

REGULATIONS

RISING TO EXPECTATIONS & CHALLENGES

ICAO / ACI Wildlife Strike Hazard
Reduction Symposium

16-18 May, 2017

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National Wildlife Biologist



Bird Strike Committee USA

DEDICATED TO PROVIDING LEADERSHIP IN
MANAGING WILDLIFE HAZARDS TO AVIATION



FACTS FIGHT CULTURE



Federal Aviation
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EXPECTATION is SAFETY

ULTIMATE GOAL = **ELIMINATION / REDUCTION OF DAMAGING STRIKES** AND/ OR NEGATIVE WILDLIFE IMPACTS ON AND NEAR THE AERODROME



(increase human safety, reduce \$\$ losses)

**Wildlife Hazards
(unique challenges)**



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FAA OVERSIGHT of WILDLIFE HAZARDS

REGULATIONS/ GUIDANCE

DATA COLLECTION

OUTREACH/ EDUCATION

RESEARCH

PARTNERSHIPS

FUNDING



Federal Aviation Administration Wildlife Regulations



14 CFR 139.337
(revised 2010)

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



Federal Aviation
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FAA Regulations, Advisories and CertAlerts

Advisory Circulars – Advisory Guidance to Comply with Regulations



AC 150/5200-32B REPORTING WILDLIFE AIRCRAFT STRIKES. May 31, 2013
(December 22, 2004)



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 TBD - 2018**



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 (June 28, 2006)



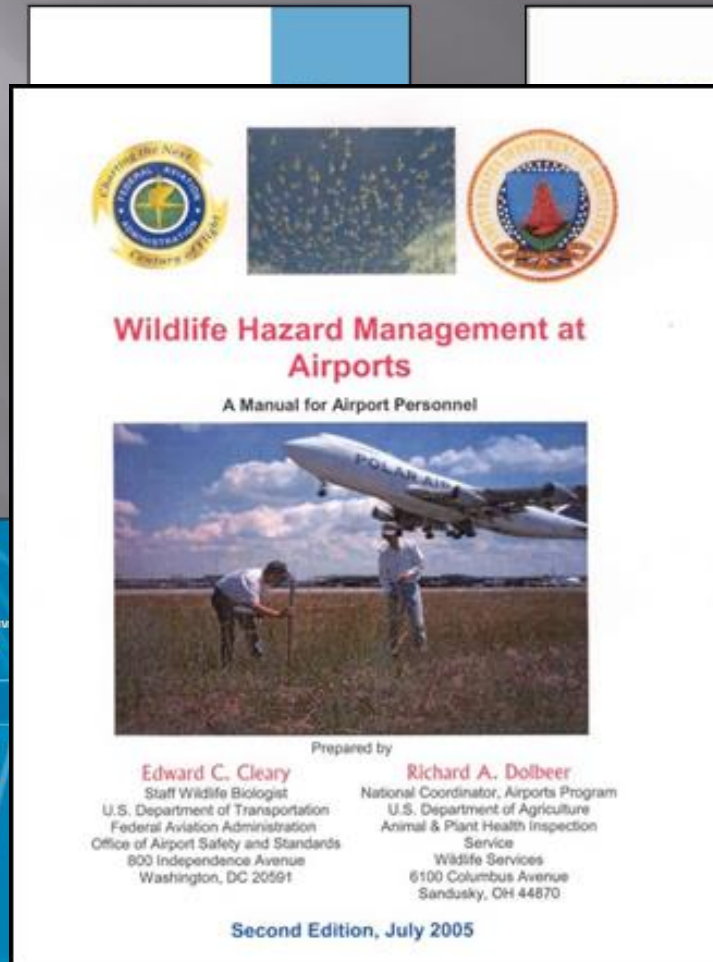
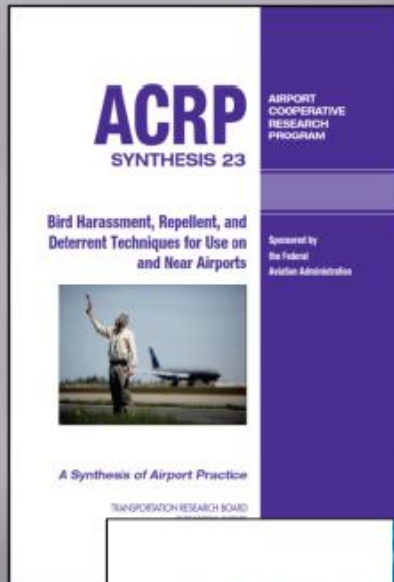
**AC No: 150/5200-38 PROTOCOL FOR THE CONDUCT AND
REVIEW OF WHSVs, WHAs, WHMPs and CONTINUAL
MONITORING TBD - 2017**



