

Bird Control Management Policy, Strategy, and Plan (Aug 2014)

Content

Introduction

- Aerodrome Licensing Requirements
- Background
- Hazard Management
- On-Airport Bird Control
- Off-Airport Bird Control
- Review

Roles & Responsibilities

- Head of Airside
- Airside Operations Manager
- Duty Manager Airside
- Duty Field Manager
- Manoeuvring Area Unit / Airside Safety Department
- Airside Facilities Manager
- Aerodrome licence Manager
- Bird Hazard Management Committee

Risk Assessment Methodology

Habitat Management

- Policy
- Soil & Grass Management
- Water Bodies
- Waste Bins/Skips

Active Bird Control Measures – On-Airport

Control or Influence of areas in the vicinity of the aerodrome

- Safeguarding Process
- Local Land Owners
- Wider Off-Airport Management

Personnel Training

Recording & Analysis of Bird Strike Reports

Permissions for Control Measures

Appendix 1 – Landscape Schedule 2013

Appendix 2 – Animal Health & Veterinary Laboratories Agency (AHVLA) Schedule of Proposed Work

Introduction

Aerodrome Licence Requirements

The Civil Aviation Authority, through the licensing requirement laid down in Civil Aviation Publication (CAP) 168 'Licensing of Aerodromes', require of the aerodrome operator that "All reasonable measures should be taken to address those features on the aerodrome that may attract birds or wildlife, control the existence of birds/wildlife on the aerodrome, and, where practicable, in the vicinity of the aerodrome to prevent bird flight lines across the aerodrome and its approach and departure routes".

In the vicinity is defined as within a 13km radius from the aerodrome reference point.

Guidance on current best practice is contained within CAP 772 'Birdstrike Risk Management for Aerodromes'.

Both CAP168 and 772 require that a Bird Control Management Plan is developed to assess bird strike risk, and to define and implement the appropriate bird control measures to reduce or mitigate the risk.

Background

Heathrow's bird hazard management is based around the two key principles of habitat management and active bird control. The threat to Heathrow is primarily from birds transiting the airfield, through the latter stages of the approach or the early stages of departure. While on approach, this can be largely off airport.

The control activities are centred on a risk based approach, taking account of the probability of a strike and the likely severity (hazard) of that strike.

Hazard Management

Habitat management involves both on-airport and off-airport controls. On airport control is exercised through both landscaping and control measures, such as the long grass policy, netting of water bodies, control of waste outlets or construction skips. Off airport control is exercised through the safeguarding process via the local planning authority and pro-active liaison with local land owners/farmers. The overall object is to reduce the attraction of the airport and its environs to birds that present a significant threat to aviation, or to break a flight line that crosses the airfield.

Active bird control is exercised on the airport and its immediate environs by the staff of the Airside Safety Department. Wider off airport pro-active management is carried out through Birdstrike Management Limited (BM Ltd).

Active control is there to remove residual birds that continue to visit the airfield or manage situations that are brought about by unplanned/unpredictable changes in habitat or weather. The objective is to drive the birds off the airfield and maintain the pressure to ensure the birds do not return.

On Airport Bird Control

On airport habitat management (carried under the Habitat Management Plan) includes the use of long grass on the airfield, control of vegetation and insects, management of food waste outlets and the wiring or netting of water areas.

Active bird control is carried out by the staff of the Airside Safety Department (ASD), who maintain a 24hr bird patrol within the airfield boundary. Electronically produced bird distress calls and pyrotechnics fired from pistols are used to scare birds from the airfield. Live rounds from shotguns or rifles are used to cull if necessary. The bird patrol is carried out in appropriately equipped vehicles giving access to all areas of the airfield.

Information from the 24hr bird patrols is recorded on a database, which produces statistical information for trend analysis.

When the presence of a large number of birds is thought to constitute a hazard to aircraft, the ASD will liaise with ATC who then advise the aircrew. A message will also be broadcast on the ATIS and a NOTAM issued if appropriate.

All bird carcasses found on the Manoeuvring Area are treated as bird strikes. Any reported bird strike within the airfield perimeter is investigated by the ASD. Bird strikes within the perimeter are reported by the ASD to the CAA on the appropriate form. Bird remains or photographs of remains are sent to BMLtd for formal identification.

Off Airport Bird Control

HAL has a limited ability to influence off airport habitat. Through the Safeguarding process, exercised via the local planning authority, HAL can object to developments that may increase sites favourable to birds (such as lakes, a copse of trees, a landfill site), or request that control measures are put in place to limit bird numbers.

BM Ltd carry out a number of surveys throughout the year to keep HAL advised of bird numbers and movements in the surrounding area. They may carry out pro-active bird control at HAL's request

Review

The Bird Hazard Management Committee review birdstrike data, habitat management and associated reports on a regular basis. Subject to these reviews, actions are amended or added to address any changed/increased threat.

BM Ltd carries out Standards Checks of HAL's habitat management and active bird control at a number of interim visits to the airport throughout the year.

