



Federal Aviation
Administration

Regulatory Guidance for Airport Wildlife Hazards

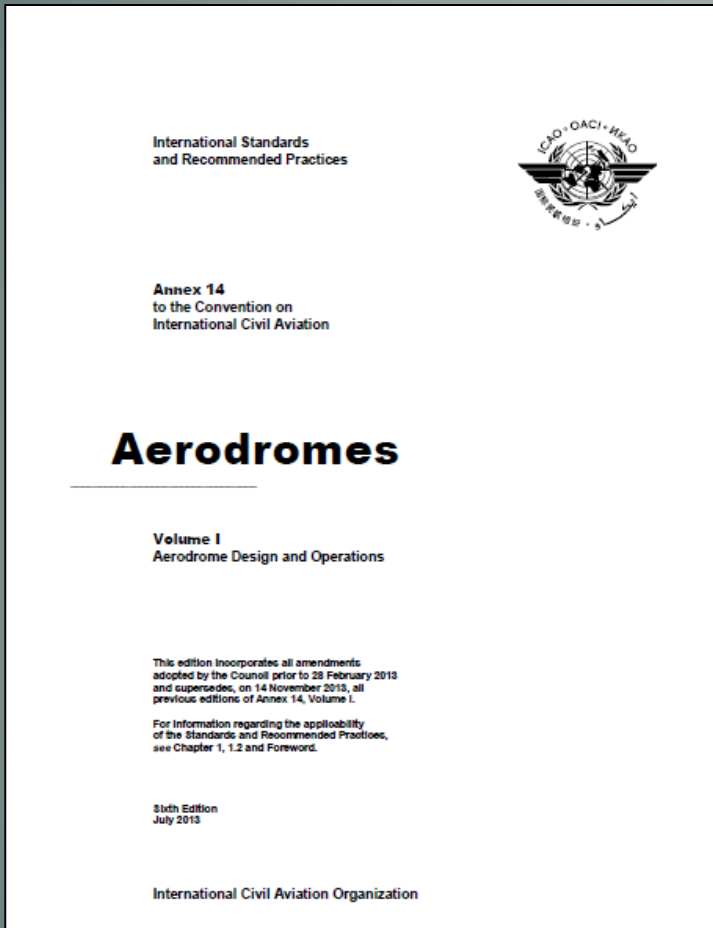
ICAO CAR/SAM Regional Bird/ Wildlife
Hazard Prevention Committee Meeting and
Conference, Asuncion, Paraguay

November 6th, 2013

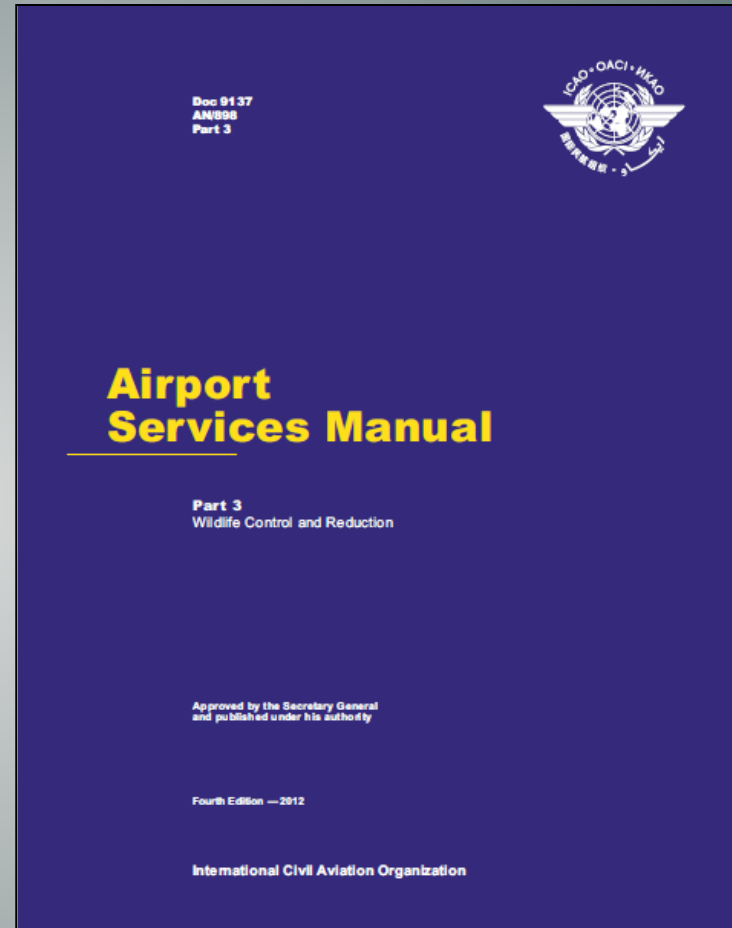
John R Weller



ICAO Guidance



sixth edition 2013



Fourth edition 2012



Federal Aviation
Administration

Airport Services Manual:

