

London Ashford Airport (Lydd)

Proposed New Terminal Building

**Supplementary Information to Environmental
Statement and Statement to Inform**

**The Predicted Impacts of a Bird Hazard Control
Programme for 500,000 ppa on Bird Species of
Conservation Importance near to London Ashford
Airport (Lydd)**

October 2007

CONTENTS

Executive Summary

1 INTRODUCTION

2 METHODOLOGY

3 STUDY RESULTS

3.1 Predicted Operational Scenario

3.2 Control Plan Required for Predicted Operational Scenario

- 3.2.1 Aerodrome Habitat: Long Grass Management
- 3.2.2 Aerodrome Habitat: Scrub Reduction
- 3.2.3 Aerodrome Habitat: Waterbody Management
- 3.2.4 Aerodrome Habitat: Roofing Management
- 3.2.5 Off-airfield Habitat Management
- 3.2.6 Active Bird Control Instructions: Surveillance, Patrolling and Dispersal
- 3.2.7 Local Safeguarding Policy

4 IMPACT ASSESSMENT AND RECOMMENDATIONS FOR MITIGATION

5 REFERENCES

APPENDIX 1 - DRAFT BIRD CONTROL PLAN

Executive Summary

London Ashford Airport, Lydd (LAA) has previously submitted a planning application for a new terminal building supported by an Environmental Statement (Parsons Brinckerhoff, 2006). Linked to this, a draft Statement to Inform (Parsons Brinckerhoff, 2007) has been submitted to Shepway District Council (SDC) in order that an Appropriate Assessment of the impacts of the proposed development can be made on the European protected SAC and SPA sites. Following consultation, and an analysis of consultee responses, LAA have agreed with (SDC) to provide supplementary information on the extent and nature of the bird hazard management programme which would be required at the airfield should the proposal be consented and implemented, and in particular the impacts on the bird species of conservation interest which are present in European and nationally protected designated conservation areas (SPA, SAC and SSSI).

The scope and terms of reference of this study have been agreed with SDC following the issue of a report from their consultants (Bureau Veritas) on September 5th 2007. These are:

“Provide a reasonably accurate assessment of the type, frequency and scale of bird-scaring activities that will be necessary to meet the LAA target of achieving <3 bird-strikes per 10,000 aircraft movements under the 500,000 passengers per annum scenario, compared to base-line conditions. Then assess how the difference will likely affect the sizes of populations of designated bird species within the SPA and SSSI (noting that this includes the waterbird population in general under the intended revision of the SPA). NB: this needs to be based on recent and relevant bird survey data. If significant effects are likely, mitigation or compensation measures should be proposed and explained.”

Taking into consideration the location of LAA and in particular its proximity to bird reserves including the Dungeness to Pett Level SPA, a Bird Control Plan (BCP) has been compiled for the maximum capacity of the proposed development which is designed to achieve the target bird strike level. There are a number of improvements to the BCP envisaged for 500,000 ppa (compared to the current BCP) which include:

- Improved long grass management programme
- Continued scrub reduction programme
- Airfield waterbody protection
- Roof space management
- Local land use agreements
- Improved active bird control
- Local safeguarding policy

Correctly implemented, the predicted impacts of this BCP on the SPA, local bird reserves and bird species of conservation importance are **minor or insignificant**. Other airports with similar BCPs and situated adjacent to SPA sites report negligible conservation impacts. A minor impact predicted for LAA on the SPA will be possible disturbance to wintering herds of Bewick Swan if they visit Arc Pit. Large waterbird flocks at Arc Pit may also be subject to transient disturbance. Outside the SPA, the BCP measures will make the airfield and surrounding land less attractive to wintering golden plover.

Provided that pro-active dialogue and co-operation is secured between the airport and conservation organisations, it is predicted that a safeguarding policy can protect the airport from additional bird hazard risk, whilst allowing maintenance and enhancement of conservation sites within the safeguarding zone, though the siting of any new reedbed or open water feature should be risk-assessed on an individual basis, and preferably sited at distance from the airfield.

The noise from aerodrome dispersal techniques is not expected to exceed that at today's levels, and with more judicious use of Digi-scare, bird-scaring cartridges and firearms, noise disturbance to the SPA could be reduced over current impact.

As a general mitigation, it is recommended that the efficacy of this revised BCP is tested for its impact by implementing a specific monitoring programme for the SPA-listed species (and for any proposed species which are adopted). If it can be demonstrated that any of the species are being negatively affected by bird control methods, then management intervention should be implemented to reverse this.

1 INTRODUCTION

London Ashford Airport, Lydd (LAA) has previously submitted a planning application for a new terminal building supported by an Environmental Statement (Parsons Brinckerhoff, 2006). Linked to this, a draft Statement to Inform (Parsons Brinckerhoff, 2007) has been submitted to Shepway District Council (SDC) in order that an Appropriate Assessment of the impacts of the proposed development can be made on the European protected SAC and SPA sites. Following consultation, and an analysis of consultee responses, LAA have agreed with (SDC) to provide supplementary information on the extent and nature of the bird hazard management programme which would be required at the airfield should the proposal be consented and implemented, and in particular the impacts on the bird species of conservation interest which are present in European and nationally protected designated conservation areas (SPA, SAC and SSSI).

Linked to this, a Statement to Inform has been submitted to SDC in order that an Appropriate Assessment of the impacts of the proposed development can be made on the European protected SAC and SPA sites. Following consultation, consultees requested supplementary information on the extent and nature of the bird hazard management programme which would be required at the airfield should the proposed terminal building be consented and implemented, and in particular the impacts of that programme on the bird species of conservation interest present at the European protected sites (SPA and SAC).

This report references information previously supplied in the Environmental Statement and/or Statement to Inform, but predominantly seeks to provide new and more detailed information.

2 METHODOLOGY

This study was undertaken by Nigel Deacon of Airfield Wildlife Management and Dr. Mark McLellan of Parsons Brinckerhoff (PB). Nigel Deacon is an expert on bird strike risk management and airfield ornithology; Mark McLellan has previously been in charge of bird strike risk management and bird ecology at London Luton Airport and is an expert on sustainable aviation.

The study commenced with a workshop conducted at LAA on July 24th 2007, which was supported by LAA personnel currently controlling bird strike risk and a PB researcher. The issues emerging from the workshop were then subject to further research.

The scope and terms of reference of the study have been agreed with SDC following the issue a report from their consultants (Bureau Veritas) on September 5th 2007. These are:

“Provide a reasonably accurate assessment of the type, frequency and scale of bird-scaring activities that will be necessary to meet the LAA target of achieving <3 bird-strikes per 10,000 aircraft movements under the 500,000 passengers per annum scenario, compared to base-line conditions. Then assess how the difference will likely affect the sizes of populations of designated bird species within the SPA and SSSI (noting that this includes the waterbird population in general under the intended revision of the SPA). NB: this needs to be based on recent and relevant bird survey data. If significant effects are likely, mitigation or compensation measures should be proposed and explained.”

