



## Training Focus

The focus: biological training for aviation personnel



Aviation training for biologists



## The Airport

Airports are busy  
high-risk operations



## Situational Awareness

Individuals operating  
airside must have  
very high situational  
awareness



## The Aviation Biologist Role

**To be effective and meaningful, the biologist must have some basic aviation knowledge**

- Monitoring wildlife
- Identifying wildlife hazards
- Communicating wildlife hazards
- Managing wildlife hazards (incl. dispersal)
- Risk assessments
- Auditing wildlife hazard management programs
- Developing procedures, plans, policies for wildlife hazard management
- Contributing to and/or facilitating stakeholder liaison
- Data management & analysis
- (radar)



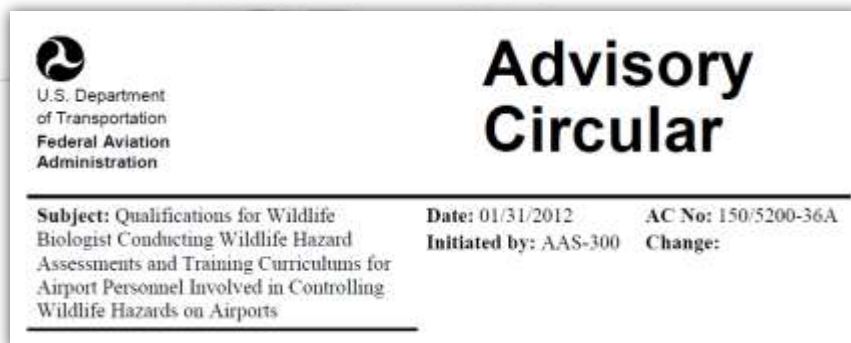
## The Ideal Aviation Biologist

- Radio operator proficiency & use
- Excellent ornithology expertise and bird identification
- Airside driving ability / authorisation
- Airside familiarisation: airport layout, signs, markers, nav aids, etc
- Firearms licence for dispersal & culling activities
- Trained in wildlife dispersal tools & techniques
- Authorised / competent for direct communication with ATC to communicate hazards and provide immediate risk mitigation advice
- Regulatory / legislative knowledge
- Able to assess and manage wildlife hazards
- Aircraft recognition & basic airport operations



USA

Aviation training regulated and required by civil aviation (FAA) for biologists carrying out wildlife hazard management work at airports



**U.S. Department of Transportation  
Federal Aviation Administration**

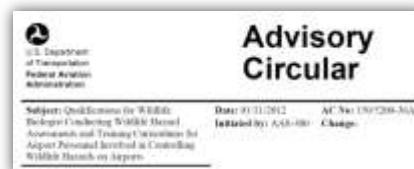
# Advisory Circular

---

**Subject:** Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculum for Airport Personnel Involved in Controlling Wildlife Hazards on Airports

**Date:** 01/31/2012      **AC No:** 150/5200-36A  
**Initiated by:** AAS-300      **Change:**

- Airport Familiarisation
- Aircraft Familiarisation
- Preview of Wildlife Hazards to Aviation
- Controlling Laws, Regulations and Policies
- Dept. of Defence Requirements
- Other Federal & State Agency Roles & Responsibilities
- FAA National Wildlife Aircraft Strike Database
- Environmental Issues (working with Federal & State Agencies)
- Initial Consultations & WHAs
- FAA WHA Reviews & Requirement for a WHMP
- Drafting & Carrying Out Integrated WHMPs
- Integrated Wildlife Hazard Management for Airports



**U.S. Department of Transportation  
Federal Aviation Administration**

# Advisory Circular

---

**Subject:** Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculum for Airport Personnel Involved in Controlling Wildlife Hazards on Airports

**Date:** 01/31/2012      **AC No:** 150/5200-36A  
**Initiated by:** AAS-300      **Change:**



## Other Biologist Aviation Training?

Nothing else formalised, standardised or regulated for biologists  
(i.e. non-airport personnel).



