

## Difference of Opinion?

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The Director-General of the Nigeria Civil Aviation Authority (NCAA), Dr. Harold Demuren, has said that the major threat to safety of air travel in Nigeria today is bird strike. Demuren disclosed that last year alone 47 aircraft suffered bird strike, adding that sometimes all the aircraft engines could pick birds and shut down. Demuren who made this known while delivering a paper at a recent safety seminar organised in Lagos by Bristow Helicopters said, "Last year alone, there were about 47 cases of bird strike. It would be tragic if engines of an aircraft are lost. Bird strike is our biggest concern today in the aviation industry, the Director-General said.

It is estimated that Nigerian airlines lose about N15 billion annually to bird strike and although it has not led to loss of lives, every bird strike jeopardises the safety of that aircraft.

### *This Day Nigeria*

Bristow Helicopters Nigeria Limited, the leading company operating commercial helicopter business in the country, has lamented that it lost about \$1million to the menace of bird strikes. This was made known by the Managing Director of Bristow Helicopters, (cont'd page 3)

## Irish AAIU Birdstrike Report

The Irish Air Accident Investigation Unit has reported its findings on the dual ingestion incident at Ireland West Airport (EIKN) in October, 2009.

The B737 aircraft encountered a flock of lapwings on takeoff and damaged both engines. The engines, CFM-56, were the same model powering the A320 which crashing into the Hudson River in New York after a goose encounter and the same engines powering the B737 which crashed after a starling encounter at Rome's Ciampino Airport. Both engines were damaged in this incident and all 38 fan blades were reported changed in the left engine. The AAIU found the cause of the incident to be bird ingestion with contributing factors being the failure of the Air Traffic Duty Controller to request a 'bird sweep' prior to the B737s departure as suggested by the Airport's Aerodrome Manual. EIKN has a low level of jet operations daily and the controller noted that a bird sweep had previously been done that morning.

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# High Altitude Birdstrikes

Well established within birdstrike lore is the fact that most strikes happen below 3,000'. There are, however, an increasing number of serious strikes which are happening well above that altitude. Little attention is paid to these threats and no mitigation is proposed. Two recent examples:

Continental Express Jet E-145  
August 10, 2010

While on the downwind leg at Salt Lake City Int'l (KSLC) at 6,900' above ground level and slowing from 280 knots to 190, the flight encountered a flock of large birds. One bird impacted the nose of the aircraft, just below the windscreen, and penetrated into the avionics compartment. The Captain lost a number of his primary flight instruments and a section of aircraft skin approximately three feet long folded back in front of the Captain's windscreen, obscuring his forward vision. The First Officer took control of the aircraft and safely landed. Damage to the aircraft was determined to be substantial. Bird remains were believed to be an American White Pelican, an animal which can weigh up to 20 pounds and has been involved in at least two fatal accidents, an USAF B-1 and a Cessna Citation business jet. Although the NTSB completed a full narrative report of this incident, WPR10LA395, no recommendations were put forward to prevent further occurrences of this threat.



Horizon Airlines DHC-8 turboprop  
November 8, 2010

While on downwind at Los Angeles International Airport (KLAX) at 6,600' and 220 knots, the aircraft struck a large bird. The bird, unidentified, struck the right wing leading edge, penetrated the wing and damaged the main wing spar. Press reports indicated the bird may have also penetrated the main fuel tank in the wing. Damage to the aircraft was substantial. NTSB has begun a preliminary investigation.



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## Next Birdstrike Conference:

Birdstrike Association of Canada will be hosting the 2011 North America Conference on September 12-15, 2011 at Niagara Falls, Ontario.

Details at: <http://www.birdstrikecanada.com/CanadaConference.html>.

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Capt. Akin Oni, briefing journalists on efforts at repositioning the company and the aviation safety conference tagged, “Target Zero,” in Lagos recently. He added that the menace of bird strikes is one of the company’s biggest challenges, adding that the strikes damaged the airframe of one of its helicopters very seriously. On the aviation safety conference with the theme, “Fostering a Safety Culture,” on December 8 and 9, 2010, Oni, said that it is aimed at bringing together senior executives from aviation companies, oil and gas sectors, regulatory authorities and government officials to discuss the latest innovations and trends in aviation safety.

**The Independent, Lagos**

John Weller, wildlife biologist for FAA’s Office of Airport Safety and Standards, and Mike O’Donnell, director of airport safety and standards for the FAA, report that “at no time” does the FAA regard the risk of a bird strike as “great or severe”. Quoted in Issue #107 of the industry publication “**Aircraft Technology**” Weller said that only 14-15 percent of birdstrikes damage aircraft and that “...we know for a fact there are 20-25 strikes a day”. Research suggests that only 30-40 percent of strikes in the U.S. are reported “...so in reality there are 40-50 occurring per day” throughout the country says Weller.

However, the same publication quotes Dr. John Allan, chairman of International Birdstrike Committee and head of the wildlife management program at the U.K.’s Food and Environmental Research Agency. According to Allan, birdstrikes represent “...one of the most significant and underrated hazards...” to aviation.