As part of the study, bird control arrangements at other airports which also have bird conservation issues to deal with were reviewed.

3. STUDY RESULTS

3.1 Predicted Operational Scenario (500,000 ppa)

As stated above in the scope and terms of reference for this study, LAA have established a target of achieving <3 bird-strikes per 10,000 aircraft movements under the proposed development scenario. This study set out to confirm (with reasonable accuracy) the type, frequency and frequency of bird-scaring activities necessary to meet this target for the maximum capacity allowed by the proposed new terminal building (500,000 ppa).

In order to achieve the proposed bird strike target rate of less than 3.0 per 10,000 air traffic movements, a maximum of 14 bird strike incidents per year would be allowable at the peak of the development scenario. At current levels of operation, the baseline level bird strike is currently averaging approximately one per year (equating to approximately 0.5 bird strikes per 10,000 air traffic movements).

3.2 Control Plan Required for Predicted Operational Scenario

Following consideration of the operational scenario predicted for LAA with a terminal building allowing 500,000 ppa, the study team has amended the 'Draft Bird Control Plan' as submitted previously with the Statement to Inform. The revised document is attached at Appendix 1.

The document has been compiled to reflect LAA's unique location, and in particular its adjacency to European and nationally designated bird reserves. In addition, case histories at other airports which already support similar passenger numbers to LAA's aspirations and/or also lie adjacent to bird conservation areas have been used to form an impression of the bird control programme likely to be required at LAA. Bird control programmes at Glasgow, RAF Kinloss, London City, Robin Hood, Doncaster, City of Derry and Dundee Airports were studied.

At Glasgow Airport, an internationally important number of whooper swans over-winter on an SSSI floodplain directly north of the airport. Whooper swans are listed under Annex 1 of the EC Wild Birds Directive as requiring special protection, and a clause has been written into the site designation of the SSSI to allow airport staff to carry out bird scaring, to move the swans away from the airport if they are perceived to be a risk to flight safety.

With a history of geese causing bird strike at RAF Kinloss, a real-time avian and wildlife hazard radar monitoring system was installed for air traffic control. The system provides 24-hour radar surveillance, and no goose-aircraft strikes have occurred since the GDS became operational in 2004.

Adjacent to dockland water bodies, London City Airport has a number of bird hazard issues to manage. The most problematic bird species include gulls, terns, mute swan and lapwings. In addition to employing routine bird-scaring measures, the airport contracts an experienced falconer.

Robin Hood Doncaster Airport has four SPA sites in nearby proximity (Thorne Moors, Hatfield Moors, Derwent Valley, and the Humber Flats), but operates a 'routine' bird scaring programme with no adverse effects reported on the SPAs.

City of Derry Airport (currently 342,000 ppa) has present 3.1 % of the wintering population of Bewick swans at the nearby Lough Foyle SPA. Routine bird scaring programmes operate with no adverse issues reported on the swan population; on-airfield waterbody (culvert and ponds) hazard issue are addressed by netting.

Dundee Airport is situated within the Firth of Tay and Eden Estuary SPA and employs 'routine' bird hazard control without any reported impacts on the SPA.

Taking into account the current bird control programme at LAA; current practice at the airports above; and with a view to achieving the required level of bird hazard control, an updated Draft Bird Control Plan has been compiled (Appendix 1). The main features of the new Draft Bird Control Plan are (in summary) as follows.

3.2.1 Aerodrome Habitat: Long Grass Management

One element of habitat management used to control birdlife at most aerodromes is a "Long Grass Policy" (LGP) based on best practice set out in CAP 772, (formerly CAP 680), with modifications to suit local conditions. There is very little doubt (in the expert opinion of Airfield Wildlife Management) that the grass management practice currently employed at LAA at today's baseline condition could be improved, such that the risk species identified for LAA are better deterred. It is proposed to modify the CAP 772 'basic' system for LAA by 'bottoming out' (grass cut to ground level and cuttings removed) of the airfield's grass areas over a cycle of 2-4 years, preferably in sections on annual rotation.

3.2.2 Aerodrome Habitat Management: Scrub Reduction

The dense scrub on the airfield harbours game birds and other risk species relatively close to the runway. It is proposed that a programme of scrub removal (already endorsed by Natural England) is implemented.

No shrub or tree planting schemes should be included in the development proposal's landscaping plan in order to reduce risk species perching, nesting or roosting at the airfield.

3.2.3 Aerodrome Habitat: Waterbody Management

The ponds and drainage ditches on the airfield are currently attractive to risk species, and it is proposed that this needs to be corrected as a contribution to reducing birdstrike risk to achieve target levels for the development scenario. It is proposed that all waterbodies will have measures installed (predominantly 20-30 cm mesh netting) to passively exclude hazardous waterfowl such as ducks, geese, swans, cormorants and herons. The nets will not exclude moorhen and coot (which are not considered a bird strike hazard), or smaller bird species such as kingfisher and wagtails, mammals, insects, reptiles or amphibians. Any installed nets will be kept in good condition and tensioned to prevent birds from becoming entangled. If bird hazard species penetrate the net they will be released and the entry route investigated and corrected.

Any new open water to be created on or near the airport by or on behalf of the airport owners will be assessed for its potential contribution to the airport's birdstrike hazard before proceeding. Sensitive location and/or passive exclusion measures may be required to mitigate any perceived increased risk. (See Local Safeguarding Policy, 3.2.7 below).

3.2.4 Aerodrome Habitat: Roofing Management

Airport building rooftops, terminal and hangar buildings may attract large gulls (normally herring gull and/or lesser black-backed gull) to breed. Airport buildings will be inspected each spring to ensure that breeding gulls do not become established, and any gull nests detected will be removed. All roof inspections to be recorded.

3.2.5 Off-airfield Habitat Management

Wherever possible, local agreements with local landowners should be implemented to reduce the attractiveness of the aerodrome environment to risk species. At LAA, Lydd, the following initiatives are recommended:

- The practice of 'putting down' game birds and the use of land adjacent to the airport for game shooting should cease;
- Where possible, and in consultation with local landowners and farmers, agricultural practices including choice of crop; ploughing, cultivating and harvesting methods; and grazing practices should seek to reduce attractiveness to risk species.
- Risk assessment of creation of new open water bodies (see 3.2.7).

3.2.6 Active Bird Control Instructions: Surveillance, Patrolling and Dispersal

LAA currently operates an active bird control programme at today's baseline conditions, using a dedicated four-wheel drive vehicle equipped with Digi-scare equipment. A new junior member of staff has recently been appointed. In addition to frequent use of Digi-scare and pistol cartridges, there is a current over-emphasis on shooting, which needs to be tempered.

