ASRS Database Report Set

Bird or Animal Strike Reports

Report Set Description ........................................ A sampling of reports referencing a bird or animal strike incident.

Update Number ...................................................27.0

Date of Update.....................................................February 27, 2019

Number of Records in Report Set ....................... 50

Number of New Records in Report Set...............24

Type of Records in Report Set ......................... For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.
TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

The attached material is furnished pursuant to a request for data from the NASA Aviation Safety Reporting System (ASRS). Recipients of this material are reminded when evaluating these data of the following points.

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

Information contained in reports submitted to ASRS may be amplified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information represents the perspective of the specific individual who is describing their experience and perception of a safety related event.

After preliminary processing, all ASRS reports are de-identified and the identity of the individual who submitted the report is permanently eliminated. All ASRS report processing systems are designed to protect identifying information submitted by reporters; including names, company affiliations, and specific times of incident occurrence. After a report has been de-identified, any verification of information submitted to ASRS would be limited.

The National Aeronautics and Space Administration and its ASRS current contractor, Booz Allen Hamilton, specifically disclaim any responsibility for any interpretation which may be made by others of any material or data furnished by NASA in response to queries of the ASRS database and related materials.

Becky L. Hooey, Director
NASA Aviation Safety Reporting System
CAVEAT REGARDING USE OF ASRS DATA

Certain caveats apply to the use of ASRS data. All ASRS reports are voluntarily submitted, and thus cannot be considered a measured random sample of the full population of like events. For example, we receive several thousand altitude deviation reports each year. This number may comprise over half of all the altitude deviations that occur, or it may be just a small fraction of total occurrences.

Moreover, not all pilots, controllers, mechanics, flight attendants, dispatchers or other participants in the aviation system are equally aware of the ASRS or may be equally willing to report. Thus, the data can reflect reporting biases. These biases, which are not fully known or measurable, may influence ASRS information. A safety problem such as near midair collisions (NMACs) may appear to be more highly concentrated in area “A” than area “B” simply because the airmen who operate in area “A” are more aware of the ASRS program and more inclined to report should an NMAC occur. Any type of subjective, voluntary reporting will have these limitations related to quantitative statistical analysis.

One thing that can be known from ASRS data is that the number of reports received concerning specific event types represents the lower measure of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 2010 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 2010. With these statistical limitations in mind, we believe that the real power of ASRS data is the qualitative information contained in report narratives. The pilots, controllers, and others who report tell us about aviation safety incidents and situations in detail – explaining what happened, and more importantly, why it happened. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.
Report Synopses
ACN: **1605746** *(1 of 50)*

**Synopsis**
C402 Captain reported a deer strike during a night landing.

ACN: **1602137** *(2 of 50)*

**Synopsis**
Corporate aircraft pilot reported company Maintenance was more concerned the trip departed on time than the damage that may have occurred from a bird strike to the engine.

ACN: **1601915** *(3 of 50)*

**Synopsis**
Small aircraft pilot reported that after flying over the aforementioned area, a NOTAM and/or chart notation regarding the bird migration should be issued.

ACN: **1600551** *(4 of 50)*

**Synopsis**
B737NG flight crew reported a rejected takeoff following a bird strike in the Number 1 engine. Maintenance found major damage to the engine.

ACN: **1595029** *(5 of 50)*

**Synopsis**
B737NG flight crew reported returning to departure airport after striking a large bird during climb. Reporter stated the radome was damaged and had to be replaced.

ACN: **1592863** *(6 of 50)*

**Synopsis**
PC-12 flight crew reported hitting a turkey on departure, then returning to airport as a precaution.

ACN: **1592527** *(7 of 50)*

**Synopsis**
Air carrier flight crew reported the Tower Controller canceled takeoff clearance due to an animal on the runway. During subsequent takeoff attempt, the crew received a takeoff configuration warning and rejected the second takeoff attempt.

ACN: **1591133** *(8 of 50)*

**Synopsis**
GA pilot reported encountering a large group of people exercising on the taxiway.

**ACN: 1590094 (9 of 50)**

**Synopsis**  
B767 flight crew reported returning to departure airport after experiencing multiple system anomalies following a severe wake turbulence encounter climbing through FL250.

**ACN: 1589776 (10 of 50)**

**Synopsis**  
CRJ flight crew reported a birdstrike to right engine on departure.

**ACN: 1589306 (11 of 50)**

**Synopsis**  
GA pilot reported unknowingly landing on a closed runway and braking hard to avoid personnel on runway.

**ACN: 1582946 (12 of 50)**

**Synopsis**  
Tower Controller and Air Carrier Captain reported taking closed runway resulting in RTO due to similar callsign with another aircraft.

**ACN: 1581670 (13 of 50)**

**Synopsis**  
Lancair ES pilot reported penetrating a TFR resulting in an airborne conflict with skydivers.

**ACN: 1578849 (14 of 50)**

**Synopsis**  
CE-525 pilot reported impact with bird on takeoff roll and rejecting takeoff.

**ACN: 1576862 (15 of 50)**

**Synopsis**  
B737-700 First Officer reported possibly striking birds after takeoff.

**ACN: 1574968 (16 of 50)**

**Synopsis**  
Private pilot reported almost hitting a skydiver during descent.
<table>
<thead>
<tr>
<th>ACN: 1572005 (17 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>B787 flight crew reported multiple bird strikes on departure.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>ACN: 1568425 (18 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>A320 First Officer reported bird strike on takeoff roll and aborting the takeoff.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1568248 (19 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>BE33 pilot reported multiple bird strikes during landing rollout.</td>
</tr>
</tbody>
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<tr>
<th>ACN: 1567305 (20 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>First Officer of a large passenger transport reported a dog becoming uncontrollable in the cabin area, threatening the flight crew and passengers.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>ACN: 1566629 (21 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Helicopter pilot reported a large bird struck the aircraft shattering the canopy.</td>
</tr>
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</table>

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<thead>
<tr>
<th>ACN: 1564528 (22 of 50)</th>
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</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>B737 flight crew reported a bird strike on departure and returning to airport.</td>
</tr>
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</table>

<table>
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<tr>
<th>ACN: 1558957 (23 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>B737-800 flight crew reported striking a large flock of birds during takeoff, resulting in damage to the Number 2 engine, and an immediate return to the departure airport.</td>
</tr>
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<tr>
<th>ACN: 1553990 (24 of 50)</th>
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<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>A320 flight crew reported returning to departure airport after experiencing a bird strike climbing through 5,000 feet. Ground inspection revealed damage to the left engine.</td>
</tr>
</tbody>
</table>

| ACN: 1539480 (25 of 50) |
Synopsis
PA-28 flight crew reported ground encounter caused by a construction worker sauntering onto runway during touch and go landing requiring evasive action by flight crew.

**ACN: 1538458 (26 of 50)**

Synopsis
B777 flight crew reported a temporary loss of thrust in one engine after a bird strike.

**ACN: 1537080 (27 of 50)**

Synopsis
General aviation aircraft pilot reported they struck a deer on landing at JVY.

**ACN: 1524893 (28 of 50)**

Synopsis
EMB-175 flight crew reported returning to departure airport after ingesting birds into the Number 1 engine. Ground inspection revealed damage to several fan stage blades.

**ACN: 1523678 (29 of 50)**

Synopsis
B737-700 flight crew reported returning to the departure airport after a bird strike in the Number 1 engine that caused significant vibration.

**ACN: 1520823 (30 of 50)**

Synopsis
B767-300 flight crew reported a bird strike on takeoff roll, resulting in aircraft damage.

**ACN: 1517241 (31 of 50)**

Synopsis
Bombardier CRJ-700 flight crew reported that immediately after rotation they encountered a large flock of birds.

**ACN: 1511993 (32 of 50)**

Synopsis
Air carrier Captain reported delaying rotation to avoid contact with Turkey Buzzards that have built nests along the runway in MPTO.

**ACN: 1507286 (33 of 50)**
Synopsis
Air Carrier flight crew reported a bird strike during departure.

ACN: 1503954 (34 of 50)

Synopsis
A319 Captain reported a person was observed walking along and exiting the left side of the runway during takeoff roll.

ACN: 1501472 (35 of 50)

Synopsis
B737 flight crew reported hitting a flock of birds shortly after takeoff. Immediately after contact they experienced some abnormal engine indications, so they decided to return to the departure airport.

ACN: 1496047 (36 of 50)

Synopsis
B737NG flight crew reported returning to departure airport after experiencing a bird strike at 800 feet AGL on initial climb.

ACN: 1495522 (37 of 50)

Synopsis
CRJ-700 flight crew reported damage to the left wing from an encounter with migratory geese at 7,000 ft.

ACN: 1490666 (38 of 50)

Synopsis
B737-700 flight crew reported diverting due to System A hydraulic failure.

ACN: 1490078 (39 of 50)

Synopsis
Air carrier flight crew reported encountering multiple bird strikes shortly after takeoff from SFO resulting in spurious flight instrument indications. After dumping fuel, a return to the departure airport was safely accomplished.

ACN: 1487708 (40 of 50)

Synopsis
PA28 pilots reported that during landing rollout, a deer walked in front of the aircraft and was struck by the propeller.
ACN: 1481106 (41 of 50)

Synopsis
Air Carrier Captain reported that a cleaning crew saw a snake under the Captain’s rudder pedals and was unable to capture it. The aircraft was rejected.

ACN: 1480719 (42 of 50)

Synopsis
B737-700 flight crew reported a bird strike after takeoff which resulted in damage to the right engine and return to departure airport.

ACN: 1473349 (43 of 50)

Synopsis
B757 pilot reported a TCAS RA on final with an aircraft that the tower knew about but did not issue as traffic.

ACN: 1468377 (44 of 50)

Synopsis
B737-800 crew reported a bird strike on departure from DCA which resulted in a loud squeal and a diversion.

ACN: 1467539 (45 of 50)

Synopsis
MD80 pilot reported a bird strike on rotation that led to engine surges, odor, and smoke in the cabin.

ACN: 1465118 (46 of 50)

Synopsis
A Maintenance Technician reported that maintenance took a delay because of the required inspection for a bird strike was not accomplished per work cards.

ACN: 1464212 (47 of 50)

Synopsis
GA flight instructor reported being surprised by skydivers while in the pattern at Mulino State Airport after requesting information several times over the CTAF frequency.

ACN: 1463768 (48 of 50)

Synopsis
B737 flight crew reported a bird strike on climbout that resulted in momentary power reduction. After an overweight landing, the crew encountered locked brakes.

**ACN: 1460855 (49 of 50)**

**Synopsis**
CRJ 200 flight crew reported accidentally deploying the passengers oxygen masks after being distracted by a mosquito in the cockpit.

**ACN: 1458832 (50 of 50)**

**Synopsis**
A319 Captain reported returning to departure airport after birds were ingested into Number 1 engine shortly after takeoff, resulting in catastrophic engine failure.
Report Narratives
ACN: 1605746 (1 of 50)

Time / Day
Date: 201812
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 0

Environment
Flight Conditions: VMC
Light: Night

Aircraft
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Cessna 402/402C/B379 Businessliner/Utiliner
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Passenger
Flight Phase: Landing
Airspace.Class G: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1605746

Events
Anomaly.Ground Event / Encounter: Person / Animal / Bird
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: Maintenance Action
Result.Flight Crew: Took Evasive Action
Result.Air Traffic Control: Provided Assistance
Result.Aircraft: Aircraft Damaged

Assessments
Narrative: 1

Landing on runway XX at ZZZ on my last flight of the night, I was on my ground rollout between 50-60 knots. I noticed ahead of us there were at least 3 deer running out on the runway. I had little time to react, and I engaged maximum braking in an attempt to avoid making direct contact with them.

One of the deer was struck directly by the nose gear at a speed of approximately 30-40 knots. The deer appeared to go under the aircraft's left front side, without making contact with either of the propellers.

The aircraft came to a complete stop, and was shutdown on the runway. No passengers or crew were injured in the incident. The plane was deboarded on the runway. The passengers were shuttled to the terminal.

Synopsis

C402 Captain reported a deer strike during a night landing.
ACN: 1602137 (2 of 50)

Time / Day
Date: 201812
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 0

Environment
Flight Conditions: VMC

Aircraft
Reference: X
Aircraft Operator: Corporate
Make Model Name: Citation Excel (C560XL)
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Passenger
Flight Phase: Landing

Component
Aircraft Component: Engine
Aircraft Reference: X

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1602137
Human Factors: Communication Breakdown
Human Factors: Time Pressure
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Maintenance

Events
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Deviation - Procedural: Published Material / Policy
Anomaly.Inflight Event / Encounter: Bird / Animal
Detector.Person: Flight Crew
When Detected: Pre-flight
Assessments

Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

On landing rollout encountered flock of birds. Hit multiple birds and heard them impact different parts of the plane. Immediate smell of burned bird filled the cabin implying we had at least one ingested in the engine. The following morning we met with the mechanic. He performed 2 inspections and noticed one of the blades had a "shadow." He was very concerned with this however our Maintenance department was more concerned about the plane leaving on time for a live leg. There was apparent no guidance from our Maintenance department other than we were [running late]. After further examinations and consultations with [manufacturer] and successful engine runs it was in fact determined to be okay. I can't vouch for whatever was said on the Maintenance side just what I heard the mechanic telling [local maintenance]. I'm a little concerned with the idea that any internal engine issue was not as critical as departing on time.

I [suggest] try having a different priority when it comes to the safe operation. Especially since nothing happened, but easily could have been different as we all know what birds can do to a jet engine.

Synopsis

Corporate aircraft pilot reported company Maintenance was more concerned the trip departed on time than the damage that may have occurred from a bird strike to the engine.
ACN: 1601915 (3 of 50)

Time / Day
Date: 201812
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: TTA.Airport
State Reference: NC
Relative Position.Angle.Radial: 64
Relative Position.Distance.Nautical Miles: 7
Altitude.MSL.Single Value: 500

Environment
Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 10
Light: Daylight
Ceiling.Single Value: 10000

Aircraft
Reference: X
ATC / Advisory.CTAF: TTA
Aircraft Operator: Personal
Make Model Name: Small Aircraft
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace.Class G: TTA

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 250
Experience.Flight Crew.Last 90 Days: 30
Experience.Flight Crew.Type: 35
ASRS Report Number.Accession Number: 1601915
Human Factors: Other / Unknown

Events
Anomaly.Inflight Event / Encounter: Bird / Animal
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: None Reported / Taken
Assessments

Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1

I conducted a recreational sightseeing flight over Jordan Lake. During this flight I noted that the presence of waterfowl and other birds had increased in the area. Prior to and again during the flight I noted that no wildlife/waterfowl preservation zones were noted in this area. Due to what may be a seasonal or migration change in the wildlife population, a notation on the sectional charts or a NOTAM may be beneficial to both the other pilots and the migrating wildlife.