Part 3 Wildlife Control and Reduction

- **Establishment of National Committee**
- **Roles, Responsibilities and Organization of Wildlife Program**
- **Aircraft Operators**
- **Risk Assessment**
- **Habitat Management**
- **Repellent Techniques and BMPs**
- **Incompatible Land Use**
- **Evaluation**



FAA OVERSIGHT of WILDLIFE HAZARDS

REGULATIONS/ GUIDANCE

DATA COLLECTION

OUTREACH/ EDUCATION

RESEARCH

PARTNERSHIPS



Wildlife at Airports: Rules, Regulations and Permits

FAA Regulations, Advisories and CertAlerts

Non-FAA Federal Laws and Policies



Migratory Bird Treaty Act



Bald and Golden Eagle Protection Act



Endangered Species Act



National Environmental Policy Act (NEPA)



Executive Order 13112 of February 3, 1999



Clean Water Act (wetlands protection)



Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)



USFWS Depredation Permit

State Laws and Policies

Local Laws and Ordinances



Federal Aviation Administration Wildlife Regulations

14 CFR 139.337 (revised 2/10/04)

- 139.337(a) ...
each certificate holder shall take immediate action to alleviate wildlife hazards whenever they are detected.



Multiple Wildlife Strikes

“The pitch of the engine said it all,” said plane-spotter Juergen Kienast, who took these dramatic pictures. “It was like sticking a bit of metal pipe into a blender.”



Substantial Damage from Wildlife Strike

OCTOBER 10, 2009- QANTAS #26 BIRD STRIKE CLIMB OUT 8,000 FT.



RADAR DOME
DAMAGE

APPROX. 3 ½ FOOT DIAMETER DENT

Engine Ingestion of Wildlife



Federal Aviation
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Wildlife of size, or in numbers, capable of causing any of the previous events is observed on or near airport.



139.337 (c) cont'd... The wildlife hazard assessment must contain at least the following:

An evaluation of...

- (1) Strike Event**
- (2) Wildlife**
- (3) Attractants**
- (4) Wildlife Hazards to Aircraft**
- (5) Recommendations**



Wildlife Hazard Assessments provide fundamental wildlife and habitat information

Identify

hazardous species
natural/ artificial attractants
trends in wildlife use

Evaluate

overall risk level of wildlife strikes
efficacy of the airport's wildlife hazard mitigation program

Prevent

future strikes through:

- operational changes
- habitat modifications
- customized harassment/ species removal

WHA provides the scientific basis for a WHMP...

WHMP = blueprint for wildlife hazard mitigation

- 1. Authorities and responsibilities**
- 2. WHA actions target dates for initiation and completion**
- 3. Wildlife hazard management procedures**
- 4. Habitat management**
- 5. Permits (local, state, and federal)**
- 6. Resources**
- 7. Training**
- 8. WHMP review / evaluation**

TWO INCIDENTS + NTSB RECOMMENDATIONS = CHANGE



139 AIRPORT

US Airways Flight 1549 departing La Guardia forced into the Hudson River on 15 January 2009.

GA AIRPORT

A Cessna 500 Citation crashed in a woodlot following departure from Wiley Post Airport on 4 March 2008.



NTSB RECOMMENDATIONS

Recommendation (A-10-75) - Require Part 139-certificated airports to conduct WHA. FAA agrees

Recommendation (A-10 -076) - Work with the USDA to develop and implement innovative technologies that can be installed on aircraft that would reduce the likelihood of a bird strike. FAA agrees

Recommendation (A-09-73) - Verify all federally obligated GA airports located near wildlife attractants are complying with AC 150/5200-33B (*Hazardous Wildlife Attractants On or Near Airports*) to perform WHAs as specified. FAA agrees

Recommendation (A-09-75) - Require all Part 139 airports and 14 CFR Part 121, Part 135, and Part 91 Subpart K aircraft operators to report all wildlife strikes, to the FAA National Wildlife Strike Database.