It is proposed that under the development scenario there will need to be increased activity, though the activities carried out will not change in nature, only frequency. It is envisaged that there will be a dedicated Bird Control Team (BCT); and an increased role for Air Traffic Control (ATC) Visual Control Room (VCR) in detecting risk species at or approaching the aerodrome, especially wildfowl.

The Bird Control Vehicle is likely to be up-graded to a bespoke vehicle under the new BCP, but this will not fundamentally change the nature of activities currently undertaken with the current vehicle. In

fact, some activities could be improved over today's practice to cause less noise and disturbance off-site than is the case today.

For example, with respect to the Distress Call Broadcast Equipment, it is much more effective if the correct distress call is broadcast to the correct species (e.g. the black-headed gull distress call works best on that species, and is not as effective on other gulls). Other improvements in the BCP include:

- distress calls work best on flocks of birds; for single birds or small groups, use another method;
- gulls in particular, and sometimes other species, will often fly towards the sound of distress calls. When used to move gull flocks from on or near the runway, this can be used to "pull" the birds to a location whilst minimally affecting the nearby SPA and other bird reserves;
- users often make the mistake of playing distress calls too loudly, and the maxim should be 'louder is not better.' Distress calls should be broadcast at the lowest volume audible to the birds. Start the equipment at a low volume setting and turn it up slowly until the birds respond. Low volume is more natural and the birds will respond better (which is why most people find that the handheld equipment works better – it is always broadcast at lower volumes because the user is more exposed to the sound). Be particularly careful of playing distress calls at high volume near the airfield perimeter. The intention is not to lift large flocks of gulls, corvids, lapwings, etc., in the surrounding countryside in an uncontrolled manner, and noise impacts on nearby bird reserves must be minimised.
- The use of Bird-scaring Cartridges, pistols and shotgun should be minimised and specifically should not be used over or near local bird reserves.
- Lures and Visual Scaring Techniques which will have low impact on nearby bird reserves should be encouraged in the Bird Control Team;
- Shooting and Trapping. Shooting is a small, but on occasion necessary, part of the airport bird control programme. Trapping is rarely used on aerodromes, and only against corvids and feral pigeons. Trapping ought not to affect conservation species; noise from shooting should be minimised and should not be carried out over or near the bird reserves.

With all active dispersal methods that cause disturbance to birds by either noise or visual techniques, it is highly unlikely that bird species would be affected by them much beyond the airfield, and certainly beyond 200m, where many other disturbance issues from the MoD ranges, quarrying or other activities have been present for many years. Evidence from other aerodromes suggests that dispersal methods do not disturb adjacent bird reserves or species.

3.2.7 Local Safeguarding Policy

Circulars (Safeguarding Directions) issued by Communities and Local Government (CLG) require Local Planning Authorities to consult civil aerodromes on relevant development proposals, explosives establishments and technical (radar/radio) sites in a 13km radius around the airport. Virtually all land types and land uses (including 'natural' habitats) attract birds in some way and in theory a case could be made to exclude virtually *anything* from the vicinity of an aerodrome. However, this would be unrealistic and unattainable and all aerodromes operate with an on-going background level of bird hazard. However, the safeguarding process targets new developments that, individually or as part of a cumulative process, could become major attractants with the potential to cause significant problems. In terms of risk assessment, the existing situation and the current disposition of local bird populations must be included in the assessment of a proposed development. The principal aims of the safeguarding policy are as follows:

- a) To guard against new or increased hazards caused by new developments;

- b) To encourage developments that reduce hazards. For example, an LPA may consult over a number of potential replacement sites for an existing landfill - some of which may reduce the hazard, whereas others would increase it; and
- c) To reduce existing hazards by seeking mitigation or prevention when an operation that has proven to be hazardous requires renewed planning permission, or re-permitting.

At LAA, local bird safeguarding issues are complicated by the existence of a range of conservation designations in the vicinity including SPA, SSSI and SAC. As a result, the local bird safeguarding policies must operate with sensitivity to the high conservation value of the area, whilst striving to avoid any increase in the bird hazard to aircraft operating at LAA and, where possible, to reduce existing hazards.

The main bird hazard concerns affecting bird safeguarding policy at Lydd are:

- a) Developments that would be likely to increase the number of waterfowl crossing the airport and/or its immediate airspace;
- b) Developments that could increase the number of gulls settling on the airport or in its immediate vicinity or crossing the airport and/or its immediate airspace (generally, landfill operations or the creation of a waterbody large enough to be adopted as a gull roost);
- c) Developments that could lead to the establishment of a breeding gull colony near the airport (large rooftops, large islands on nearby lakes);
- d) Developments that could lead to the creation of a new starling roost that affected the airport (e.g. extensive reedbeds, dense conifer plantations); and
- e) Wetland creation schemes

The stated aim and policy of LAA under the proposed development scenario is to co-exist pro-actively and congenially with surrounding land-owners and users, and in particular to respect the conservation status of surrounding land use, especially for birds. Whilst aware of its responsibilities under 13km safeguarding, LAA is also keenly aware of the high avian conservation value on surrounding land, including RSPB reserves and European and nationally protected sites. LAA respects the need to balance airport safety against maintaining and enhancing bird reserves. In order to achieve this, the airport is committed to being a good neighbour to conservation sites and to dialogue with conservation bodies. Correctly implemented, a local safeguarding policy would maintain aerodrome safety whilst allowing conservation objectives to be achieved. For example, the creation of new waterbodies for birds should be located away from the airfield, so that hazard risk would not significantly increase.

4. IMPACT ASSESSMENT AND RECOMMENDATIONS FOR MITIGATION

4.1 A draft bird control plan (BCP) has been compiled to address a scenario at LAA, where the proposed new terminal building has been constructed, and an operational capacity of 500,000 ppa has been reached. The BCP has been compiled with the aim of achieving <3 bird strikes per 10,000 aircraft movements. The authors of the BCP are confident that if the BCP is implemented correctly, this would be achieved.

4.2 Main components of the BCP are:

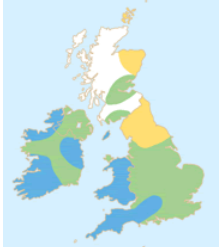
- An improved and rigorously implemented long grass management programme;
- A scrub reduction programme pre-agreed with Natural England and in context of a proposed biodiversity action plan for the airport;
- Netting and other measures to deter risk species from aerodrome waterbodies, whilst retaining their accessibility to non-risk species;
- Ensuring that risk species such as gulls do not nest or otherwise occupy roofing space;
- Using local land use agreements, deter risk species from land adjacent to the airport. In particular, halt the practice of game bird rearing and shooting near the airfield, and where possible, encourage agricultural practice to deter risk species.
- Active Bird Control Instructions: Surveillance, Patrolling and Dispersal. Methods likely to be employed at 500,000 will not substantially differ from those used at today's baseline, but the frequency of patrolling and use of dispersal methods will increase. Air Traffic Control will be tasked with more responsibility in detecting hazards, and working more closely with the ground team to deal with hazards.
- Local Safeguarding Policy. Whilst aware of its responsibilities under 13km safeguarding, LAA is also keenly aware of the high avian conservation value on surrounding land, including RSPB reserves and European and nationally protected sites. LAA respects the need to balance airport safety against maintaining and enhancing bird reserves. In order to achieve this, the airport is committed to being a good neighbour to conservation sites and to dialogue with conservation bodies. Correctly implemented, a local safeguarding policy would maintain aerodrome safety whilst allowing conservation objectives to be achieved. For example, the creation of new waterbodies for birds should be located away from the airfield, so that hazard risk would not significantly increase.