## The Syllabus

Airport Operations      Safety      Authorisation

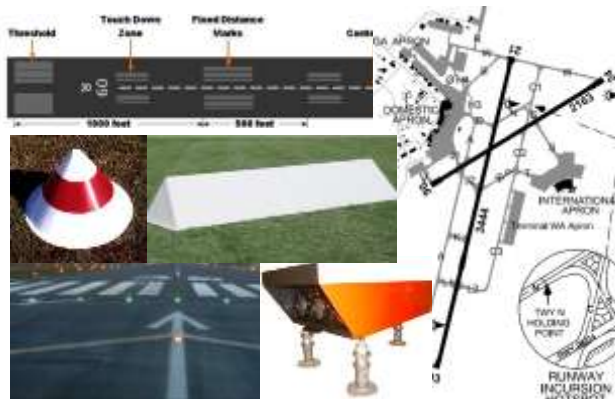
Communication      The Wildlife Hazard      Radio Operations

Hazard Management      Roles and Responsibilities

Aircraft Familiarisation

## Airport Operations

- Lighting: RWY, TWY, apron, HIAL
- Markers: threshold, unserviceability, gable
- Movement areas & how they are used: RWY, TWY, aprons
- Layout & Facilities: apron, terminal, airside, landside

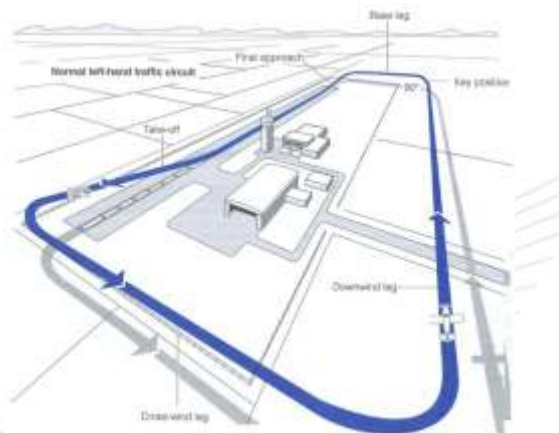


## Airport Operations

- Signs: RWY, TWY etc
- Navigation Aids: VOR, DME, NBD,
- Airport Type: controlled, non-controlled
- Airside Driving: designated areas, roads, speed limits, driving in proximity to aircraft



## Airport Operations



## Roles &amp; Responsibilities

- Airport Management
- Airport Safety Officers
- ATC
- Emergency Services
- Ground Crews
- Local Environment Authorities
- Other relevant government departments



## The Syllabus

### Radio Operations

- Radio Use
- The Phonetic Alphabet
- Standard Phrases



Phonetic alphabet

Character	Pronunciation	Character	Pronunciation
A	Alpha	S	Sierra
B	Bravo	T	Tango
C	Charlie	U	Uniform
D	Delta	V	Victor
E	Echo	W	Whiskey
F	Foxtrot	X	X-Ray
G	Golf	Y	Yankee
H	Hotel	Z	Zulu
I	India	0	Zero
J	Juliett	1	One
K	Kilo	2	Two
L	Lima	3	Three
M	Mike	4	Four
N	November	5	Five
O	Oscar	6	Six
P	Papa	7	Seven
Q	Quebec	8	Eight
R	Romeo	9	Nine

## The Syllabus

### Authorisation

- Security Access Requirements
- Airside Driving
- Weapons
- Wildlife Control Permits





## Communication

- AIP
- NOTAMs
- ATIS
- BWC Reports
- Other Hazard Notifications

<b>CAIRNS AIRPORT BIRD WATCH REPORT</b>		<b>No.2010/07</b>
<b>Condition: Severe – Flying Fox</b>		
<b>Legend</b>		
Bird Watch condition <b>SEVERE</b> . Heavy concentration of birds on or immediately above the active runway or other specific locations that represent an immediate hazard to safe flying operations (>100 FF in a 10 min period).		
Bird Watch condition <b>MODERATE</b> . Concentrations of birds observable in locations that represent a probable hazard to safe flying operations (~50 and ~100 FF in a 10 min period).		
Bird Watch condition <b>LOW</b> . Normal bird activity on and above the airfield with a low probability of hazard.		
Bird Watch <b>ALERT</b> . Weather, time of day and seasonal conditions which make an influx of birds onto the airfield likely.		
<b>Issue date: 29 April 2010</b>		<b>Review date: 6 May 2010</b>
Prepared By: <b>Contact Details:</b>		
Name: Barbara Cox		Phone: 07 4080 6743
Position: Operations & Standards Mgr		Fax: 07 4036 9657