FAA disagrees



NOTICE OF PROPOSED RULEMAKING

- 1. Mandate WHA for all Part 139 certificated airports.**
- 2. Define alternatives to successive WHAs and clarify WHA frequency.**
 - (a) Continual Wildlife Monitoring option or;**
 - (b) Updated WHA every 10 years (triggering event or significant habitat modification still used to evaluate WHMP)**
- 3. Mandate WHMP for all Part 139 certificated airports**
- 4. Remove 139.203 exemption for Class IV airports**
- 5. Clarify requirements for biologists conducting WHAs**



FAA Regulations, Advisories and CertAlerts

Advisory Circulars – Advisory Guidance to Comply with Regulations



AC 150/5200-32A REPORTING WILDLIFE AIRCRAFT STRIKES 12/22/04



AC 150/5200-34A CONSTRUCTION OR ESTABLISHMENT OF LANDFILLS NEAR PUBLIC AIRPORTS January 26, 2006



AC 150/5200-33B HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS 8/28/2007



AC 150/5200-36 Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports ... **June 28, 2006**



AC No: 150/5200-?? **PROTOCOL FOR THE CONDUCT AND REVIEW OF WHSVs, WHAs, WHMPs and CONTINUAL MONITORING** 2012



AC 150/5200-32A REPORTING WILDLIFE AIRCRAFT STRIKES 5/31/2013

CHANGES

- Increased Options for Wildlife Strike Reporting
- Improved Access to National Wildlife Strike Database
- Updated Information on How to Submit Strike Evidence
- Updated Information re: Strike ID 250 Feet from Runway Centerline



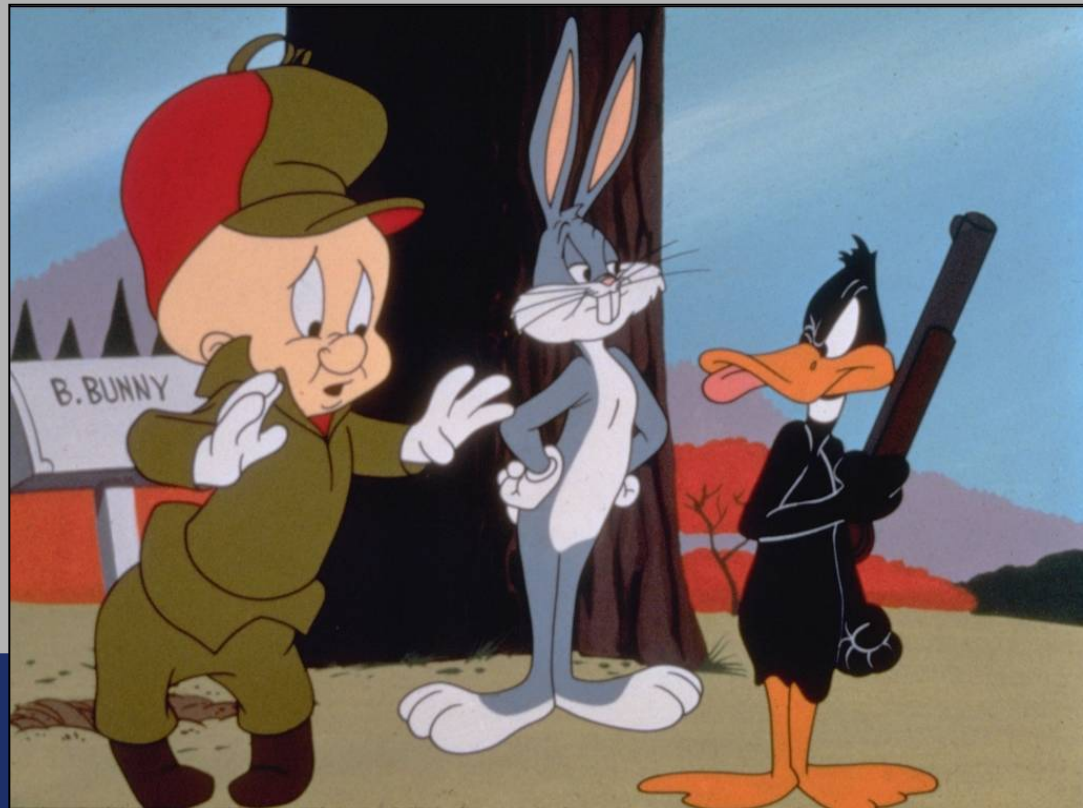
AC 150/5200-34A CONSTRUCTION OR ESTABLISHMENT OF LANDFILLS NEAR PUBLIC AIRPORTS January 26, 2006

Defines minimum distance from airports (6 miles) for creation of new landfills and outlines exemption process