Roles & Responsibilities

Head of Airside

Responsible for the safe operation of the airfield, including bird hazard management (BHM). The implementation of BHM is delegated to the Airfield Operations Manager. Chair of the Bird Hazard Management Committee.

Airfield Operations Manager

1. Advise the HoA on matters relating to bird hazard management
2. The overall assessment of the birdstrike risk level.
3. Ensure the BHM policy is produced and kept up-to-date
4. Oversee the implementation of BCMP.
5. Provide the Airside Departments resources for the implementation of the BCMP
7. Ensure the provision of appropriately trained staff within the Airside Safety Department (ASD) to carry out bird hazard control duties.
8. Ensure the provision of the procedures within ASD to carry out bird hazard control.
9. Liaison with Birdstrike Management Limited on provision of bird hazard management services and off airport activities
10. Responsible for reporting bird hazard management data.

The Duty Manager Airside (DMA)

Accountable for the implementation of the BHM policy on a daily basis

The Duty Field Manager (DFM)

1. Organise and manage bird control operations on a daily basis
2. Monitor bird control activities on a daily basis, including record keeping.
3. Facilitate the active surveillance, bird dispersal, culling and other field tasks within the immediate vicinity of the airfield.
4. Ensure the supply, safe keeping and correct maintenance of bird control equipment and consumables

The Duty Manager Airside (Bird Hazard Management)

A nominated DMA has accountabilities for BHM within the ASD and is a member of the BHM Committee.

1. Daily/weekly/monthly data analysis of bird activity, management & strike data
2. Detailed assessment of the birdstrike risk level (supported by the BHM Committee)
3. Liaison with Natural England with respect to the provision of culling Licence(s) at Heathrow

The Manoeuvring Area Unit (MAU) staff of the Airside Safety Department (ASD)

1. Maintain surveillance of bird activity on the aerodrome and in the immediate vicinity
2. Carry out active bird control measures to detect, deter and counter any bird activity.
3. Issue and operate firearms associated with BHM.
4. Liaise with Air Traffic Control as appropriate.
5. Record bird and bird control activity
6. Record actual, potential or suspected birdstrikes.

7. Ensure evidence of a birdstrike is forwarded to Birdstrike Management Ltd for analysis.
(For details on the MAU role, see the ASD Training Manual)

Airside Facilities Manager

1. Landscape management is the accountability of the Head of Facilities (Airside, Engineering and Landside). Responsibility for the airside and landside landscape is delegated to the Airside Facilities Manager and actioned through the Airside Maintenance Team Manager (Airside MTM).
2. The Facilities Manager is responsible for ensuring that habitat management is planned and carried out in order to meet the requirements of the BCMP. This will be planned, recorded and reported through the Landscape Schedule. Copies of the Schedule will be available to the BHM Committee.
3. The Airside MTM is a member of the BHM Committee.

Aerodrome Licence Manager

1. Member of the BHM Committee, representing the Head of Safety & Assurance.
2. Responsible for writing the BCMP
3. Monitoring and assessing the effectiveness of the BCMP.
4. Audit function relating to the BCMP & BCM activity.
5. Advise and mentor the BHM committee

Bird Hazard Management Committee

Membership of the BHM Committee consists of the Head of Airside (Chair), Airfield Operations Manager, a nominated Duty Manager Airside, the Airside MTM (from Facilities Management) and the Aerodrome Licence Manager. The Head of Airside Policy & Standards (Central Airside Operations) also attends the meeting. A member of Birdstrike Management Limited will attend from time-to-time.

The Committee aims to sit every 5 weeks to review the following;

- Habitat management plan
- Bird monitoring data – on and off airport
- Birdstrikes
- Reports and recommendations
- On-going actions
- Training Status of staff

Risk Assessment Methodology

A standard risk assessment methodology is used to describe the hazard (the birds around the airport and their location and behavior) and to assess the levels of risk arising from that hazard based on a matrix of probability and severity of any likely birdstrike event. Probabilities are based on the birdstrike record over the past 5 years, and severity on the probability of damage following a strike with the species concerned using data from the entire UK birdstrike sample.

Each species or group of species is assigned to one of 5 categories as follows:

Probability

No. Strikes per year (airport data)	>10	3-10	1-2.9	0.2-0.9	0-0.1
Probability category	Very High	High	Moderate	Low	Very Low

Severity

Percentage of strikes causing damage (national data)	>20%	10 – 20%	6 - 9.9%	2 - 5.9%	0 - 1.9%
Severity category	Very High	High	Moderate	Low	Very Low

The risk is then evaluated using a severity x probability matrix as follows:

SEVERITY	PROBABILITY				
	Very High	High	Moderate	Low	Very Low
Very High	Red - Further Action Required				Options
High				Mgtment	
Moderate			Review		
Low			Yellow -		
Very Low		Green -	No further	Action	Required

The assessment of risk is made by reviewing the birdstrikes that have taken place and the movement or presence of birds within the aerodrome vicinity. This review is carried out annually by Birdstrike Management and on a rolling basis by the Bird Hazard Management Committee. Long or short term actions are then planned.