<b>AIRSERVICES AUSTRALIA SPECIAL NOTAM BRIEFING</b>	
0900 UTC 11/05/07	
<b>CAIRNS (YBCZ)</b>	<b>C197/07</b>
<b>FLYING FOXES/BATS IN VICINITY OF AD CTC AIRPORT SAFETY OFFICER ON 0612773065 OR 0402027732 FROM 05 120000 TO 05 250000 DAILY 0800/0900</b>	

## Aircraft Familiarisation

- Aircraft Types
- Civil, Military, GA



## Airside Safety

- Emergency Response & Incidents
- Engine Ingestion
- Jet Blast
- PPE
- Firearm use



## The Wildlife Hazard

- Background
- Defining Strikes
- Impacts & Consequences
- Regulations & Standards



## The Wildlife Hazard – Management

- Dispersal Tools & Equipment
- Culling
- Passive Management
- Safe Firearm Use
- Concepts & Techniques



Department for  
Environment and Heritage  
**Code of Practice**  
for the humane destruction of birds by shooting  
in South Australia



- Biology, ornithology & bird behaviour
- Wildlife attractants and related ecology
- Writing wildlife management plans
- Legislation relevant to wildlife – including legislative significant wildlife
- Conducting wildlife surveys and other monitoring programs





## Assessment

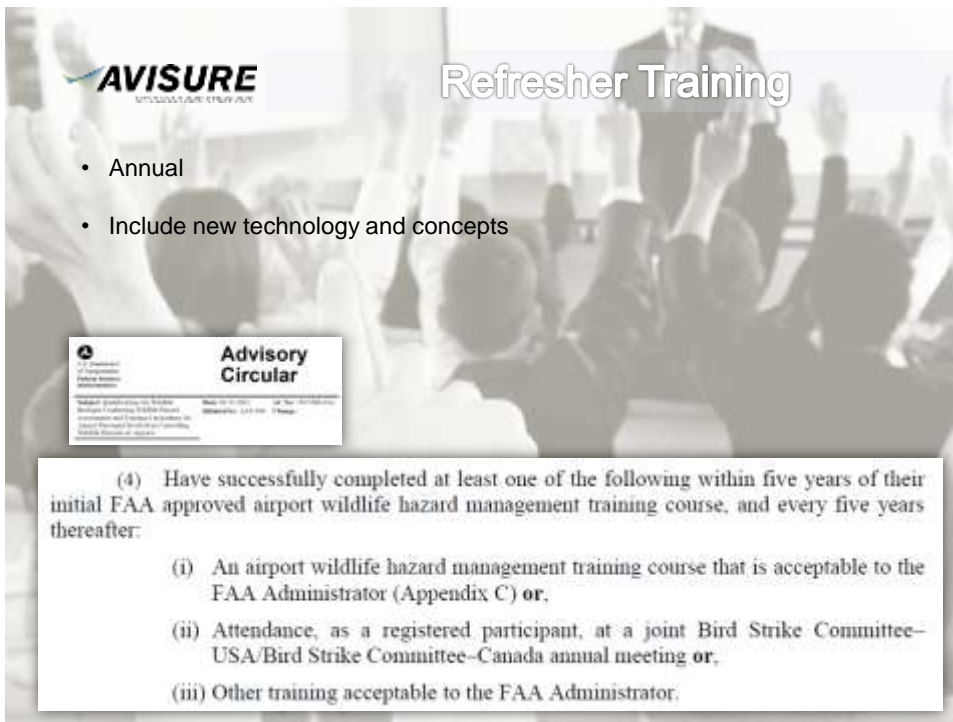
In addition to passing the competency assessment, participants could be required to have (example):

