

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

**Release Date:** December 2014

**Document:** AAWHG RP 5.1(0)

**Disclaimer:** *This Recommended Practice has been developed by the Australian Aviation Wildlife Hazard Group.*

*All material contained in this documented is provided for information only. The use of and/or the taking of any action in reliance on this information, by any person or entity, is entirely at their own risk.*

*Any outcome as a result of action or reliance on this information is the sole responsibility of the user and not of the Australian Aviation Wildlife Hazard Group.*

### 1. Outline

- 1.1 This Recommended Practice (**RP**) aims to ensure that personnel engaged in wildlife hazard management functions at an aerodrome are appropriately trained and are competent.
- 1.2 This document has been developed through the Australian Aviation Wildlife Hazard Group (**AAWHG**). It has drawn upon information available from the AAWHG membership, local industry representatives and also from international sources.
- 1.3 The practices outlined in this document should be considered by industry representatives to:
  - Ensure that aerodrome safety and support personnel are trained in the available tools, techniques and procedures to address aviation wildlife hazards; and
  - Ensure that aerodrome safety and support personnel are competent in their functions related to wildlife hazard management.
- 1.4 It is recommended that this document should be read in conjunction with:
  - RP 1.3 Wildlife Risk Assessment and Analysis
  - RP 4.0 Wildlife Hazard Mitigation (reserved)
- 1.5 This document will be subject to regular review through the Australian Aviation Wildlife Hazard Group. Should you wish to provide comment or would like to contribute to the content of this document, please contact the group at its email address: [rp@aawhg.org](mailto:rp@aawhg.org)

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

### 2. Regulatory context

- 2.1 The CASA Manual of Standards - Part 139 Aerodromes requires that persons engaged in reporting functions, including those for wildlife hazards, have been adequately trained for the role and possess relevant experience.
- 2.2 Advisory Circular 139-26 furthermore recommends that for wildlife hazard monitoring and mitigation, personnel should be suitably trained and in the latter case, qualified as appropriate.

### 3. Definitions

- 3.1 The following terms are used within this Recommended Practice:

|                     |   |
|---------------------|---|
| <b>Training</b>     | The transfer of knowledge and the attainment of skills and competencies as a result of an educational process. Training has a specific goal of improving the capability, capacity, productivity and performance of a trainee. |
| <b>Competency</b>   | The demonstrated attainment of an ability or skill by the trainee.  |
| <b>Assessment</b>   | To evaluate and measure the academic readiness, learning progression and skill acquisition of a trainee.  |
| <b>Commensurate</b> | In proportion. Corresponding in size or degree.   |

### 4. General Principles

- 4.1 All personnel undertaking a safety function related to wildlife hazard management should receive prior training and pass an assessment of their competency.
- 4.2 Any training and competency program however should not be limited to those personnel whom are directly engaged in identification and mitigations tasks (i.e. 'in the field'). Wildlife hazard management is a complex system. Many support personnel also provide input which is integral to its successful function such as:
- Document management;
  - Database management;
  - Environmental management;
  - Planning;
  - Security/access control;

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

- Financial management;
  - Information management;
  - Human resource management;
  - Senior/executive management.
- 4.3 For personnel engaged in wildlife hazard management or working in a safety support role, both the training provided and any resultant assessment of competency should be commensurate for their engagement in the wildlife hazard management system.
- 4.4 In general, the educational syllabus for Wildlife Hazard Management should ensure commensurate training is provided for, but not limited to, the following areas:
- Wildlife Hazard Management definitions, concepts, principles and legal context;
  - Risk assessment and risk management;
  - Wildlife observation and identification (including off aerodrome hazards);
  - Strike remains collection;
  - Wildlife hazard and strike reporting
  - Mitigation measures (both active and passive); and
  - Data and document management.
- 4.5 Each of the above points will be expanded upon further in this RP.
- 4.6 Once provided, competency should be assessed post training and then on an ongoing basis through continuous monitoring. Renewal or remedial training may be required for personnel in the future. Please refer to sections 13 and 14 of this RP for more information.
- 5. Wildlife Hazard Management definitions, concepts, principles and legal context**
- 5.1 Aerodrome wildlife control and support personnel should receive commensurate training in wildlife hazard management definitions concepts, principles and legal context. This training should include but not be limited to:
- The context and nature of wildlife hazards and the risk to aircraft operations;
  - The role and functions of both CASA and the ATSB;
  - Wildlife hazard definitions in CASA Advisory Circular (AC) 139-26;
  - Safety regulations and standards including those from CASA, the ATSB and the applicable Workplace Health and Safety authority in the relevant State or Territory;
  - National and/or State/Territory Environmental regulations;
  - Common law considerations including negligence and duty of care considerations;

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

- Rare, special concern and endangered species which may be present at the aerodrome or within its environs. This also includes any relevant regulations and conservation policies which apply.