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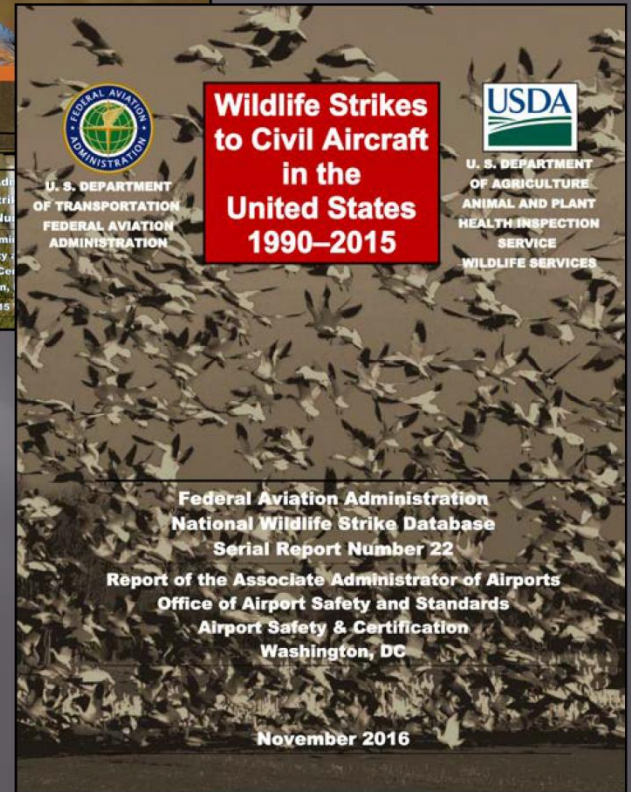
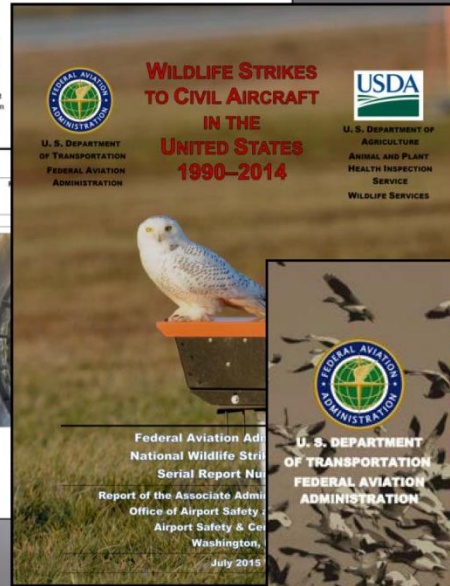
ADDITIONAL RESOURCES

ACRP Manuals on Wildlife Hazard Management at Airports



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National Wildlife Strike Database Report



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EXPECTATIONS OF STRIKE DATA

- **CAA needs enough data to:**
 - determine high risk species
 - track national trends
 - provide scientific foundation for regulatory guidance
- **Airports need enough data to:** identify & mitigate hazardous species, strike dynamics and attractants and evaluate effectiveness of wildlife management program
- **Industry needs enough data to:** evaluate effectiveness of aircraft components