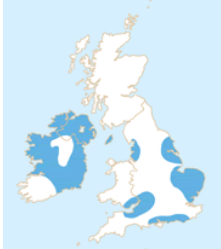

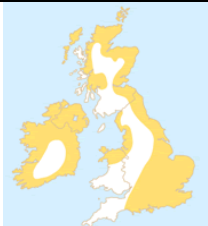

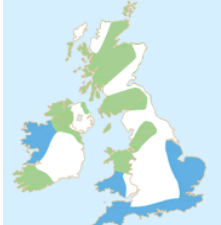

4.3 The impacts of the BCP required for the development scenario have been assessed for their impacts on birds of conservation interest at the site and particular for those of importance to the SAC lying adjacent to the airfield.

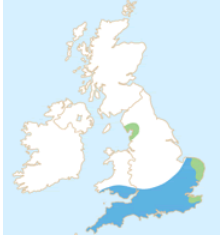

4.4 The bird species of principal importance for the Dungeness to Pett Level SPA are set out in the following table.

Table 1. Species of major conservation interest at the Dungeness to Pett Level SPA

● RESIDENT ● PASSAGE
● SUMMER ● WINTER

Species	U.K Locations	Occurrence at LAA	Local SPA status	Susceptibility to BCP Disturbance
<i>Shoveler</i>		Resident. Shoveler are surface feeding ducks and are almost always associated with water habitat. They have not been noted on the airfield, but are common on the waterbodies of the	Listed	Not a birdsrike risk species, and known to be tolerant to disturbance. Clearly tolerant to current levels of bird control noise disturbance, and present near to other airports including Coventry, Humberside and Heathrow. Not likely to be 'lifted' by bird scaring on - airport. Should be deterred

		nearby RSPB reserves and Walland Marsh.		from visiting airfield waterbodies if these are netted.
<i>Bewick Swan</i>		Winter visitor; the SPA has a population of around 179. Recent surveys indicated that the herd uses Walland Marsh as a roost, but can also be present at Arc Pit south of the airport.	Listed	Birdstrike risk species. Special account of these and other swan species is made in the BCP. Swan herds at Walland Marsh would not be disturbed by bird control activities at the airport, but they may be at Arc Pit. It is recommended that the species are (for their own safety and that of aircraft) deterred from the airfield.
<i>Mediterranean Gull</i>		Summer visitor and small resident breeding population. Numbers increasing probably due to climate change. Seen in gull flocks around the airfield and breeds at the RSPB reserve.	Listed	Birdstrike risk species, along with other gulls; likely to be in flocks of black-headed gull. BCP contains measures to deter gulls from the airfield. Very unlikely to be deterred from nearby SPA or other reserves by bird control practices.
<i>Common Tern</i>		Breeding summer visitor. Populations have declined at Dungeness since the 1980's. Present on Burrows Pit islands.	Listed	Not a birdstrike risk species and SPA breeding sites well away from the airfield, beyond disturbance from bird control measures.
<i>Little Tern</i>		Breeding summer visitor, Dungeness SPA supports around 35 breeding pairs.	Listed	Not a birdstrike risk species and SPA breeding sites well away from the airfield, beyond disturbance from bird control measures.
<i>Hen Harrier</i>		Winter migrant to the south, with a peak count of 17 individuals at the SPA.	Proposed	Not a birdstrike risk species, but is known to visit the airfield, and does not appear to be easily deterred by current dispersal practices. Likely to be deterred by an improved long grass policy.
<i>Golden Plover</i>		Over winter at Dungeness in large numbers, where they form large flocks with lapwing and appear on and near the airport	Proposed	Priority birdstrike species. Must be deterred from the airfield (long grass policy is key).

<i>Bittern</i>		Over-winter & breed in small numbers on the SPA.	Proposed	Not a birdstrike risk species and extremely unlikely to be on the airfield or its vicinity. Will not be deterred from the SAC by bird control measures. Habitat creation to increase numbers needs to take account of local safeguarding policy.
<i>Sandwich Tern</i>		Breeding summer visitors, nesting on Burrows Pit.	Proposed	Not a birdstrike risk species and SPA breeding sites well away from the airfield, beyond disturbance from bird control measures.

There is a proposed addition to the SPA citation of waterbird flocks of >20,000. Regular wintering waterbird flocks of 36,000 are present at the SPA, including Bewick's swan *Cygnus columbianus bewickii*, European white-fronted goose *Anser albifrons albifrons*, wigeon *Anas penelope*, gadwall *Anas strepera*, teal *Anas crecca*, shoveler *Anas clypeata*, pochard *Aythya ferina*, little grebe *Tachybaptus ruficollis*, great crested grebe *Podiceps cristatus*, cormorant *Phalacrocorax carbo*, bittern *Botaurus stellaris*, coot *Fulica atra*, golden plover *Pluvialis apricaria*, lapwing *Vanellus vanellus*, sanderling *Calidris alba*, whimbrel *Numenius phaeopus* and common sandpiper *Actitis hypoleucos*.

The geese and ducks are birdstrike species, and need to be deterred from the airfield. The species in the paragraph above are clearly tolerant to current levels of bird control noise disturbance. Correctly implemented, airfield dispersal methods are very unlikely to deter or even 'lift' these species from SPA waterbodies. Maintenance and creation of new reedbed and waterbodies need to take account of local safeguarding policy.

4.5 The following table summarises the predicted impact of the components of the Bird Control Plan on the bird species of conservation importance.

Table 2. Main Components of Draft Bird Control Plan and Their Predicted Impacts on Bird Habitat and Bird Species of Conservation Importance

BCP Component	Predicted Impact
Long grass management programme	Minor impact on current SAC conservation species; will make the airfield less attractive to golden plover (proposed SAC species), but the plover is a birdstrike risk species.
Scrub reduction programme	Zero impact on conservation species
Waterbody protection	Zero impact on conservation species
Roof space management	Zero impact on conservation species, aside from possibly deterring Mediterranean gull.
Local land use agreements	May reduce adjacent habitat value for golden plover (proposed SAC species), but the plover is a birdstrike risk species (only present in winter months).
Active bird control instructions	Used correctly, it is predicted that the impact from dispersal techniques should not rise above today's level of disturbance, which does not deter conservation species from their local habitat.
Local safeguarding policy	Provided that pro-active dialogue and co-operation is secured between the airport and conservation organisations, it is predicted that a safeguarding policy can protect the airport from additional bird hazard risk, whilst allowing maintenance and enhancement of conservation sites within the safeguarding zone.

