

**BY ORDER OF THE COMMANDER
436TH AIRLIFT WING**

**DOVER AIR FORCE BASE
INSTRUCTION 91-212**

1 FEBRUARY 2013

Safety



**DOVER AFB BIRD/WILDLIFE AIRCRAFT
STRIKE HAZARD (BASH) PROGRAM**

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This instruction provides a base program to minimize aircraft exposure to potentially hazardous wildlife strikes. It implements AFI 91-202, *US Air Force Mishap Prevention Program*. This instruction applies to all host, associate, and temporary duty organizations on Dover AFB, including US Air Force Reserve members and units. The 436 AW/SEF is the OPR. The 436 AW/CC is responsible for implementation of this instruction.

SUMMARY OF CHANGES

This document is updated to reflect minor changes in the BASH program. Changes are made in the following paragraphs: 1.2.1, 1.2.4, 1.2.5, 1.2.6, 1.3, 1.4.1, 1.4.9, 1.4.10, 1.5, 1.6.1, 1.6.3, 2.3.2, 2.3.7, 2.4.5, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.6, 2.9.3, 2.9.4, 3.2, 3.3, 4.1.2, 4.1.3, 4.3, and 4.4.1. Paragraphs 2.8.7, 2.10.1, 2.10.2, 2.11.4, 2.12.1, 2.13.1, 4.3.3, and 4.4 are added to further define unit responsibilities and limitations.

1. BASH Program Information.

1.1. Situation. Dover AFB is in an area of high Bird Aircraft Strike Hazard (BASH) potential. Located on the Atlantic migratory flyway, Dover AFB is a stop-over zone for thousands of migrating birds from September to April each year. The air base is located in close proximity to three wildlife refuges, surrounded by grain and bean farms and has several large bodies of water nearby. A healthy resident goose population exacerbates the situation.

1.2. Specific hazards.

1.2.1. Waterfowl. Canadian and Snow goose populations present a significant hazard to the Dover flying environment. In addition to a resident Canadian goose population, migratory birds begin arriving in early October and depart in early April. These birds gather in flocks of several hundred to several thousand and fly across Dover's approach and departure corridors during their daily transition between roosting and feeding areas. Effective dispersal techniques include, but are not limited to, the use of a wildlife management expert who uses working dogs and pyrotechnics.

1.2.2. Birds of prey. Hawks, owls, and vultures soar over and near Dover's runways in search of food. While searching they often fly co-altitude with aircraft on the approach or departure flight paths. Mitigation efforts include ridding the airfield environment of rodents and the use of pyrotechnic dispersal techniques.

1.2.3. Gulls. Gulls present a particularly hazardous situation to Dover AFB. A distinct pattern has emerged where gulls fly from the coastal area across both runways inland in the morning in small groups. In the late afternoon they gather at the marsh and Pioneer ponds at the approach end of runway 01. When leaving this area at dusk they spiral up in large groups to circle the ponds at altitudes up to 1000 ft. above ground level and fly back to the coastal areas across the approach of runway 01 and occasionally 32. During cold weather and rainy days the birds use the runway overruns and taxiways as areas to warm themselves. Dispersal techniques include but are not limited to the use of working dogs, pyrotechnics, paint ball guns and depredation.

1.2.4. Blackbirds. These species present a hazard during their flocking season. The flocking population peaks from mid-October through November and again in February. The large number of birds presents a significant threat when they feed on seeds in the vicinity of the airfield. Dispersal techniques include the use of long grass management and pyrotechnics.

1.2.5. TILCON ponds. TILCON is a gravel pit that has several large bodies of water on its property, located at the approach end of runway 01. The water attracts large numbers of waterfowl and gulls resulting in a significant hazard to air traffic. Gulls spiral up to depart the area in the afternoon and fly directly in the arrival and departure corridors. Methods used to mitigate this hazard include active harassment of birds and a cooperative environmental management effort with Pioneer.

1.2.6. Waste Transfer Station. A waste transfer station operated by Eastern Shores Environmental Inc. (ESE) is located less than 1,500 feet from the departure end of runway 01. This transfer station is in the process of relocating to a location 20 miles from the airfield and is currently only accepting cardboard. Methods used to mitigate this hazard include observing operations and monitoring bird activity.