### 6. Risk assessment and management

6.1 Any training provided on risk assessment and management should include but not be limited to the following:

- Availability and selection of risk assessment and analysis tools;
- The correct application of the risk assessment and analysis technique(s);
- The consequences of wildlife strikes on aircraft systems, structures and propulsion systems; and
- Integration with the safety management system for the aerodrome;

6.2 For further information on Wildlife Risk Assessment and Analysis, please refer to RP 1.3

### 7. Wildlife observation and identification

7.1 Any training provided on wildlife observation and identification should include but not be limited to the following:

- Wildlife ecology and biology;
- Wildlife observation practices;
- Accurate wildlife identification (including the use of field guides);
- Wildlife strike identification procedures;
- Available services for scientific strike remains identification;
- The monitoring of wildlife hazards off aerodrome and within its environs.

### 8. Strike remains collection

8.1 Any training provided on strike remains collection should include but not be limited to the following:

- Locating strike remains;
- The safe collection of strike remains; and
- Correct preservation, storage and transfer of strike remains.

### 9. Wildlife hazard and strike reporting

9.1 Any training provided on wildlife hazard and strike reporting should include but not be limited to the following:

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

- Publishing wildlife hazard information in Aeronautical Information Publication (AIP);
- Raising NOTAMs for wildlife hazards;
- Reporting wildlife strikes to the ATSB (as defined under the Transport Safety Investigation Regulations); and
- Distributing reports and safety communications to key stakeholders.

9.2 For further information on wildlife hazard reporting, please refer to CASA AC 139-26 and to the ATSB website: <http://atsb.gov.au>.

### 10. Mitigation measures

10.1 Regarding wildlife hazard mitigation, aerodrome wildlife control and safety support personnel should receive training in both passive and active mitigation measures commensurate to their role.

#### 10.2 Passive mitigation

- 10.2.1 Any training provided on passive mitigation should include the following:
- Identification of attractants on the aerodrome and within its environs;
  - Airport habitat management, vegetation policies, infrastructure protection and drainage system management.

#### 10.3 Active mitigation

- 10.3.1 Any training provided on active mitigation should include the following:
- the correct selection of the most appropriate mitigation technique/equipment;
  - The safe and effective use of the applicable mitigation technique/equipment;
  - The humane use of the applicable mitigation technique/equipment on wildlife;
  - Procedures for coordinating tactically with Air Traffic Control or a Certified Air/Ground Radio Operator (if applicable); and
  - Procedures for the notification and/or reporting of active mitigation activities (as applicable).
- 10.3.2 If the mitigation activity may require entry onto the movement area of an aerodrome, this training should cover:
- aircraft familiarisation, including aircraft identification, aircraft design and propulsion system hazards;
  - the impact of wildlife strikes and Foreign Object Debris on aircraft systems;

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

- aerodrome (airside) driver training including aerodrome familiarisation and air traffic control communications (if applicable);
  - aerodrome signs and markings;
  - navigational aids and clearance areas;
  - aerodrome operations and safety; and
  - any other matters the aerodrome operator deems appropriate.
- 10.3.3 If equipment for active mitigation includes the use of a firearm, this training should cover:
- State or Territory requirements on the use of firearms;
  - correct storage and security of the firearm;
  - correct operation of the firearm;
  - the correct use of personal protective equipment;
  - procedures for misfire and hang fire events.
- 10.3.4 For more information on the safe use of firearms, please refer to RP 3.2.1.
- 10.3.5 If active mitigation includes the destruction of wildlife (including eggs or wildlife carrying unborn young), this training should cover:
- relevant State or Territory or National legislation including any required permits;
  - Correct identification of the wildlife and/or nesting site(s);
  - Humane destruction technique;
  - Safe and correct disposal technique.
- 10.3.6 If equipment for active mitigation includes the use of pyrotechnics, this training should cover:
- relevant State or Territory or National legislation requirements on the use of pyrotechnics;
  - correct storage and security of the pyrotechnics;
  - operational safety; and
  - the correct use of personal protective equipment.

## 11. Document and Data management

- 11.1 Regarding the completion and maintenance of document for wildlife hazard management, aerodrome wildlife control and support personnel should receive commensurate training on the:
- policy and procedures for documentation and record maintenance;
  - recording of wildlife populations, location and behaviour;
  - recording of dispersal activities and the use of consumables (i.e ammunition);
  - recording of wildlife incidents, strikes and damaging strikes;
  - the correct interpretation of the data sets related to their role.