4.6 Proposed Mitigation. The following mitigation is recommended, based on the predicted impacts above.

BCP Component	Predicted Impact	Proposed Mitigation
Long grass management programme	Minor impact on current SAC conservation species; may make the airfield less attractive to golden plover (proposed SAC species), but the plover is also a birdstrike risk species (only present in winter months).	None. The golden plover is a bird strike risk species and needs to be deterred from feeding at the airfield. However, wintering surveys indicated that wintering flocks are not often seen near the airfield, preferring habitat off-airport.
Scrub reduction programme	Zero impact on conservation species	None proposed
Waterbody protection	Zero impact on conservation species	None proposed
Roof space management	Zero impact on conservation species	None proposed
Local land use agreements	May reduce adjacent habitat value for golden plover (proposed SAC species), but the plover is also a birdstrike risk species (only present in winter months).	None. The golden plover is a bird strike risk species and needs to be deterred from feeding at the airfield. However, wintering surveys indicated that wintering flocks are not often seen near the airfield, preferring habitat off-airport.
Active bird control instructions	Used correctly, it is predicted that the impact from dispersal techniques should not rise above today's level of disturbance, which does not deter conservation species from their local habitat.	As set out in the bird control plan, noisy dispersal methods should be mitigated by controlling volume of distress call simulation equipment and minimising noisy or otherwise disturbing techniques which may affect the neighbouring SAC. Operators to be given thorough training in the requirement to reduce disturbance to conservation sites to a minimum.
Local safeguarding policy	Provided that pro-active dialogue and co-operation is secured between the airport and conservation organisations, it is predicted that a safeguarding policy can protect the airport from additional bird hazard risk, whilst allowing maintenance and enhancement of conservation sites within the safeguarding zone.	Ensure safeguarding policy is adhered to using working group of aviation and conservation representatives.

4.7 Residual impacts , (i.e. those remaining assuming the mitigations contained in the BCP are adopted) on the bird species of conservation importance are predicted to be negligible. However, a general mitigation is recommended that the efficacy of this revised BCP is tested for its impact on the conservation species by implementing a specific monitoring programme for the SPA-listed species (and for any proposed species which are adopted). If it can be demonstrated that any of the species are being negatively affected by bird control methods, then management intervention should be implemented to reverse this. (It should be noted that other factors may be responsible for any decline in SPA-listed species, and this would need to be carefully taken into account, for example, see 4.8 below).

- 4.8 A separate and additional study has been undertaken on the impacts of the levels and characteristics of aircraft noise likely to be received by the avian conservation sites and species at the operational scenario predicted for the proposed development. This is submitted as Supplementary Environmental Information. Additional or cumulative effects of aircraft noise and bird control programme impacts need to be taken into account.
- 4.9 Timing of implementation. It is proposed that, if permission is granted for the proposed development, the following levels of growth trigger the following actions:

Issue	Trigger for Implementation
Formalise and adopt Bird Control Plan	Prior to implementation of project
Improve long grass programme	Prior to implementation of project
Scrub reduction	Prior to implementation of project
Water body protection	Prior to implementation of project
Roof space management	Prior to implementation of project
Off-airfield habitat management	Deal with game bird issue prior to implementation of project. Establish working group of neighbouring landowners and stakeholders immediately prior to implementation of project. Review efficacy of programme at 100,000, 200,000, 300,000, 400,000 and 500,000 passengers.
Active bird control instructions	Begin new programme prior to implementation of project. Review efficacy of programme and 'ramp up' as necessary at 100, 000, 200,000, 400,000 and 500,000 passengers.
Local safeguarding	Establish working group of neighbouring landowners and stakeholders prior to implementation of project
Monitoring of SPA bird species	Prior to implementation of project. Include proposed SPA species as adopted.

- 4.10 Draft Bird Control Plan. A draft document is attached (Appendix 1). This document (BCP) is a constantly evolving document is will need to be formalised, adopted and updated.

5 REFERENCES

CAA. CAP 680: Aerodrome Bird Control. (2002) 2nd Edition. Withdrawn on 30 March 2007, superseded by CAP 772.

CAA. CAP 772: Birdstrike Risk Management for Aerodromes. (2007)

Appendix 1 - Draft Bird Control Plan

DRAFT BIRD CONTROL PLAN
(New terminal building and 500,000 ppa)

OCTOBER 2007

1 INTRODUCTION

LAA, Lydd is required by the Civil Aviation Publication (CAP) 772 to formulate and implement comprehensive and auditable bird hazard control plans, which must cover at least the following:

- I. Responsibilities & Accountabilities;
- II. Specific Bird Hazard Risk Assessment, both on and off the aerodrome;
- III. Bird Hazard Control aims & policy;
- IV. Staff terms of reference;
- V. Habitat Management Programme;
- VI. Active bird control instructions: Surveillance, patrolling & dispersal;
- VII. Equipment;
- VIII. Monitoring: Record keeping, quality assurance and on going risk assessment;
- IX. Training; and
- X. Safeguarding.

In the case of LAA, Lydd, the Bird Control Plan (BCP) has been formulated to reflect the high conservation level of the surrounding areas, and in particular the nearby SPA and RSPB bird reserves. The Plan has been specifically compiled to minimise impacts of the bird control programme on the bird species of conservation interest at the SPA. If followed, the bird control programme should not negatively affect the avian conservation interest at the SPA or other areas of avian conservation interest.

2 BIRD HAZARD CONTROL AIMS & POLICY

The processes and procedures described in this document are designed to reduce the risk of hazardous bird strikes to aircraft using LAA to acceptable levels, whilst minimising disturbance to protected bird habitat near to the airport. It is essential that all personnel involved in implementing this policy follow the procedures diligently and afford them a high priority. It is also designed to have input and oversight from Shepway District Council, Natural England, RSPB, and any other stakeholder on neighbouring conservation land.

3 RESPONSIBILITIES & ACCOUNTABILITIES

The LAA expansion proposals will require the upgrading of the current bird control services, which are carried out by the Airport Fire Service Team. The primary roles and responsibilities are likely to be with:

3.1 Airfield Operations Manager (AOM)

The AOM is responsible for implementing the bird hazard control policy and maintenance of the associated guidance documents, as well as regular reviews of its implementation and efficiency with the Bird Control Coordinator (BCC).

3.2 Bird Control Coordinator (BCC)

The BCC reports to AOM on a day-to-day basis and is the on-site technical specialist on aerodrome bird control. The primary responsibility is to develop and use their expertise to ensure that the airport's BCP minimises the bird hazard and is implemented fully and efficiently.

Some of the duties carried out by the bird control coordinator may be delegated to the shift supervisors.