Synopsis

Small aircraft pilot reported that after flying over the aforementioned area, a NOTAM and / or chart notation regarding the bird migration should be issued.
Time / Day
  Date : 201812
  Local Time Of Day : 0601-1200

Place
  Locale Reference.Airport : ZZZZ.Airport
  State Reference : FO
  Altitude.AGL.Single Value : 0

Environment
  Flight Conditions : VMC

Aircraft
  Reference : X
  ATC / Advisory.Tower : ZZZZ
  Aircraft Operator : Air Carrier
  Make Model Name : B737 Next Generation Undifferentiated
  Crew Size.Number Of Crew : 2
  Operating Under FAR Part : Part 121
  Mission : Passenger
  Flight Phase : Takeoff

Component
  Aircraft Component : Engine
  Aircraft Reference : X

Person : 1
  Reference : 1
  Location Of Person.Aircraft : X
  Location In Aircraft : Flight Deck
  Reporter Organization : Air Carrier
  Function.Flight Crew : Pilot Flying
  Function.Flight Crew : Captain
  Qualification.Flight Crew : Air Transport Pilot (ATP)
  Qualification.Flight Crew : Instrument
  Qualification.Flight Crew : Multiengine
  Experience.Flight Crew.Last 90 Days : 100
  Experience.Flight Crew.Type : 1776
  ASRS Report Number.Accession Number : 1600551

Person : 2
  Reference : 2
  Location Of Person.Aircraft : X
  Location In Aircraft : Flight Deck
  Reporter Organization : Air Carrier
  Function.Flight Crew : First Officer
  Function.Flight Crew : Pilot Not Flying
  Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 10025
ASRS Report Number.Accession Number : 1600504

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Ground Event / Encounter : Person / Animal / Bird
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Rejected Takeoff
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
On takeoff roll, a large brown bird struck the number one engine. Vibrations and loud rumbling was observed. I aborted the takeoff at about 40 knots. Cleared the runway. Emergency procedures and checklists accomplished. Normal deplaning of the passengers. Debriefed the crew. The mechanic and I inspected the motor, several fan blades severely bent, and interior of the inlet covered in blood. No further evidence of the bird exists.

Narrative: 2
On take-off roll at approximately 30-40 knots, we had a bird strike which we first thought was a nose wheel impact, with a low vibration noise for several seconds, at which time we aborted the takeoff. The noise stopped. We exited the runway and went to a remote pad and shut down the engines and requested Maintenance assistance to inspect the aircraft. We got airstairs and were able to see that the strike was in the #1 engine. With major damage, the aircraft was deplaned and the passengers taken to the terminal via buses.

Synopsis
B737NG flight crew reported a rejected takeoff following a bird strike in the Number 1 engine. Maintenance found major damage to the engine.
ACN: 1595029

Time / Day
Date: 201811
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 3500

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737 Next Generation Undifferentiated
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Climb
Airspace.Class B: ZZZ

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiflame
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Type: 4717
ASRS Report Number.Accession Number: 1595029

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiflame
Qualification.Flight Crew: Instrument
Experience: Flight Crew.Type: 24
ASRS Report Number: Accession Number: 1595049

Events
Anomaly: Inflight Event / Encounter: Bird / Animal
Detector: Person: Flight Crew
When Detected: In-flight
Result: General: Maintenance Action
Result: Flight Crew: Landed As Precaution
Result: Flight Crew: Returned To Departure Airport
Result: Aircraft: Aircraft Damaged

Assessments
Contributing Factors / Situations: Environment - Non Weather Related
Primary Problem: Environment - Non Weather Related

Narrative: 1
Captain, Pilot Monitoring. First Officer, Pilot Flying. We were climbing through 3,500 FT MSL and accelerating to 250 KIAS when we struck a very large bird (perhaps a seagull or Canada goose). It impacted the radome on the Captain's side. It was the most violent bird strike that I have ever experienced. During the cabin crew debrief, our flight attendants seated by door 1L informed me that they too heard the impact. Bird remains covered the center portion of the Captain's windshield. We immediately checked for normal engine indications and reported the bird strike to Departure Control. There was no abnormal noise or vibration emanating from the radome and all pitot-static indications were normal. Passing 10,000 FT MSL, we did not select ECON Climb, but rather increased speed gradually to 280 knots and continued to climb. Again, there were no abnormal indications. Passing FL180, we attempted to contact Dispatch and requested a phone patch to [Maintenance] Airframes which took a few minutes to establish. We consulted with both [Maintenance] and Dispatch. I was concerned about the structural integrity of the radome and the fact that we had 3 hours of flight time remaining to [our planned destination]. Our Dispatcher conveyed that if we were to divert, return to [departure airport] was preferable. We discussed our options as a crew and elected to return to [departure airport]. We [requested a return to departure airport from] Center and took vectors to intercept the arrival. I reprogrammed the FMC for the diversion, got data for an overweight landing, conducted a brief with the cabin crew, briefed the passengers, reviewed the QRG Diversion Guide, reviewed the Airspeed Unreliable QRH, reviewed the FM Performance Non-Normal Section for Airspeed Unreliable Pitch and N1 settings at our weight, got the ATIS, set up for the ILS, briefed the ILS, assumed Pilot Flying Duties, and completed an uneventful overweight landing. In our cockpit crew debrief, "What could we have done better?" my First Officer said he thought he could have helped me more. He did a superb job handling the flying and VHF 1. Prior to submitting this report, I called [Maintenance] to check on the outcome of the maintenance inspection. The maintenance inspection revealed delamination in the impact area which required removal and replacement of the radome.

Narrative: 2
[Report narrative contained no additional information.]

Synopsis
B737NG flight crew reported returning to departure airport after striking a large bird during climb. Reporter stated the radome was damaged and had to be replaced.
**ACN: 1592863 (6 of 50)**

**Time / Day**
- Date: 201811
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.AGL.Single Value: 1000

**Environment**
- Flight Conditions: VMC
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: ZZZ
- Aircraft Operator: Fractional
- Make Model Name: PC-12
- Crew Size.Number Of Crew: 2
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Initial Climb
- Airspace.Class C: ZZZ

**Person : 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Fractional
- Function.Flight Crew: Pilot Not Flying
- Function.Flight Crew: Captain
- Qualification.Flight Crew: Commercial
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Multiengine
- ASRS Report Number.Accession Number: 1592863
- Human Factors: Situational Awareness
- Human Factors: Distraction

**Person : 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Fractional
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: First Officer
- Qualification.Flight Crew: Commercial
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Multiengine
- ASRS Report Number.Accession Number: 1592970
Human Factors: Distraction
Human Factors: Situational Awareness

**Events**
- Anomaly. Aircraft Equipment Problem: Critical
- Anomaly. Inflight Event / Encounter: Bird / Animal
- Detector. Person: Flight Crew
- Were Passengers Involved In Event: N
- When Detected: In-flight
- Result. Flight Crew: Landed As Precaution
- Result. Air Traffic Control: Provided Assistance
- Result. Aircraft: Aircraft Damaged

**Assessments**
- Contributing Factors / Situations: Environment - Non Weather Related
- Primary Problem: Environment - Non Weather Related

**Narrative: 1**

After departure at ZZZ, we were given a left turn to the north and passed off to Approach. Coming through about 1000' AGL, we noticed a flock of what looked like turkey vultures circling at our altitude. As we continued our climb to our assigned 2000', one of the birds maneuvered directly into our flight-path and hit the front of the aircraft. Upon impact, I requested an immediate turn-back to ZZZ (we were positioned for the downwind already).

My co-pilot, who was acting as Pilot Flying, was monitoring the engine parameters and we did not see any fluctuations. Approach asked if we required any assistance and as PIC, I deemed we did not, but needed landing priority. I noticed a burning smell from the bird possibly being ingested. Approach passed us back to the tower and we landed with no issues. After we de-boarded our passengers, we did a quick visual inspection and determined that a large bird had entered the engine intake. Operations, Management, and Maintenance were all contacted and the aircraft was grounded.

**Narrative: 2**

We took off out of ZZZ about 800' we were issued a turn to heading 360 in the turn about 1000' a large bird struck in the bottom of the prop arc in front of the engine intake. Right after it happened we smelled singed feathers and burned meat through the vents. There were no abnormal indications in the engine instruments so we decided to continue in the pattern and requested priority for a precautionary landing and remained within gliding distance of the airport at all times. After the precautionary landing we were able to taxi back to [FBO] and unload the aircraft there. On post flight inspection the was visible evidence that the engine had ingested a substantial amount of the bird after it struck the prop arc but the prop appeared to be undamaged.

**Synopsis**

PC-12 flight crew reported hitting a turkey on departure, then returning to airport as a precaution.
ACN: 1592527 (7 of 50)

Time / Day
Date: 201811
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: MEM.Airport
State Reference: TN
Altitude.AGL.Single Value: 0

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.Tower: MEM
Aircraft Operator: Air Carrier
Make Model Name: Commercial Fixed Wing
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Flight Phase: Takeoff

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1592527
Human Factors: Troubleshooting
Human Factors: Distraction

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1592852

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Person / Animal / Bird
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Rejected Takeoff
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Ambiguous

Narrative: 1

We were cleared for takeoff on Runway 36 right as we initiated the takeoff roll (power about 45%) rolling about 20 kts, Tower cancelled our takeoff clearance due to a visual sighting of a coyote on the runway. We pulled power to idle and stopped. The tower could not declare the runway clear for some time. Since we had only rolled 500 ft we recomputed the data, changing the V speeds, and setting the flaps at 14.5 as the new takeoff data stated. When the coyote was observed clear of the runway, we were again cleared for takeoff. As the throttles were advanced got an aural flap warning, so we again rejected the takeoff and cleared the runway. Speed was estimated at 40 kts so minimal braking was used. After recomputing the takeoff data and reconfiguring the aircraft, we neglected to input the new flap setting into the MCD. Practice double aborts in the sim.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported the Tower Controller canceled takeoff clearance due to an animal on the runway. During subsequent takeoff attempt, the crew received a takeoff configuration warning and rejected the second takeoff attempt.
**Time / Day**
- Date: 201811
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: MNZ.Airport
- State Reference: TX
- Altitude.AGL.Single Value: 0

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Light: Daylight
- Ceiling.Single Value: 12000

**Aircraft**
- Reference: X
- ATC / Advisory.UNICOM: MNZ
- Aircraft Operator: Personal
- Make Model Name: Small Aircraft
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Taxi

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Private
- Experience.Flight Crew.Last 90 Days: 35
- Experience.Flight Crew.Type: 75
- ASRS Report Number.Accession Number: 1591133

**Events**
- Anomaly.Deviation - Procedural: Published Material / Policy
- Anomaly.Ground Event / Encounter: Person / Animal / Bird
- Detector_PERSON: Flight Crew
- When Detected: Taxi
- Result.General: None Reported / Taken

**Assessments**
Contributing Factors / Situations: Airport
Contributing Factors / Situations: Company Policy
Primary Problem: Airport

**Narrative: 1**

Upon clear of active runway while taxiing up to the ramp I notice a group of people exercising on the ramp in front of [the] new hangars. Cars were parked on the ramp where airplanes tie down. There had to be about 25 people exercising in a group. Some parents had their kids running around on taxiways and on the ramp to the new hangars. The exercising group did leave [the] taxiway and moved to one side to yield to plane traffic. They did not move their cars though. This just can't happen. I've heard about this problem from other people that fly out of here also. I can't believe the city would allow this to go on. I'm not one to tattle tale or one to cause problems. This is just dangerous. I've heard the exercise group said they have a right to be out at the airport since it [is] city owned. Maybe so, they don't need to be in the way of airplanes taxiing around for takeoff or landing. Maybe they could move to a part of the airport that's not used by planes.

**Synopsis**

GA pilot reported encountering a large group of people exercising on the taxiway.
**ACN: 1590094 (9 of 50)**

**Time / Day**
- Date: 201810
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference.ATC Facility: ZNY.ARTCC
- State Reference: NY
- Altitude.MSL.Single Value: 25500

**Environment**
- Flight Conditions: VMC

**Aircraft : 1**
- Reference: X
- ATC / Advisory.Center: ZNY
- Aircraft Operator: Air Carrier
- Make Model Name: B767 Undifferentiated or Other Model
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Climb

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.Center: ZNY
- Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer

**Person : 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Pilot Not Flying
- Function.Flight Crew: First Officer
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Type: 497
- ASRS Report Number.Accession Number: 1590094

**Person : 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 11892
ASRS Report Number.Accession Number : 1590323

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Physical Injury / Incapacitation
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
During climb out passing approximately 25,000 feet we encountered a brief moment of severe turbulence somewhere between 25,000-26,000 feet. Possibly wake turbulence from another aircraft. The turbulence started and ended after 2-3 seconds. There was no time to command "flight attendants be seated immediately" as the event was over before I could even pick up the cabin interphone. We checked in with the cabin and initially were told one of the flight attendants in the aft galley had sustained a wrist injury. The flight attendants in the mid and aft galleys also indicated a loud bang was heard and that the tail shook violently with the turbulence encounter. We continued the climb to 31,000 feet. At level off we evaluated the EICAS, STAT, F/CTRL and GEAR pages on the MFDs. Nothing abnormal was noted. Additionally, we could not make contact with New York Oceanic on the L HF radio. Upon successful contact with New York Oceanic on the R HF radio we could not receive a successful SELCAL check on either radio. We contacted dispatch via SATCOM and conducted a conference call with [Maintenance] and the [Chief Pilot]. We came to a collaborative decision after describing the incident that in the interest of safety we should air return to [departure airport] to have the aircraft inspected. I called back to have the relief pilot woken up. He returned to the cockpit and before making the final call to turn around we consulted one last time with all three of us on the flight deck. He agreed with all of the above. We received a clearance from New York Oceanic and initiated the return to [departure airport]. We coordinated with Dispatch and New York Oceanic to dump the remaining fuel in our center tank to be under max landing weight. During the descent we experience a partial failure of the L autopilot. We lost pitch mode of the L autopilot and switched to the R autopilot without further issue. On downwind approach at 4000 feet we struck a bird with the radome. Configuration and approach was normal. Touchdown was normal. No other anomalies were felt during the approach and landing.

Narrative: 2
[Report narrative contained no additional information.]
Synopsis
B767 flight crew reported returning to departure airport after experiencing multiple system anomalies following a severe wake turbulence encounter climbing through FL250.
ACN: 1589776 (10 of 50)

Time / Day
Date: 201810
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 600

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: Regional Jet 200 ER/LR (CRJ200)
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Climb
Airspace.Class E: ZZZ

Component
Aircraft Component: Engine
Aircraft Reference: X
Problem: Malfunctioning

Person : 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1589776
Human Factors: Situational Awareness
Human Factors: Troubleshooting
Human Factors: Distraction

Person : 2
Reference: 2
Location Of Person.Aircraft: X
Narrative: 1

On takeoff at 600 feet I was the pilot flying, the Captain was monitoring. We were watching the instruments to monitor the takeoff and watching for the 1000 foot mark. The Captain pointed to the right, which caught my attention, and I looked where he was pointing. There was a large bird 10 feet at 2 o'clock level apparent from a 12 degree climb. I banked maybe 10 degrees to the left and very quickly we heard a loud bang from the right rear and had indications that the right engine had been struck. The Captain pulled the right throttle to idle and I continued flying. As we continued the climb to 1000 feet (Captain gave me APR power and we accelerated to Vt), monitoring and analyzing, the Captain contacted ATC and [apprised them of the situation] as well as coordinated with the Flight Attendant. At 1000 feet we accelerated to 220 knots and continued our climb to 3000 feet. During that time we analyzed the situation.

