Federal Aviation Administration

Fact Sheet

For Immediate Release

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FAA Wildlife Hazard Mitigation Program

Background

Following the US Airways Flight 1549 bird strike and emergency landing in the Hudson River on January 15, 2009, public interest in the FAA's wildlife mitigation efforts significantly increased. However, the agency's Office of Airports has overseen a wildlife management program for nearly 50 years and has conducted wide-ranging research to find the best ways to keep airports safe by making them less attractive to all types of wildlife. The FAA remains committed to its long-standing goal of reducing wildlife hazards at or near our nation's airports. To reach that goal, the FAA regularly partners with academia, military, other government agencies, and the aviation industry to conduct research and outreach in this area. The FAA manages airport wildlife hazards through a number of avenues including regulation, agency guidance, advisory circulars and ongoing education.

FAA Wildlife Hazard Mitigation Efforts in 2009

The US Airways Flight 1549 bird strike and emergency landing in the Hudson River resulted in a number of new initiatives, including:

National Wildlife Strike Database Goes Public

On April 24, 2009, the FAA made the bird strike database available to the public with a small amount of data containing privacy information such as personal phone numbers deleted. Prior to this, only portions of the database were publicly available. The FAA began collecting data in the 1990s for use by the FAA's Office of Airports, academia, and researchers as a means to improve airport safety and reduce wildlife hazards.

Certification Alert

The FAA issued a certification alert to airport operators on June 11, 2009, reminding them of their obligation under Part 139 to conduct Wildlife Hazard Assessments if they experience a "triggering event" as outlined in Part 139.337 (b):

An air carrier experiences multiple wildlife strikes;
An air carrier aircraft experiences substantial damage from striking wildlife;
An air carrier aircraft experiences an engine ingestion of wildlife;

Wildlife of a size, or in numbers, capable of causing any of the items described above.

For additional information on Part 139 go to: http://www.faa.gov/airports/airport_safety/part139_cert/ (http://www.faa.gov/airports/airport_safety/part139_cert/) .

After issuing the certification alert, the FAA identified 96 airports that had experienced these types of events but had not conducted an assessment. Those airport operators were notified and required to do an evaluation. As of December 2009, approximately 16 airports had completed assessments, 51 had begun assessments, and 21 are slated to begin assessments in 2010. The United States Department of Agriculture determined that the triggering events for eight airports occurred outside the airport environment. The eight airports are:

Elmira/Corning Regional (ELM), Elmira, NY
Fresno Yosemite International (FAT), Fresno, CA
Ithaca Tompkins Regional (ITH), Ithaca, NY
Klamath Falls International (LMT), Klamath Falls, OR
Lynchburg Regional/ Preston Glenn Field (LYH), Lynchburg, VA
Massena International–Richards Field (MSS), Massena, NY
Natrona Co International (CPR), Casper, WY
Salisbury-Ocean City Wicomico Regional (SBY), Salisbury, MD

The FAA provides Airport Improvement Program (AIP) funds for assessments and for the development of a follow-on Wildlife Hazard Management Plan, if needed. Certification Alerts can be found on http://www.faa.gov/airports/airport_safety/certalerts/ (http://www.faa.gov/airports/airport_safety/certalerts/) .

Mandatory Wildlife Hazard Assessments

The FAA believes all airports should understand the level of wildlife activity on or near their airport. Accordingly, the FAA initiated rulemaking in late summer 2009 to make assessments mandatory at all Part 139 airports whether or not an airport has had a "triggering event."

The FAA plans to publish a Notice of Proposed Rulemaking by the end of 2010.

General Aviation Airports Wildlife Hazard Assessments

The FAA is developing a program to conduct Wildlife Hazard Assessments at approximately 2,000 general aviation airports. The FAA expects this program to begin later this year, in a phased-in approach that will take several years to complete because of the large number of assessments required. The FAA will make AIP funding available for these assessments.