AC 150/ 5200-36A Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculum for Airport Personnel Involved in Controlling Wildlife Hazards on Airports 1/31/2012

Purpose. AC describes the qualifications for wildlife biologists who **conduct WHAs** for 14 CFR Part 139 airports, and at non-certificated airports funded by an AIP or Passenger Facility Charge (PFC) Program. **“We recommend that airports, at a minimum, consult with a qualified airport wildlife biologist when developing a WHMP. However, airports are not required to do so.”**



AC 150/5200-33B HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS 8/28/2007

Section 1. SEPARATION CRITERIA FOR ATTRACTANTS

Section 2. LAND-USE PRACTICES

Section 3. PROCEDURES FOR WILDLIFE HAZARD MANAGEMENT

**Section 4. FAA NOTIFICATION AND REVIEW OF PROPOSED LAND-USE
PRACTICE CHANGES IN THE VICINITY OF PUBLIC-USE AIRPORTS**

PROPOSED CHANGES

**New Section: Airport Procedures for Off-site
Attractants**

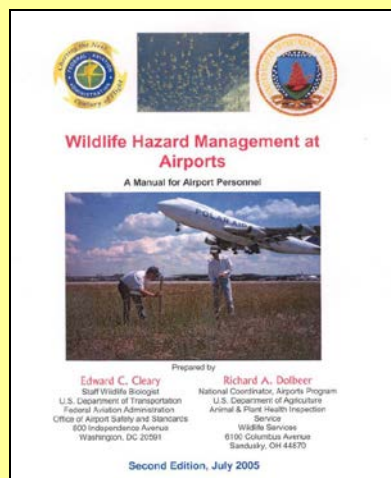
**New Section: Protocol for Threatened and
Endangered Species on Airports**

Inclusion of GA Airport Wildlife Responsibilities



AC No: 150/5200-38 REQUIREMENTS FOR WILDLIFE HAZARD ASSESSMENTS, WILDLIFE HAZARD MANAGEMENT PLANS AND SITE VISITS x/xx/2013

Standardized counts of birds should be made at least twice monthly.



Specialized surveys might be needed to document mammals on the airport. These specialized mammal surveys should be conducted at least twice during a 12-month WHA.



AC 150/5200-38 PROTOCOL FOR THE CONDUCT AND REVIEW OF WHSV_s, WHA_s, WHMP_s AND CONTINUAL MONITORING **xx/2013**

- 1. Provide guidance for WHSV, WHA, WHMP, and Continual Monitoring**
- 2. Minimum number of bird surveys/ day?**
- 3. Minimum number of bird/ mammal surveys/ month?**
- 4. Minimum number of days between sampling periods?**
- 5. Provide Airport Certification Safety Inspectors with guidelines/ templates regarding review of WHAs/ WHMPs**
- 6. Provide airports WHA/ WHMP templates for RFPs**



Certalerts

Advisory Information for ACSI & Airports

- Certalert No. 97-09** Wildlife Hazard Management Plan Outline 11/17/1997
- Certalert No. 04-16** Deer Hazard to Aircraft and Deer Fencing 12/13/2004
- Certalert No. 98-05** Grasses Attractive To Hazardous Wildlife 9/21/1998
- Certalert No. 04-09** Relationship Between FAA and Wildlife Services 8/30/2004
- Certalert No. 02-06** Access to the FAA National Wildlife Aircraft Strike Database 10/1/2002
- Certalert No. 03-03** Guidelines For Submitting Bird Strike Feather Remains For Identification 8/29/2003
- Certalert No. 06-07** Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State - Listed Threatened and Endangered Species and Species of Special Concern on Airports Date: 11/21/2006
- Certalert No. 09-10 Wildlife Hazard Assessments in Accordance with Part 139 Requirements June 11, 2009**



MOU's & MOA's

Partnerships / Expertise Recognition

MOA - Between the FAA, the U.S. Air Force, U.S. Army, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to Address Aircraft-Wildlife Strikes

MOU - Between the FAA and the USDA/ Animal and Plant Health Inspection Service/ Wildlife Services

MOU - Between the FAA and the Department of the Interior United States Fish and Wildlife Service Regarding Implementation of Executive Order 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds"