The controls felt normal for single engine thrust from the left engine. The [right] engine was performing normally at idle. The Captain pushed the throttle up on the right engine and found that we had usable thrust to 61% N1. We referenced the checklists and decided that we would leave the right engine at idle and return and land using the single engine descent and before landing checklists. The Captain coordinated with ATC for a couple 360 degree turns to run checklists, coordinate, brief and prepare. Then coordinated for a Visual Approach. We executed the approach with me flying and him monitoring to an uneventful landing and taxi back. We canceled our IFR with Radio on the ground, parked and deplaned normally.

There appeared to be no reaction from emergency response agencies at the field. Although
we did not end up needing them, if we had, I'm not sure they would have known and that we would have had a way to communicate with them.

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

CRJ flight crew reported a birdstrike to right engine on departure.
**Time / Day**

Date: 201810
Local Time Of Day: 0601-1200

**Place**

Locale Reference. Airport: D50.Airport
State Reference: ND
Relative Position. Angle. Radial: 30
Relative Position. Distance. Nautical Miles: 1000
Altitude. MSL. Single Value: 1985

**Environment**

Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Ceiling. Single Value: 20000

**Aircraft**

Reference: X
ATC / Advisory. CTAF: D50
Aircraft Operator: Personal
Make Model Name: Small Transport, Low Wing, 2 Recip Eng
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Passenger
Flight Phase: Landing
Route In Use: Visual Approach
Airspace. Class G: D50

**Person**

Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function. Flight Crew: Pilot Flying
Function. Flight Crew: Single Pilot
Qualification. Flight Crew: Private
Qualification. Flight Crew: Multiengine
Experience. Flight Crew. Last 90 Days: 25
Experience. Flight Crew. Type: 1300
ASRS Report Number. Accession Number: 1589306
Human Factors: Situational Awareness
Human Factors: Communication Breakdown
Communication Breakdown. Party1: Flight Crew
Communication Breakdown. Party2: Other

**Events**
Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Ground Event / Encounter : Person / Animal / Bird
Detector.Person : Flight Crew
Miss Distance.Vertical : 5
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments
Contributing Factors / Situations : Airport
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Ambiguous

Narrative: 1

Received a weather briefing describing clear VFR conditions to D50. Proceeded to fly without event to D50. Called in on UNICOM at 25 miles out, 15 miles out, and 5 miles out with no response. Descended, turned base to final fairly close to the runway threshold. The surrounding terrain was yellow stubble. Just before touchdown I saw a very faded yellow "X" in the yellow stubble ground area off the approach end of the runway. I immediately looked down the runway. The only movement I saw was on the left side at the beginning of the runway - I spotted a workman in a dingy high-visibility work jacket. I saw no other obstacles. Being very low and slow I made the decision to complete my landing. As soon as the airplane touched down approximately 1,000 feet down the runway 2 additional workmen walked out of the yellow stubble directly onto the runway - one from each side. I applied the brakes. When it became apparent the workers did not see me or hear me I locked the brakes. One of the skid marks was approximately 800 feet long. While the plane was skidding I maneuvered to the far right side of the runway. At the last minute the workmen finally saw me and/or heard me and stepped aside. I continued to taxi onto the ramp and park the airplane.

I parked the plane on the ramp. I went to speak to members of the work party who were cleaning cracks in preparation for putting asphalt in the cracks on the runway. All of their equipment and pickups were on the ramp. I didn't see any of this during my approach. I was very surprised but none of them seemed affected or alarmed by the near miss. I inquired whether they had any radios or communication devices. They assured me they did not. I then called the airport manager who was not in the area at the time. During this phone call the airport manager told me they had just decided to do the work and had started [earlier] that morning. Between the airport manager, myself, and the leader of the men working on the runway, we decided that when they paused for lunch I would take off to fly back [home]. The right main tire was worn from the skidding and I had the tire changed that afternoon.

My local FBO informed me that the notice for the airport closure went out approximately 10 minutes I received my flight briefing. No equipment or people were hurt.

The faded yellow "X" and the dingy yellow jackets made it impossible for me to see when they were in the yellow stubble. Had the "X" been on the runway instead of in the stubble I would have likely seen it and flown around.

The workmen were wearing earmuffs or ear protection which apparently prevented them
from hearing the noise from the airplane as I was landing.

They apparently did not see me landing either because they walked from the yellow stubble directly onto the runway in front of me after I had already touched down.

I have approached airports in the past that I was unaware were closed and the bright ORANGE "X" on the end of those runways was very easy to spot from a distance and thus allowed me to avoid attempting to land on such closed runways at those airports.

**Synopsis**

GA pilot reported unknowingly landing on a closed runway and braking hard to avoid personnel on runway.
**Time / Day**

Date: 201810
Local Time Of Day: 1801-2400

**Place**

Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 0

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Takeoff

**Person : 1**

Reference: 1
Location Of Person.Facility: ZZZ.Tower
Reporter Organization: Government
Function.Air Traffic Control: Local
Qualification.Air Traffic Control: Fully Certified
ASRS Report Number.Accession Number: 1582946
Human Factors: Communication Breakdown
Communication Breakdown.Party1: ATC
Communication Breakdown.Party2: Flight Crew

**Person : 2**

Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 3980
Experience.Flight Crew.Type: 930
ASRS Report Number.Accession Number: 1583595
Human Factors: Confusion
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC
Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Ground Conflict, Less Severe
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Ground Incursion : Runway
Anomaly.Ground Event / Encounter : Person / Animal / Bird
Detector.Person : Air Traffic Control
Result.Flight Crew : Rejected Takeoff
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

I was working both locals combined during the planning stages of a runway change. We were on a west operation landing runway XXR and runway XY. We were going to go to runway XXL and runway YY and I was informed of the last XXR arrival. An aircraft reported hitting a fox on runway XXR which closed the runway and I sent the first guy around on final and was able to side step the rest of the arrivals to runway XXL. I had 2 departures for XXL, I cleared the first one in between arrivals and the second one was Aircraft X. Since we were going to be departing runway XXR soon, ground control was instructed to start taxiing aircraft to runway XXR which was closed at the time due to the fox being hit.

After an arrival touched down I told Aircraft X to line up and wait. He did just that, but subsequently Aircraft Y [similar callsign to Aircraft X] took runway XXR. The supervisor must have taken the closed runway X's off the runway because I never recalled the airport releasing the runways back to the tower. I cleared Aircraft X for takeoff on runway XXL and both aircraft started rolling. I immediately told Aircraft Y to stop and exit the runway and told Aircraft X he could roll. Both aircraft slowly exited the runway and the next arrival for runway XXL was sent around.

I do not have any recommendations for this event, they were similar sounding call signs but the one concern I had was why would the supervisor take the X's off the runway if the runway was still closed which would dismantle that feature of the safety logic. Luckily I was able to stop Aircraft Y from taking off of a closed runway.

Narrative: 2

On Aircraft Y from ZZZ to ZZZ1 on the take-off roll phase. While lined up and waiting for the take-off clearance on runway (XXR) the tower says "Aircraft Y clear for take-off runway XXL." By the time he finished his sentence I was already rolling. As the pilot flying at the time, I initiated the take-off roll, but when I realized he said XXL - and as the FO (First Officer) was trying to clarify what he said - I rejected the take-off roll and got off the runway, then tried to clarify what happened and called Dispatch to let them know the situation.

So, it turns out that there was another [Company] aircraft with similar call sign (Aircraft X) lined up and waiting on runway XXL, and the controller got confused between us and their call sign and runway assignment. After all of the stuff cleared out we went back to the runway and took off with no issues.

On my behalf I should've waited until the controller finished his complete clearance before
I initiated the take-off roll. Confusing take off instruction. Acted little too early before clarifying the clearance instruction. Rejected take-off. Listen until the complete ATC clearance is issued then act.

**Synopsis**

Tower Controller and Air Carrier Captain reported taking closed runway resulting in RTO due to similar callsign with another aircraft.
ACN: 1581670 (13 of 50)

Time / Day
Date: 201809
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 4
Altitude.MSL.Single Value: 3000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: Lancair ES
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Flight Phase: Final Approach
Route In Use: None
Airspace.Class E: ZZZ
Airspace.TFR: ZZZ

Aircraft: 2
Reference: Y
Make Model Name: Beechcraft King Air Undifferentiated or Other Model
Mission: Skydiving
Airspace.Class E: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Private
Experience.Flight Crew.Last 90 Days: 40
Experience.Flight Crew.Type: 1226
ASRS Report Number.Accession Number: 1581670
Human Factors: Situational Awareness
Events

Anomaly.Airspace Violation : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

I was flying practice approaches for currency in and around ZZZ airport. I was briefed and was aware of the TFR over ZZZ1 for an air show. I was flying a practice GPS XX approach. I selected the GPS XX approach as it was on the opposite side of the airport from the TFR. I was communicating and monitoring the UNICOM frequency. I announced my position multiple times. When I was on short final, a King Air suddenly appeared on downwind for Runway XY [opposite direction] and announced his intention to land on XY, despite me having announced multiple times that I was on short final for XX. My attention was on the King Air when I glanced up and saw a windshield full of skydivers. I immediately began evasive action, turning first to the left so as to pass behind the King Air. However, I realized that turning left limited my visibility of the skydivers, so I then proceeded to turn back right parallel to the runway so I could see the skydivers. I also began a climb. I was very shaken by the event. By the time I composed myself and stopped looking for skydivers, I looked at my MFD and realized I had penetrated the TFR. I immediately executed a steep turn to the right to exit the TFR space. At the same time I switched from the UNICOM frequency to 121.5. About 20 seconds later I got a call on 121.5 from ATC. I described the situation to him, and was given a number to call.

My penetration of the TFR was inadvertent and a result of the emergency situation with the skydivers. I believe my actions were justified, as avoiding contact with a skydiver was my priority during the emergency. I believe the King Air that appeared had been carrying the skydivers and made no attempt on UNICOM to inform me of their presence. I exited the TFR promptly on my own volition once the emergency situation had resolved itself.

Synopsis

Lancair ES pilot reported penetrating a TFR resulting in an airborne conflict with skydivers.
During the takeoff roll while passing 60 kts I observed approximately 4 Cranes land about 1000 ft in front of me. They took flight and moved out of the way so I elected to continue
the takeoff. Then at around 85 kts they landed back in the same spot. I executed a rejected takeoff and struck one, maybe two of them. The bird bounced off of the right-hand windscreen as we were stopping. I heard several other impact sounds as we plowed through the grouping. After we taxied back to parking and shut down and subsequent walk-around it was apparent that right engine had ingested the Crane. Fan blades were bent and there was blood and feathers all over the engine and adjacent hull. The windshield appeared to be scratched up from the impact glancing blow. We contacted company and our director of maintenance and filled out the wildlife hazard report with the airport manager.

**Synopsis**

CE-525 pilot reported impact with bird on takeoff roll and rejecting takeoff.
**Time / Day**

Date: 201809
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 3000

**Environment**

Flight Conditions: Mixed
Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737-700
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Takeoff
Airspace.Class C: ZZZ

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1576862
Human Factors: Troubleshooting

**Events**

Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Inflight Event / Encounter: Bird / Animal
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Landed As Precaution
Result.Flight Crew: Returned To Departure Airport

**Assessments**
Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Aircraft

Narrative: 1

On Takeoff roll just after V1, I (Pilot Flying) noticed a flock of geese hanging out on the final 1/3 of Runway XX. As I rotated, they took off but stayed low. We informed Tower of the birds while entering initial climb. As we went to clean up the flaps, I noticed the engine telemetry boxes flashing white and the left (Number 1) engine indicated a low oil quantity. At this point, I indicated to the Captain (Pilot Monitoring) that the indication was abnormal and we thought it MIGHT be related to the birds on the runway. The Captain took controls and we leveled at 3,000 feet as per the clearance. We indicated to ATC that we might have a problem and that possibly the birds had something to do with it.

While level, we assessed the condition of the engines and initially found the oil quantity to be decreasing in Number 1 as we added thrust. Then, the quantity levels stabilized. We initiated a climb with ATC to test the thrust/oil quantity/engine performance and found the Number 1 engine to be acting normally, but with a lower quantity than on the Number 2 and less than what we started the leg with. At this point, we determined that we needed to come back around for a landing and inspection in case there was bird ingestion or an engine oil problem (in an abundance of caution). We ran the QRH for engine shutdown just in case we actually lost the engine.

We opted to perform a flaps 40 landing as we were overweight and had a "normal" performing engine. We asked for an approach to Runway XX and had the trucks rolling so as to ascertain the physical condition of the aircraft before returning to the gate in ZZZ. The approach, landing, rollout, and taxi in were all uneventful. ARFF [Aircraft Rescue and Firefighting] found no damage to the aircraft (and no bird carcasses were found on the runway). Contract Maintenance performed the engine inspection as well as the overweight landing inspection, finding no damage. The result was a deferred Number 1 oil quantity indicator and oil service for both engines.

Synopsis

B737-700 First Officer reported possibly striking birds after takeoff.
ACN: 1574968 (16 of 50)

Time / Day
Date: 201809
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: HHR.Airport
State Reference: CA
Relative Position.Angle.Radial: 77
Relative Position.Distance.Nautical Miles: 5
Altitude.MSL.Single Value: 2000

Environment
Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 10
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.TRACON: SCT
Aircraft Operator: Personal
Make Model Name: PA-24 Turbo Comanche
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Descent
Route In Use: Visual Approach
Route In Use: Direct
Airspace.Class B: LAX

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 600
Experience.Flight Crew.Last 90 Days: 20
Experience.Flight Crew.Type: 200
ASRS Report Number.Accession Number: 1574968
Human Factors: Situational Awareness

Events
Anomaly.Conflict: Airborne Conflict
Anomaly.Inflight Event / Encounter: Bird / Animal
Anomaly.Inflight Event / Encounter: Object
Detector.Person: Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Primary Problem : Ambiguous

Narrative: 1
I was cleared into Class B Airspace and given direct to HHR and allowed to descend at my discretion. Approximately 5 miles out and approximately 2000 feet MSL I saw a person wearing a helmet, goggles, and some sort of harness at my 2 [o'clock] position. I applied full left aileron to avoid hitting the person. I was not able to tell if it was a para-plane, a parachutist, or exactly what I saw as there was not time. I did not see a chute or canopy, probably because it happened so fast. I notified SoCal Approach that I almost hit someone, maybe a parachutist or something. Approach asked me to contact Hawthorne Tower, which I did and continued to land the plane.

Since I was under ATC control, if the radar track and my discreet transponder code were recorded, my exact position and altitude could be identified when I made the evasive turn to the left.