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

### 12. Selection and appointment of training providers/personnel

- 12.1 Wildlife Hazard Management training should be conducted by qualified persons or specialists with proven and relevant experience.
- 12.2 Personnel appointed to provide training in wildlife hazard management should hold:
- qualifications in wildlife control (or possess relevant experience);
  - qualifications in aerodrome operations (or possess relevant experience); and
  - qualifications in education or training and assessment.
- 12.3 The selected training product/package should address the core elements recommended throughout this document. Suitable training courses can be sourced from universities, registered training providers, wildlife hazard management consultancies and from other education service providers.
- 12.4 For nationally recognised training, the government website: [www.training.gov.au](http://www.training.gov.au) encompasses a national register of Registered Training Organisations (RTOs) and recognised training products. With regard to wildlife hazard management, AVI08 - Aviation Training Package contains some modules of relevance. These include:
- [BSBRK401A](#) - Identify risk and apply risk management processes;
  - [AVIB3005A](#) - Inspect and report on aerodrome serviceability;
  - [AVIF2023A](#) - Follow occupational health and safety procedures
  - [AVI1Z508B](#) - Maintain basic situation awareness in the aviation workplace;
  - [AVI2O108A](#) - Use firearms on an aerodrome to control wildlife hazards;
  - [BSBSUS201A](#) Participate in environmentally sustainable work practices
- 12.5 **Please note:** *The use of an RTO nor alignment with AVI08 is currently not mandated for wildlife hazard management training. To the knowledge of the AAWHG, AVI08 does not cover every area of training and competency recommended under Para 4.4 above. Accreditation in these Aviation Training Package modules however has the benefit of a standardised training and assessment program. The trainee will also obtain a nationally recognised qualification upon the completion of a sufficient number of modules.*

### 13. Assessment of Competency

- 13.1 The successful completion of the training program should be demonstrated by passing a theoretical and practical competency assessment.
- 13.2 Following the completion of training and the attainment of competency, written confirmation or certification should be provided to the trainee.
- 13.3 If a published training procedure is not provided or cannot be readily referenced, the assessor should attest **in writing** the fields, skills or units of competency that the trainee has successfully completed.

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

### 14. Recurrency training and reassessment of competency

- 14.1 Once personnel are initially trained and assessed as being competent, regular refresher training should be provided at periodic intervals. This will ensure their knowledge is kept current with any changes to procedures, policies, their working environment and advances in technology.
- 14.2 The host organisation should provide a system for monitoring the knowledge and competency of their staff in wildlife hazard management. If personnel are subsequently assessed as having gaps in their knowledge and/or skills, remedial training and assessment needs to be provided.
- 14.3 An annual verification of skills and competency is recommended at a minimum.

### 15. Integration with Aerodrome Manual or procedures manual

- 15.1 The policies and procedures for aerodrome wildlife hazard management training should be documented.
- 15.2 For a Certified Aerodrome, these details should be recorded in the relevant section of their Aerodrome Manual.
- 15.3 For a Registered Aerodrome, these should be recorded within their documented safety procedures.

### 16. Review of training procedures

- 16.1 The procedures for training should be subject to regular review.
- 16.2 It is recommended that these reviews should be conducted at two yearly intervals.

### 17. Records management

- 17.1 The maintenance of records for training is vitally important to support the process. These records can also be used to substantiate an organisation's mitigation strategy.
- 17.2 In the absence of an overriding legislative requirement, it is recommended that these records are maintained for a minimum of 7 years from the original date of their creation.

## TRAINING AND COMPETENCY: AERODROME SAFETY PERSONNEL

### 18. References

- 18.1 International Organization for Standardization, 2009, Geneva, *International Standard 31000:2009*
- 18.2 International Civil Aviation Organisation, 1991, *Airport Services Manual Bird Control and Reduction* (Doc 9137-AN/901 Part 3)
- 18.3 Civil Aviation Safety Authority, 1998, Australia, *Civil Aviation Safety Regulations 1998*, <[www.comlaw.gov.au](http://www.comlaw.gov.au)>
- 18.4 Civil Aviation Safety Authority, 1998, Australia, *Civil Aviation Regulations 1988 1988*, <[www.comlaw.gov.au](http://www.comlaw.gov.au)>
- 18.5 Civil Aviation Safety Authority, 2012, Australia, *Civil Aviation Orders*, <[www.comlaw.gov.au](http://www.comlaw.gov.au)>
- 18.6 Civil Aviation Safety Authority, 2011, Australia, *Advisory Circular AC 139-26*, <[www.casa.gov.au](http://www.casa.gov.au)>
- 18.7 International Bird Strike Committee, 2014, *Standards For Aerodrome Bird/Wildlife Control No. 2. (Not yet published)*.
- 18.8 European Aviation Safety Agency, 2014, *Wildlife strike hazard reduction - Training for wildlife control. (Not yet published)*.

### Acknowledgements

The AAWHG would like to acknowledge the following in appreciation for their assistance with the focumation of this RP:

- Anastasios Anagnostopoulos, Head, Wildlife & Landscaping, Environmental Services Department, Athens International Airport; and
- Avisure, Australia