1.3. Bird Hazard Working Group (BHWG). The BHWG meets to review wildlife strike data, identify and recommend actions to reduce hazards, and recommend changes in operational procedures. The BHWG meetings should discuss, but are not limited to the following topics: wildlife strike statistics, bird activity, habitat management/modification, BASH plan procedures, BASH awareness and education, and activities/results of the wildlife management contractor. The BHWG will meet quarterly during BASH Phase I and bi-monthly during Phase II or as bird conditions warrant. The BHWG is hosted by Wing Safety (436 AW/SE) and chaired by the Vice Wing Commander (436 AW/CV). Other members of the BHWG

include: 436 AW/CP (Command Post), 436 AW/PA (Public Affairs), 436 AW/JA (Legal), 512 AW/SE (Safety), 436 OG/CC, 3 AS/CC, 9 AS/CC, 436 OSS/CC, 436 OSS/OSA (Airfield Ops), 436 OSS/OSAA (Airfield Management), 436 OSS/OSAT (Tower), 436 OSS/OSO (Current Ops), 436 OG/OGV (Stan/Eval), 512 OG/OGV (Stan/Eval), 436 MSG/CC, 436 CES/CEOD (CE Chief of Ops), 436 CES/CEOES (Grounds QAE), 436 CES/CEOHB (Pest Management Shop), 436 CES/CEV (CE Environmental Flight), 436 FSS/SVRA (Aero Club), 436 CONS/LGCB (Contracting), and the Wildlife Management contractor.

1.4. Habitat modification. By incorporating specific practices into the base land management plan, Dover AFB can maintain a flightline habitat less attractive to birds and other wildlife. Any base beautification or wetland enhancement plans will be coordinated through Wing Safety (436 AW/SE), Base Legal (436 AW/JA), Civil Engineering (436 CES/CEV), and Airfield Operations (436 OSS/OSA) IAW AFI 13-204V3, *Airfield Operations Procedures and Programs*.

1.4.1. Managing grass height. Refer to AFI 91-202. The grass height goal is 7-14 inches “effective height.” This refers to the grass depth after it is cut, not the actual height of the mower blade. When cut to the minimum 7-inch level, slower growing species of grass are not allowed to grow properly, while other species are allowed to grow to extreme lengths before being cropped back. The result is a patchwork of short, stumpy grass species, interspersed with longer, fast-growing patches. There is a two-part solution to this problem. First, faster growing species of weeds should be eliminated or reduced by the controlled use of herbicides. Second, the mowing contractor should maintain grass to achieve the 7-14 inches “effective height”. A properly designed and maintained long grass management program strives to reduce the bird population on the airfield. Long grass works to deter birds by either preventing them from efficiently seeing the invertebrates close to the ground or preventing them from seeing into the distance, effectively making them unable to remain vigilant for the approach of predators. Short grass cutting (i.e. the manicured lawn protocol) should be limited as much as possible. The areas immediately around buildings and hangars on the base proper could be cut short if required, but the standard throughout the airfield environment should be longer grasses with only qualified exceptions, i.e. the Air Museum and the Civil Air Terminal.

1.4.2. Controlling broad-leafed weeds. Broad-leafed weeds attract a variety of birds, may produce seeds or berries, and may limit grass growth. Keep broad-leafed weeds to a minimum on the airfield. Apply herbicides as necessary to achieve this and comply with AFI 32-1053, *Pest Management Program*.

1.4.3. Planting sparsely vegetated areas. Eliminate bare areas on the airfield. Plant grass species unattractive to wildlife as necessary to maintain ground cover.

1.4.4. Fertilizing. Selectively stimulate grass growth to promote adequate vegetation height and uniform cover. Otherwise limit use of fertilizer that promotes lush green growth attractive to wildlife.

1.4.5. Removing edge effect. Maintain the airfield as uniformly as possible to reduce the transition zone between two distinct habitat types (e.g., brush to grassland).

1.4.6. Leveling of airfield. Level or fill high or low spots to reduce attractiveness to wildlife and prevent standing water. Ensure paragraph 1.4 is complied with.