Synopsis
Private pilot reported almost hitting a skydiver during descent.
Time / Day
Date : 201808
Local Time Of Day : 0001-0600

Place
Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.AGL.Single Value : 1400

Environment
Light : Night

Aircraft
Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B787 Dreamliner Undifferentiated or Other Model
Crew Size.Number Of Crew : 4
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Climb
Airspace.Class B : ZZZ

Person : 1
Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 16000
Experience.Flight Crew.Last 90 Days : 120
Experience.Flight Crew.Type : 1708
ASRS Report Number.Accession Number : 1572005

Person : 2
Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Narrative: 1

This started as a 4 person crew from ZZZ. This is a late night departure. The flight was delayed approximately 30 minutes for slot time allocation at the destination airport. The aircraft had a clean logbook and ETOPS sign off with no known mechanical issues. We pushed back, started engines, ran the ECL (electronic checklist) in accordance with the AFM (Aircraft Flight Manual). We requested runway XXR for departure and were given taxi instructions to the Hold Point short of that same runway. I was the working [relief pilot] in the center jumpseat and the flying pilot was the FO (First Officer) in the right seat for takeoff. We were given position and hold on Runway XXR and a few moments later we were cleared for takeoff via the RNAV SID off XXR. Starting takeoff roll was as expected with no issues. Acceleration was good with no abnormalities noted.

Upon liftoff the landing gear was retracted and LNAV was captured and the PF (pilot flying) was hand flying at the time. Numerous low clouds and fog were passed through as a broken layer to the west of the airport with some patchy clear spots between while climbing to 3,000 feet on the SID. I was looking forward as we passed approximately 1,400 feet and saw a very distinct pattern of "spots" in the landing lights ahead of us and a split second later the loud sound of multiple impacts and blood on the Captain's windscreen appeared. All of us quickly realized this was a bird strike event. I immediately
looked at the engine EFIS stack and it looked like all indications were still normal and the PF said no control issues were noted. This was a NADP-1 departure for noise abatement off XXR so the flaps were still set at 10 degrees as set for takeoff. The flaps were retracted and no abnormalities noted.

The PM (pilot monitoring) said he wanted to continue the departure as normal as no control, engine, or pressurization abnormalities were apparent. He then told the PF to continue flying and asked me to use the SATCOM system to contact our dispatcher and request a comm link with [Maintenance Control]. I did this and he began a conference call as we all listened in. While this was happening I asked the Pilot Flying to turn on the Weather Radar to see if the radome had possible damage. He did so and was getting good sweeps and returns. The Captain was now talking with a [Chief Pilot] as well who suggested testing the radar as I suggested and also suggested a wing check from the passenger cabin to see if there was visible damage.

The four of us discussed this and felt that a wing check is limited in the dark at best and only paints part of the real picture of what any damage MIGHT be on the rest of the aircraft. Having JUST departed and having noted that ZZZ1 was our first ETOPS alternate we were very keen to the fact that there was a huge hurricane approaching the ZZZ1. This also was weighed in with the fact that this flight was long over the middle of the Pacific Ocean at night where ETOPS alternates are sparse at best. We really had NO IDEA what damage had been done if any. All we knew is that there were a flock of birds we hit, not just a single bird. The Captain then decided that the best course of action was to do an air return to and let [Maintenance Control] do an inspection once on the ground. We were approaching the oceanic entry point and ATC asked what our intentions were and it was decided to request vectors to hold outside of this airspace so we could look at the FOM (Flight Operations Manual) diversion guide and prepare to dump fuel for reducing to our maximum landing weight. The Captain then asked me to talk to our Lead Flight Attendant and ask her to come up and talk to him. She arranged for the door to be blocked and entered the flight deck. The Captain was now heavily involved in running the fuel dump checklist and asked me to brief her. I told her that we would be dumping fuel and returning and that I would make an announcement to the passengers to that effect shortly. Right after she left to go back to the cabin I asked the relief Captain if it would be best just to [advise ATC] "just in case" and he agreed and suggested this to the PM. [ATC was advised] and souls on board count given to ATC.

The estimated time to dump the 100,000 pounds of fuel we needed was about 20 minutes so I asked if the passengers could get up to use the rest rooms and the seatbelt sign was turned off. I then briefed the passengers on the situation and told them that we should be back on the ground in about 30 minutes. After all the relevant checklists were run, the FMC re-programmed, and performance data was called up for landing on Runway XXL, We all discussed the fact that the flaps may have been damaged and that we might need additional time to deploy them if that was the case. We didn't really know what to expect but discussed it nonetheless. ATC also asked us what assistance we might require on landing and the captain asked for fire/rescue to be available on landing to visually inspect the aircraft exterior before proceeding to the gate. The flaps deployed normally as did the landing gear.

Upon landing Tower switched us to Fire Rescue frequency where they drove their truck around the airplane and noted no fluid leaks or damage visible and asked if they could help with anything else. The Captain said he felt it was safe to taxi to the gate and thanked them for their help. We were directed to gate at the international terminal. The aircraft was secured and the jetbridge allowed the passengers to de-plane uneventfully.
There were lots of Ground Support Staff waiting to meet us and we decided to go outside and have a look to see what had happened. A mechanic was busy tallying up the birdstrikes and said it was 16. Then 22, Then 26... I don't really know the exact number as we went into the terminal shortly after that. All I know is that it was WAY more than any of us expected to see. I didn't see any damage to the airplane at the points of impact but the mechanics were preparing to use a man-lift to get close up to each point of impact when we left.

**Narrative: 2**

Our flight was delayed due [to] early arrival curfew. Our routing was almost through mid-Pacific. After takeoff, we encountered several and simultaneous bird strikes at 400 feet AGL with take flaps still extended at 10. We were phone patched to [Maintenance Control] and [Chief Pilot]. We continued our climb at much slower speed due questionable and probable compromised aircraft structural integrity. Eventually after long discussions with proper channels, I made the decision to dump fuel and return. We [advised ATC] and landed with no further incident. We were informed by inspecting Line Maintenance Personnel that there were over 20 bird strikes including multiple strikes over leading edge flaps.

**Narrative: 3**

I was the relief Captain on this flight and sitting behind the flying FO (First Officer). On takeoff, at approximately 400 feet AGL, there was a very loud bang which turned out to be a flock of birds striking our airplane. Gear was retracted but flaps were still at takeoff setting of 10 degrees. My vantage point behind the flying FO prevented me from witnessing the jarring event but the Captain, the Flying FO, and the relief FO, all said it was at least 4-6 birdstrikes. I peered around the FOs seat and saw a blood splatter on the Captain's windshield. Since the structural integrity of the aircraft was in question our climb at lower speed as a precaution while we discussed our options. Dispatch, [Maintenance Control], were phone patched as resources to make a safe, sound and prudent decision. The engines and other systems appeared to be running normally. What we were unable to ascertain was the structural integrity of the aircraft. One birdstrike, might be acceptable with the telltale sign on the window and without any visible damage. However, 4-6 birdstrike at once poses a major concern particularly with a [long] flight over the Pacific Ocean at night. After thoughtful deliberation with all the parties involved the flying Captain used his Captain's Authority to [advise ATC] and return back to [the airport]. We dumped fuel to meet our max landing weight and landed without incident. As a precautionary measure, after clearing the runway we stopped on the taxiway to have ARFF personnel assess the aircraft for any damage that might pose a problem during taxi. We got the all clear and taxied to the gate with ARFF escorting us. After our duties were completed all four of us went down to the tarmac to look at the birdstrikes. An Operations personnel informed us there were at least 12 hits on the aircraft. The last count I heard before we left was 26 birdstrikes.

**Synopsis**

B787 flight crew reported multiple bird strikes on departure.
On the takeoff roll, a bird strike occurred shortly after the 100 kts call. Visibility was good but it was not yet daylight. The bird appeared to be the size of a duck or large crow and
struck the FO (First Officer) forward windscreen before bouncing to the right side of the aircraft. The Captain was pilot flying and initiated the abort which was executed as briefed. Fire trucks were requested and they met the aircraft on the taxiway after it was determined that it was safe to clear the runway and that there were no injuries. In concurrence with their assessment and QRH/FM guidance, the aircraft was returned to the gate where the passengers were deplaned. Subsequent inspection did not reveal damage to the aircraft except for the loosening of a seal on the number one engine thrust reverser due to deployment. The decision to abort was supported by both crew members due to the size of the bird and its relative speed at impact. Without confidence that the windscreen had not been damaged and the bird had not been ingested by the number two engine, assurance that the aircraft could become and remain airborne was in question and that criteria was briefed as an acceptable reason for an abort in the high speed regime.

**Synopsis**

A320 First Officer reported bird strike on takeoff roll and aborting the takeoff.
**ACN: 1568248 (19 of 50)**

**Time / Day**
Date: 201808
Local Time Of Day: 1801-2400

**Place**
State Reference: DE
Relative Position.Distance.Nautical Miles: 0
Altitude.AGL.Single Value: 0

**Environment**
Flight Conditions: VMC
Weather Elements / Visibility: Visibility: 10
Light: Dusk
Ceiling.Single Value: 12000

**Aircraft**
Reference: X
Aircraft Operator: Personal
Make Model Name: Bonanza 33
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Personal
Flight Phase: Landing
Route In Use: Direct
Route In Use: Visual Approach

**Person**
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 2250
Experience.Flight Crew.Last 90 Days: 19
Experience.Flight Crew.Type: 1480
ASRS Report Number.Accession Number: 1568248
Human Factors: Other / Unknown

**Events**
Anomaly.Ground Event / Encounter: Person / Animal / Bird
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: None Reported / Taken

**Assessments**
Contributing Factors / Situations: Environment - Non Weather Related
Contributing Factors / Situations: Human Factors
Primary Problem: Environment - Non Weather Related

Narrative: 1
Immediately following a normal approach and landing, on landing roll noticed objects on runway which were turned out to be a large flock of geese. I thought I would be slowed enough and they would start to move so that with these two factors occurring, there would be no conflict. However, since it was a grass runway, and while not wet, I did not want to apply maximum braking on a "soft" field and risk a loss of control. Since they did not expedite their departure, I ran through them, striking five with propeller and gear door. I do not think anything other than a reduced geese population could prevent this. I retrospectively thought about if a low approach to inspect first would have been useful to avoid this. But I think this would have positioned me to potentially be flying through a departing flock at high power, higher speed, and low altitude in dark conditions resulting in a much less favorable outcome. I have been flying to this field and have not previously noted flocks of birds on the runway while landing.

Synopsis
BE33 pilot reported multiple bird strikes during landing rollout.
ACN: 1567305 (20 of 50)

Time / Day
Date: 201808
Local Time Of Day: 0001-0600

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude.MSL.Single Value: 25000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Climb
Airspace.Class A: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 5567
Experience.Flight Crew.Last 90 Days: 240
ASRS Report Number.Accession Number: 1567305

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Other / Unknown
Anomaly.Inflight Event / Encounter: Bird / Animal
Detector.Person: Flight Crew
Detector.Person: Passenger
Detector.Person: Flight Attendant
Were Passengers Involved In Event: Y
When Detected: In-flight
Result.Flight Crew: Returned To Departure Airport
Result.Air Traffic Control: Provided Assistance
Assessments

Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

Shortly after the sterile light came off, we received a call from the back. The flight attendant described a dog that was out of control. The Captain informed me of the situation. The dog was a large lab size dog.

Only a few minutes passed before we got a second call from the back. The Captain gave me control of the aircraft, and ATC communications.

After the call, the Captain informed me that the flight attendant was frantic, and the situation was getting worse. The dog's owner was apparently not in complete control of the animal. The passengers around the dog and the flight attendant were fearful for their safety.

We discussed the situation, and began a phone patch with dispatch.

A third call came from back (perhaps 2 minutes from last call.) We were leveling at FL250 (I think). The dog was out of control. The dog had attempted to bite passengers, and / or flight attendants.

The Captain was managing the call to dispatch and the flight attendants.

At some point the flight attendants were able to get the animal locked into one of the lavatories.

At this point the comfort of our passengers had been compromised, and the safety of our passengers and or our crew was in jeopardy.

The Captain and I discussed our options of continuing on [several hour-long] flight to [our destination], returning to [our departure airport], or diverting to another field. Dispatch, the Captain, and I concurred that the safest course of action was to return to [our departure airport].

ATC informed us that they would be [giving us landing priority]. We would have [notified them] anyways due to possibility of overweight landing. After further planning, it was determined that we would be landing overweight. Dispatch contacted [Operations Control], and sent the calculations for a safe overweight landing. We chose to land on the longest runway. No further incident.

Synopsis

First Officer of a large passenger transport reported a dog becoming uncontrollable in the cabin area, threatening the flight crew and passengers.
ACN: 1566629 (21 of 50)

**Time / Day**
- Date: 201808
- Local Time Of Day: 0001-0600

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 500

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility.Visibility: 10
- Ceiling.Single Value: 10000

**Aircraft**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Air Taxi
- Make Model Name: McDonnell Douglas Helicopter Undifferentiated or Other Model
- Crew Size. Number Of Crew: 1
- Operating Under FAR Part: Part 135
- Flight Plan: VFR
- Mission: Passenger
- Flight Phase: Initial Climb
- Airspace.Class B: ZZZ

**Component**
- Aircraft Component: Cockpit Canopy Window
- Aircraft Reference: X
- Problem: Failed

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Taxi
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Rotorcraft
- Qualification.Flight Crew: Flight Instructor
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Total: 7300
- Experience.Flight Crew.Last 90 Days: 180
- Experience.Flight Crew.Type: 2400
- ASRS Report Number.Accession Number: 1566629

**Events**
- Anomaly.Aircraft Equipment Problem: Less Severe
- Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
Anomaly.Inflight Event / Encounter: Bird / Animal
Detector.Person: Flight Crew
Were Passengers Involved In Event: Y
When Detected: In-flight
Result.General: Maintenance Action
Result.Flight Crew: Landed in Emergency Condition
Result.Flight Crew: Requested ATC Assistance / Clarification
Result.Flight Crew: Returned To Departure Airport
Result.Air Traffic Control: Provided Assistance
Result.Aircraft: Aircraft Damaged

Assessments
Contributing Factors / Situations: Environment - Non Weather Related
Primary Problem: Environment - Non Weather Related

Narrative: 1
After departure, level 500 MSL/AGL, bird came through right front window. Debris hit pilot and front two passengers. Passenger #2 (by doorway) had pieces of bird and Plexiglass hit his face and his glasses, as he put it, "exploded off of my face." I looked down and saw Passenger #1 (front middle seat by me as the pilot) holding a piece of Plexiglass in her hand and bleeding. I radioed the Tower and advised of the bird strike and that I was immediately returning to base (about 3 miles) since the aircraft didn't seem to be damaged except for a hole in the windshield. We returned to base with no issues with airworthiness and Passenger #1 was bleeding, so I wanted to get her medical attention as soon as possible. The bleeding [turned out] being very minor after we landed. She said her injury was only a scratch so self-diagnosed herself. Airport medical came and looked at her and she confirmed that she was fine. The hole in the right front window was approximately 20" x 24" and ZZZ wildlife officer came out and took blood and feather samples to determine the exact type of bird it was.