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## **New New York Shooting Plan**

In June, 2010 the Port Authority of New York/New Jersey and the USDA announced an expansion of their goose elimination plan to include areas within seven miles of JFK and LaGuardia Airports. Previously the plan had addressed only the killing of geese on City property within five miles of the airports.

In December the USDA released its EIS of a plan which would eliminate not just gulls and geese within this area, but also target, literally, double-crested cormorants, mute swans, Atlantic brant, European starlings and rock pigeons.

Although six different courses of action are discussed in the Executive Summary of the plan, ranging from do nothing to very active control, it is not clear exactly which course of action the Port and the USDA will choose as their new course of action.

The Executive Summary may be viewed here:

<http://www.aphis.usda.gov/regulations/pdfs/nepa/Title%20Page,%20Executive%20Summary,%20Table%20of%20Contents.pdf>

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## Accident/Incident Report

### Dual ingestion—July, 2010

#### American Eagle ERJ, Asheville, N.C.

During approach, at approximately 300 feet, the flight encountered a flock of geese. Numerous geese were struck and birds ingested into both engines. One engine was replaced. Despite being a dual ingestion no NTSB investigation was conducted.



### Dual ingestion—June, 2010

#### Thomas Cook B757

During takeoff at Dalaman, Turkey, enroute Manchester, U.K., aircraft experienced multiple birdstrikes. Although aware of the strikes and that engine vibration had increased notably the crew elected to continue 2,000 miles to destination. UK AAIB announced that postflight inspection revealed numerous bird hits on the aircraft and both engines showed signs of ingestion. No rule or policy guidance is available to crews regarding the implications of multiple bird ingestions.



### Engine destroyed, airport closed-October, 2010

#### KLM A-330

During departure from Entebbe, Uganda, the aircraft ingested a crested crane into its right engine, destroying the engine. The aircraft made an immediate return to Entebbe but was unable to vacated the runway upon landing. The airport was closed for two and one half hours and several other flights had to divert to their alternate destinations.



### Enroute substantial damage-November, 2010

#### Delta Airlines E170 RJ

During climbout from the Minneapolis Airport, while passing through 5,000 feet, the aircraft struck a large flock of birds. NTSB reported that substantial damage was done to the airframe. The aircraft returned safely to MSP.





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## New mandatory airport training option

Dr. Jim Kent, adjunct professor at Embry Riddle's Worldwide Campus and course developer for ERAU, has announced a new, online, method for airport personnel to comply with their FAA required 8 hour annual wildlife control training.

"The beauty of this course", said Dr. Kent, "is that airport personnel have 30 days to complete their training. They can work right from their desk at the airport or from home, anywhere they have internet access". The 8 hour course is divided into 7 modules and a test. The course can be entered at will anytime during the 30 day term. The course covers the mandatory material such as bird identification and wildlife biology, but expands its remit to areas such as SMS and efficacy of wildlife control tools.

"We have a variety of teaching tools, from narrated PowerPoint lectures to videos on subjects such a pyrotechnic use", Kent said. "The course is facilitated so there is an instructor available to the students during the course to answer questions or give guidance. Plus we leaned on outside experts, such as the Daytona Beach Airport, to assist us in constructing some of the material." When asked about the cost, Kent's reply was: "It's cheap, both in direct enrollment cost (\$199) and the fact that there is no travel cost, no hotel, no airfare. Also the course can be done without little interruption of the daily routine. No one has to leave the airport to go to a meeting with an out of town expert. It's perfect for midsize and small airports."

So, how's it going? "Wonderful", crowed Kent. "Our first class had airport personnel from California and Florida, Greece and Brazil. The energy was amazing and the networking via the discussion board was staggering. The ability to learn from others via the internet has lead to some permanent relationships and new lines of communication within the community."

Dr. Kent was formerly a Professor and department head at the US Air Force Academy and formerly a member of the USAF BASH team.

For more information: <http://fusion.erau.edu/ec/wwc/onlineReg/enroll.cfm?program=263> or call 866-574-9125.

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## FAA revises AC 150/5200-36 Guidance

FAA Airports is in the process of revising Advisory Circular 150/5200-36 'Qualifications for Wildlife Biologists...and Training Curriculums'. This advisory was first published five years ago and has been the subject of much debate and interpretation since. As a result it is currently in the amendment process.

Although a copy of the draft is not available on the FAA's website persons who wish to comment and offer improvements to the AC may obtain a copy of the proposed amendment from FAA biologist John Weller at [john.weller@faa.gov](mailto:john.weller@faa.gov).

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## Birdstrikes up at Sacramento, other Airports

The number of bird strikes at U.S. airports continues to increase, even as the total number of flights has trended down. In January 2009, a flock of geese caused the crash of a U.S. Airways jet into New York's Hudson River. Since then, according to numbers from the Federal Aviation Administration, the number of bird strikes on planes has gone up significantly.

At Sacramento International Airport, for example, the number of bird strikes in 2009 was 186 compared with 112 two years before. In 2010, there were 196 bird strikes at the airport (*including 10 aircraft with significant damage and 15 with minor damage-editor*).