Habitat Management

Policy

Heathrow employs a long grass policy within the airfield boundary and manages the planting of trees and shrubs to ensure they do not provide roosting or feeding opportunities. Habitat management is overseen by the Airside Maintenance Team Manager, who is a member of the Bird Hazard Management Committee.

Soil & Grass Management

The long grass policy requires the sward to be maintained at 150-200mm (6-8 inches). Certain areas of the airfield grass are subjected to enormous 'stress' by the continual passing of aircraft engines, with the resulting drying effect of the hot jet blast. This is a constant challenge to the long grass policy.

The on airfield grass is managed on a yearly rotation and is recorded in the Ground Maintenance (Airfield) plan and the Landscape Schedule.

Soil samples are taken at the beginning of the year to assess the PH value and the number of insect larvae present. An assessment is also made of the thatch layer. Based on the agronomist report, soil treatment, insecticide and bottoming out actions for the first quarter of the year are planned.

Grass cutting commences in the spring, initially with bottoming out of the selected area of the airfield, along with a selective weed spraying. Cutting continues through the summer months depending on weather conditions and grass growth. Fertilizer is applied when required.

Autumn is the preferred time of grass repair, when the soil is warm and the grass is moist. Cutting ceases at the end of autumn and the grass is untouched until the spring.

On-going development on the airfield results in areas of grass being disturbed. The Project Process includes the reinstatement of any such grass area to a specified standard. Details are held by the Airside Facilities Manager.

Water Bodies

Areas of water on the aerodrome are netted to exclude birds. This includes the north-west balancing pond and the twin rivers to the west of the airfield. A maintenance programme is in place to ensure that the netting is effective and that plants/shrubs within the water areas are kept under control.

Waste Bins/Skips

Sources of food, such as waste bins and skips, are required to be covered or have lids that exclude birds. Patrols by the Airside Safety Department include the monitoring of works sites and known areas of potential food sources (such as the taxi car park).

Active bird control measures – on airport

Active bird control is carried out by the Manoeuvring Area Unit (MAU) of the Airside Safety Department (ASD). The MAU maintain a 24hr bird patrol within the airfield boundary. Electronically produced bird distress calls, pyrotechnics fired from pistols and live rounds from shotguns and a rifle are used to scare birds from the airfield. The bird patrol is carried out in appropriately equipped vehicles giving access to all areas of the airfield.

Full details of active bird scaring methods are held within the ASD Training Manual and associated Standard Operating Procedures (SOP).

Control or influence of areas in the vicinity of the aerodrome

Safeguarding process

HAL has a safeguarding process with the local planning authority for consultation on proposed developments within 13 km of the aerodrome that may have the potential to attract birds to the site, and increase the bird strike threat to the aerodrome.

The safeguarding process is managed through the Safeguarding Officer in Airside Safety & Compliance. Local Planning Authorities (LPA) send all safeguarding consultations to the Safeguarding Officer who make an assessment of the bird hazard risk. Objections are raised if required and bird control requirements suggested as part of the development process. This may include habitat management and active bird control. Details are forwarded to the Aerodrome Licence Manager for consideration & comment.

Local Land Owners

There is currently no liaison with local land owners and farmers.

Wider off airport management

HAL employ Birdstrike Management Limited (BMLtd) to carry out surveys and bird control measures in the wider area around Heathrow. BMLtd submit reports to HAL both in formal methods (reports) and via e-mail to report of progress. There are also meetings throughout the year where BMLtd and HAL staff meet to discuss issues. Such meetings usually take place during critical parts of the season (related to grass management and specific species management on/off the airfield).

Personnel training

The staff of the Manoeuvring Area Unit attend a CAA recognised Bird Hazard Management course as part of their training. There is a refresher course every 3 years. The staff also have an in-house training sessions as part of the training programme, with a refresher on a yearly basis. The courses include recognising the hazard, bird identification and dispersal methods. The staff hold appropriate Firearms Licences and undertake training to ensure that they handle and operate the section weapons in a safe and effective manner. Details can be found in the ASD Training Manual and in the Standard Operating Procedures (SOPs).

Recording and analysis of birdstrike reports; the logging of bird species and data analysis

Birdstrikes are record on the CAA form 1282 (strikes, near misses, reported). Such recording will be initiated by either a reported strike (actual or a near miss) or a carcass found on the airfield. An initial investigation will be carried out to establish which aircraft may or was hit, and during what period of the flight. A photograph or sample of the bird (such as a group of feathers) will then be sent to BMLtd for formal identification.

Birdstrike data is analysed by the Duty Manager Airside (DMA) with Bird Hazard responsibility and by the Bird Hazard Management Committee. Potential trends or ‘spikes’ in the data are discussed for appropriate action.

Permissions for control measures

Responsibility for obtaining licences to control specific bird species rests with the Duty Manager Airside (DMA) with Bird Hazard responsibility. Alternatively, such licences may be obtained on HAL’s behalf by an organisation employed to carry out such control measures. Currently, this would usually be BMLtd.

BHM Committee
August 2014