Synopsis
Helicopter pilot reported a large bird struck the aircraft shattering the canopy.
**ACN: 1564528 (22 of 50)**

**Time / Day**
- Date: 201807
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference: Airport: ZZZ.Airport
- State Reference: US
- Relative Position: Distance: Nautical Miles: 2
- Altitude: MSL: Single Value: 3000

**Environment**
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory: Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B737-700
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Climb
- Airspace: Class B: ZZZ

**Person : 1**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function: Flight Crew: First Officer
- Function: Flight Crew: Pilot Flying
- Qualification: Flight Crew: Multiengine
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Qualification: Flight Crew: Instrument
- Experience: Flight Crew: Last 90 Days: 494
- Experience: Flight Crew: Type: 4000
- ASRS Report Number: Accession Number: 1564528
- Human Factors: Situational Awareness
- Human Factors: Troubleshooting

**Person : 2**
- Reference: 2
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function: Flight Crew: Captain
- Function: Flight Crew: Pilot Not Flying
- Qualification: Flight Crew: Instrument
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
Detector.Person : Flight Attendant
When Detected : In-flight
Result.Flight Crew : Landed As Precaution

Assessments
Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Aircraft

Narrative: 1
Shortly after takeoff from ZZZ Runway XXR we impacted a bird while climbing out and turning to the initial departure heading. As the PF (Pilot Flying), I saw a black flash on the left side of the aircraft and felt an impact followed by a flesh burning smell in the flight deck. Additionally the Cabin Crew called and stated they smelled the same smell and felt the impact as well. The Captain directed them to view the number 1 engine for any signs of damage. They noted a large dent on the outer section of the number 1 cowling. We assessed that we indeed experienced a bird strike with engine ingestion and a return to ZZZ was warranted.

After assessing the engine readings as normal we elected to continue operating the number 1 engine. I then started coordinating with ATC for our return while the Captain coordinated with Dispatch and the Cabin Crew and briefed the passengers. Additionally he obtained the required landing data and we ran all applicable checklists. The approach and overweight landing were uneventful and we returned to the gate. Upon inspection, our assessment was proven correct with the number 1 engine sustaining significant damage to the cowling and probable ingestion. The Captain made the required write-ups and the aircraft was turned over to Maintenance.

Narrative: 2
Shortly after takeoff from Runway XXR from ZZZ at approximately 3000 ft AGL, we struck a large bird as we began a turn toward the west on radar vectors. The PF (Pilot Flying) and PM (Pilot Monitoring) knew we had struck a bird but neither of us saw it until the very last second. A burning smell was noted in the cabin and the flight station. There were no abnormal engine indications at that time. Passengers and the Flight Attendant reported some damage to the #1 engine. The Flight Crew requested a downwind for return to ZZZ. All checklists were completed, landing data was run, Dispatch, ATC, and [Operations] were all informed. An uneventful overweight landing was completed at ZZZ.

Synopsis
B737 flight crew reported a bird strike on departure and returning to airport.
Time / Day
Date: 201807
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 50

Environment
Light: Dawn

Aircraft
Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737-800
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Takeoff
Airspace.Class B: ZZZ

Component
Aircraft Component: Turbine Engine
Aircraft Reference: X
Problem: Malfunctioning

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Last 90 Days: 597
Experience.Flight Crew.Type: 14000
ASRS Report Number.Accession Number: 1558957
Human Factors: Situational Awareness
Human Factors: Time Pressure
Human Factors: Workload

Person: 2
Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Ground Event / Encounter : Person / Animal / Bird
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1

From the gate to conducting the takeoff roll all was normal operations. During the takeoff roll after 80 knots (100 knots or so) we noticed a discoloration on the runway. We had no idea what is was, maybe just a visual anomaly. After V1 we realized that it could be birds, however not until we began rotation (moving at 250 fps) did the birds start flying. We flew into the middle of the flock of birds; hard to say how many, but it was a big flock. We heard the numerous bird strikes hit the aircraft, at this time we assumed that both sides of the aircraft took strikes, as we could not tell the exact locations. The landing gear was left down. Shortly after takeoff the right engine vibration meter, as well as physical vibration was indicated.

The Number 1 engine was stable, Number 2 engine was indicating vibration of 5.6 (on the VIB meter) with reverse highlighting and box around engine parameters. We informed the Tower of the bird strike, requested return to the airport and [advised ATC]. At 400 feet N1, N2 and EGT seemed to be stable on both engines, although the vibration indication was high on the Number 2 engine. We discussed possible shut down, however we had no idea as to the condition of the Number 1 engine. We continued to 1,000 feet and at this time our gear was down and flaps were set at 10 degrees. We elected to leave the flaps at 10 degrees not knowing of any damage sustained during the bird encounter. We reduce
thrust, continued to climb to 2,000 feet and began left turn for left traffic to XKR.

As we reduced the thrust the VIB meter lowered to around 2.5 and we noticed the physical vibration reduced as well. F/A (flight attendants) and passengers were notified and told our intentions. We consulted the QRH vibration issue and possible engine shut down if conditions changed, we still did not know if the Number 1 engine was affected. We elected to continue and land at ZZZ, although our options remained open as condition warranted. We both agreed to land on XKR. Knowing that the Number 2 engine and possibly the Number 1 engine were affected by the strike, getting back on the ground safely was our goal. Either of our alternate options was extending our air time, by our estimate five to ten minutes. Runway XKR had positive stopping margins, however if flaps had problems or a shutdown of an engine was required ZZZ1 or ZZZ2 were our options.

On base flaps were lowered to 15, the FO (First Officer) informed me that no abnormal indications were noticed, we continued as discussed. Turning final, flaps 30 were selected with no adverse effect or control issues. Upon reaching 1,000 feet all stable indications were observed and we continued for landing. Touchdown was smooth and braking normal as auto brake was selected. As we turned off runway nose wheel steering was difficult at first, after re-centering it perform normally. Rescue trucks were off to the east side north of our turnoff, we taxied up to and shut both engines down to have the rescue crews to clear and check the aircraft. FA and Passengers were notified of our current condition and a delay back to the gate.

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

B737-800 flight crew reported striking a large flock of birds during takeoff, resulting in damage to the Number 2 engine, and an immediate return to the departure airport.
ACN: 1553990 (24 of 50)

Time / Day
Date: 201806
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 5000

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: A320
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Climb
Airspace.Class C: ZZZ

Component
Aircraft Component: Turbine Engine
Aircraft Reference: X
Problem: Malfunctioning

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 12000
ASRS Report Number.Accession Number: 1553990

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
ASRS Report Number.Accession Number: 1553994
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
On takeoff we were in a turn between 4,000 feet and 5,000 feet MSL when we heard a bang and vibration coming from the left side of the aircraft behind the cockpit. We discussed what it could be and I contacted the Flight Attendant to inquire what she was hearing. The Flight Attendant reported loud noise in First Class on left side of aircraft. Engine instruments were normal. I decided to return to the airport to get it checked out, as it was obviously not normal. As we reduced power on the engines in preparation for returning to the airport, the vibration and noise returned to normal level. I [notified ATC of our situation] and landed uneventfully. Upon arrival at the gate, we were informed that we had a large bird strike on the left engine that damaged the engine cowling and blades. Did not see or know that we had struck a bird until we were on the ground.

Narrative: 2
[Report narrative contained no additional information.]

Synopsis
A320 flight crew reported returning to departure airport after experiencing a bird strike climbing through 5,000 feet. Ground inspection revealed damage to the left engine.
ACN: 1539480 (25 of 50)

Time / Day
Date: 201805
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: GIF.Airport
State Reference: FL
Altitude.AGL.Single Value: 0

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.UNICOM: GIF
Aircraft Operator: Personal
Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: IFR
Flight Phase: Landing
Route In Use: Visual Approach
Airspace.Class E: GIF

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 450
ASRS Report Number.Accession Number: 1539480
Human Factors: Time Pressure

Events
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Ground Event / Encounter: Person / Animal / Bird
Detector.Person: Flight Crew
Miss Distance.Horizontal: 100
Miss Distance.Vertical: 200
When Detected: In-flight
Result.Flight Crew: Took Evasive Action
Assessments

Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

We were on doing a touch and go at Winter Haven (GIF) and after touchdown, a construction worker walked right out on the runway in our path. The student had no time to react other than lock up the brakes. I quickly took the flight controls and applied full power and lifted the aircraft off the ground to avoid hitting the person on the active runway. We avoided any type of accident, but when we returned back to PIE, we found the tires flat spotted on both mains.

Synopsis

PA-28 flight crew reported ground encounter caused by a construction worker sauntering onto runway during touch and go landing requiring evasive action by flight crew.
**ACN: 1538458 (26 of 50)**

**Time / Day**
- Date: 201804
- Local Time Of Day: 0001-0600

**Place**
- Locale Reference: ATC Facility: ZZZ.TRACON
- State Reference: US
- Altitude.MSL.Single Value: 6000

**Environment**
- Flight Conditions: VMC
- Light: Dawn

**Aircraft**
- Reference: X
- ATC / Advisory: TRACON: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B777-200
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Descent
- Airspace.Class B: ZZZ

**Component**
- Aircraft Component: Engine
- Aircraft Reference: X
- Problem: Failed

**Person: 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Captain
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Multipe engine
- Experience.Flight Crew.Total: 28000
- ASRS Report Number.Accession Number: 1538458
- Human Factors: Troubleshooting

**Person: 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
Narrative: 1

It was my leg flying. Our clearance was to descend to 5000 ft. On right base at about 6000 ft, in the landing lights, my FO (First Officer) and I saw a large flock of white birds pass just under the nose of the aircraft. We felt a slight vibration from the left engine, followed by a roll back and EICAS "Left Engine Fail" message. [Crew] began to work the checklist as I notified ATC stating we had hit a flock of birds and apparently lost the left engine. I requested ARFF (Airport Rescue and Fire Fighting) to meet us as we were cleared directly to the runway. As I turned my attention to the checklist progress, [crew] had determined that the auto relight system had engaged and the engine was accelerating back to idle. They informed ATC that the engine appeared to be functioning normally. The EICAS "Engine Fail" message went away so we configured and proceeded inbound for a normal 25 flap landing. We stopped midfield on the runway to allow ARFF to inspect the aircraft. I had everyone remain seated and then had ARFF follow us to our gate. A great job by [crew]. Their professionalism was indispensable.

Narrative: 2

[Report narrative contained no additional information.]
Narrative: 3
[Report narrative contained no additional information.]

Synopsis
B777 flight crew reported a temporary loss of thrust in one engine after a bird strike.
ACN: 1537080 (27 of 50)

Time / Day
Date: 201804
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: JVY.Airport
State Reference: IN
Altitude.AGL.Single Value: 0

Environment
Flight Conditions: Mixed
Weather Elements / Visibility. Visibility: 10
Light: Dusk
Ceiling.Single Value: 3000

Aircraft
Reference: X
ATC / Advisory.CTAF: JVY
Aircraft Operator: Corporate
Make Model Name: Light Transport
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Passenger
Flight Phase: Landing

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 6000
Experience.Flight Crew.Last 90 Days: 80
Experience.Flight Crew.Type: 60
ASRS Report Number.Accession Number: 1537080
Human Factors: Situational Awareness
Analyst Callback: Completed

Events
Anomaly.Ground Event / Encounter: Person / Animal / Bird
Detector.Person: Flight Crew
When Detected: In-flight
Result.Genera: Maintenance Action
Result. Flight Crew: Took Evasive Action
Result. Aircraft: Aircraft Damaged

Assessments
Contributing Factors / Situations: Airport
Contributing Factors / Situations: Environment - Non Weather Related
Primary Problem: Environment - Non Weather Related

Narrative: 1

Upon landing roll out at approximately 80 knots, a deer ran into the path of the aircraft. I was unable to stop or depart given the airspeed. I attempted to swerve some and managed to miss the main gear, but the deer impacted the right wing root. It then rolled over the wing judging by the blood splatter. A wildlife report was filed and I am waiting on the cost of damage as to notify the NTSB.

Callback: 1

Reporter stated that the FAA FSDO inspected aircraft and no NTSB report was required.

Synopsis
General aviation aircraft pilot reported they struck a deer on landing at JVY.
ACN: 1524893 (28 of 50)

**Time / Day**

Date: 201803  
Local Time Of Day: 0601-1200

**Place**

Locale Reference:  
Airport: ZZZ.Airport  
State Reference: US

**Aircraft**

Reference: X  
ATC / Advisory: Tower: ZZZ  
Aircraft Operator: Air Carrier  
Make Model Name: EMB ERJ 170/175 ER/LR  
Crew Size: Number Of Crew: 2  
Operating Under FAR Part: Part 121  
Flight Plan: IFR  
Mission: Passenger  
Flight Phase: Takeoff  
Airspace: Class C: ZZZ

**Component**

Aircraft Component: Turbine Engine  
Aircraft Reference: X  
Problem: Malfunctioning

**Person : 1**

Reference: 1  
Location Of Person: Aircraft: X  
Location In Aircraft: Flight Deck  
Reporter Organization: Air Carrier  
Function: Flight Crew: Captain  
Function: Flight Crew: Pilot Not Flying  
Qualification: Flight Crew: Air Transport Pilot (ATP)  
ASRS Report Number: Accession Number: 1524893

**Person : 2**

Reference: 2  
Location Of Person: Aircraft: X  
Location In Aircraft: Flight Deck  
Reporter Organization: Air Carrier  
Function: Flight Crew: Pilot Not Flying  
Function: Flight Crew: First Officer  
Qualification: Flight Crew: Air Transport Pilot (ATP)  
Experience: Flight Crew: Type: 1100  
ASRS Report Number: Accession Number: 1525157

**Events**
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
During the takeoff, right after rotation, a flock of small birds crossed in front of us at approximately 10 ft AGL. I was not able to avoid them and we both heard the sound of impact from birds being struck. Immediately we heard a "buzzsaw" sound coming from the Number 1 engine as well as saw the LP vibration on engine 1 jump to 1.9, which was approximately three times that of the other spools. We could feel the vibration also. In addition there was briefly a smell of burning animal flesh in the cockpit. Knowing we had ingested a bird into that engine, I instructed the FO to tell ATC we needed to return to the field for a precautionary landing. The engine still produced normal thrust and we saw no other abnormal indications. I stayed in the pattern while the FO notified the flight attendants of what happened and that we'd be returning to the field for a precautionary normal landing. He also informed the passengers via the PA.

I setup for a downwind while the FO ran the climb, descent, and approach checks and reloaded the FMS for the air return. We were at approximately 73,500 lbs so not overweight. During this entire time the engine still made the loud buzzsaw sound and vibrations were still felt. The odd smell didn't last more than a couple minutes.

I did not declare an emergency as this was a precautionary landing and thrust was still normal. We were airborne for probably less than 10 minutes. We landed without incident and taxied to the gate. I made a PA informing the passengers that we had ingested a bird and that I wanted them to deplane as maintenance needed to inspect the plane. I called Dispatch and informed them of the air return and maintenance write up. I wrote the plane up and informed Maintenance Control.

