

Federal Aviation Administration

Advisory Circular

 Subject: REPORTING WILDLIFE AIRCRAFT STRIKES
 Date: 12/22/04
 AC No: 150/5200-32A

 Initiated by: AAS-300
 Change:

1. Purpose:

This Advisory Circular (AC) explains the importance of reporting collisions between aircraft and wildlife, more commonly referred to as wildlife strikes. It also examines recent improvements in the Federal Aviation Administration's (FAA) Bird/Other Wildlife Strike Reporting system; how to report a wildlife strike; what happens to the wildlife strike report data; how to access the FAA National Wildlife Aircraft Strike Database; and the FAA's Feather Identification program.

2. Background:

The FAA has long recognized the threat to aviation safety posed by wildlife strikes. Worldwide, wildlife strikes cost civil aviation an estimated \$1.2 billion annually. Each year in the U.S., wildlife strikes to U.S. civil aircraft cause about \$500 million in damage to aircraft and about 500,000 hours of civil aircraft down time. For the period 1990—2004, over 63,000 wildlife strikes were reported to the FAA. About 97 percent of all wildlife strikes reported to the FAA involve birds, almost 3 percent involve mammals and less than 1 percent involved reptiles. Waterfowl (ducks and geese), gulls, and raptors (mainly hawks and vultures) are the bird species that cause the most damage to civil aircraft in the United States. Vultures and waterfowl cause the most losses to U.S. military aircraft.

The FAA has initiated several programs to address this important safety issue, including the collection, analysis, and dissemination of wildlife strike data. The FAA actively encourages the voluntary reporting of wildlife strikes.

3. How to Report a Wildlife Aircraft strike:

A wildlife strike has occurred when:

- 1. A pilot reports striking 1 or more birds or other wildlife;
- 2. Aircraft maintenance personnel identify aircraft damage as having been caused by a wildlife strike;
- 3. Personnel on the ground report seeing an aircraft strike 1 or more birds or other wildlife;
- 4. Bird or other wildlife remains, whether in whole or in part, are found within 200 feet of a runway centerline, unless another reason for the animal's death is identified; and
- 5. An animal's presence on the airport had a significant negative effect on a flight (i.e., aborted takeoff, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal) (Transport Canada, Airports Group, *Wildlife Control Procedures Manual*, Technical Publication 11500E, 1994).

Pilots, airport operations, aircraft maintenance personnel, or anyone else who has knowledge of a strike is encouraged to report it to the FAA. Wildlife strikes may be reported to the FAA using the paper FAA Form 5200-7 <u>Bird/Other Wildlife Strike Report</u>, or electronically at the *Airport Wildlife Hazard Mitigation* web site: <u>http://wildlife-mitigation.tc.faa.gov</u>. The FAA's Bird/Other Wildlife Strike Report Form can be downloaded or printed from the same web site. Paper copies of Form 5200-7 may also be obtained from the appropriate Airports District Offices (ADO), Flight Standards District Offices (FSDO), and Flight Service Stations (FSS). Copies of the Bird/Other Wildlife Strike Report form are also found in the Airman's Information Manual (AIM).

Paper forms are pre-addressed to the FAA. No postage is needed if the form is mailed in the United States. It is important to include as much information as possible on the strike report.

The FAA National Wildlife Strike Database Manager edits all strike reports to insure consistent, error-free data before entering the report into the database. This information is supplemented with non-duplicated strike reports from other sources. About every 6 weeks, an updated version of the database is posted on the web site. Annually, a current version of the database is forwarded to the International Civil Aviation Organization (ICAO) for incorporation into ICAO's Bird Strike Information System Database.

Analyses of data from the FAA National Wildlife Aircraft Strike Database has proved invaluable in determining the nature and severity of the wildlife strike problem. The database provides a scientific basis for identifying risk factors; justifying, implementing and defending corrective actions at airports; and for judging the effectiveness of those corrective actions. The database is invaluable to engine manufacturers and aeronautical engineers as they develop new technologies for the aviation industry. Each wildlife strike report contributes to the accuracy of and effectiveness of the database. Moreover, each report contributes to the common goal of increasing aviation safety.

4. Access to the FAA National Wildlife Aircraft Strike Database:

In order to expedite the dissemination of this important information, the FAA has developed procedures for searching the database on line at: <u>http://wildlife-mitigation.tc.faa.gov</u>. The public may access the database without a password and retrieve basic information on the number of strikes by year, by state, and by species of wildlife.

