, address the following general areas:
  - (1) an understanding of the nature and extent of the aviation wildlife management problem, and local hazard identification;
  - (2) an understanding of the national and local regulations, standards, and guidance material related to aerodrome wildlife management programs (use of best-practice models);
  - (3) appreciation of the local wildlife ecology and biology, including (where applicable) the importance of good airfield grass management policies, and the benefits they can deliver to wildlife control;
  - (4) the importance of accurate wildlife identification and observations, including the use of field guides;
  - (5) local and national laws and regulations relating to rare and endangered species, and species of special concern, and the aerodrome operators policies relating to them;
  - (6) wildlife strike remains collection, and identification policies and procedures;
  - (7) long-term (passive) control measures, including on and off aerodrome habitat management, including identification of wildlife attractions, vegetation policies, air navigation aids protection, and drainage system, and water body management practicalities;
  - (8) short-term (active) tactical measures, using well established effective wildlife removal, dispersal, and control techniques;
  - (9) documentation of wildlife activities and control measures, and reporting procedures (the aerodrome wildlife management plan);
  - (10) firearms and field safety, including the use of personal protective equipment; and

- (11) wildlife strike risk assessment and risk management principles, and how these programs integrate with the aerodrome's safety management system.
- (e) Wildlife control staff should be fully aware of the conditions and terms of the operations of the aerodrome environment. Where this is not relevant, the wildlife control personnel should receive appropriate training, including:
  - (1) aerodrome airside driver training, including aerodrome familiarisation, air traffic control communications, signs and marking, navigational aids, aerodrome operations, and safety and other matters the aerodrome operator deems appropriate; and
  - (2) aircraft familiarisation, including aircraft identification, aircraft engine design, and impact of wildlife strikes on aircraft systems.
- (f) It should be ensured that wildlife control staff maintains competence in the role. This could be achieved either by regular refresher training or another system of monitoring, acceptable to the appropriate authority. The maintenance of competence should include the areas in (d) and (e) above, and also include:
  - (1) reviewing firearms safety;
  - (2) changes in the local environment;
  - (3) changes in risk management policy;
  - (4) recent wildlife events at the aerodrome;
  - (5) improvements in active and passive measures; and
  - (6) any other matters the aerodrome operator deems appropriate.

#### **GM4 ADR.OPS.B.020 Wildlife strike hazard reduction**

##### **RECORDING AND REPORTING OF WILDLIFE STRIKES AND OBSERVED WILDLIFE**

- (a) It is necessary to maintain a record of all wildlife activity or 'bird/wildlife log'. The log should include, at least, the following information:
  - (1) numbers, species, and location of birds/wildlife seen; and
  - (2) actions taken to disperse birds/wildlife, and the results of these actions.
- (b) The log should be completed at regular intervals by the wildlife control staff.
- (c) The log should be analysed to identify which species represent a hazard, at which times of day or year, or under which weather conditions, etc.
- (d) The aerodrome operator should have a system in place to collect bird/wildlife strike reports in close cooperation with data owners, like aircraft operators, air navigation service providers, aircraft engine maintenance departments, etc.