Airport spokeswoman Gina Swankie said most damaging bird strikes happen well above the airport operations area and wildlife hazard management tools.

Sacramento International Airport has taken many measures to try to reduce the number of birds, with the primary being habitat modification, says Swankie. The various methods include keeping ditches mowed and putting grates on culverts to discourage wildlife. Harassment tools include using taped distress calls, propane cannons and pyrotechnics. According to Swankie, birds are removed - killed - as a last resort. Passengers said they sometimes see the birds as they take off and land at the Sacramento International. "Planes can hit birds and damage the engines and cause real severe damage to your plane. But I also know this is a major migratory area for birds and so I'm really concerned about being able to conserve them," said passenger Marilyn Draheim.

**KXTV News 10 Sacramento, March 9, 2011**

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## Fewer flights, more birdstrikes at Reno

Even as the number of flights at Reno-Tahoe International Airport has gone down, the number of bird strikes has not dropped, Federal Aviation Administration data shows.

Between 1990 and 2010, a total of 205 incidents of birds striking Reno-Tahoe International Airport aircraft occurred, according to FAA data. Sacramento International Airport, by comparison, had 196 in 2010 alone.

Bird strikes are what caused US Airways Flight 1549 to crash in the Hudson River in New York two years ago. As many as 21 bird strikes in any one year occurred at Reno's airport. Despite a decline flights, 18 occurred in both 2008 and 2010. It dropped to 10 in 2009.

Back in the 1990s, usually single digit reports of bird strikes were reported. The FAA says reporting bird strikes is not mandatory. Airport spokesman Brian Kulpin said another reason for inconsistent reports is that if someone sees a blood spot on an aircraft he or she can report it as a bird strike at the Reno airport, even though it may have happened 200 miles away.

**Reno Gazette-Journal, March 9, 2011**

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## Qualified Airport Biologist Listing

Based on industry and airport community request, Embry Riddle Aeronautical University is vetting resumes of biologists who seek to work on airports. Under FAA Advisory Circular 150/5200-36 only biologists who qualify may conduct wildlife assessments on airports. As both airports and biologists have said they were having difficulty determining qualification, ERAU has set up a panel of experts who review biologists qualifications. If the applicant appears to satisfy the criteria in the Advisory Circular, the applicant's name is posted on the ERAU website.

A list of qualified biologists and applications for listing can be found on the web at: [http://wildlife.pr.erau.edu/workshop/qualified\\_biologists.html](http://wildlife.pr.erau.edu/workshop/qualified_biologists.html).



### NEXT WILDLIFE HAZARD TRAINING SESSION

Embry-Riddle has scheduled its next airport wildlife training seminar for the Portland International Airport, Oregon, on March 23-25, 2011. Our host, PDX, will be providing the meeting space.

***This seminar is currently the only public training acceptable to the FAA Administrator to fulfill the FAA's training requirements of Advisory Circular 150/5200-36.***

The seminar is three days in length. The first two days consist of classroom sessions led by the nation's top wildlife management experts. These sessions allow for plenty of interaction with the instructors, opportunities for questions and networking with fellow participants. Day three features a field trip to the host airport, during which hands-on wildlife mitigation exercises will be performed and mitigation techniques discussed.

Participants who successfully complete the seminar will receive a certificate of completion and continuing education units (CEU) from Embry-Riddle Aeronautical University.

You may register online at Embry-Riddle's website <http://www.erau.edu/ec/soctapd/wildlife-dfw.html> or call 866-574-9125 for more information.

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## Editorial

It's all very confusing, well beyond my simple mind to reconcile. On one hand the FAA, through its Director of Airport Safety Mike O'Donnell, says birdstrikes are not a great risk. He would seem to be right. In 2010, at New York's JFK Airport, of the 220 strikes that year only 6 caused damage and that was minor. Same for Chicago's O'Hare, 243 strikes but only 4 with only minor damage. Clearly, airport birdstrikes aren't a great risk with those numbers.

On the other hand the Port of New York and the USDA are making plans to 'eliminate' thousands of birds for safety's sake, spending lots of tax dollars to do it. And FAA Airports is pressing forward with its plan to require, and pay for, wildlife assessments at all Part 139 airports and hundreds of GA airports. FAA R&D continues to pour millions into research and decades long study programs. Airport operators complain of inconsistent reporting and inability to reach out to the problem areas. And the last four catastrophic accidents in the U.S. caused by birds did not happen on airports. Yet the off airport problem is not being addressed.

There seems to be a disconnect, and not just in my mind. If there is no 'great' problem, why are there catastrophic accidents and great spending? Great, of course, being a relative word. What would be hugenormous amounts to you or I is fairly modest to the Federal government. But they are still tax dollars spiraling down the rabbit hole, through the looking glass and into the Mad Hatter's pocket. "The time has come", the Walrus said, "to talk of many things: of shoes and ships and sealing wax....and whether pigs have wings."

And stewardship and leadership, and all those difficult things. Courage is a nebulous notion at times. If we have a problem, let's stand up and say so. Work on a solution. If not, let's sweep up, turn out the lights and all go home. Which is it?

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