

## FIREARMS: GENERAL SAFETY

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### 1. Outline

- 1.1 This Recommended Practice (**RP**) aims to provide the aviation industry with information on how to use firearms safely for the purpose of wildlife hazard management.
- 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 It is intended that the practices outlined in this document will be utilised by industry representatives to:
  - Use firearms safely to manage wildlife in order to ensure aviation safety; and
  - Use firearms in accordance with any applicable regulations.
- 1.4 It is recommended that this document should be read in conjunction with:
  - RP 3.2 Active Mitigation (Reserved)
  - RP 3.2.2 Firearms: Effective use for Wildlife Hazard Management (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: [info@aawhg.org](mailto:info@aawhg.org)

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### 2. Use of firearms - General

- 2.1 Firearms typically form a necessary and effective control measure within an integrated wildlife hazard management plan.
- 2.2 Firearms can be used as a deterrent measure for wildlife by either using the acoustic properties of the firearm and/or propelling pyrotechnic ammunition.
- 2.3 Firearms can also be used to control wildlife populations and/or risk species that pose a hazard to aviation safety.
- 2.4 Any personnel operating a firearm or related equipment need to be adequately trained in their safe and correct use. Adequate supervision needs to be maintained during the operation of firearms. This applies equally to company personnel and/or any contracted (i.e. 3<sup>rd</sup> party) staff that are used for this purpose.
- 2.5 Only registered and approved firearms should be used.
- 2.6 The type of firearm and ammunition used should be carefully selected to ensure it is appropriate and safe for the intended purpose.
- 2.7 When using a firearm, any wildlife that is affected its use should always be treated humanely whenever possible.
- 2.8 All firearms and ammunition are potentially lethal and need to be handled with care at all times. Care is to also be taken when transporting and/or handling ammunition. Treat every firearm as if it is loaded.
- 2.9 The use of firearms should be subject to an appropriate and complete risk assessment. Appropriate control measures need to be put in place prior to their use.
- 2.10 Any firearm, related equipment and their operating procedures should be managed by the relevant Safety Management System.
- 2.11 The use of a firearm and related equipment should also comply with any applicable Occupation Health and Safety legislation.

### 3. Regulatory requirements

#### 3.1 Aerodrome Operators

- 3.1.1 For Certified Aerodromes with a confirmed wildlife hazard, the Manual of Standards Part 139, section 10.14 requires a Wildlife Hazard Management Plan to be developed. This plan must address an ongoing strategy for bird and animal hazard reduction and also suitable harassment methods.
- 3.1.2 Advisory Circular 139-26 contains recommendations for regulated aerodromes to conduct wildlife hazard mitigation.

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3.1.3 Under the Aviation Transport Security Regulations 2005, aerodromes which are bound by the Airports Act 2004 must include in their Transport Security Programme:

- Procedures for using firearms and other weapons in the airside area or landside security zones;
- Methods for ensuring that staff who have a need to know are aware of the restrictions on the possession and use of firearms, other weapons and prohibited items within the airport.
- Procedures to handle or transport firearms, other weapons and prohibited items (that) are consistent with relevant Commonwealth, State or Territory laws.

3.1.4 Under the Aviation Transport Security Regulations 2005, aerodromes which are bound by the Airports Act 2004 are authorised to have personnel with firearms within the airside area of an airport, if:

- with the consent of the airport operator, personnel are engaged in controlling wildlife or other animals on the airport;
- personnel hold and have in their position a firearms licence, validly issued under the law of the State or Territory in which the airport is located, for the firearm; and
- a licence or permission is required under the law of the State or Territory for the person to shoot wildlife or animals on the airport, the personnel hold and have in their position such a licence or permission.

### 3.2 State and Territory regulations affecting firearm owners and operators

3.2.1 Regulations for the possession and use of firearms vary between the states and territories. Please refer to your applicable firearm management authority for more information.

### 3.3 State and Territory regulations affecting occupational health and safety

3.3.1 Regulations and policy related to Occupational Health and Safety can vary between the states and territories. Please refer to your applicable authority for more information.

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### 4. Definitions

4.1 The following terms are used within this Recommended Practice:

<b>Firearm</b>	A weapon (pistol, shotgun, rifle or any combination of such) that is capable of firing a projectile using an explosive charge as propellant.
<b>Foreign Object Debris (FOD)</b>	A substance, debris or article that is alien to the movement area and could potentially cause damage to an aircraft.
<b>Hang fire</b>	An occurrence when there is an appreciable delay between activating the firing mechanism and the actual firing event.
<b>Live Rounds</b>	Cartridges that contain shot or a solid projectile.
<b>Misfire</b>	Occurs when a shooter activates the firing mechanism and is met with a failure of the loaded ammunition to fire.
<b>Pyrotechnic Rounds</b>	A non-lethal projectile intended to present a very marked visual and aural stimulus to which most species of wildlife will respond. It is specifically designed for the purpose of scaring, rather than killing wildlife.