Contract maintenance showed up about thirty minutes later and did find bird remains on the interior of the nacelle, and on multiple stator vanes. Also two fan blades had been bent considerably. As a result the flight was canceled for an indefinite repair time. No remains were found elsewhere on any part of the airframe. The city ops vehicle said he found the remains of two birds on his runway inspection.

Narrative: 2
[Report narrative contained no additional information.]

Synopsis
EMB-175 flight crew reported returning to departure airport after ingesting birds into the Number 1 engine. Ground inspection revealed damage to several fan stage blades.
**ACN: 1523678** (29 of 50)

**Time / Day**
- Date: 201803
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference: Airport: ZZZ.Airport
- State Reference: US
- Altitude.AGL.Single Value: 10

**Environment**
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B737-700
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Takeoff
- Airspace.Class C: ZZZ

**Person : 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Captain
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Experience.Flight Crew.Last 90 Days: 337
- Experience.Flight Crew.Type: 10000
- ASRS Report Number.Accession Number: 1523678

**Person : 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: First Officer
- Function.Flight Crew: Pilot Not Flying
- Experience.Flight Crew.Last 90 Days: 53
- ASRS Report Number.Accession Number: 1523691

**Events**
Narrative: 1

At or between 10 feet to 50 feet AGL during takeoff rotation, two Canadian geese flew across our nose with about 120 degrees right aspect angle. I saw the birds and attempted a very slight upward rotation to avoid them; however impact occurred shortly thereafter, into the Number 1 engine. I elected to leave the landing gear down and the takeoff flaps set, as I did not know if the birds hit the nose or nose gear. The impact felt very hard, like it was to the lower front of the aircraft. I continued the takeoff climb to 1000 feet AGL, and then started a right turn out and climb to 2000 feet. After impact, there was a very loud bang and instantaneous heavy vibration in the airframe.

Both the First Officer and I noticed a smell of burning bird in the cockpit. I reduced the power setting on the number 1 engine with no noticeable reduction in the vibration. I called for the Engine Fire, Seizure, and Separation Checklist and noticed high vibration on the number 1 engine, approximately 3.3. I pulled the thrust down to idle on the number 1 engine and noticed little to no vibration thereafter. As the FO was reading the checklist, I made the decision to leave the engine running at idle and to transition to the Single Engine Landing Checklist. I informed the Flight Attendants of the situation, and that we were returning to land. I did not brief the passengers as we were very busy. I started the APU and set up for the ILS.

Tower was concerned about our flight path. I directed the FO to reply we were turning right base to final and prepared to land. On final we ran the Before Landing Checklist and were losing sight of the runway due to heavy rain. On short final we saw the runway with good visibility to land. We landed and taxied clear, at which time I briefed the passengers on what had happened. We taxied to the gate without incident and shut down.

Things happened very, very fast and I rushed the QRH Checklist. We missed one item, to select flap inhibit, which gave us a too low flaps warning on final approach. Due to our heavy weight and flaps 15 configuration, it was very hard to slow down. Due to the rain, I was thinking we might have to go around, but when we broke out, we were on glide path and about VREF plus 20 knots fast, but slowing as we passed over the overrun. Landing thereafter was uneventful.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis
B737-700 flight crew reported returning to the departure airport after a bird strike in the Number 1 engine that caused significant vibration.
**Time / Day**

Date: 201802
Local Time Of Day: 0001-0600

**Place**

Locale Reference.Airport: ZZZ.Airport
State Reference: US

**Environment**

Light: Night

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B767-300 and 300 ER
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Nav In Use: FMS Or FMC
Flight Phase: Takeoff
Route In Use: None
Airspace.Class C: ZZZ

**Component**

Aircraft Component: Fan Blade
Aircraft Reference: X

**Person : 1**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1520823
Human Factors: Troubleshooting

**Person : 2**

Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
On the takeoff roll, at approximately 120 knots, I saw/felt/heard what I perceived to be a bird strike of the left side of the aircraft. The bird (?) appeared to be white and moderate to large size. It seemed to be a glancing blow. No engine anomalies nor control issues were present thus the takeoff continued normally. There was a short-lived (one minute or less) very faint burnt odor, which cleared rapidly during the initial climbout. The flight proceeded uneventfully until after landing and taxiing clear of the runway, the Captain noticed a large cloud of smoke, which appeared to be coming from the aircraft. The smoke quickly cleared and we had no indications in the cockpit of any problems. We stopped the aircraft on the taxiway and requested Airport Rescue and Fire Fighting (ARFF) inspect the aircraft before proceeding into the ramp. ARFF reported no abnormalities. Brake temperatures were normal. We then proceeded into the ramp. After exiting the aircraft the Captain and Mechanic saw damage to several of the left engine fan blades and damage to an inspection panel inboard of the left engine.

Narrative: 2
[Report narrative contained no additional information.]

Synopsis
B767-300 flight crew reported a bird strike on takeoff roll, resulting in aircraft damage.
**ACN: 1517241 (31 of 50)**

**Time / Day**
- Date: 201802
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.AGL.Single Value: 10

**Environment**
- Flight Conditions: IMC
- Weather Elements / Visibility: Icing
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: Regional Jet 700 ER/LR (CRJ700)
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Takeoff
- Airspace.Class C: ZZZ

**Person : 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1517241
- Human Factors: Situational Awareness

**Person : 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: First Officer
- Function.Flight Crew: Pilot Not Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1516998
- Human Factors: Situational Awareness

**Events**
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1

Weather conditions at time of door closure was moderate snow showers. We required de-
ice. We did this 10 feet off the gate. Normal thrust with both wing and cowl anti-ice was
used for takeoff. After V1, at rotation, I noticed a flock of over approximately 100 birds
flying off the runway, vertically, directly in the path of our takeoff. We were approximately
10 feet off the runway when we hit the birds. There was no evasive action we could take.
We hit multiple, more than 7 birds on takeoff. One bird hit the middle of our windshield
pillar and was stuck to the windshield wiper until about 7,000 feet.

My immediate reaction was to fly the plane as a normal departure until we could assess
the situation. My immediate concern was possible engine damage and current icing
conditions. We climbed to 10,000 feet for the safety of altitude and conditions. At
transition of airspeed from 200 to 250 knots, we started noticing a vibration and vibrating
noise from the front nose area of the aircraft. I [advised] ATC that we would like to return
to [departure airport].

Our vectors were quick and direct. My First Officer had about 200 hours in the aircraft. If
we intercepted the localizer directly we would not have been set up in time. I could also
see that the First Officer was having difficulty from time pressure to get checklists done
and prepare for landing. Weights, speeds, proper setup and briefing of the approach were
of concern. I informed approach that we needed more time and we were vectored across
the localizer. When we were ready I notified ATC. The extra time helped considerably. The
weights and speed numbers for landing came back from ACARS and said we would be at
67,700 pounds on landing, an overweight landing. We then planned and performed an
overweight landing on a snow covered runway. The landing was very smooth and the nose
wheel was kept off the ground for the longest possible time due to possible nose gear
issues. (See previously described vibration noted to front of airplane.)

After landing we checked that all passengers were okay, with no injuries, with the flight
attendants. We parked off gate with plane stairs for unloading. Fire rescue boarded the
airplane prior to the passengers unloading. During unloading, one passenger that was on
his phone fell down the airplane stairs and was caught by two firemen before hitting
anything. The gentleman, reported by the gate agent, went to the hospital.

Airport Authority found 7 or more dead birds on the runway. Maintenance found 5 bird
strikes on the aircraft. One to the center pillar of the windshield, one to the number two
pitot tube under the First Officer's window, [and] two strikes to the right wing. I believe we also took one to two birds in the left engine.

**Narrative: 2**

Bird strike immediately after rotation. Large flock of birds (approximately 50) flew across runway from left to right. Evasive action was impossible. Captain and I both called out "birds." Continued standard callouts and configuration. Upon climb we both heard an abnormal noise and the decision was made to return to the field. ATC was notified. Landing was uneventful. Upon inspection of aircraft post-landing, evidence of at least 5 strikes was observed.

**Synopsis**

Bombardier CRJ-700 flight crew reported that immediately after rotation they encountered a large flock of birds.
**Time / Day**
- Date: 201801
- Local Time Of Day: 0001-0600

**Place**
- Locale Reference: Airport: MPTO.Airport
- State Reference: FO
- Altitude: MSL.Single Value: 2000

**Environment**
- Flight Conditions: VMC
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory: Tower: MPTO
- Aircraft Operator: Air Carrier
- Make Model Name: Commercial Fixed Wing
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Flight Phase: Takeoff

**Person**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function: Flight Crew: Captain
- Function: Flight Crew: Pilot Flying
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Experience: Flight Crew: Total: 23500
- Experience: Flight Crew: Last 90 Days: 187
- Experience: Flight Crew: Type: 9483
- ASRS Report Number: Accession Number: 1511993

**Events**
- Anomaly: Deviation - Procedural: Published Material / Policy
- Anomaly: Ground Event / Encounter: Person / Animal / Bird
- Detector: Person: Flight Crew
- When Detected: Other
- Result: Flight Crew: Took Evasive Action

**Assessments**
- Contributing Factors / Situations: Airport
- Contributing Factors / Situations: Procedure
- Primary Problem: Airport

**Narrative: 1**
Landed Panama City many times in the 20 years I have been flying down south. This time I noticed something different. The Turkey Buzzard population were roosting next to and in the grasses that were freshly cut besides the runway. I noted large nest of birds peering at us as we exited the runway, and on the takeoff roll the following day we almost had a bird fly into our path right after I called V1. I called to the flying pilot to delay, then rotate, thus causing us to rotate 2000 ft from the end, just missing these large fowl that have wing span looking over 10 ft wide. They are spaced along the side in nesting positions. Years ago I worked an airport management job and noted all U.S. airports have Wildlife Control. I'm not sure if Panama has Wildlife Control but it sure would be nice to know they are extracting these guys from the area while we are taking off at Max Gross Wt. Not a comfy feeling knowing for 7000 ft we could have ingested one of these dudes.

**Synopsis**

Air carrier Captain reported delaying rotation to avoid contact with Turkey Buzzards that have built nests along the runway in MPTO.
Time / Day
Date: 201712
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: OAK.Airport
State Reference: CA
Altitude.MSL.Single Value: 2000

Environment
Light: Dawn

Aircraft
Reference: X
ATC / Advisory.TRACON: NCT
Aircraft Operator: Air Carrier
Make Model Name: Large Transport
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Initial Climb
Route In Use.SID: OAKLAND TWO
Airspace.Class C: OAK

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days: 318
Experience.Flight Crew.Type: 5600
ASRS Report Number.Accession Number: 1507286

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1507294
Human Factors: Distraction

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Observer
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
I was PM (Pilot Monitoring). Captain was PF (Pilot Flying). We have flown many times together. We departed on the OAK 2 Departure. We were delayed at the gate but I don't believe that manifested itself as a causal factor in the bird strike. We leveled off at 2000 ft as we checked in with NorCal Departure. NorCal told us that one mile in front of us there might be traffic. The Controller was getting a non-reporting return. We did not acquire any traffic. Controller reported us clear and instructed us to climb unrestricted to FL190. We put 19,000 ft in the altitude and initiated a climb. Just as the climb started, we passed through a flock of birds that were not discernible until they were right in front of us. They were brown in color and, for the moment I saw them, appeared smaller than Water Fowl; maybe Finch to Crow size. We knew we had at least one strike, audible. We suspected more.

Aircraft performed normally on controls. Engine indications remained entirely normal. No abnormal odor. Captain remained PF. I relayed to ATC the bird strike. I then referred to the QRH (no guidance), AOM (Aircraft Operating Manual) Non Normal bird strikes, and [other manuals] guidance. We contacted Dispatch with notification of the strike. About this time, Non-rev Pilot in back communicated that there was a large dent in the number 2 nacelle leading edge. Captain kept control. Using security protocol, I went to Passenger compartment and observed damage. Baseball-Softball sized dent leading edge number 2 nacelle. The dent contour suggested that the bird remains went over nacelle not thru the engine. We took photos. We reviewed photos on flight deck and, given good engine ops and no other observed damage we elected to continue.

Safe, uneventful flight, approach, and landing. Upon post flight inspection, we observed a softball size hole in the leading edge of the FO (First Officer) side horizontal stabilizer. This was a location of another strike. We could not observe this location in flight and, since the aircraft was operating entirely normally, we had no reason to suspect significant further damage on aircraft.

Narrative: 2
[Report narrative contained no additional information.]

Synopsis
Air Carrier flight crew reported a bird strike during departure.
**Time / Day**

Date: 201712
Local Time Of Day: 0601-1200

**Place**

Locale Reference: Airport: RNO.Airport
State Reference: NV
Altitude.AGL.Single Value: 0

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory: Tower: RNO
Aircraft Operator: Air Carrier
Make Model Name: A319
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Takeoff
Airspace.Class C: RNO

**Person : 1**

Reference: 1
Location Of Person: Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Experience.Flight Crew.Total: 12046
Experience.Flight Crew.Type: 5611
ASRS Report Number: Accession Number: 1503954

**Person : 2**

Reference: 2
Location Of Person: Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 14728
Experience.Flight Crew.Type: 8707
ASRS Report Number: Accession Number: 1504373

**Events**
Anomaly.Deviation - Procedural : Security
Anomaly.Ground Event / Encounter : Person / Animal / Bird
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Airport
Contributing Factors / Situations : Human Factors
Primary Problem : Airport

Narrative: 1
Well into takeoff roll, above 100 knots, I observed a person exiting the left side of the runway. The person was well clear of the left wingtip and I took no evasive action to avoid the person. Once safely airborne, the Captain reported the position of the person to RNO tower.

Narrative: 2
On takeoff roll out of RNO (16R-First Officer flying), I noticed a young man walking along the edge of the runway while we were rolling down the runway. After liftoff, I reported it to the tower, and they diverted the other landing aircraft to runway 16L. Not really sure what this guy was doing walking on the runway, or what his intentions were.

Synopsis
A319 Captain reported a person was observed walking along and exiting the left side of the runway during takeoff roll.
ACN: 1501472 (35 of 50)

Time / Day
Date: 201711
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 500

Environment
Light: Night

Aircraft
Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737-700
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Climb
Flight Phase: Initial Climb
Airspace.Class C: ZZZ

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1501472

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1501499
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Diverted
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Landed As Precaution
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
On initial climbout, we encountered an enormous flock of very large birds. At least one bird was engulfed in the number 2 engine and another struck the left retractable Landing light. We heard loud impacts of birds on both sides of the aircraft and noticed an immediate airframe vibration noise coming from the right side (number 2 engine). The number 1 engine seemed to not suffer damage and appeared to be operating normally. I was the Pilot Flying (PF), and lowered the nose to continue a shallow climb. This allowed me to reduce the thrust on the number 2 engine to reduce the vibration. At this reduced thrust setting, Vibration on the engine instruments indicated 2.4 on the number 2, and 0.7 on the number 1 engine (which was running at a much higher thrust setting).