1.4.7. Removing dead vegetation. Remove dead vegetation such as brush piles, grass clippings, etc. This will effectively remove the cover it affords. Removal of dead vegetation also helps control rodent populations.

1.4.8. Remove bird and animal carcasses from the airfield. In an effort to avoid attracting scavengers, remove carcasses as soon as they are discovered. Forward remains that may have been caused by collision with aircraft to Flight Safety (436 AW/SEF) for identification.

1.4.9. Pest controls. Invertebrates and rodents are key food sources for many birds. Periodically survey and reduce these pests when required. Pesticides and traps can reduce pest populations. Ensure compliance with AFI 32-7086, *Hazardous Materials Management*, Section 2.5. The use of these pesticides must be coordinated through and approved by the 436 CES Pest Management Shop. The use of these pesticides must be in strict accordance with their instructions IAW AFI 32-1053 and in conjunction with the approved EPA permit for Dover AFB regarding Storm-water Pollution Prevention.

1.4.10. Maintaining drainage ditches. Regularly inspect ditches to keep them clear. Maintain ditch sides as steep as possible (minimum slope ratio of 5 to 1) and mow vegetation to discourage wading birds and emergent vegetation. Improve drainage as necessary to inhibit temporary ponds or puddles and coordinate with CEV to ensure no impact on wetlands.

1.4.11. Eliminate roosting sites. Control roosts by vegetation management of roost sites where possible. Prune trees to reduce the number of perches if necessary. Refer To Whom It May Concern: the Land Management Plan and UFC 3-260-01, *Airfield and Heliport Planning and Design*.

1.4.12. Discourage wildlife feeding. Signs should be placed in picnic areas to educate the public on the hazard posed by feeding wildlife, particularly geese.

1.5. Bird Dispersal Operations. Airfield Management or the Wildlife Control Contractor may accomplish bird dispersal operations. Dispersal operations include, but are not limited to, the use of working dogs, pyrotechnics, and paint ball guns. Prior to conducting dispersal, the airfield control tower will be contacted by telephone or radio for coordination of bird movement. No movement of birds will be accomplished until cleared by tower personnel. Personnel performing dispersal will inform tower of the location of birds and anticipated direction of movement. If dispersal is being conducted off base, use the grid map (see Attachment 2) to ensure clear communication of the location. Upon notification and approval for movement of birds, the tower will upgrade the bird watch condition (BWC) for affected runway(s) as appropriate. Once dispersal operations are complete and the birds have vacated the area, contact the tower with this information. The tower may then change the bird watch condition as appropriate.

1.6. Depredation. Depredation may need to be accomplished to re-enforce reaction to pyrotechnics or eliminate a strike hazard from the airfield. Strict adherence to the U.S. Fish and Wildlife Service permit is required. The Deputy Base Civil Engineer maintains the permit; the permit must be renewed annually. The permit must be carried at all times while depreddating. The number of each wildlife species taken must be documented. Refer to the permit for number of each species allowed, disposition of remains, ammunition requirements,

and specific restrictions. The following paragraphs outline further restrictions that will apply to depredation on Dover AFB.

1.6.1. Only qualified Pest Management or Safety Office personnel and authorized Wildlife Control Contractors will conduct depredation activities within the boundaries of the depredation permit. Personnel conducting depredation operations shall be separated at Public Transportation Route (PTR) distance from all explosives storage and handling facilities IAW AFMAN 91-201.

1.6.2. SFS will issue a letter authorizing the Wildlife Control Contractor to transport weapons and ammunition on base.

1.6.3. Transport weapons and ammunition IAW Delaware State law. If small arms ammunition is being stored within the BASH contractor facility, an Explosives Facility License (AF Form 2047) is required and shall be issued by the 436 AW/SEW Weapons Safety Manager. Regardless of quantity, the explosives facility license shall conform to all requirements listed in Chapter 11 of AFMAN 91-201. If a clearing barrel is used at the BASH facility, it shall conform to the requirements listed in AFMAN 31-229.

1.6.4. Notify SFS and Command Post anytime firearms will be discharged on base. Include number of personnel, location, start time, and estimated completion time.

1.6.5. Notify the Base Legal office when conducting planned depredation. If emergency depredation is conducted, notify as soon as possible.