### 5. Operation of firearms

#### 5.1 Recommended procedures for safe firearm use

It is recommended the following procedures are followed to ensure safe firearm use:

- 5.1.1 A firearm should never be left UNATTENDED at any time.
- 5.1.2 ALWAYS treat firearms as if they were LOADED – DO NOT rely on the safety catch.
- 5.1.3 Pass or accept only OPEN and UNLOADED firearms.
- 5.1.4 When carrying a firearm ALWAYS ensure the muzzle is pointed toward the ground or in a safe direction away from personnel, equipment and infrastructure.
- 5.1.5 ALWAYS maintain a FIRM and SAFE GRIP on a firearm and carry it so that the direction of the barrel can be controlled in the event of a fall or stumble.
- 5.1.6 DO NOT climb on or negotiate obstacles with loaded firearms – DO NOT rely on the safety catch.

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- 5.1.7 ALWAYS ensure that a firearm is UNLOADED and EMPTY with the action OPEN before taking it into any vehicle or building.
- 5.1.8 Never operate a firearm from inside a vehicle.
- 5.1.9 ALWAYS ensure that gun barrels are CLEAR of any obstruction BEFORE LOADING. Blocked barrels can burst and cause severe injury.
- 5.1.10 Make SURE of your target before FIRING. Remember the firing zone is not only the area between you and your target, but also the area beyond the target which is still within the extreme range of the firearm. If in doubt **DO NOT SHOOT**.
- 5.1.11 ALWAYS be ALERT to the DANGER of people, vehicle, aircraft (note helicopters could approach from any direction), moving into line of fire both in front of and behind the target area.
- 5.1.12 Always point firearms in a safe direction. **NEVER POINT OR AIM A FIREARM AT A PERSON**. If in doubt **DO NOT SHOOT**.
- 5.1.13 NEVER point or aim a firearm at an object or at a target area UNLESS INTENDING TO SHOOT.
- 5.1.14 NEVER shoot at a flat, hard surface or at the surface of water.
- 5.1.15 Always ensure that pyrotechnic ammunition is separated and clearly distinguishable from Live Rounds.
- 5.1.16 Before discharging any form of pyrotechnic, operators should understand the characteristics (range, report type, dBL rating, report delay) of each cartridge type and ensure all safety considerations will not be compromised.
- 5.1.17 Pyrotechnics can pose a FIRE HAZARD following an explosion occur close to the ground or during dry windy conditions. After discharge, operators should monitor the site for signs of fire and respond accordingly.
- 5.1.18 ALWAYS remove all FOD such as spent cases, wadding, cartridges, pyrotechnic canisters etc. from the movement area.
- 5.1.19 Secure weapons in an appropriate firearm storage cabinet when not in use and/or travelling off airport.
- 5.1.20 REPORT all firearms faults or unserviceability to the responsible manager or accountable person. Refer Section 5.3 of this RP for more information.
- 5.1.21 Personnel using firearms are strongly recommended to use appropriate Personal Protective Equipment. Refer Section 5.5 of this RP for more information.

**FIREARMS: GENERAL SAFETY****5.2 Safety procedures in the event of a misfire and/or unexploded ammunition:**

It is recommended that in the unlikely event of a misfire and/or unexploded ammunition, the following procedures are followed:

- 5.2.1 Keep the muzzle of the firearm pointed in a safe direction.
- 5.2.2 Wait at least one minute in the case of a delayed discharge event.
- 5.2.3 Carefully OPEN the action keeping the rear of the shell pointed AWAY from yourself and anyone else.
- 5.2.4 Check the base of the shell to see if primer has been struck.
- 5.2.5 If struck and there is definite indentation, carefully remove the round and immerse in water within a safe confined area for a minimum of 12 hours.
- 5.2.6 If soft struck or not struck at all remove the round and cease using the firearm. Advise the responsible manager or accountable person of the hazard.
- 5.2.7 A licensed gunsmith or appropriately qualified person should be engaged to inspect the firearm and perform any required maintenance and recertification.
- 5.2.8 Be AWARE that some ammunition types (i.e. pyrotechnic) can cause a FIRE should a malfunctioning round come into contact with a combustible material (i.e. dry grass). It is recommended that an extinguishing agent or appliance is readily available and is deployed in the event of a fire (should it be safe to do so).
- 5.2.9 In the case of the safe recovery of unexploded pyrotechnics, the cartridge should be immersed in water within a safe confined area until the explosive material has disintegrated.
- 5.2.10 It is recommended that an appropriate ammunition misfire storage container is available for the temporary disposal of any misfired ammunition. Such a container should be clearly labelled and located within a safe and secure area.

