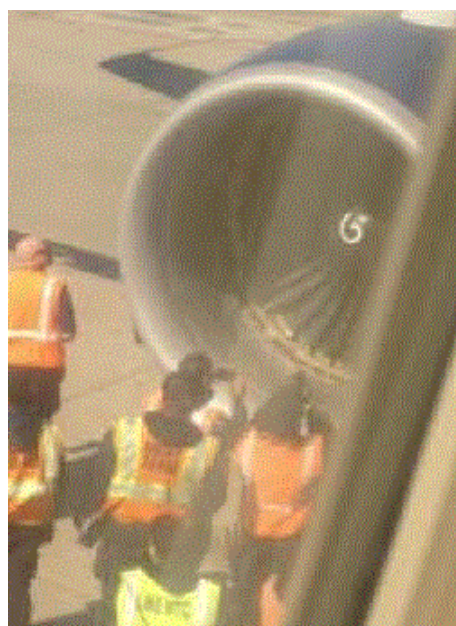


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**FAA Takes Action**

A Delta Air Lines B-757, on departure from New York's JFK Airport, ingested birds into its right engine, suffering engine damage which required the engine to be shut down.



The flight, bound for Los Angeles, returned for a safe landing. Significant damage to the first stage fan blades of the engine can be seen in the photo at left. This photo and others were taken by passenger Grant Cardone. Cardone was using a hand held electronic device to record the birdstrike and the return flight. Subsequently Cardone received a non-punitive letter of caution from the FAA admonishing him for using the electronic device during the takeoff and landing phase of the flight, an act which violates FAA rules. (see p.3)

**Bird downs Marine Corps attack helicopter**

According to a U.S. Marine accident report, the fatal crash of a Marine AH-1 attack helicopter in California last year was caused by a collision with a female red tailed hawk. This raptor, weighing about 3 pounds (1.5 kg), apparently struck the AH-1 just below its rotor blades on part of the transmission know as the pitch change link. The rotors became unbalanced and the aircraft broke into 3 sections almost immediately. Both Marine aviators were killed on impact.

The Marine Corps called the accident "...unavoidable".

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## Bad weekend for government



Vice President Joe Biden's Air Force jet, a military model of the B-757, ingested a bird into its left engine while landing at Santa Barbara, California in April. While the Air Force was not forthcoming with much information regarding the incident, it did say Biden's plane was damaged sufficiently that a Gulfstream business jet had to be substituted for the V.P.'s return trip to Washington, D.C.

USAF announced Biden's return trip was accomplished on time but made no mention of mitigation which may prevent this type of incident in the future.

Meanwhile, in Europe, Secretary of State Hilary Clinton's plane suffered a similar fate the same weekend. Flying from Brussels to attend a Paris conference, Hilary's plane also encountered a bird strike. Media reports indicate that the Secretary arrived safely in Paris but USAF did not release details of the damage.

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## NTSB investigates uncontained engine failure in Denver

NTSB cause #ENG11IA051 reported on the results of the NTSB's investigation of a United Air Lines B-757 uncontained engine failure at Denver in September, 2011. While on rollout after landing the left engine ingested a red tailed hawk, about a 3 pound bird. A least 3 fan blades released causing a cascading failure of all of the fan blades in the engine. Shrapnel was sprayed out of the engine as a result of the flying debris from the failure of the fan blades and probably because the engine was being operated in reverse at the time. Shrapnel penetrated the engine cowl, struck the aircraft fuselage, the left wing, a passenger window and entered one of the left tires. Additionally the right engine fan blades showed signs of impact damage.

In reviewing this incident the NTSB noted that no debris had exited the engine *case*, rather the debris exited through the engine *cowl*, which meant that, technically, the engine remained in compliance with the design standards. The NTSB issued no recommendations for future mitigation of these type of engine failures nor did it recommend any mitigation to reduce the risk of future bird ingestions.

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## BSCUSA meeting

The next meeting of BSCUSA will be held in Memphis, Tennessee on August 13-16, 2012.