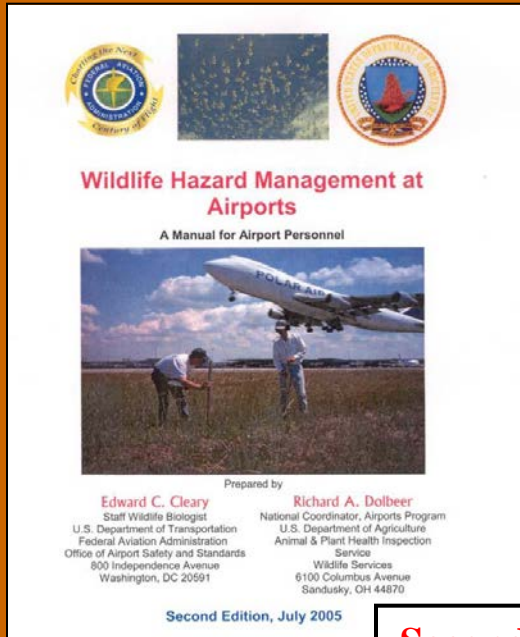
MOU - Between the FAA and the Bird Strike Committee USA

MOU - Between the FAA and the National Association of State Aviation Officials - 2010 Initiative Wildlife Hazards Attachment to existing MOU

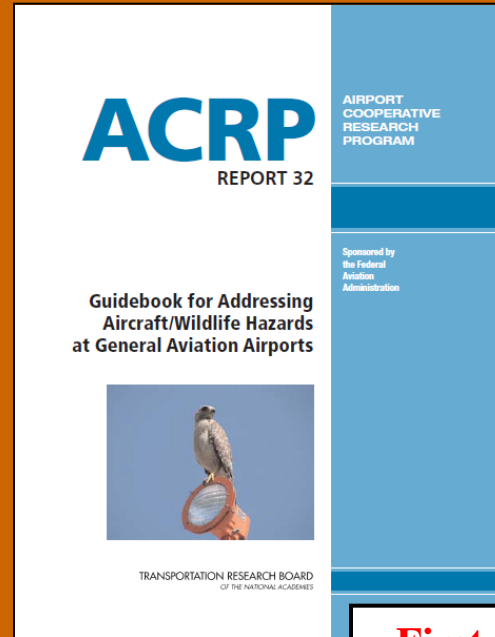


Resources

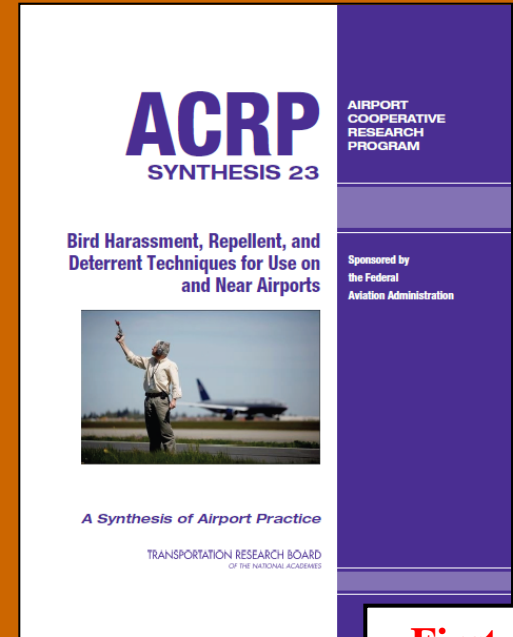
FAA/USDA and ACRP Manuals on Wildlife Hazard Management at Airports



**Second
edition
(2005)**



**First
edition
(2010)**



**First
edition
(2011)**





Search the Database

Report a Strike

Edit a Strike Report

About the FAA Wildlife Strike Database

The FAA Wildlife Strike Database contains records of reported wildlife strikes since 1990. Strike reporting is voluntary. Therefore, this database only represents the information we have received from airlines, airports, pilots, and other sources.

There are two ways to view information in the database:

1. Do a quick search from the [Search the Database page](#). You can export the results to Microsoft Excel.
2. [Download the complete FAA Wildlife Strike Database](#) in Microsoft Access format, and create your own queries.

Our search tool shows key information for each wildlife strike, including Date, Airport, Airline, Aircraft, and Species. To view all 94 fields of information for one or more reports, you must open the complete database. You can also visit the FAQ page for [Frequently Asked Questions](#) about wildlife strikes.

Quick Facts

The FAA has maintained a wildlife strike database since 1990.

The FAA wildlife strike database has recorded over 121,000 (Civil and USAF) wildlife strikes between 1990 and 2010.

92% of the bird strikes to commercial aircraft occur at or below 3,500 ft AGL (above ground level).

In 2010, 52% of the birds struck were identified to the species level.

FAA Wildlife Hazard Mitigation Web Site Revision

New Look

User Friendly

New Information

New Capabilities