Wildlife / Aircraft Strikes

- from the ground up -

0-3,500 ft AGL = 92% of strikes



0-500 ft AGL = 72% of strikes

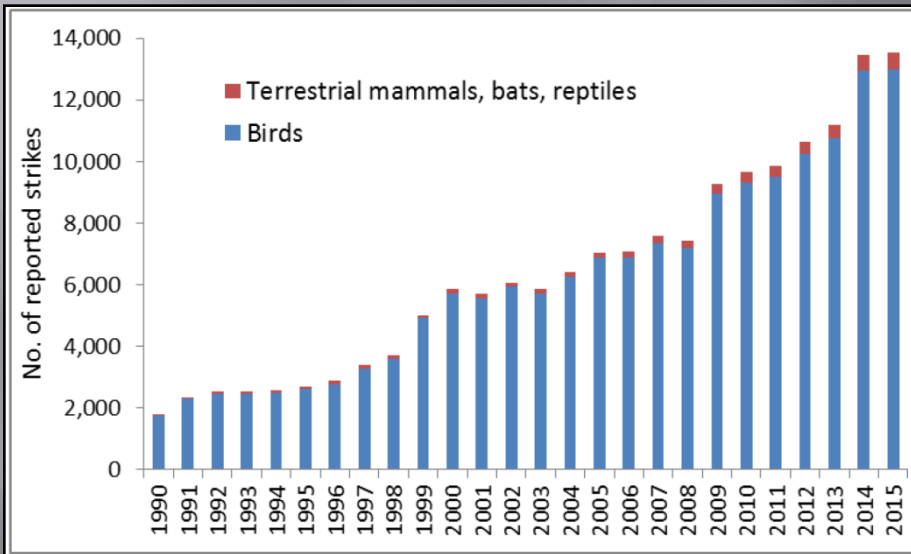


0 ft AGL = 41% of strikes

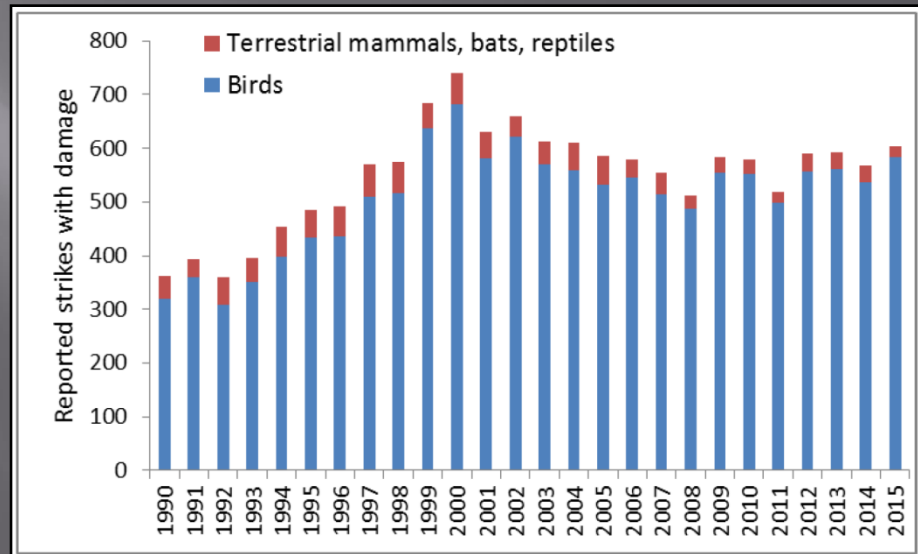


STRIKE REPORT CHALLENGE - USE THE DATA

- **Strike reporting continues to increase at all airports.**
- **Damaging strike within the airport environment (500 feet AGL) continue to decrease indicating safer airports.**



**Strikes Reported to Civil Aircraft, USA:
1990 - 2015**



**Damaging Strikes to Civil Aircraft, USA:
1990 - 2015**



Separation Distances

Off-site Attractants = Innovative Collaboration



STRIKE FACTS – as Metrics



- **Multiple strike reports for a single strike event = improved Outreach.**
- **Decrease in average bird size involved in strikes = improved safety & outreach.**
- **Bird identification high of 60% in 2014 & 2015.**
- **47% of all strikes reported. 42% increase from 2004-2008 to 2010-2014.**

Electronic Reporting Options



Federal Aviation Administration Airport Technology R&D Branch Airport Wildlife Hazard Mitigation

FAA Wildlife Strike Database

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, the 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 for Database page. This 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 34 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 21,000 (Civil and USAF) wildlife strikes between 1990 and 2013.

82% of the total strikes to commercial aircraft occur at or below 3,000 ft AGL, below ground level.

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

<http://wildlife.faa.gov/wildlife/default.aspx> (1/3/11)

Outreach

**Strike Posters
2011, 2012, 2014
12,000 posters each year**

- Airports (3,300)
- Flight Schools
- Airlines
- Pilots Association
- Engine Manufacturers
- Aviation Industry

U.S. Department of Transportation
Federal Aviation Administration

REPORT WILDLIFE STRIKES

<http://www.faa.gov/orwildlife> <http://www.faa.gov/mobile>



QR Code

<http://wildlife.faa.gov>



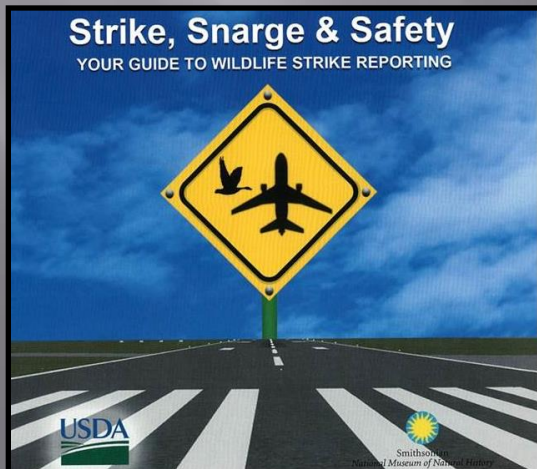
Federal Aviation Administration

Outreach



FAA Safety Video Series:
Wildlife Hazard Management
and Strike Reporting
2015

“Sandy Wright / Richard
Dolbeer Excellence in
Strike Reporting” Award
2014



USDA &
Smithsonian
Institution
video: Guide to
Reporting
Strikes 2012



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Bird Strike Committee USA

An MOU between the FAA and the BSC-USA was signed May 2012 to formalize this cooperative relationship.