**5.3 Safety procedures in the event of a hang fire:**

In the unlikely event of an appreciable delay between activating the firearm and the firing event occurring (generally not more than 10-15 seconds), the following procedures should be followed:

- 5.3.1 Cease using the firearm and ammunition immediately.
- 5.3.2 Handle the firearm safely and return it to safe storage.
- 5.3.3 Isolate the ammunition in use at the time of the hang-fire event.

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5.3.4 REPORT the fault to the responsible manager or accountable person.

5.3.5 A licensed gunsmith or appropriately qualified person should be engaged to inspect the firearm, ammunition and perform any required maintenance and recertification.

### 5.4 Cleaning and general care of firearms:

It is recommended that the following procedures are followed for the cleaning and general care of firearms:

5.4.1 All firearms should be inspected for cleanliness before use. A dirty mechanism could result in a misfire.

5.4.2 Firearms should be cleaned routinely or following any period of regular use. Regular lubrication is also recommended.

5.4.3 Firearms should always be cleaned in the event of a misfire.

5.4.4 A licensed gunsmith should conduct regular safety checks on the firearms.

5.4.5 If any care or operating procedures as stated in the operating instructions for a firearm are found to be in conflict with the recommended practices of this document, the operating instructions for the firearm should prevail.

### 5.5 Personal Protective Equipment

5.5.1 When using firearms, it is strongly recommended that appropriate Personal Protective Equipment is used and/or worn. This should include but not be limited to:

- Hearing protection
- Eye Protection/Safety Glasses
- Sturdy/fully enclosed footwear

## 6. **Authorisation and licencing**

6.1 All officers that handle and operate firearms should hold an appropriate licence that is issued by the applicable authority.

6.2 All firearms used for wildlife hazard management should be approved and registered under the relevant regulations of the applicable state or territory.

6.3 Any modifications to the firearm should be approved in accordance with the relevant regulations of the applicable state or territory. Any such modifications should be made by a licensed gunsmith or a properly qualified and experienced person.

6.4 Officers who are tasked to handle and operate firearms should be properly authorised by their organisation.

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6.5 Any relevant permits to control and/or harass wildlife should be obtained from the relevant authority(s) prior to commencing wildlife management.

### 7. Training

7.1 It is strongly recommended that all operators of a firearm are appropriately trained and are assessed as being competent in their use. This training should include but not be limited to:

- Completion of a firearms safety course;
- Company based safety training;
- Dedicated wildlife hazard management training;
- Completion of a Aerodrome Reporting Officer course (or are supervised by an Aerodrome Reporting Officer who is trained);
- Specialised firearms training as required (i.e. through a clay target club, rifle club, etc.)
- Humane destruction of wildlife (if culling activities are undertaken).

### 8. Review

8.1 The procedures for the use of firearms should be subject to regular review and should be conducted annually at a minimum.

### 9. Records management

9.1 The maintenance of records for the use of firearms is vitally important to support the process. The maintenance of records will assist organisations in:

- Tracking when firearms are used;
- Tracking what species were controlled/deterred by using a firearm;
- Tracking the effectiveness of firearm use in controlling the wildlife hazard;
- Tracking the use and disposal of ammunition.

9.2 These records can also be used to substantiate an organisation's mitigation strategy.

9.3 In the absence of an overriding legislative requirement, it is recommended that these records are maintained for a minimum of 2 years from the original date of their creation.

### 10. References

- 10.1 International Organization for Standardization, 2009, Geneva, *International Standard 31000:2009*
- 10.2 International Civil Aviation Organisation, 1991, *Airport Services Manual Bird Control and Reduction* (Doc 9137-AN/901 Part 3)
- 10.3 Civil Aviation Safety Authority, 1998, Australia, *Civil Aviation Safety Regulations 1998*, <[www.comlaw.gov.au](http://www.comlaw.gov.au)>



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- 10.4 Civil Aviation Safety Authority, 2012, Australia, *Manual of Standards Part 139*, <[www.comlaw.gov.au](http://www.comlaw.gov.au)>
- 10.5 Civil Aviation Safety Authority, 2011, Australia, *Advisory Circular 139-26*, <[www.casa.gov.au](http://www.casa.gov.au)>
- 10.6 Infrastructure and Transport, 2005, Australia, *Aviation Transport Security Regulations 2005*, <[www.comlaw.gov.au](http://www.comlaw.gov.au)>
- 10.7 Brisbane Airport, 2013, *Firearm Safety and Storage*
- 10.8 Brisbane Airport, 2012, *Lethal control procedure*
- 10.9 Darwin International Airport, 2013, *Firearms: Safety and Use*
- 10.10 Darwin International Airport, 2012, *Firearms: Licencing and Authorisation*
- 10.11 Darwin International Airport, 2012, *Ammunition and Firearm Usage Register*
- 10.12 International Bird Strike Committee, 2006, *Standards For Aerodrome Bird/Wildlife Control*, <<http://www.int-birdstrike.org>>