- 10hrs dispersal observation
- 2hrs ATC observation
- 8hrs airside driving observation day
- 4hrs airside driving observation night



## Delivery





**AVISURE**  
STRUCTURE CHANGE

## Refresher Training

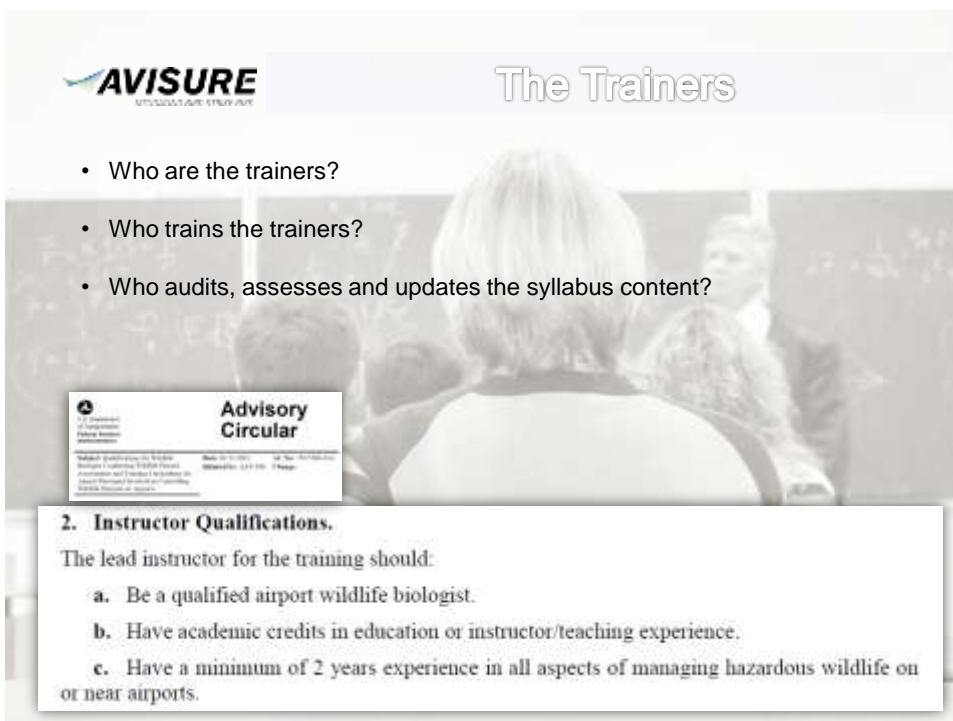
- Annual
- Include new technology and concepts

**Advisory Circular**

Subject: Airport Wildlife Hazard Management Training Course  
 Issued: 01/11/2011  
 Effective Date: 01/11/2011

(4) Have successfully completed at least one of the following within five years of their initial FAA approved airport wildlife hazard management training course, and every five years thereafter:

- An airport wildlife hazard management training course that is acceptable to the FAA Administrator (Appendix C) **or**,
- Attendance, as a registered participant, at a joint Bird Strike Committee–USA/Bird Strike Committee–Canada annual meeting **or**,
- Other training acceptable to the FAA Administrator.



**AVISURE**  
STRUCTURE CHANGE

## The Trainers

- Who are the trainers?
- Who trains the trainers?
- Who audits, assesses and updates the syllabus content?

**Advisory Circular**

Subject: Airport Wildlife Hazard Management Training Course  
 Issued: 01/11/2011  
 Effective Date: 01/11/2011

**2. Instructor Qualifications.**

The lead instructor for the training should:

- Be a qualified airport wildlife biologist.
- Have academic credits in education or instructor/teaching experience.
- Have a minimum of 2 years experience in all aspects of managing hazardous wildlife on or near airports.



Thank you

Feedback and ideas please: [kpatrick@avisure.com.au](mailto:kpatrick@avisure.com.au)

