

Regulatory Guidance for Airport Wildlife Hazards

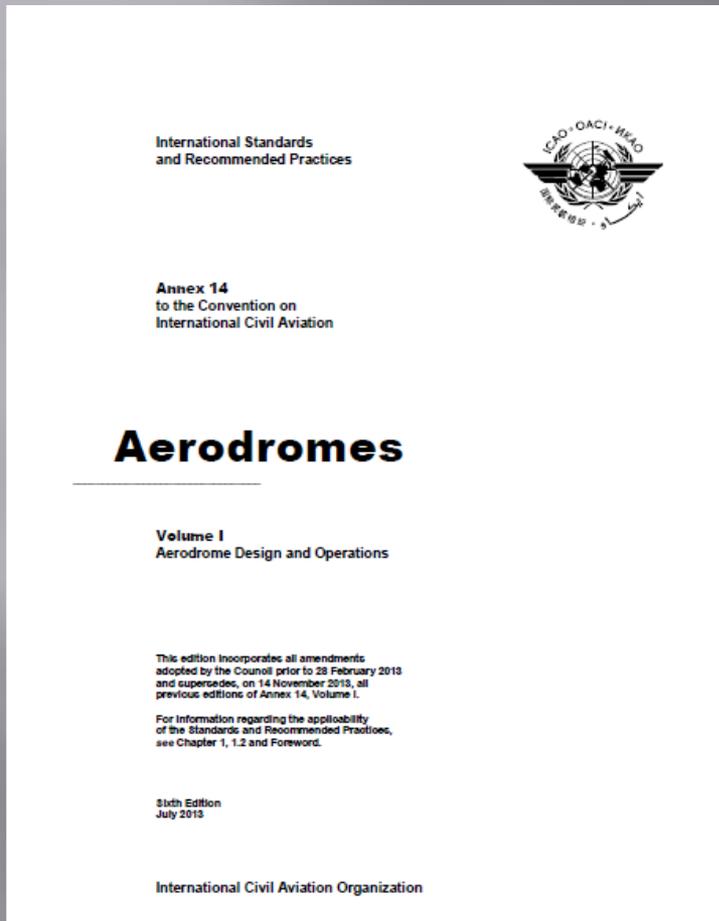
ICAO, World Birdstrike Association &
CARSAMPAF Bird/Wildlife Strike
Prevention Conference

Santa Fe, Mexico City, Mexico,
October 20th – 24th, 2014

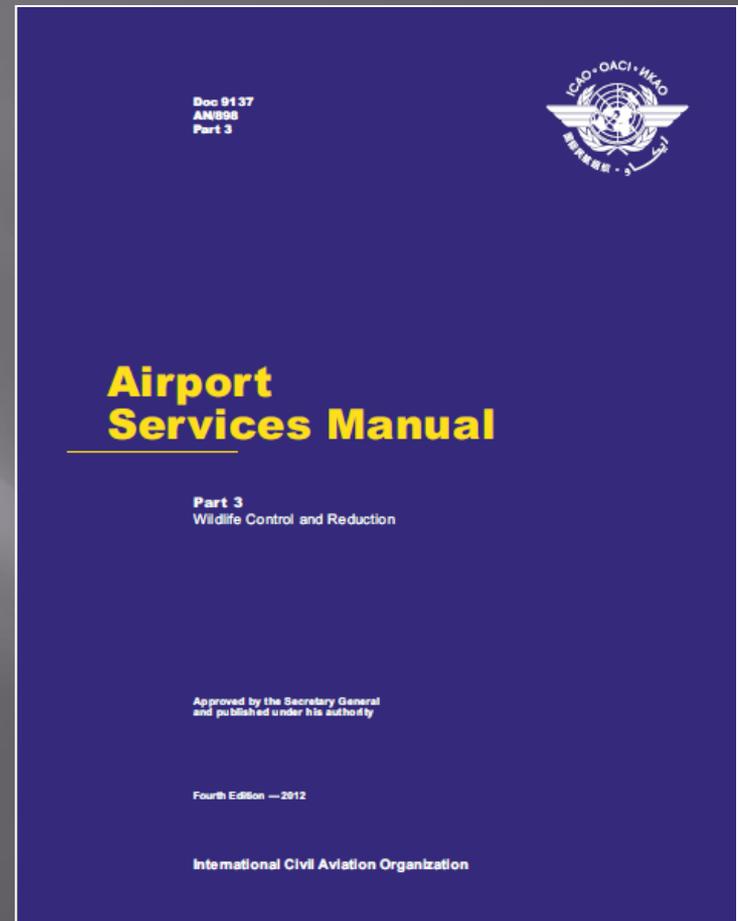
John R Weller



ICAO Guidance



Sixth edition 2013



Fourth edition 2012



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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



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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



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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**



Assessments provide fundamental wildlife and habitat information

Identify hazardous species
natural/ artificial attractants
trends in wildlife use

Evaluate overall risk level of wildlife hazards
efficacy of the airport's wildlife mitigation program

Prevent future strikes through:

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

WHA is 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.