Contact AAAE for registration and details at: [www.birdstrike.org](http://www.birdstrike.org)

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## Two out of three *IS* bad



Largely unnoticed and certainly uncommented upon was the near disaster suffered by a Fedex MD-11 upon departure from Memphis, Tennessee on March 1st. During the late night departure, while climbing through about 8,500', the aircraft struck a flock of snow geese. The aircraft was extensively damaged according to the Fedex report. The report noted that all three engines were struck by geese; two of the three engines ingested geese and were damaged or essentially destroyed. Further, the geese pene-

trated the fuselage, caved in the nose radome, damaged a wing and the horizontal stabilizer. The aircraft was at fairly light weight and able to fly on only one engine for its safe return to Memphis.

Memphis is located in the central part of the U.S. The Mississippi River, a major bird migratory route, passes through Memphis and immediately to the west of the airport. To date there have been no new initiatives announced by industry or the FAA to counter this off airport problem.



### FAA takes action (cont'd from p. 1)

Cardone defended himself by saying that electronic devices do not constitute a hazard. His comment is interesting in light of the facts. While FAA data does not indicate any aircraft incidents or accidents which can be directly traced to hand held electronic devices, FAA data does state that birdstrikes cost aviation in America over \$600 million each year in damage. Also the U.S. suffered four aircraft accidents caused by aircraft/bird collisions in 16 months during the 2007-2009 period. FAA data further indicates that reported birdstrikes at JFK have increased by 56% over the last several years. Thus far there have been no new initiatives announced by the Port of New York to reduce the risk of birdstrikes at JFK. Neither has the FAA proposed any new actions for mitigation at JFK or announced demands on JFK to reduce the risk of birdstrikes at the airport.

## Accident/incident Report



### Sept. 2011 - Accident—2 fatal

While on a training mission in southern California the AH-1 attack helicopter struck a red tail hawk, damaging its transmission. The helo broke apart in midair and both crewmembers were killed on impact. The accident report recommended better shielding for the transmission system to prevent reoccurrence.



### December, 2011 - Incident

While on approach to the Toronto airport a British Airways B-777 encountered a flock of geese. Geese were injected into the left engine, damaging the core and causing engine failure. Additionally three large holes were reported in the left wing, measuring up to 10” in diameter each.



### Uncontained engine failure

In September a United Air Lines B-757 experienced an uncontained engine failure upon landing at Denver. During rollout the left engine ingested a red tailed hawk. The engine suffered a cascading failure of the fan blades, ejecting fan blades and other debris from the engine, impacting but not penetrating the fuselage and the right engine.



### April, 2012 - Incident

A Jet Blue EMB-170 twin jet, departing White Plains, New York, encountered a flock of geese on climbout. The aircraft collided with several geese, including one which became stuck between the cockpit windows. The aircraft returned for a safe landing. White Plains is located approximately 12 miles directly north of the La Guardia Airport on the same body of water. In 2009 an A-320 crashed into the Hudson River after colliding with geese on departure from La Guardia.

## Accident/Incident Report (cont'd)



### February, 2012 - Incident

On departure from Toronto enroute St. Lucia an Air Canada A-319 struck a very large flock of birds. The aircraft return safely to discover that the left engine damage required replacement of 5 fan blades. A separate flock of birds appeared to have also damaged the flaps. Over 25 dead starlings were found on the runway, which was closed for half an hour.



### November, 2011 - Incident

On departure from Amsterdam enroute Barcelona an Easyjet A-319 ingested a bird into its right engine. Damage was severe enough to require the crew to shut down the engine. The flight returned safely after being airborne 30 minutes.



### February, 2012 - Incident

On departure from the Madrid airport enroute Tenerife an Iberia A-321 encountered a flock of birds reported to be storks. A bird was ingested into the left engine which failed due to damage. The flight returned safely to Madrid after being airborne only 15 minutes.



### May, 2012 - Incident

An Iberia A-340, enroute Madrid to San Juan, P.R., struck a reported 'vulture' on climb out. The collision collapsed the fiberglass radome, causing part of it to peel back. The aircraft's pitot system generated erroneous data to the flight management computers, causing erroneous cockpit indications. The damaged radome hanging into the air stream was the cause of the bad cockpit information.