1.6.6. Wing Safety is the OPR for all planned depredation.

1.6.7. All depredation conducted at Pioneer will be coordinated with Pioneer management.

1.6.8. Any depredation conducted on private property requires written consent of the property owner and prior coordination with the base legal office (436 AW/JA).

1.6.9. All participants will wear blaze orange during depredation operations.

1.6.10. An Air Force observer who is not shooting will act as depredation supervisor and will have authority to stop shooting or depredation operation at any time. Depredation will be stopped anytime an unsafe act or condition exists.

1.6.11. The depredation supervisor will brief all participants on the purpose of depredation, fields of fire, bird height restrictions, no fire zones, and start/stop firing signals.

1.6.12. Clear "hold fire" communication will be established and briefed prior to depredation.

1.6.13. Instructions for dispersal operations (Paragraph 1.5) will also apply for bird depredation.

2. Organizational Tasking.

2.1. Vice Wing Commander. Chairs the BHWG and is the approval authority for recommendations.

2.2. Operations Group Commander (436 OG/CC).

2.2.1. Retains BASH restriction waiver authority for all AMC aircraft departures and arrivals, and has approval authority for AMC aircraft departures and arrivals during BWC SEVERE.

2.2.2. Issues specific guidance to the Airfield Operations Flight on procedures during Bird Watch Conditions.

2.2.3. Makes operational changes to avoid areas and times of known hazardous bird concentrations, mission permitting.

2.3. Wing Safety (436 AW/SE).

2.3.1. OPR for the BASH program.

2.3.2. Completes annual review of this instruction and forwards document to HQ AMC/SEF electronically NLT 1 October each year.

2.3.3. OPR for the BHWG.

2.3.4. Responsible for wildlife strike reporting IAW section 3.

2.3.5. Recommends and notifies appropriate base agencies of implementation/termination of BASH phase II.

2.3.6. Serves as the Quality Assurance Evaluator for the wildlife control contract.

2.3.7. In conjunction with 436 CES, maintains liaison with Delaware Department of Natural Resources and local wildlife refuges.

2.3.8. Educates base population on wildlife strike potential and procedures at Dover AFB.

2.3.9. Ensures BASH plan is published on unit safety web page. Notify AMC/SEF if address changes.

2.3.10. Advise units of the actual Phase II period by message. This will include both implementation and termination messages. As a minimum, address messages to Address List 8367 (All AMC Flying Units), HQ AMC SCOTT AFB IL//SE/A3//, HQ AMC TACC SCOTT AFB IL//XOO/XOC/XOG/XOP/XOZ//, HQ ACC LANGLEY AFB VA//SE/A3//, HQ AETC RANDOLPHAFB TX//SE/A3//, HQ AFSC KIRTLAND AFB NM//SEFW//, NAVSAFECEN NORFOLK VA, and any other frequent users of the airfield. Use of Address List 8367 is authorized for Phase II message traffic for all Address List 8367 addressees.

2.4. Wildlife Control Contractor.

2.4.1. Patrols Dover AFB and selected surrounding properties.

2.4.2. Notifies tower of presence of hazardous bird activity on or around airfield.

2.4.3. Conducts dispersal operations IAW paragraph 1.5.

2.4.4. Conducts depredation IAW paragraph 1.6.

2.4.5. Coordinates with Pest Management Shop for rodent and insect control.

2.4.6. Coordinates with Pest Management Shop for emergency depredation issues.

2.5. Command Post (436 AW/CP).

2.5.1. Disapproves any request from transient crews to train in the local Dover area if Phase II restrictions are in effect (see section 4).

2.5.2. Coordinates for delay, diversion, and release of AMC controlled aircraft based on BWC. Issues bird watch advisories to all non-AMC aircraft arriving and departing Dover AFB.

2.5.3. Assigns X113 delay code for all AMC missions delayed due to wildlife hazard conditions.

2.5.4. Ensures transient aircraft involved in a wildlife strike fill out an AF Form 853, **Air Force Bird Strike Report**, and forwards it to Wing Safety.

2.6. Air Traffic Control (436 OSS/OSA).

2.6.1. Monitors level of bird activity using tower observation, RAPCON reports, aircrew reports, and Bird Management Contractor reports.