How best to utilize a voluntary committee and share workload?



FAA National Wildlife Strike Database Management Partnerships

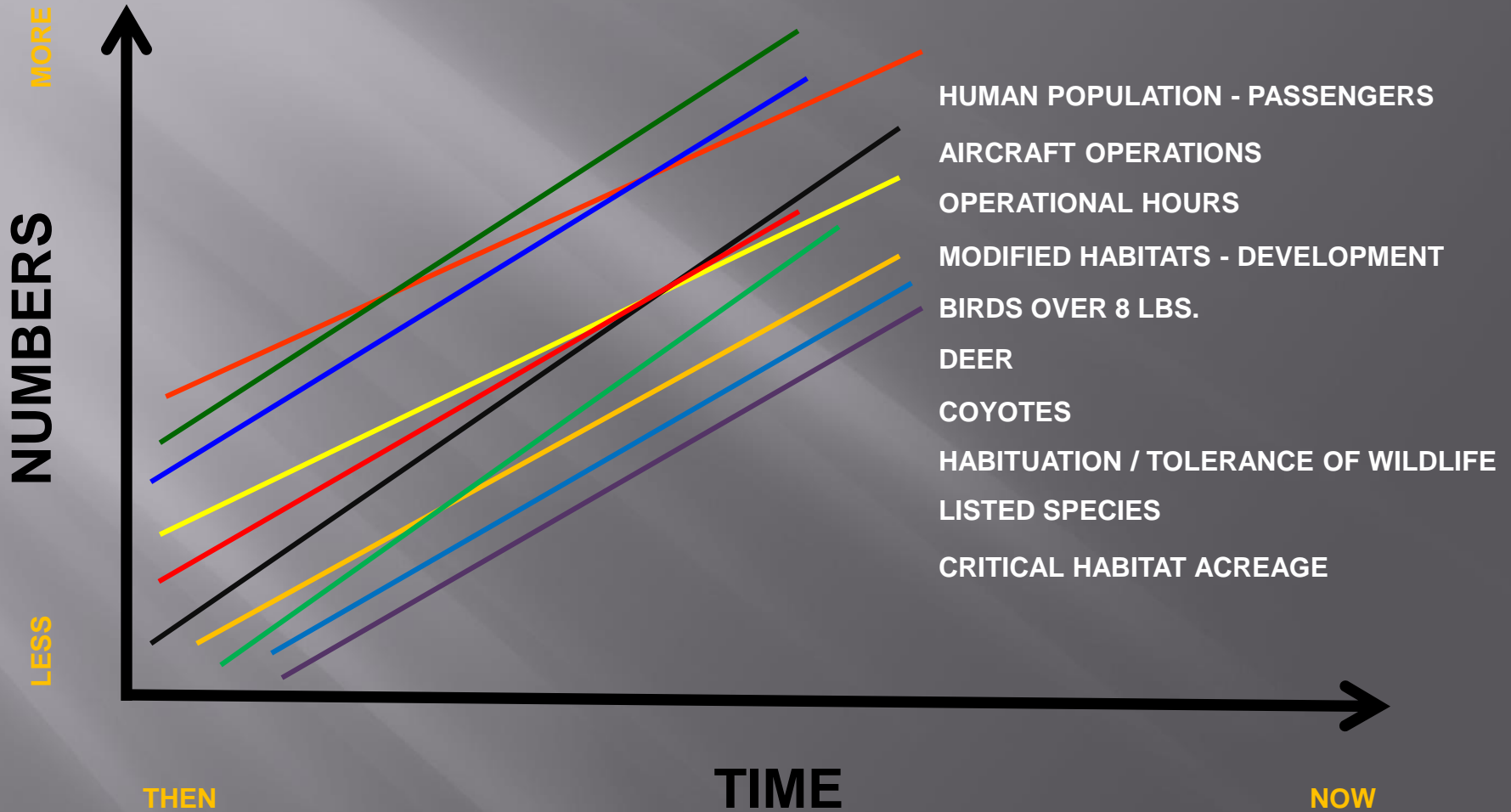


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Challenges to an Effective Wildlife Program



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More Challenges to an Effective Wildlife Program

- Performance measures for Airports and CAA
- Utilization of IBIS for CAA's
- Improved safety communications (ATIS, NOTAMS, PIREPS)
- Improved protocols for assessment frequency/ continual monitoring
- Clearinghouse of data exchange beyond conferences



Questions?