3.3 Bird Control Operatives (BCO)

BCOs will carry out bird hazard control operations including continuous surveillance, active dispersal, monitoring and intelligence gathering.

3.4 Air Traffic Control (ATC)

The role of ATC is as follows:

- a) Primary surveillance for hazardous concentrations and movements of birds whenever the duty BCO is not on the airfield. This role will be initiated when ATC receives an “off airfield” radio call from the duty BCO;
- b) Back-up surveillance for hazardous concentrations of birds whenever the airfield is operational;
- c) Passing warnings of bird hazards to pilots;
- d) Passing pilot reports of birdstrikes or bird sightings to the duty BCO in an expeditious manner; and
- e) Expediting the movements and operations of bird control patrols around the airfield.

4 HABITAT MANAGEMENT PROGRAMME

4.1 Grass Management

The principle element of habitat management used as a bird deterrent across most airports is a “Long Grass Policy” (LGP) based on the best practice in CAP 772, (formerly CAP 680), with modifications to suit local conditions.

Day-to-day monitoring and management of such a programme is the responsibility of the bird control team, AOM and/or ATC Watch Manager, with external consultants providing additional technical advice where required. An annual maintenance regime is agreed in advance between the airport and the grounds maintenance contractor and is subject to continuous monitoring by the BCT, and modification as required. The basic strategy is to maintain all airside grass areas continuously (except as necessary for periodic maintenance) between an absolute minimum height of 150mm and a maximum height of 250mm year-round.

At LAA, the local soil conditions (very shallow topsoil combined with a free-draining shingle substrate and rapid leaching of nutrients) and local agreements with Natural England regarding management of habitats on parts of the airfield, means that this “basic” LGP, as described in CAP 772, must be modified locally.

In particular, previous practices of annual silage cropping have been shown to be far from ideal and require annual input of fertilisers to balance the export of nutrients with the cut grass. Failure to do so has been shown to lead to increasing impoverishment of soil nutrients, resulting in weakening of the grass sward and encouragement of broadleaved “weed” species which may be directly attractive to hazardous birds, particularly nitrogen-fixing species such as clovers and vetches. Instead it is proposed to modify the CAP 772 “basic” system, by bottoming out (grass cut to ground level and cuttings removed) of the airfield’s grass areas over a cycle of 2-4 years, preferably in sections on annual rotation.

4.2 Aerodrome Habitat Management: Scrub Reduction

The dense scrub on the airfield harbours game birds and other risk species relatively close to the runway. It is proposed that a programme of scrub removal (already endorsed by Natural England) is implemented.

No shrub or tree planting schemes should be included in the development proposal’s landscaping plan in order to reduce risk species perching, nesting or roosting at the airfield.

4.3 Aerodrome Habitat: Waterbody Management

The ponds and drainage ditches on the airfield are currently attractive to risk species, and it is proposed that this needs to be corrected as a contribution to reducing birdstrike risk to achieve target

levels for the development scenario. It is proposed that all waterbodies will have measures installed (predominantly 20-30 cm mesh netting) to passively exclude hazardous waterfowl such as ducks, geese, swans, cormorants and herons. The nets will not exclude moorhen and coot (which are not considered a bird strike hazard), or smaller bird species such as kingfisher and wagtails, mammals, insects, reptiles or amphibians. Any installed nets will be kept in good condition and tensioned to prevent birds from becoming entangled. If bird hazard species penetrate the net they will be released and the entry route investigated and corrected.

Any new open water to be created on or near the airport by or on behalf of the airport owners will be assessed for its potential contribution to the airport's birdstrike hazard before proceeding. Sensitive location and/or passive exclusion measures may be required to mitigate any perceived increased risk. (See Local Safeguarding Policy, 3.2.7 below).

4.4 Aerodrome Habitat: Roofing Management

Airport building rooftops, terminal and hangar buildings, may attract large gulls (normally herring gull and/or lesser black-backed gull) to breed. Airport buildings will be inspected each spring to ensure that breeding gulls do not become established, and any gull nests detected will be removed. All roof inspections to be recorded.

4.5 Off-airfield Habitat Management

Wherever possible, local agreements with local landowners should be implemented to reduce the attractiveness of the aerodrome environment to risk species. At LAA, Lydd, the following initiatives are recommended:

- The practice of 'putting down' game birds and the use of land adjacent to the airport for game shooting should cease;
- Where possible, and in consultation with local landowners and farmers, agricultural practices including choice of crop; ploughing, cultivating and harvesting methods; and grazing practices should seek to reduce attractiveness to risk species.
- Risk assessment of creation of new open water bodies (see 3.2.7).

4.6 Construction or Earthworks on the Airport

Before any significant construction works or earthworks commence on the airport, BCC will conduct a local risk assessment to determine the potential of these works to attract hazardous birds and will recommend appropriate modifications or mitigation measures should they be required.

5 ACTIVE BIRD CONTROL INSTRUCTIONS: SURVEILLANCE, PATROLLING & DISPERSAL

By using the appropriate bird dispersal methods, bird strike can be greatly reduced. The BCT should commence operations at least one hour before the first aircraft movement to allow equipment to be checked, the airfield to be thoroughly inspected and with sufficient time to gain full control over any birds that may be found on the airfield. Bird control patrols will continue through the hours of darkness while the airport remains open.

5.1 Surveillance and Bird Control Patrols

Surveillance for birds will be maintained throughout operating hours as follows:

- By the BCT: frequent and extended mobile patrols and, when appropriate, periods of observation from the ATC Visual Control Room (VCR); and
- Whenever BCT is not patrolling the airfield or in the VCR: surveillance from the VCR by the Duty Aerodrome Controller (in addition to ATC's continuous duty of care).

5.2 Operating Area

The BCT operates from all accessible areas to disperse birds and prevent birds from alighting on the airfield. In order to preserve the bird deterrent properties of the Long Grass Policy, vehicles are only driven on grassed areas (except for established access tracks) in exceptional circumstances where birds could not otherwise be dispersed. The dedicated bird control vehicle will operate from within the confines of the perimeter fence except when a specific acute bird hazard (e.g. flocks of birds attracted by ploughing in the active runway approach) requires deployment off the airfield. This should only be done in extreme circumstances and with the agreement of ATC and AOM (or nominated deputy). The preferred option is to deploy an additional person to the area of concern with the portable distress call equipment and maintain the level of cover on the airfield.

Wherever possible, in addition to surveillance of the airfield, the BCT should actively look for concentrations of hazardous birds in the fields immediately adjacent to the airport perimeter and disperse them when it is safe to do so. This will increase the amount of time required for these birds to encroach onto the airfield, creating a “buffer zone” several hundred metres wide around the perimeter. The fields in the approach and climb-out areas are particularly critical, and it should be remembered that birds in the runway approaches/undershoot areas are more hazardous to landing aircraft than birds on the runway. Birds may be dispersed from adjacent fields by the use of distress calls, arm scares or lures.

