

LAFB BASH Program

Introduction

In an effort to provide the safest flying conditions possible, the 1st Fighter Wing (1 FW) continually implements and improves aviation safety programs. One of these programs is the Bird/Wildlife Aircraft Strike Hazard (BASH) prevention program. The purpose of the BASH program is to minimize aircraft and pilot exposure to potentially dangerous wildlife strikes in the local flying area of Langley Air Force Base, Virginia. The program is supported by the 1 FW BASH Plan 91-20 and requirements of Air Force Instruction (AFI) 91-202, *The US Air Force Mishap Prevention Program*; AFI 91-204, *Safety Investigations and Reports*; and AF Pamphlet 91-212, *BASH Management Techniques*.

The 1 FW BASH Plan has adopted an integrated-multidiscipline management approach that involves four primary components: monitoring and research; aircraft avoidance; hazard response; and habitat management. Each component requires the cooperative and proactive efforts of Flight Safety, Airfield Management (AM Ops), Aircraft Maintenance, Control Tower, and Natural Resources. In 1999, 1 FW requested assistance from the United States Department of Agriculture, Animal Plant and Health Inspection Service, Wildlife Services (USDA/APHIS/WS) program and entered into an Interagency Agreement that provided two full-time staff dedicated to the management and implementation of the BASH Plan.

Monitoring and Research

All wildlife strike incidents (both damaging and non-damaging) are investigated and reported through Air Force Safety Automated System database. For a 24 year period (1985-2009), 409 wildlife strikes were reported resulting in over \$2.2 million in aircraft parts and/or labor; while continuing to practice an 85% species identification rate. Standardized wildlife surveys are conducted monthly and seasonally to monitor local abundance and behavior; preferred habitat; and species composition of birds, mammals, and rodents. Over 750 surveys have been conducted, documenting over 255,000 bird and mammal species within or near the airfield. The 1 FW also collaborates with the WS National Wildlife Research Center in conducting scientific studies of avian runway crossings; airfield bird forage analysis; raptor banding and relocation; and estimating osprey strike risk using satellite tracking devices.

Aircraft Avoidance

Flight operation modifications are considered daily and seasonally. Mission permitting, flight operations are altered to avoid areas and times of hazardous bird activity. Daily bird watch conditions are adjusted to alert and instruct aviators to raise traffic pattern altitude; change traffic pattern direction; limit or prohibit takeoffs and landings; mandate traffic pattern departures and rejoin 3000' AGL; and direct full stop landings. Takeoff and landing 1 hour before and after dawn or dusk are seasonally prohibited during the fall and spring bird migration periods. In addition, pilots are continually encouraged to review Avian Hazard Avoidance System and Bird Avoidance Model programs when planning or conducting sortie missions.

Wildlife Hazard Response

In 2000, a BASH Response Team (BRT) was formed to respond to immediate and seasonal wildlife threat to flight safety. Comprised of WS and AM Ops staff, the BRT uses a combination of different tools to disperse or take wildlife species posing a threat to flight safety. The BRT is responsible for employing over 8,500 actions to mitigate wildlife hazards from the airfield. The BRT is also responsible for monitoring and documenting airfield wildlife activity and habitat conditions that are attractive to hazardous species.

Habitat Management

Removing or modifying existing wildlife attractions that lure hazardous species to the airfield is the most effective long-term measure for reducing BASH on or near an airfield. Examples of habitat modification and exclusion projects completed within the last 9 years include: overhead grid-wire exclusion of golf course ponds; bird perch inhibitors on airfield sign and lighting structures; removal and modification of nesting substrates; practicing tall grass management on the airfield; controlling vegetation growth along airfield ditches; seeding areas of bare ground; ensuring proper water drainage or discharge, fill and level of airfield water collecting areas; practicing detention stormwater management and off-site wetland mitigation. In addition, base development and land-use practices are continuously evaluated to identify and prevent potential BASH impacts.

Point of Contact:

Thomas J Olexa, Flight Safety – Wildlife Services Office; 65 Sweeney Blvd, Langley AFB, Va 23665, DSN: 574-5357 or 757-764-5357, email thomas.olexa@langley.af.mil