Access for airport operators, airline operators, engine manufactures, air frame manufactures, and certain other governmental agencies requires a password to access the database and allows retrieval of more detailed wildlife strike information for their specific area of concern. An airport operator's access is limited to strike information for incidents occurring on its particular airport. Airlines may only access strike records involving aircraft owned or operated by them. Comparisons among individual airports and airlines are not made.

Airline and airport operators, airframe and engine manufactures, or governmental agencies may gain access to the FAA National Wildlife Aircraft Strike Database by writing the FAA Staff Wildlife Biologist. All written requests should follow the guidelines provided below:

- 1. On Company Letterhead, request access to the FAA National Wildlife Aircraft Strike Database. Include:
 - a. Your preferred password. (The FAA does not assign passwords. The password should be no more than 8 characters, alphanumeric, and case sensitive.)
 - b. Your contact information. (Title, mailing address, phone number, and e-mail address.)
- 2. Submit the request to:

FAA Staff Wildlife Biologist, AAS-300

Federal Aviation Administration,

800 Independence Ave. SW.

Washington, DC. 20591.

3. When the FAA receives the request for access to the database, the request and the password will be entered into the system. Upon completion of the process, the requestor will be notified by email.

The database is accessible from the *Airport Wildlife Hazard Mitigation* web page (<u>http://wildlife-mitigation.tc.faa.gov</u>):

5. Bird Identification:

Accurate species identification is critical for bird-aircraft strike reduction programs. Wildlife biologists must know what species of animal they are dealing with in order to make proper management decisions. The FAA, the U.S. Air Force, and the U.S. Department of Agriculture – Wildlife Services are working closely with the Feather Identification Lab at the Smithsonian Institution, Museum of Natural History, to improve the understanding and prevention of bird-aircraft strike hazards. Bird strike remains that cannot be identified by airport personnel or by a local biologist can be sent (with FAA Form 5200-7) to the Smithsonian Museum for identification.

Feather identification of birds involved in bird-aircraft strikes will be provided free of charge to all U.S. airport operators, all U.S. aircraft owners/operators (regardless of where the strike happened), or to any foreign air carrier if the strike occurred at a U.S. airport.

Please observe the following guidelines for collecting and submitting feathers or other bird/wildlife remains for species identification. These guidelines help maintain species identification accuracy, reduce turn-around time, and maintain a comprehensive FAA National Wildlife Aircraft Strike Database.

- 1. Collect and submit remains as soon as possible.
- 2. Provide complete information regarding the incident
 - a. Fill out FAA Form 5200-7 Bird/Other Wildlife Strike Report.
 - i. A copy of Form 5200-7 can be downloaded and or printed from: <u>http://wildlife-mitigation.tc.faa.gov/</u>T.
 - b. Mail report with feather material (see address below).
 - c. Provide your contact information if you wish to be informed of the species identification.
- 3. Collect as much material as possible in a clean plastic/ziplock bag. (Please, do not send whole birds).
 - a. Pluck/pick a variety of feathers from the wings, tail and body.
 - b. Do not cut off feathers. This removes the downy region needed to aid in identification.
 - c. Include any feathers with distinct colors or patterns.
 - d. Include any downy "fluff".
 - e. Include beaks, feet, and talons if possible.
 - f. Where only a small amount of material is available, such as scrapings from an engine or smears on wings or windshields, send all of it.
 - g. Do not use any sticky substance such as tape or post-it notes to attach feathers.
- 4. Mail the Bird/Other Wildlife Strike Report and collected material to the Smithsonian's Feather Identification Lab. They will forward the report to the FAA Staff Wildlife Biologist at the FAA's Office of Airport Safety and Standards.

For Material Sent via Express Mail Service:	For Material Sent via US Postal Service:
Feather Identification Lab	Feather Identification Lab
Smithsonian Institution	Smithsonian Institution
NHB, E610, MRC 116	PO Box 37012
10 th & Constitution Ave. NW	NHB, E610, MRC 116
Washington, D.C. 20560-0116	Washington, D.C. 20013-7012
(This can be identified as "safety investigation material")	(Not recommended for priority cases.)

for

The species identification turn around time is usually 24 hours from receipt. Once processed, the reports and species identification information are sent to the database Manager for entry into the FAA National Wildlife Aircraft Strike Database. Persons wishing to be notified of the species identification must include contact information (e-mail, phone, etc.) on the report.

For more information contact The FAA Staff Wildlife Biologist [(202) 267-3389], or the Smithsonian's Feather Identification Lab [(202) 633-0801].

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