5.3 Patrol Pattern

Bird control patrols may be carried out at intervals while the airport is quiet (less than 1 aircraft movement per hour) but sufficient time must be dedicated to the task to keep hazardous bird numbers to a minimum, particularly to protect the most vulnerable aircraft movements (for example, jet or turboprop aircraft movements). A general rule is to commence a patrol at least 30 minutes before an aircraft movement and continue until the aircraft movement is completed. At times of intense bird activity (e.g. wet days in the winter months) up to one hour of constant effort may be required to gain sufficient control to allow an aircraft movement to take place safely. When aircraft movements become frequent (>1 per hour) BCT patrolling should be continuous throughout airfield operating hours, except when required to carry out other agreed duties as follows:

- Surface inspections;
- Airfield lighting inspections;
- Foreign Object and Debris (FOD) recovery; and
- Snow & ice clearing supervision.

5.4 Dealing with Site-Specific Bird Hazards

Procedures for dealing with the bird species commonly encountered at Lydd Airport are described in detail during training courses and in the training notes and CAP 772, and in general gulls, grassland plovers, pigeons and other common flocking species are the priority group, as at other airports in the UK. The following are additional site-specific local hazards that require special attention:

5.4.1 Bewick Swans

The only significant difference between LAA's bird hazard and most other airports in coastal locations is the presence of wildfowl, primarily Bewick swans, over flying the airport and its immediate airspace. Flight lines are difficult to establish, but the BCT should build up their knowledge of these birds (winter visitors) and establish diurnal patterns. These birds may cross singly or as groups in close formation and this latter habit, combined with their weight (6kg +) makes them a significant hazard to aircraft if they are struck. In recent years, the herd of Bewick swans have tended to congregate in Walland Marsh to the west of the airfield:

BCOs and ATC personnel are to maintain surveillance for these birds and report them to inbound or outbound aircraft. An “all clear” call is to be made when the birds have departed safely. The use of distress calls and pyrotechnics is ineffective against crossing wildfowl and may delay their departure or increase the birdstrike hazard by causing panic. Crossing wildfowl will not be shot, or shot at. Detailed records of species, numbers, timing, flight direction, etc., will be kept in order to determine any patterns or trends and to investigate whether forecasting or mitigation of such events is possible. This will be supported by visiting sites beyond the airport boundary to determine favoured roosting

sites, feeding areas, etc. to determine current habitat use and current or potential interactions with local land use practices or future developments.

5.4.2 Other species-specific hazards.

If a bird species becomes a specific hazard, bespoke procedures for deterrence should be assembled. Wintering flocks of golden plover could become an issue especially as the airport reaches 300,000 passengers, though implementation of this Plan should reduce hazard from plover to an acceptable level.

6 EQUIPMENT AND DISPERSAL METHODS

In order to minimise bird strike, it is common practice at all airports to deter birds away from the site, particularly during landing and take off. There are five main dispersal methods; however, each species reacts differently to each method. Therefore, it is important to match the correct dispersal method with the right species; this requires the Bird Control Team to have correct training and experience. In the case of LAA, Lydd, it is essential that the choice and implementation of equipment reflects the requirement to reduce off-site disturbance at bird reserves.

6.1 Bird Control Vehicle

A four-wheel drive vehicle with good all-round visibility to be provided for the purposes of performing bird control duties on the airport. The vehicle should be fitted with the necessary radio equipment; distress call broadcast equipment and suitable storage and security facilities for weapons, ammunition and other equipment. If the primary vehicle becomes unserviceable, or at times of intense bird activity, an alternative vehicle will be provided, to be used with the portable distress call system.

6.2 Distress Call Broadcast Equipment

The BCT is equipped with digital bird distress call broadcast equipment fitted in the vehicle and a second portable unit as backup/supplementary equipment. All personnel will be trained in the use of this equipment, and detailed descriptions of its operation are contained in CAP 772. The following issues will be adhered to when using, or preparing to use, the equipment:

- a) It is much more effective if the correct distress call is broadcast to the correct species (e.g. the black-headed gull distress call works best on that species, and is not as effective on other gulls). Therefore, in order to use the equipment effectively, BCOs will be required to achieve and maintain the ability to identify the common airfield bird species. When mixed flocks are present, start with the most numerous species;
- b) Distress calls work best on flocks of birds. With single birds or very small groups, use another method;
- c) Detection, identification, positioning of the vehicle, playing of the distress calls and complete dispersal will take several minutes. Allow sufficient time for the full process or the results will be poor (or could make the situation worse by putting flocks into the air while an aircraft movement takes place). If time is short, use another technique;
- d) Gulls in particular, and sometimes other species, will often fly towards the sound of distress calls. This should be borne in mind when positioning the vehicle. When used to move gull flocks from on or near the runway, this can be used to “pull” the birds to a safer location;
- e) With the exception of starling flocks, distress calls should always be broadcast from a stationary vehicle, or moving at no more than walking pace. If broadcast from a moving vehicle, birds are unable to respond naturally and will learn to ignore the distress calls;
- f) Users often make the mistake of playing distress calls too loudly. In this context, louder is not better – distress calls should be broadcast at the lowest volume audible

to the birds. Start the equipment at a low volume setting and turn it up slowly until the birds respond. Low volume is more natural and the birds will respond better (which is why most people find that the handheld equipment works better – it is always broadcast at lower volumes because the user is more exposed to the sound). Be particularly careful of playing distress calls at high volume near the airfield perimeter. The intention is not to lift large flocks of gulls, corvids, lapwings, etc., in the surrounding countryside in an uncontrolled manner;

- g) Distress calls may need periodic “reinforcement” by combining with other methods, e.g. lures. In the case of corvids, occasional shooting of these birds may be necessary to retain the effectiveness of distress calls;
- h) If distress calls fail to work on the target species, alternate or reinforce their use with other methods. Continuing to use distress calls alone when their effectiveness is reduced can lead to them becoming completely ineffective;
- i) There are no effective distress calls for many airfield species. Unless a specific distress call is available on the broadcast equipment, use other methods to disperse these species. The “pigeon” distress call often included on distress call broadcast equipment is not recommended for dispersing woodpigeons or stock doves; and
- j) Starlings react less well to distress calls than other species, commonly by flying directly away and alighting again within 200 metres. It may be necessary to pursue the flock with distress calls playing until they depart from the airfield. Reinforcement by shooting these birds may be required with starlings.

6.3 Bird-scaring Cartridges and Pistol

The BCT is supplied with bird-scaring cartridges (non-lethal bird scaring pyrotechnics) to the current CAA recommended specification and a dedicated pistol to fire them. A spare pistol is also held at Lydd Airport. All personnel are trained in the efficient and safe use of these cartridges, and supplementary information is contained in the “Safe Use of Firearms” document. A range of Personal Protective Equipment (PPE) is issued to all BCOs for the firing of birdscaring cartridges. This equipment is to be used whenever these cartridges are to be fired. A register of firearms and ammunition is kept and weapons and ammunition are to be signed out (and back in) daily and transfers noted on shift handover.