We didn't have much excess airspeed as we were very light out, but we continued a shallow climb allowing the aircraft to slowly accelerate as well. We notified Tower that we were returning to the field. I called the Flight Attendants and told them we were returning to [departure airport]. I didn't have time to notify the Passengers as we were quite busy. We were given a left turn to a heading of 010 and an altitude of 2000'. At that point we were climbing through 2300' so I descended back down to 2000'. Because of our close proximity to [the parallel runway] (the closer runway along our northern downwind track), we initially requested [a different runway] (for a more normal turn radius).

However, there was Company traffic on a 10 mile final, so I requested [the parallel runway] and we widened our downwind leg some (to afford a normal turn to the closer [the parallel runway]). I operated the number 2 engine close to flight idle to reduce the airframe vibration. We utilized the FMC computed landing speeds, with Flap 30 and auto brakes 2. Our weight at this time was 111,000 pounds. Aside from the vibration coming from the number 2 engine, and the smell of cooked bird, we had no other abnormal indications. We configured the aircraft for landing, completed the Before Landing Checklist and made an uneventful landing. After we turned off the runway, I shut number 2, we started the APU, and taxied back to the gate we just departed.

Narrative: 2
Emergency vehicles and Personnel followed and met aircraft at gate along with Maintenance. We advised Passengers after returning to the gate on the ground.

Synopsis
B737 flight crew reported hitting a flock of birds shortly after takeoff. Immediately after contact they experienced some abnormal engine indications, so they decided to return to the departure airport.
ACN: 1496047 (36 of 50)

Time / Day
Date: 201711
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 800

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737-800
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Takeoff
Airspace.Class B: ZZZ

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Type: 9010
ASRS Report Number.Accession Number: 1496047

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Type: 9630
ASRS Report Number.Accession Number: 1496064

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Procedural : Weight And Balance
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport

Assessments
Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Aircraft

Narrative: 1

There was no weather or bird activity reported in the area. Previous aircraft that departed did not report any birds in the vicinity of the airport. We began the takeoff roll in VFR conditions. At positive climb rate I called for gear up. Shortly after the gear came up and at approximately 800 feet AGL, I heard a loud bang and felt a slight yaw to the left. Auto pilot was not engaged and the auto throttle was engaged. No rudder input was required to maintain our flight path. I immediately scanned the engine instruments to verify that they were both operating normally. No abnormal engine indications were noted, and the plane was flying normal. Both the Captain and I noticed a burnt smell in the aircraft and assumed we had a bird strike. The Captain [advised ATC] and requested vectors for an immediate return to the airport. Tower informed us that they saw smoke come from the engine, but seemed to be normal. We were directed to climb to 4000 feet and vectored for a left downwind. All indications were normal and the aircraft was handling normally.

Once the autopilot was engaged, the Captain accomplished the after takeoff checklist, and I programmed the FMC for our return. I also sent the divert message to notify the company of our planned return. I called for the approach descent checks and briefed the visual backed up by the ILS. We discussed the possibility of losing the number 1 engine on final and the possibility of using flaps 15 for a single engine landing. On our base leg, I called for the approach checklist as we started to descend. Once on final, I called for gear down and flaps 15 and the landing checklist. Prior to the final approach fix, I called for flaps 30. The landing was normal. Tower directed us to contact ramp. We asked for the fire trucks to see if there were any visual indications of damage to the number 1 engine. They reported no issues, and followed us [to] the gate. I accomplished the after landing flow and the Parking checklist.

Once at the gate, the Captain remained in the flight deck to accomplish the maintenance write up for the bird strike and overweight landing. I walked out to the ramp to inspect the number 1 engine and noticed the bird strike at the 10 o'clock position.

I believe we handled the event appropriately and safely. Although there was no apparent damage to the engine, I believe our return to the airport was prudent.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis
B737NG flight crew reported returning to departure airport after experiencing a bird strike at 800 feet AGL on initial climb.
Time / Day
Date: 201711
Local Time Of Day: 1801-2400

Place
Locale Reference. ATC Facility: ZZZ.TRACON
State Reference: US
Altitude. MSL. Single Value: 7000

Environment
Light: Night

Aircraft
Reference: X
ATC / Advisory. TRACON: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: Regional Jet 700 ER/LR (CRJ700)
Crew Size. Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Descent
Airspace. Class E: ZZZ

Person: 1
Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function. Flight Crew: First Officer
Function. Flight Crew: Pilot Flying
Qualification. Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number. Accession Number: 1495522

Person: 2
Reference: 2
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function. Flight Crew: Captain
Function. Flight Crew: Pilot Not Flying
Qualification. Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number. Accession Number: 1495662

Events
Anomaly. Inflight Event / Encounter: Bird / Animal
Detector. Person: Flight Crew
When Detected : In-flight
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
We were at 7,000 ft and 210 knots at night and a bit more than 20 miles from [destination]. I saw a quick flash of what I could make out to be a number of birds, as they passed through the beam of the landing light, just a millisecond before they hit. We felt the impact but was only a small vibration. Immediately after the impact, we got a Duct Mon Fault and Anti-Ice Fault message. The Captain called the flight attendants right away, so that they knew what had happened. However, we did not inform ATC, as there was no issue with the aircraft and we figured it was too far out to be an airport hazard to other aircraft. Upon landing the Captain called maintenance and we both went out to look at the damage. It was at this point that we realized the damage was quite extensive, with multiple impacts along the wing and wing root.

The threat was that the damage could have been worse and had a possible effect on the aerodynamics as we slowed.

This was not a preventable situation but in the future, if it happen again, I will inform ATC. This way they have the information and may use it however they wish. Also, it may be good in this situation in the future, to ask the flight attendant, if they can see any damage to the wings, so that we can better evaluate the extent of the damage.

Narrative: 2
[We believe the type of birds to be] migratory geese.

Synopsis
CRJ-700 flight crew reported damage to the left wing from an encounter with migratory geese at 7,000 ft.
Time / Day
Date: 201710
Local Time Of Day: 1201-1800

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude.MSL.Single Value: 41000

Environment
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737-700
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Cruise
Airspace.Class A: ZZZ

Component
Aircraft Component: Hydraulic System

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Type: 7000
ASRS Report Number.Accession Number: 1490666
Human Factors: Distraction
Human Factors: Human-Machine Interface
Human Factors: Troubleshooting
Human Factors: Workload

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Event Summary:

**Events**

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Diverted
Result.Flight Crew : Landed in Emergency Condition
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Aircraft Damaged

**Assessments**

Contributing Factors / Situations : Equipment / Tooling
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

**Narrative: 1**

Approximately 60 miles NE of ZZZ we started seeing an Intermittent Master Caution indication with no abnormal overhead annunciation. We tried the recall, but it did not illuminate anything overhead so we began checking other systems when the Captain displayed the hydraulic quantity indicator, which read approximately 19 percent on the "A" side. He then gave me the radios (I was the Pilot Flying) and attempted to contact Dispatch to see if they would like us to divert to ZZZ. Shortly during this difficult contact procedure (communication issues with Dispatch), the Master Caution light and the "A" Engine Driven Hydraulic Pump light illuminated. We ran the QRH Hydraulic Pump Low Pressure Checklist and turned off the "A" pump.

Dispatch finally advised us to go to ZZZ and we were then given direct to the airport along with a descent from ATC. I began using the speedbrakes to help the descent and we noticed the quantity getting lower so we decided to review the loss of "A" procedure and also agreed to use flaps 15 for landing. Captain received the flaps 15 numbers, we then reviewed the approach and ran the Descent and Approach Checklist. We were cleared direct ZZZZZ for the ILS XXL. Approach informed us they had Fire and Rescue waiting. We decided to drop the gear early when the nose gear failed to extend, Captain manually extended it and successfully indicated down and green.

He then took over as Pilot Flying. Just inside the marker we started losing system A. I got out the QRH, ran the Before Landing Checklist and he gently touched down on [Runway] XXL. The fire trucks were waiting, we decided not to reconfigure and asked them to check for leaks/fumes. They indicated a leak from the nose wheel but no fire or fumes. Our gate was blocked by another aircraft and we both agreed to pull straight ahead to Gate XX. I contacted Ops to advise them and the Firemen guided us in. As I walked around the
The Fire Fighters pointed out a bird in the nose wheel well, which probably happened on takeoff and caused the entire event. Hats off to the Captain! Great job!

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

B737-700 flight crew reported diverting due to System A hydraulic failure.
ACN: 1490078 (39 of 50)

Time / Day
Date: 201710
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: SFO.Airport
State Reference: CA
Altitude.MSL.Single Value: 900

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Tower: SFO
Aircraft Operator: Air Carrier
Make Model Name: Widebody Transport
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Initial Climb
Airspace.Class B: SFO

Component
Aircraft Component: Air Data Computer
Aircraft Reference: X
Problem: Malfunctioning

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 21000
Experience.Flight Crew.Last 90 Days: 200
Experience.Flight Crew.Type: 13000
ASRS Report Number.Accession Number: 1490078
Human Factors: Time Pressure
Human Factors: Troubleshooting
Human Factors: Workload
Human Factors: Distraction

Person: 2
After takeoff at about 800 ft and before raising flaps, we struck a flock of approximately 20 birds. We probably hit about 6 of them. Both windshields were partially obscured and the "Windshear" alert sounded. The birds were spotted just before impact so it was
obvious that we hadn't encountered windshear. After the encounter, the captain’s airspeed was showing approximately 80 knots when the standby and First Officer's airspeed read approximately 190 kts. Control of the aircraft was transferred to the First Officer who continued the climb and retracted flaps on schedule. ATC was notified of the bird strike and location. We requested an initial climb to 10,000 ft and advised them there were some systems affected by the bird strike and that we would be working the problem.

The flight directors were not working, and LNAV and VNAV seemed unreliable. The First Officer hand flew the airplane. The autopilot was later engaged as we determined that it worked in "R." The First Officer flew the airplane and handled most of the radio work with the second observer backing him up. The Captain and First Observer accomplished the "IAS Disagree or Airspeed Unreliable" checklist. This brought back the Captain's airspeed indicators to normal.

An analysis of the aircraft's condition and equipment status was done. The flight directors had biased from view, LNAV was inoperative, the airplane seemed to turn slower than normal, and we did not know what other damage had been done. We request ATC to provide vectors for us to prepare for dumping and used Satcom for conference call with dispatch and maintenance. We did not feel it was safe or wise to continue to destination so began preparation to return to SFO.

The aircraft weight was approximately 830,000 lbs so we dumped approximately 200,000 lbs of fuel to bring weight down to 630,000 lbs in preparation for landing back in SFO. Logbook entries, approach preparation, briefings, and checklists were accomplished during dumping which took approximately 45 mins. The BDEGA 2 arrival and ILS Runway 28R were flown by the captain using the autopilot in HDG SEL and FLCH, then GS and LOC to approximately 1200 ft, then hand flown for landing with Flaps 30.

**Narrative: 2**

At 1000 ft after takeoff, while captain was flying, we hit a flock of geese. Blood momentarily covered windscreen on both sides and aural/EICAS warnings activated. Captain's PFD showed false air data info such as low speed, winds, altitude, vertical speed indicator, and auto throttles were unresponsive. FO instrumentation appeared accurate, and Captain transferred control to him. I worked with Captain on the EICAS messages by checklist while FO and other relief pilot flew and communicated with ATC. After checklist were completed and established in vectored holding pattern, a crew, dispatch, Maintenance Control and aircraft assessment lead Captain to decide that a return to SFO was safest. Communicated to all agencies necessary, crew, and passengers. Uneventful return to base.

**Narrative: 3**

[Report narrative contained no additional information.]

**Synopsis**

Air carrier flight crew reported encountering multiple bird strikes shortly after takeoff from SFO resulting in spurious flight instrument indications. After dumping fuel, a return to the departure airport was safely accomplished.
ACN: 1487708

Time / Day
Date: 201709
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 0

Environment
Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Light: Night
Ceiling.Single Value: 20000

Aircraft
Reference: X
ATC / Advisory. CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Mission: Training
Flight Phase: Landing
Flight Phase: Taxi
Route In Use: None
Airspace.Class E: ZZZ

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Instructor
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 17800
Experience.Flight Crew.Last 90 Days: 70
Experience.Flight Crew.Type: 150
ASRS Report Number.Accession Number: 1487708

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
I was instructing in a Piper PA28-161 Warrior. My student was making the landing rollout, completing a normal full flap night landing. He made three touch and goes and the full stop was to be our last landing of the evening. No deer were seen during any of the first three landings. Runway lights were on the medium step, and all appeared to be illuminated. The aircraft's beacon, strobes, navigation lights, and nose mounted LED landing light were on and operating throughout the landing roll and at the time of the deer strike.

During landing roll, at approximately mid-field on the 5,000 foot runway, the student had slowed the plane to about 20 mph a small buck deer came into view walking left to right onto the runway 30 yards ahead of us. The student in the left seat applied heavy braking. I took the controls and applied maximum braking and had slowed to about 3 miles per hour. With no way to avoid the deer, we watched as the small buck walked into the idling prop.

Exiting the plane, we found the dead buck laying on its right side about three feet behind the nose wheel and under the inboard portion of the right wing. It appeared as though the propeller struck the deer near the right hindquarters, breaking its back. I would estimate the weight of the animal to be about 75 pounds.

No attempt was made to restart the engine, which died when the prop stopped as it hit the deer. Instead, we completed the shutdown checklist and secured the aircraft. I walked to the hangar and brought a golf cart to the aircraft. After removing the deer carcass from the runway, we towed the aircraft to its hangar with a tow bar and the golf cart.

A precursory inspection in the lighted hangar revealed no visible damage to the propeller, cowling, or nose gear assembly. I stress the visual examination was precursory and in no way equaled a professional assessment by a qualified A&P mechanic. No one was injured.

I was flying with my instructor in a Piper PA28-161 warrior. I was coming back from a night cross-country. I needed to get 5 of my night landings completed. Me and my instructor had already done 3 touch and go's, and to the side and on the runway was
clear, in the dark night of what we could see. All the lights were on at the airport, all the lights on the airplane [were] on. We were coming on our last landing to a full stop on that night. I was right on the glide slope 2 red 2 white and was doing a normal landing. Right when I touched down I applied brakes and pulled back on the controls, so we could taxi-off taxiway Charlie. As we were coming to a stop I saw a little buck deer come from my left to my right, and I said deer, deer! He was trotting along and when he looked into my landing light he stopped.

When I said deer, deer! I applied heavy braking and pulled back on the controls as hard as I could. The brakes locked up and applied the maximum braking. And we locked the brakes and we were stopping quickly. My instructor helped with braking the plane. And we hit the deer about 3 miles an hour with the idling prop. If the deer was 5 feet farther we would of missed him. I maintained control of aircraft as this happened. I maintained the centerline of the runway, I didn't swerve, [and] I kept the plane straight and in control. And when we hit, the idling prop stopped. The first thing that came to my mind was the ELT, and I tuned it to 121.5 MHz, and the ELT didn't go off. We shut everything off except the lights on the aircraft, for safety reasons.