## Score card

In an effort to contrast the hazard of birdstrikes and its risk with other natural hazards encountered by aviation every day, the following score card is offered. Data is for U.S. only and since our last newsletter was published in 2011.

<b>Wind shear accidents/incidents/engine losses:</b>	<b>none</b>
<b>Icing accidents/incidents/engine losses:</b>	<b>none</b>
<b>Volcanic ash accidents/incidents/engine losses:</b>	<b>none</b>
<b>Bird strike accidents/incidents/engine losses:</b>	<b>See pages 1,2,3,4,5</b>

## Senate action in New York

Perhaps tired of the leisurely pace of bureaucratic diddling, U.S. Senator Kirsten Gillibrand (D-N.Y.) has decided that law making may move the issue of birdstrike safety at New York City area airports forward.

“We cannot afford to sit back and wait for a catastrophe to occur before cutting through bureaucratic red tape between federal agencies,” said Gillibrand. “We cannot and should not wait another day to act while public safety is at risk.”

Gillibrand was referring to the impasse between U.S. Department of Agriculture employees and those of the National Park Service. While both agencies have publicly stated that safety of the tax payers was their first concern, neither agency seems to accomplish anything.

U.S.D.A. is responsible for the mitigation of wildlife hazards with people; National Park Service runs the wildlife refuge immediately across the fence from New York’s JFK airport. The park is filled with thousands of birds - some are large waterfowl which represent a clear threat to airplanes. Therein lies the problem.

Gillibrand clearly doesn’t see the problem: “Sometimes we’re faced with making the decision between the individual animal and human safety. When you look at the population involved here, Canada geese are abundant,” she said. “The goal is not to rid the country or a state or a city of all Canada geese. Our constant focus is on how we can keep aviation passengers safe while maintaining the wildlife population.”

Gillibrand’s legislation would expedite the removal of Canada geese from the Jamaica Bay Wildlife Refuge near JFK by requiring the USDA to act within 90 days of a determination by the Federal Aviation Administrator and the National Parks Service that geese residing on lands within 5 miles of a commercial airport pose a threat to flight safety.

The geese would be removed during their molting period — between June and August — when the birds lose their feathers and cannot fly. According to Carol Bannerman, public affairs specialist for the USDA wildlife services, removal of geese could involve lethal procedures such as shooting or gassing the animals.

*(Queens Times Ledger)*

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## Qualified Airport Biologist Listing

Based on industry and airport community request, Embry Riddle Aeronautical University is, once again, 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 Dallas-Ft Worth area on June 19-21, 2012. Our host will be DFW International.

***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

Alarm bells ring. Caution flags flutter. Red lights flash. Warning, after warning, after warning. Who answers? Uncontained engine failures, fatal crashes, dual engine goose ingestions. What does it take? What is the disconnect, why is the carnage not answered? Why is this rate of risk acceptable to FAA, USDA, BSCUSA, IBSC, NTSB, IATA, industry in general? Maybe because we have become *used* to it for so long we no longer think of these risky events as risky.

We have engaged in the **Deviation of Normalcy**. Like NASA, at the Space Shuttle disaster, we simply ignore the facts and press forward, another day at the office. ‘That’s oversimplification’, you say. ‘Prove it’, I say. **Who** is sounding the call to have a comprehensive, integrated plan to address the risk? *Nobody*, certainly not any of the above organizations. **Who** is leading the effort to bring industry and government together to solve the problem? *Nobody*, certainly not any of the above organizations. If these engines were failing because of poor maintenance, bad parts, faulty repair facilities, false repair reports, the government would be all over it. Congress would investigate. Industry would howl for action. But - it’s only birds! So we slide our standards.

We have solved the problem of airport wildlife control. All we need is implementation and oversight of what we know. That’s all. Why is that so hard to achieve? Off the airport we have no plan whatsoever. If the birds overwhelm the design standards we simply fail. Failure is acceptable here. The only part of aviation where that is so.

Recently, *Stars & Stripes*, the military’s newspaper, detailed how the Navy had relieved a squadron commander for filing false reports. It concluded its story by saying that this was the 12th commander relieved by the Navy for cause in a year. Perhaps we could use some accountability here? Nahhh, that’s hard work. And risky.

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