The practical use of bird-scaring cartridges is described in detail in CAP 772, in the training material provided and in the “Safe Use of Firearms” document, and will therefore not be reproduced in the BCP.

6.4 “Lures” and Visual Scaring Techniques

The construction and use of the “lure,” the use of “arm scares” and the value of human presence (on foot) on the airfield as bird dispersal techniques are covered in detail both in the training material and in CAP 772. Although these techniques are fairly short-range and have some limitations, their use is to be commended, as they add variety to what would otherwise be a very limited and stereotyped bird control repertoire. Corvids in particular can often be dispersed better by the use of lures, arm scares or simple human presence than by the use of distress calls and pyrotechnics. Additionally, these techniques can be used in areas where the other methods may be inappropriate or unsafe. These techniques may seem unsophisticated, and they are greatly under-used but they are safe, effective, inexpensive and highly resistant to habituation.

6.5 Shooting and Trapping

Shooting is a small, but on occasion necessary, part of the airport bird control programme, and this necessity is recognised in the issue of General Licences to allow the taking of certain birds and their eggs to preserve air safety. Trapping is rarely used on aerodromes, and only against corvids and feral pigeons. The humane and effective use of traps is a highly specialised field skill that cannot be

learned in the training room or from written material and is not recommended for general use by BCOs on UK airports.

7 MONITORING: RECORD KEEPING, QUALITY ASSURANCE & ON-GOING RISK ASSESSMENT

7.1 Record Keeping

The BCT maintains a continuous record of bird activity on and around the airfield using daily bird count forms and bird control activity in a log diary. BCT complete CA 1282 bird strike report forms for all bird strikes and bird remains found in situations that suggest the bird(s) had been killed by an aircraft. Completed CA 1282s are passed to the BCC for safekeeping and the transmission of copies to CAA.

7.2 Data Analysis and Reports

The BCC produces a monthly report based on bird count and diary records of bird control operations and an annual report based on a detailed analysis of bird count and bird strike data, monthly reports and log records.

7.3 Quality Assurance

Record keeping is a self-disciplining procedure for BCT staff involved in bird control operations. The BCC inspects bird control operations and records and, annually, analyses all records and produces a review report. Short-term performance indicators include record keeping standard, bird counts, vehicle mileage and ammunition consumption. Bird population trends and bird strikes provide long-term performance indicators. All operational records are regularly inspected by the AOM.

8 TRAINING

8.1 Civil Aviation Authority (CAA) Standards

All staff and management personnel involved in the Bird Control Policy will be trained to CAA - recognised standards at courses and seminars, backed up with on the job training.

All firearms users will be trained in the safe use of firearms in general and specifically for operations at Lydd Airport.

Periodic refresher training will be arranged as necessary.

8.2 Weapons, Ammunition, Training and Licensing

In order to facilitate the safe and expeditious removal of birds when necessary, the BCT is equipped with a 12-bore shotgun and shotgun cartridges suitable for the purpose (an air rifle may be issued for the control of birds inside aircraft hangars and buildings). The cartridges will be manufactured with biodegradable fibre wads and where possible, lead-free shot will be used. All users will be trained in the use of the weapon and will hold current Shotgun Certificates issued by the local Police Authority. Rules and procedures for use of firearms on the airport are detailed in a separate document - *The Safe Use of Firearms*. Secure storage for weapons and ammunition are provided and are subject to periodic checks by local police. A register of firearms and ammunition is kept and weapons and ammunition are to be signed out (and back in) daily and transfers noted on shift handover. Weapons are to be cleaned after use and before returning them to storage and serviced according to the servicing schedule. Any damage or defects are to be reported immediately.

8.3 Bird Conservation Areas

It is essential at LAA, Lydd that the BCT is aware of the location and management objectives of SPA and other nearby bird reserves. All bird control practices should be conducted in this context.

9 SAFEGUARDING

9.1 Aims

Circulars (Safeguarding Directions) issued by the Communities and Local Government (CLG) require Local Planning Authorities to consult civil aerodromes on relevant development proposals, explosives establishments and technical (radar/radio) sites. Virtually all land types and land uses (including 'natural' habitats) attract birds in some way and in theory a case could be made to exclude virtually *anything* from the vicinity of an aerodrome. However, this would be unrealistic and unattainable and all aerodromes operate with an on-going background level of bird hazard. However, the safeguarding process targets new developments that, individually or as part of a cumulative process, could become major attractants with the potential to cause significant problems. In terms of risk assessment, the existing situation and the current disposition of local bird populations must be included in the assessment of a proposed development. The principle aims of the safeguarding policy are as follows:

- a) To guard against new or increased hazards caused by new developments;
- b) To encourage developments that reduce hazards. For example, an LPA may consult over a number of potential replacement sites for an existing landfill - some of which may reduce the hazard, whereas others would increase it; and
- c) To reduce existing hazards by seeking mitigation or prevention when an operation that has proven to be hazardous requires renewed planning permission, or re-permitting.

10.2 Local Safeguarding Policy

At LAA, local bird safeguarding issues are complicated by the existence of a range of conservation designations in the vicinity including SPA, SSSI and SAC. As a result, the local bird safeguarding policies must operate with sensitivity to the high conservation value of the area, whilst striving to avoid any increase in the bird hazard to aircraft operating at Lydd Airport and, where possible, to reduce existing hazards.

The main bird hazard concerns affecting bird safeguarding policy at Lydd are:

- f) Developments that would be likely to increase the number of waterfowl crossing the airport and/or its immediate airspace;
- g) Developments that could increase the number of gulls settling on the airport or in its immediate vicinity or crossing the airport and/or its immediate airspace (generally, landfill operations or the creation of a waterbody large enough to be adopted as a gull roost);
- h) Developments that could lead to the establishment of a breeding gull colony near the airport (large rooftops, large islands on nearby lakes);
- i) Developments that could lead to the creation of a new starling roost that affected the airport (e.g. extensive reedbeds, dense conifer plantations); and
- j) Wetland creation schemes

The stated aim and policy of LAA under the proposed development scenario is to co-exist pro-actively and congenially with surrounding land-owners and users, and in particular to respect the conservation status of surrounding land use, especially for birds. Whilst aware of its responsibilities under 13km safeguarding, LAA is also keenly aware of the high avian conservation value on surrounding land, including RSPB reserves and European and nationally protected sites. LAA respects the need to balance airport safety against maintaining and enhancing bird reserves. In order to achieve this, the airport is committed to being a good neighbour to conservation sites and to dialogue with conservation bodies. Correctly implemented, a local safeguarding policy would maintain aerodrome safety whilst allowing conservation objectives to be achieved. For example, the creation of new waterbodies for birds should be located away from the airfield, so that hazard risk would not significantly increase.