Level of Reporting and Mandatory Reporting

In May 2009, the FAA tasked SRA International, Inc., a leading provider of information technology service, and Richard Dolbeer, Ph.D., a world renowned wildlife hazard mitigation expert, to review its National Wildlife Strike Database. The FAA wanted to determine: the current level of wildlife strike reporting; the level of voluntary strike reporting necessary to develop national trends; whether mandatory strike reporting is necessary; and how the FAA could increase its data collection.

In the December report, Dolbeer estimated that the total number of strikes reported has increased from 20 percent during the period from 1990-1994 to 39 percent from 2004-2008. The majority of strike reports are filed at Part 139 airports, and approximately six percent at general aviation airports. Although there is a higher level of reporting, the number of damaging strikes has not increased mainly because many certificated airports have successfully put in place professionally-run wildlife hazard programs. Dolbeer determined the current level of reporting (39 percent) is statistically valid and is sufficient for the FAA to develop national trends and mitigation policies. Based on those findings, he concluded that mandatory reporting is not required.

The report did identify reporting gaps among certificated airports, air carriers, and general aviation airports. The FAA is conducting outreach with the aviation community to close these reporting gaps. A copy of the report can be found on http://www.airporttech.tc.faa.gov/safety/downloads (http://www.airporttech.tc.faa.gov/safety/downloads) .

Redesigned Website

The FAA conducted usability studies and retooled the wildlife hazard web site (http://wildlife-mitigation.tc.faa.gov (http://wildlife-mitigation.tc.faa.gov/)) to make it more user-friendly and to allow more advanced data mining. The new site, (http://wildlife.faa.gov (http://wildlife.faa.gov/)) has search fields that enable users to find data on specific airports, airlines, engine types, as well as date and state without having to download the entire database.

Another Option for Online Strike Reporting

In addition to wildlife strike reporting via the web, the FAA is developing software that would allow anyone to file a wildlife strike report using handheld mobile devices.

Continuing Wildlife Hazard Efforts
Avian or Bird Radar Technology

In 2001, the FAA began working with the United States Air Force to develop a radar system for detecting and tracking birds on or near airports. In 2006, the FAA initiated a science-based performance assessment program to assure the public that the use of commercial avian radars at airports does not compromise safety and is compatible with all aspects of airport operations at civil airports in the United States.

The commercial avian radar systems currently being assessed by the FAA are designed to detect birds flying on and in the vicinity of an airport and to provide information about the bird targets in terms of position and direction of movement. The target information may be in the form of text or visual display such as a map. The information can be used to mitigate the risks associated with the bird activity and aircraft safety.

The Center of Excellence for Airport Technology (CEAT) at the University of Illinois has been the FAA's partner for the performance assessments which have taken place at airports with varied wildlife issues. The initial avian radar systems were deployed at Seattle-Tacoma International Airport in 2007, followed by deployments at to Chicago's O'Hare International Airport and New York's John F. Kennedy International Airport in 2009. A deployment is planned for Dallas Fort Worth International Airport in 2010. The FAA and CEAT chose the four airport locations for radar deployment based on airport size and type

of operations, weather conditions, wildlife management programs, and the type and number of wildlife species and habitats.

The FAA plans to develop a performance specification that airports can use to competitively procure bird radar systems using AIP grants.

The current or planned bird radar evaluation schedule includes:

Two Accipiter (Accipiter Radar Technologies, Inc.) radar units deployed and under assessment at Seattle-Tacoma International Airport since 2007

Two Accipiter radar units deployed and under assessment at Chicago O'Hare International Airport since October 2009

Two Accipiter radar units deployed and under assessment at John F. Kennedy International Airport expected in January 2010

Negotiations are underway to procure and evaluate one MERLIN (DeTect) radar unit at the National Center for Atmospheric Research, in 2010

One MARS (Geo-Marine) radar unit planned for deployment and assessment at Dallas Fort Worth International Airport in the spring of 2010

FAA-Smithsonian Interagency Agreement

The FAA's working relationship with the Smithsonian goes back to the 1960s when the two agencies, along with the military and aircraft manufacturers, began working together to identify bird species using remains from strikes. Bird identification helps airfield personnel put together habitat management programs that discourage birds from nesting on airfields and provides information to aircraft manufacturers so they can better design engines and aircraft to withstand bird collisions.