2.6.2. Tower supervisors determine the BWC based on wildlife activity (see section 4). In addition to Tower's observations, the BWC will be based on reports from the RAPCON, aircrews, Safety, and/or information provided by the Bird Management Contractor. After a reported bird strike within the terminal environment, the BWC will automatically be raised to MODERATE for reassessment of the BWC. During this time, Tower, with recommendations from the Bird Management Contractor and aircraft in the pattern, will determine the appropriate BWC.

2.6.3. Advises all personnel, aircraft, vehicles, and the Bird Management Contractor over the Tower net when the BWC changes. Airfield Management Operations will be notified via the Information Dissemination System v5 alarm notification.

2.6.4. During Phase II, tower will broadcast the BWC on the Automatic Terminal Information Service (ATIS) and to the Bird Management Contractor over the Tower net when the BWC changes. Tower controllers will make a blanket broadcast on the Tower Net stating any changes to the BWC Monday through Friday from sunrise to sunset. Phraseology example would be, "Attention all vehicles and personnel, Dover's bird watch condition is _____ (low, moderate, severe)" or "Attention all vehicles and personnel, Dover's bird watch condition is _____ (low, moderate, severe) to RWY _____ (01/19, 14/32)". The BWC should be included on the ATIS when the BWC is Moderate or Severe, regardless of Phase I or II. When the BWC is rapidly changing tower will include the following statement on the ATIS: "Due to rapidly changing bird watch conditions, contact Dover Tower or Dover Approach for current bird watch condition."

2.6.5. Issue detailed advisories to all arriving aircraft through approach control and to all departing aircraft through ground control prior to switching to tower frequency.

2.6.6. Forward a copy of daily BWC log to Wing Safety.

2.6.7. Coordinates activities with bird dispersal units IAW paragraph 1.5.

2.7. Airfield Management (436 OSS/OSAA).

2.7.1. Coordinates on-base wildlife controls including harassment, grounds maintenance,

and depredation.

2.7.2. Inspects airfield and runways for potential wildlife hazards.

2.7.3. Coordinates with the Bird Management Contractor for assistance in wildlife dispersal.

2.7.4. Notifies tower of hazardous wildlife activity on or around airfield.

2.7.5. Notifies Command Post of BWC.

2.7.6. Reports known wildlife strikes to Wing Safety.

2.7.7. Retrieves, or contacts Pest Management Shop to retrieve, carcasses on taxiways and runways.

2.7.8. Conducts dispersal operations IAW paragraph 1.5.

2.7.9. Coordinates with Safety in the creation of charts and maps of local bird/wildlife hazards to the airfield and surrounding areas.

2.7.10. Ensures compliance with additional Airfield Management BASH responsibilities IAW AFI 13-204V3.

2.8. Civil Engineering (436 CES)

2.8.1. Monitors contractor compliance with the grass management program.

2.8.2. Conducts depredation IAW paragraph 1.6.

2.8.3. Conducts pest management including insect and rodent control.

2.8.4. Applies for and maintains federal and state fish and wildlife depredation permits.

2.8.5. Corrects environmental conditions that increase BASH potential.

2.8.6. Complies with habitat management as outlined in paragraph 1.4.

2.8.7. In conjunction with 436 AW/SE, maintains liaison with Delaware Department of Natural Resources and local wildlife refuges.

2.9. Current Operations (436 OSS/OSO)

2.9.1. Schedules takeoffs/arrivals to comply with BASH Phase II restrictions (see section 4).

2.9.2. Coordinates with TACC to schedule mission departures to comply with BASH Phase II restrictions to the maximum extent possible (see section 4).

2.9.3. Forward BASH Phase I and Phase II start/end dates (normally 1 October and 1 April) to TACC planning cell to enter into the Global Decision Support System (GDSS) Airfield Data Base (AFD) as planning remark in the Temporary Restrictions/Planning Remarks section.

2.9.4. Enter sunrise, sunset and BASH windows on the monthly schedule.

2.10. Aircraft Maintenance Squadrons

2.10.1. 436 AMXS will report all wildlife strikes and forward remains of strikes to Wing Safety.

2.10.2. 736 AMXS will report all wildlife strikes and forward remains of strikes to Wing Safety.