FAA Regulations, Advisories and CertAlerts



AC 150/5200-32B REPORTING WILDLIFE AIRCRAFT STRIKES. May 31, 2013 (May 31, 2013)



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 150/5200-36A Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports January 31, 2013



AC No: 150/5200-38 PROTOCOL FOR THE CONDUCT AND REVIEW OF WHSVs, WHAs, WHMPs and CONTINUAL MONITORING 2014



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

CHANGES

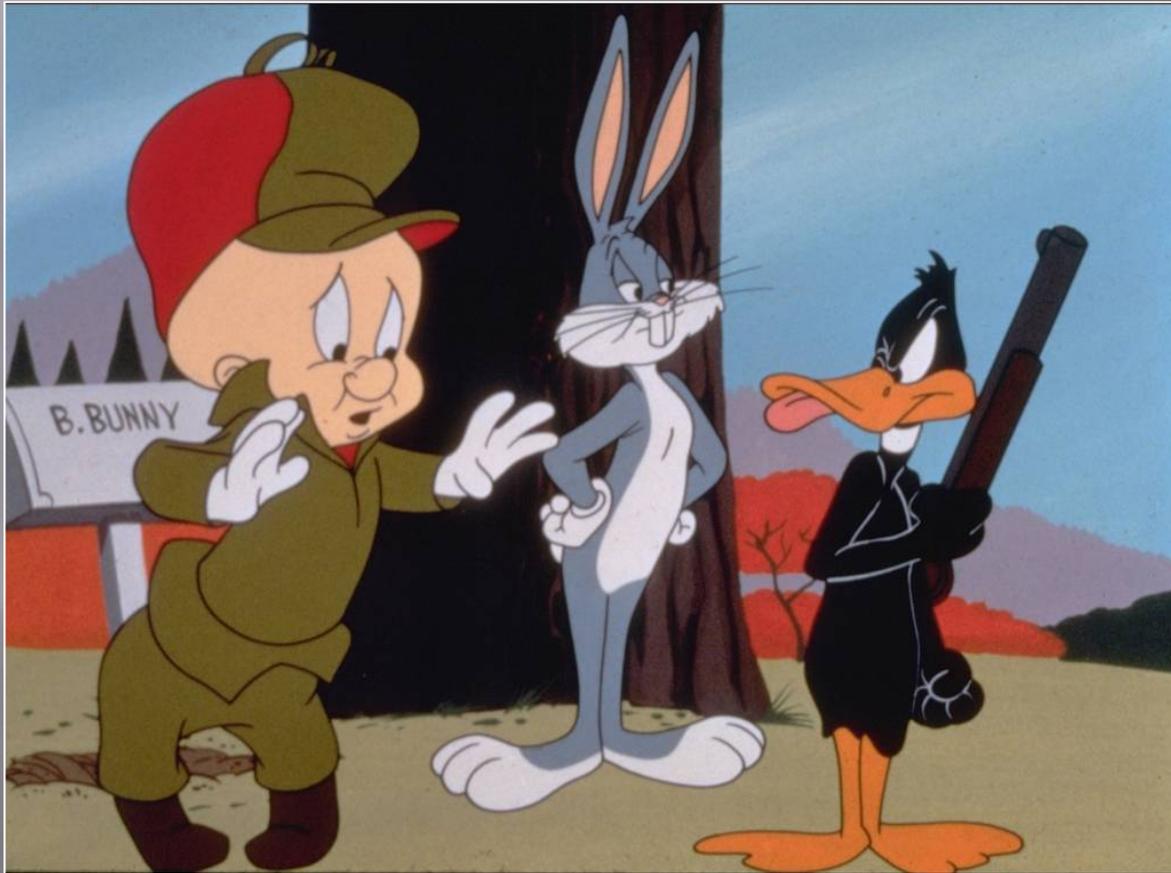
- Increased Options for Wildlife Strike Reporting
- Improved Access to National Wildlife Strike Database
- Updated Information on How to Submit Strike Evidence
- Updated Information re: Strike ID 250 Feet from Runway Centerline



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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 1/31/2013

Purpose:



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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



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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**

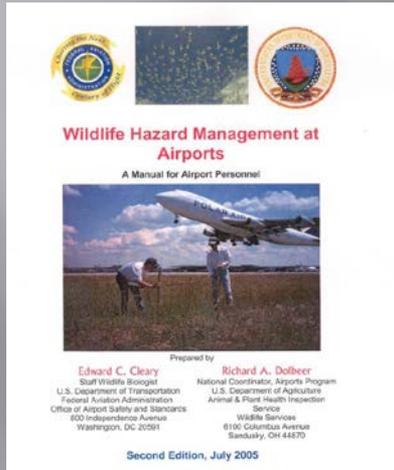
Inclusion of GA Airport Wildlife Responsibilities



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AC No: 150/5200-38 PROTOCOL FOR THE CONDUCT AND REVIEW OF WHSVs, WHAs, WHMPs and CONTINUAL MONITORING 2014

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.