In 2000, the FAA provided financial support to the Smithsonian to identify bird remains from civil aviation bird strikes as a free-of-charge service to any United States-registered aircraft, regardless of where the strike occurred, and foreign carriers if the strike occurred at a United States airport.

In 2003, the FAA, USAF, and the Smithsonian signed a cooperative interagency agreement to work together to support bird strike identification. Later that year, the FAA supported another Smithsonian program for bird strike identification using DNA technology and provided funding for a DNA sequencer and other analytical equipment.

In 2006, the Smithsonian completed the DNA library of known bird sequences for over 700 species of bird in North America. Between 2000 to December 2009, researchers identified 3,940 birds involved in civil aviation incident. They also have identified more than 200 different species of birds struck by civil aircraft, mainly in the United States.

United States Department of Agriculture (USDA)

For the last 15 years, the FAA and the USDA have conducted a research program to make airports safer by reducing the risks of aircraft-wildlife collisions. The research efforts designed to improve wildlife management techniques and practices on and near airports include:

Methods for making airport habitats less attractive to species that are the most dangerous in terms of aircraft collisions. This is accomplished by studying which species use the airport property, how they behave in that environment, and why they are attracted

Techniques for controlling species by restricting access to attractive features like storm water ponds

Technologies for harassing and deterring hazardous species

FAA Partnerships and Outreach

Bird Strike Committee USA

The FAA cosponsors the Bird Strike Committee – USA as part of its continued public outreach and education effort to increase awareness within the aviation community about wildlife hazards. This is an international forum where biologists, engineers, airline personnel, and others come together to exchange ideas and learn about the latest technology to mitigate wildlife hazards.

Advisory Circulars

The FAA has issued a number of advisory circulars (AC) that provide guidance and information on reporting bird strikes and mitigating wildlife hazards. ACs can be found on http://www.faa.gov/airports/resources/advisory_circulars/ (http://www.faa.gov/airports/resources/advisory_circulars/) .

150/5200-32A, Reporting Wildlife Aircraft Strikes – explains the importance of reporting collisions between aircraft and wildlife. It also examines recent improvements in the FAA's Bird/Other Wildlife Strike Reporting system, details how to report a wildlife strike, explains what happens to the wildlife strike report data, explains how to access the FAA's National Wildlife Aircraft Strike Database, and describes the FAA's Feather Identification Program.

150/5200-33B, Hazardous Wildlife Attractants on or Near Airports – provides guidance on identifying certain land use areas in the vicinity of public-use airports that have the potential to attract hazardous wildlife. It also provides guidance about the placement of new airport development projects (including airport construction, expansion, and renovation) pertaining to aircraft movement in the vicinity of hazardous wildlife attractants.

150/5200-34A, Construction or Establishment of New Landfills Near Public Airports – containsguidance on how to comply with new Federal statutory requirements about the construction or establishment of new landfills within six miles of certain public airports.

150/5200-36, Qualifications for Wildlife Biologist – describes the qualifications for wildlife biologists who conduct WHAs for airports certificated under Title 14, Code of Federal Regulations, Part 139. In addition, it addresses the minimum wildlife hazard management curriculum for the initial and recurrent training of airport personnel involved in implementing an FAA-approved Wildlife Hazard Management Plan.

Manuals

Wildlife Hazard Management at Airports, a Manual for Airport Operators, (2nd edition. 2005 available in English and Spanish and the 1st edition 1999 available in English, Spanish, French, Chinese). This is the first of a kind publication to provide basic guidance to addressing Wildlife Aircraft Strike issues at airport.

Annual Report, *Wildlife Strikes to Civil Aircraft in the United States, 1990-2008.* First published in 1995, this document provides information on wildlife hazard strikes to civil aircraft.

To view these documents go to http://wildlife-mitigation.tc.faa.gov/public_html/index.html#manuals (http://wildlife-mitigation.tc.faa.gov/public_html/index.html#manuals) .

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