2.11. Public Affairs (436 AW/PA)

2.11.1. Maximizes public awareness and understanding of the impact wildlife has on safe flying operations.

2.11.2. Informs internal and external audiences on the reason for, and ethical means of, controlling wildlife populations on Dover AFB.

2.11.3. Approving official for information requests/news releases regarding the wildlife control program.

2.11.4. Use all means available to ensure the base population, to include housing residents, are aware of depredation activities. Ensure planned depredation is advertised in base paper, EIM, and electronic message board as time permits.

2.12. 436th Operations Group Tactics and Training (436 OSS/OSK).

2.12.1. Assesses all low altitude tactical and VFR training areas using Avian Hazard Avoidance System (AHAS) and Bird Avoidance Models (BAM) and ensures flying operations follow restrictions (altitude and airspeed) outlined by AHAS and BAM and phase II restrictions (see section 4).

2.13. Security Forces Squadron (436 SFS).

2.13.1. Coordinates depredation IAW paragraph 1.6.

3. Reports and Forms.

3.1. All wildlife strikes (damaging and non-damaging) will be reported to Wing Safety on the AF Form 853, **Air Force Wildlife Strike Report**.

3.2. Wildlife strikes resulting in damage greater than \$50,000 will be reported IAW AFI 91-204, *Safety Investigations and Reports* and AFM 91-223, *Aviation Safety Investigations and Reports*.

3.3. Wildlife strikes will be entered into the Air Force Safety Automated System (AFSAS) as they occur, but no later than the 15th of the following month.

3.4. Wing Safety will forward wildlife remains to the Smithsonian Institution IAW AFM 91-223.

4. Flying Operations.

4.1. Bird Watch Conditions. The following terminology is established to rapidly communicate bird activity. Restrictions associated with each condition are applicable to all AMC aircraft. The BWC can be different for each runway and will be called as applicable. It cannot be overstressed that the use of numbers ("5-15 large birds") in the definition of a BWC is intended as a guide. Personnel responsible for establishing and maintaining a BWC must assess a myriad of factors when establishing BWCs. One bird in any given location can drive a BWC of Severe, Moderate or Low. **NOTE:** The restrictions associated with each condition do not preclude the aircraft commander's emergency authority to land if fuel status or other emergencies pose a greater risk.

4.1.1. BWC LOW. LOW is defined as normal bird activity (fewer than 5 large birds or fewer than 15 small birds) on or above the airfield with a low probability of hazard. Local training and airlift missions approved.

4.1.2. BWC MODERATE. MODERATE will be declared during increased bird population (5 to 15 large birds or 15 to 30 small birds) in locations (airdrome and within 20 degrees of arrival and departure corridors) that represent an increased potential for strike. The BWC will be upgraded only if visual sightings indicate reported bird activity presents an actual threat. Only initial takeoffs and full stop landings are allowed for the BWC MODERATE runway. The aircraft commander and ATC must coordinate an arrival or departure path that has the least amount of reported bird activity. If both runways are MODERATE, local transition training must either hold until the BWC is downgraded or coordinate with Command Post to go to an alternate training airfield.

4.1.3. BWC SEVERE. SEVERE will be declared when high bird population [more than 15 large birds (waterfowl, raptors, gulls, etc.) or 30 small birds (terns, swallows, etc.)] on or immediately above the active runway or specific locations (taxiways, in-field areas, departure or arrival routes, etc.) that represents a high potential for strike. The BWC will be upgraded only if visual sightings indicate reported bird activity presents an actual threat. Local training and airlift mission departures and arrivals require 436 OG/CC approval for a runway that is BWC SEVERE. The aircraft commander will coordinate with ATC to determine the best arrival/departure route and runway. The aircraft commander will coordinate through Command Post to obtain 436 OG/CC approval for air operations. Command Post will notify tower and RAPCON if operations are approved or disapproved.

4.2. Phase I Operations. Phase I operations concentrate on bird control actions and are in effect year round. During phase I, BWC will be used to communicate any strike hazards.