- 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. Provide Airport Certification Safety Inspectors with guidelines/ templates regarding review of WHAs/ WHMPs**



Certalerts

- 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

Certalert No. 13-01 Federal and State Depredation Permit Assistance

January 30, 2013



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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"

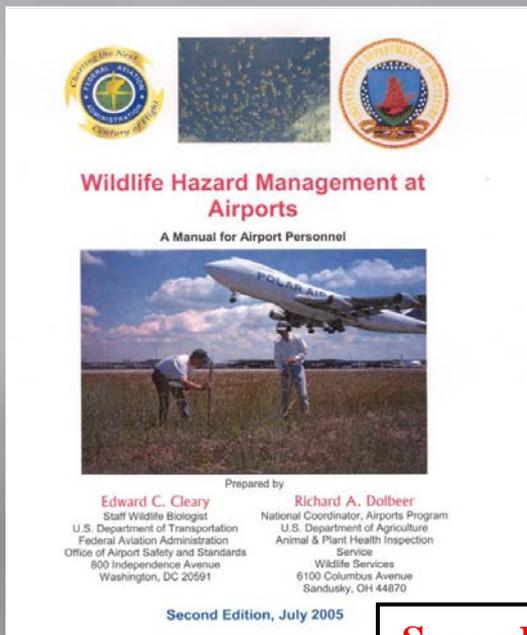
MOU - Between the FAA and the Bird Strike Committee USA

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

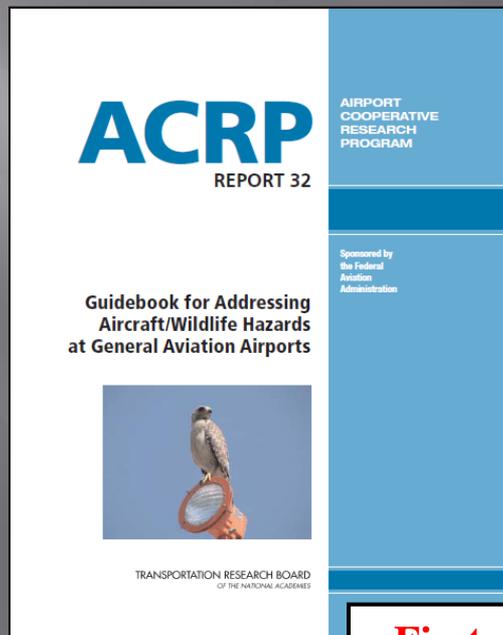


Resources

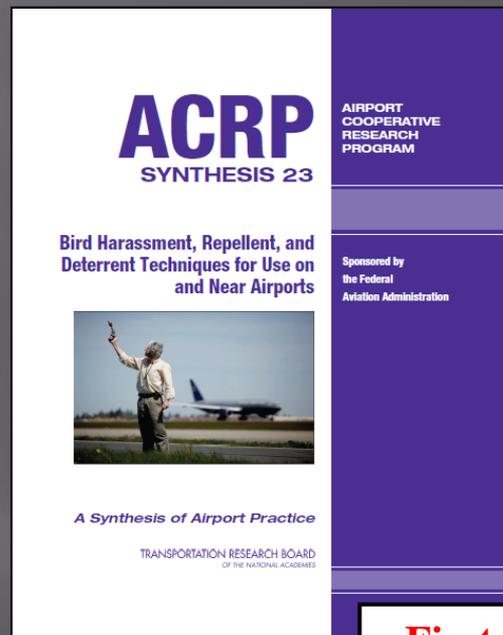
FAA/USDA and ACRP Manuals on Wildlife Hazard Management at Airports



**Second
edition
(2005)**



**First
edition
(2010)**



**First
edition
(2011)**



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Airport Technology R&D Branch
Airport Wildlife Hazard Mitigation



- 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.

<http://wildlife-mitigation.tc.faa.gov/wildlife/default.aspx>

12/2/2011

FAA Wildlife Hazard Mitigation Web Site Revision

New Look

User Friendly

New Information

New Capabilities

Available at: <http://wildlife.faa.gov>



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FAA CHALLENGES

- Improved guidance, oversight and communication
- Notification to FAA re: proposed off-site attractants
- Threatened & endangered species on or near airports
- Agricultural practices on / near airports
- ATIS / NOTAMS “white noise” warnings
- Undefined time frames – WHA recurrence and report completion
- High Tech detection / monitoring systems at airports