4.3. Phase II Operations. Phase II is implemented during the migratory and flocking bird seasons that historically take place from early October to early April. The Phase II period can be adjusted by Wing Safety with coordination of the Wildlife Control Contractor. The decision to alter the Phase II window is accomplished through the Bird Hazard Working Group on the recommendations of Wing Safety. Additional restrictions to flying operations apply during phase II as follows:

4.3.1. Current Operations should not schedule arrivals/departures during peak bird hours, between 30 minutes prior to and 90 minutes after sunrise and sunset. Should mission requirements dictate, AMC aircraft on TACC missions are restricted to full stop landings and mission departures during peak bird hours. Scheduling 436th/512th training operations during this time requires 436 OG/CC approval.

4.3.2. Use a minimum radar traffic pattern altitude of 3000 feet to the maximum extent possible. Deviations are permitted for higher priority tasking such as aircraft separation, etc. Bird radar returns, reported sightings, and bird watch condition should be used to decide whether to issue a lower pattern altitude.

4.3.3. During Phase II, 436 OG/CC approval required for any transient request to train in the local Dover area within the high risk times near sunrise and sunset (-.5 to +1.5

hours of sunrise and -.5 to +1.5 hours of sunset.

4.4. Dover AFB Aero Club/Flight Training Center. Due to the size, speed and ability to maneuver to avoid birds, Dover AFB Aero Club aircraft will be permitted to operate normally during phase I and phase II except as follows:

4.4.1. Dover AFB Aero Club aircraft will not take-off or land on any runway that is reported as BWC SEVERE.

4.4.2. Dover AFB Aero Club flight instructors will not clear student pilots for solo flight when BWC is MODERATE or SEVERE.

4.4.3. During phase II, Dover AFB Aero Club pilots with less than 100 hours total flight time should avoid arrivals/departures between 30 minutes prior to and 90 minutes after sunrise and sunset.

RICHARD G. MOORE, JR., Colonel, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 11-2C-5, Vol. 3, DAFB Sup 1, *C-5 Operations Procedures*, 08 August 2011
AFI 11-2C-17, Vol. 3, DAFB Sup, *C-17 Operations Procedures*, 11 July 2007
AFI 13-204V3, *Airfield Operations Procedures and Programs*, 09 January 2012
AFI 31-207, *Arming and Use of Force by Air Force Personnel*, 29 January 2009
AFI 32-1053, *Pest Management Program*, 23 June 2009
AFI 32-7086, *Hazardous Materials Management*, 24 September 2008
AFI 91-202, *The US Air Force Mishap Prevention Program*, 05 August 2011
AFI 91-202 AMC SUP 1, *The US Air Force Mishap Prevention Program*, 31 August 2004
AFI 91-204, *Safety Investigations and Reports*, 24 September 2008
AFPAM 91-212, *Bird Aircraft Strike Hazard (BASH) Management Techniques*, 1 February 2004
AFM 31-229, *USAF Weapons Handling Manual*, 12 May 2004
AFM 91-223, *Aviation Safety Investigations and Reports*, 06 July 2004
UFC 3-260-01, *Airfield and Heliport Planning and Design*, 17 November 2008

Prescribed Forms

No Forms prescribed by this publication.

Adopted Forms

AF Form 2047, *Explosives Facility License*, 04 July 1998
AF Form 853, *Air Force Wildlife Strike Report*, 15 October 2005

Abbreviations and Acronyms

AFI-Air Force Instruction
AFM-Air Force Manual
AGL-Above Ground Level
AMC-Air Mobility Command
AHAS-Avian Hazard Advisory System
ATC-Air Traffic Control
ATIS-Airport Terminal Information System
BAM-Bird Avoidance Model
BASH-Bird Aircraft Strike Hazard
BHWG-Bird Hazard Working Group

BWC-Bird Watch Condition
CES-Civil Engineering Squadron
DER-Departure End of Runway
EPA-Environmental Protection Agency
ESE-Eastern Shores Environmental
FAA-Federal Aviation Administration
IAW-In Accordance With
IMC-Instrument Meteorological Conditions
OPR-Office of Primary Responsibility
RAPCON-Radar Approach Control
SAS-Safety Automated System
SFS-Security Forces Squadron
TACC-Tanker Airlift Control Center
VMC-Visual Meteorological Conditions

Attachment 2
WILDLIFE REPORTING GRID MAP