When we got out, the buck was 3 feet behind the wheel, with a broken back. I called the owner of the plane and he was on his way, and the deer, I called the Game Warden, and said I could keep the deer if I cleaned it, which I did. We did not restart the aircraft, and we went through the shutdown checklist, with the lights still on. My instructor went and got the golf cart to tow the plane, and I stayed with it, so if someone came in the pattern, I had my lights on, and I could make a call and say abort landing, and don't land, so we could talk to other pilots to be safe, but no one came into the pattern. We put the deer on the cart and towed the plane back to its hangar, but there was no visual damage to the propeller, cowling, or nose gear assembly. The visual examination was precursory and in no way equaled a professional by a qualified A&P Mechanic. But [neither] the instructor nor I [were] hurt. We both were safe and nothing happened to us.

**Synopsis**

PA28 pilots reported that during landing rollout, a deer walked in front of the aircraft and was struck by the propeller.
ACN: 1481106 (41 of 50)

**Time / Day**
- Date: 201709
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.AGL.Single Value: 0

**Environment**
- Light: Daylight

**Aircraft**
- Reference: X
- Aircraft Operator: Air Carrier
- Make Model Name: Large Transport, Low Wing, 2 Turbojet Eng
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Nav In Use: FMS Or FMC
- Flight Phase: Parked

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1481106
- Human Factors: Situational Awareness
- Human Factors: Other / Unknown

**Events**
- Anomaly.Flight Deck / Cabin / Aircraft Event: Other / Unknown
- Anomaly.Deviation - Procedural: Published Material / Policy
- Anomaly.Ground Event / Encounter: Person / Animal / Bird
- Detector.Person: Other Person
- When Detected: Aircraft In Service At Gate
- Result.General: Flight Cancelled / Delayed

**Assessments**
- Contributing Factors / Situations: Company Policy
- Contributing Factors / Situations: Human Factors
- Contributing Factors / Situations: Procedure
- Primary Problem: Ambiguous


**Narrative: 1**

Airport customs requires that aircraft departing for an international destination have a pre-departure inspection. The crew is not allowed on the aircraft during the inspection. While waiting at the gate for the inspection to be completed, the gate agent came out of the gateway followed by several people in business dress. Well within hearing distance of the passengers, the gate agent said Captain I am required to inform you that while cleaning the cockpit, the cleaning crew saw a snake under the captain's pedals. The snake got away and they have not been able to find it. I am required to tell you this.

At this time, the inspection was complete and I was allowed on the aircraft. I found two mechanics in the flight deck. I was informed that they had not been able to find the snake and they were not able to say with certainty what species of snake it was. The logbook had not been notated with a write up. I placed a write up in the book. I was also getting a line check on this flight. The check airman told me that his father was deathly afraid of snakes and suggested that some passengers on the flight may suffer with the same conditions.

I contacted dispatch and discussed with them that I was uncomfortable taking the aircraft with an unknown reptile condition. The dispatcher agreed there was an unknown condition in the aircraft and the possibility that a snake could expose itself in flight or worse on the approach come out from under the rudder pedals. Dispatch agreed with my position.

The gate agent then asked to board the aircraft. I said no, as we might be changing aircraft. I then contacted the Chief Pilot. I explained the situation and told him I was uncomfortable flying the aircraft without determining what the condition of the snake was. I had specifically asked if the cleaning crew had really had seen a snake? I was informed yes, that they had tried to vacuum it up and it had slithered away. The Chief Pilot agreed with me and told me he would have a new aircraft for us in five minutes. We were assigned the aircraft at the gate next door.

The aircraft had to go through an international departure inspection. It took about forty-five minutes to get the inspection done. During that time, the tower called twice. There were no gate agents so I answered the phone. The first time the agent said, "We got you a new aircraft are you going to board?" I said we were standing around twiddling our thumbs waiting for an international departure inspection. The second inspection was a different person who identified himself as a manager. He had the same aggressive attitude and asked if we were going to board. I replied the same response. He hung up the phone. The inspection was finally completed, we boarded and departed one hour late.

During this process, I felt pressured by the tower personnel to board and take an aircraft in an unknown safety condition. I also felt that if I had not placed the write-up I the book the tower would have tried to ignore the condition of the aircraft and the possible safety issue if a snake had exposed itself in flight. Unconfirmed when I returned, I asked a gate agent what had happened to the "snake airplane". I was told the aircraft was left in service and the next Captain had been asked to sign some type of form stating he was informed the snake had not been found.

**Synopsis**

Air Carrier Captain reported that a cleaning crew saw a snake under the Captain’s rudder pedals and was unable to capture it. The aircraft was rejected.
ACN: 1480719 (42 of 50)

**Time / Day**
- Date: 201709
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference: Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 2000

**Environment**
- Flight Conditions: Mixed
- Weather Elements / Visibility.Visibility: 8
- Light: Daylight
- Ceiling.Single Value: 2000

**Aircraft**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B737-700
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Initial Climb
- Airspace.Class B: ZZZ

**Component**
- Aircraft Component: Turbine Engine
- Aircraft Reference: X
- Problem: Malfunctioning

**Person : 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Experience.Flight Crew.Type: 8000
- ASRS Report Number.Accession Number: 1480719

**Person : 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
Function.Flight Crew : First Officer  
Function.Flight Crew : Pilot Not Flying  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Experience.Flight Crew.Last 90 Days : 120  
Experience.Flight Crew.Type : 5200  
ASRS Report Number.Accession Number : 1480743

Events
Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Inflight Event / Encounter : Bird / Animal  
Detector.Person : Flight Crew  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Landed in Emergency Condition  
Result.Flight Crew : Returned To Departure Airport  
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Environment - Non Weather Related  
Primary Problem : Environment - Non Weather Related

Narrative: 1
After takeoff, we had just retracted the landing gear and were accelerating when, at the last second, I saw a black dot ahead of us in our turn left to a 200 heading. It appeared to be a bird. I tried to pull the nose up to climb above it, but it wheeled up, put its brakes on by pulling its wings back and then dropped off to the right. It entered our right engine and we immediately had a loud buzzing noise along with engine vibration at about 3.5 to 4 on the number 2 engine. I checked the engine N1s and N2s and the engine was still rotating, but the vibration continued unchecked. My First Officer and I discussed the parameters as I initially thought to call for the severe damage checklist, but instead elected to call for the engine vibration checklist as the engine was still running.

After retarding the throttle to idle, the vibrations subsided. I elected to keep the engine running, but land configured for a single engine landing with flaps at 15 just in case the engine failed at any point. Landing and rollout were uneventful. I shut down number 2 engine after landing and had the fire trucks check out our number 2 engine for leaks or damage and clear us to taxi. At the gate, the damage to the fan blades on the rotor was apparent.

Narrative: 2
We elected to return to the airport for landing.

Synopsis
B737-700 flight crew reported a bird strike after takeoff which resulted in damage to the right engine and return to departure airport.
**ACN: 1473349 (43 of 50)**

**Time / Day**
- Date: 201708

**Place**
- Locale Reference: Airport: EWR.Airport
- State Reference: NJ
- Altitude MSL Single Value: 6000

**Environment**
- Flight Conditions: VMC

**Aircraft : 1**
- Reference: X
- ATC / Advisory: TRACON: N90
- Aircraft Operator: Air Carrier
- Make Model Name: B757 Undifferentiated or Other Model
- Crew Size Number of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Final Approach
- Route In Use: Visual Approach
- Airspace Class B: EWR

**Aircraft : 2**
- Reference: Y
- Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
- Airspace Class B: EWR

**Person**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function: Flight Crew: Captain
- Function: Flight Crew: Pilot Flying
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Experience: Flight Crew Type: 550
- ASRS Report Number: Accession Number: 1473349
- Human Factors: Distraction
- Human Factors: Situational Awareness
- Human Factors: Workload
- Human Factors: Communication Breakdown
- Communication Breakdown Party 1: Flight Crew
- Communication Breakdown Party 2: ATC

**Events**
Anomaly.Conflict : NMAC
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Took Evasive Action

Assessments
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
We had a bird strike at 6000 ft just to preface this event. Was given a descent to 2000 ft and slow to 170 knots, then told to follow a company 737 for a visual approach to 4R. Then a frequency change to tower frequency. Before we could check in with tower, and as we were leveling at 2000 ft, we got a TRAFFIC, TRAFFIC. I looked at the TCAS and showed an aircraft at 500 ft below us and climbing (almost directly below our position slightly to the left on the 10 mile scale) then within a second we got a CLIMB, CLIMB and the red envelope had a very aggressive climb (not like the small climbs in the SIM for training), I clicked off the autopilot and auto throttles and pitched to climb outside of the red box. I glanced at the TCAS as it showed the other aircraft at 300 feet. After climbing to about 2800 feet we got a CLEAR OF CONFLICT. The FO (First Officer) switched back to approach and told them we had just performed an RA maneuver for traffic. ATC said something to the effect that, oh yeah, there's Aircraft Y there at 1800 ft but I am not talking to him, and said something about that being a tower thing. We continued the visual approach to 4R and landed without further incident.

Synopsis
B757 pilot reported a TCAS RA on final with an aircraft that the tower knew about but did not issue as traffic.
ACN: 1468377  (44 of 50)

Time / Day

Date : 201707
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DCA.Airport
State Reference : DC
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.Tower : DCA
Aircraft Operator : Air Carrier
Make Model Name : B737-800
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Takeoff

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1468377

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 7150
ASRS Report Number.Accession Number : 1468393

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected: In-flight
Result: Flight Crew: Diverted
Result: Flight Crew: Landed in Emergency Condition

Assessments
Contributing Factors / Situations: Aircraft
Contributing Factors / Situations: Environment - Non Weather Related
Primary Problem: Aircraft

Narrative: 1
We had a bird strike at rotation taking off Runway 19 at DCA. The bird hit the radome and the Captain's windshield. On climb out there was a loud squeal and we suspected a window seal leak. We [advised ATC of the situation] and with Captain's authority, landed overweight. We followed the appropriate QRH procedures. The landing was normal, touchdown was less than 50 feet per minute and we weighed 147,000 pounds. A bird strike form has been submitted. The Aircraft Maintenance Log (AML) was filled out appropriately and addressed by maintenance, no damage was found.

Narrative: 2
Takeoff from DCA Runway 19, just after rotation we had a single thump on the airframe and noticed a large bug splat on the Captain's forward windscreen close to the center line. We concluded it was a bird strike, no other indications noticed. The Captain continued the climb and clean up with no problems until reaching roughly 4,000 feet where a very loud squeal was heard. We assumed a window seal had been compromised and under Captain's Authority decided to [advise ATC of the situation] and divert. Speed never exceeded 250 and altitude no higher than 5,000. Aircraft maintained pressurization throughout. We did notice the squeal decreased and ceased at less than 1.4 differential PSI (3,500 feet). Appropriate QRH checklists were accomplished. We landed overweight at 147,000 with less than 60 feet/minute [on the] Vertical Speed Indicator (VSI) on touchdown, 30 flaps, brakes 1 and rolled long to prevent overheating brakes. Crash and rescue met us on just off the runway for inspection of airframe and brakes. No issues. Bird strike form submitted.

Synopsis
B737-800 crew reported a bird strike on departure from DCA which resulted in a loud squeal and a diversion.
ACN: 1467539  (45 of 50)

Time / Day
Date : 201707
Local Time Of Day : 1201-1800

Place
Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 0

Aircraft
Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : MD-80 Series (DC-9-80) Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Takeoff

Component
Aircraft Component : Turbine Engine
Aircraft Reference : X
Problem : Malfunctioning

Person
Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1467539
Human Factors : Situational Awareness

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Detector.Person : Flight Attendant
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Landed As Precaution
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

**Narrative: 1**

At rotation on takeoff we had a surge on left engine with a loud bang. The EPR (Engine Pressure Ratio) dropped to approx. 1.60 then returned to normal with a brief MC (Master Caution) light. All 3 FAs called and said "we have a real bad odor with smoke" We then [advised ATC] and returned to [the departure airport]. Also a deadheading pilot told a FA that we might have a blown tire. We really didn't know what we had. The tower had had the runway checked for debris. It was clean. After landing the aircraft was checked out then we taxied to gate. It was an overweight landing 140,000 lbs. The post flight walk around showed signs of bird remains in left engine. FAs did a great job and the passengers seemed to be in good spirits.

**Synopsis**

MD80 pilot reported a bird strike on rotation that led to engine surges, odor, and smoke in the cabin.
The previous flight leg the airplane experienced a birdstrike landing. Maintenance accomplished a birdstrike inspection per Maintenance Manual. No Maintenance checkcard
was referenced. I asked 2 mechanics to accomplish Maintenance task 5. Afterwards management stated it was an unacceptable delay because General procedures manual allows the maintenance manual references to be used in lieu of the workcards. True, unbeknownst to me GPM does state this. However, General procedures Manual states the workcard takes "precedence" when "conflicts" occur between documents. The 737 Maintenance Manual 5 and task card 5 have profound differences.

The question now arises, if a mechanic chooses the Maintenance Manual reference over the workcard, how does he/she know the language of the Maintenance Manual is consistent with the work card. Furthermore, GPM technically allows Maintenance Manual references to be used instead of all common task workcard procedures like towbar disconnect or oil servicing.

**Synopsis**

A Maintenance Technician reported that maintenance took a delay because of the required inspection for a bird strike was not accomplished per work cards.
**Time / Day**

Date: 201707
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: 4S9.Airport
State Reference: OR
Altitude.MSL.Single Value: 2700

**Environment**

Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory.CTAF: 4S9
Make Model Name: Cessna Single Piston Undifferentiated or Other Model
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Flight Phase: Descent
Airspace.Class E: P80

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: FBO
Function.Flight Crew: Instructor
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1464212
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Crew

**Events**

Anomaly.Deviation - Procedural: Published Material / Policy
Anomaly.Deviation - Procedural: FAR
Anomaly.Inflight Event / Encounter: Bird / Animal
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Took Evasive Action
Assessments
Contributing Factors / Situations : Airport
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Ambiguous

Narrative: 1
Routine Training flight. We followed proper procedures by announcing our position with the intent of performing a simulated engine failure to a touch and go at Mulino airport.

We were on frequency of CTAF and asked if there were any gliders or jumpers at Mulino. No response! A little closer we announced again asking if there was any traffic, jumpers and gliders at Mulino. Again, no response. We climbed to 2700' over Southwest corner of Runway 32 with the intent of performing a simulated engine fail to touch and go.

As we were descending, in our second turn we heard the jump plane pilot say there were open canopies EAST of Runway 32. We looked and saw jumpers between 1800-2000' and on our westbound heading flew NW away from the runway and airport. We were west of runway and jumpers were east of runway. We were scolded by the jump pilot to read the sectional chart. The chart is clearly marked with glider and jump symbology.

What troubles me is that the jump pilot monitors both Approach and CTAF. We were on frequency and announced and heard no reports or follow up jumper advisories. If we were in perceived conflict the Jump pilot can very easily shout out jumper traffic if he is monitoring the CTAF.

The responsibility for see and avoid is on us but advisories for jumpers is additional responsibility for jump school personnel. My suggestion is for the jump pilot to make multiple advisories and have a ground spotter on CTAF who can call out to any aircraft in the pattern who cause a conflict.

Synopsis
GA flight instructor reported being surprised by skydivers while in the pattern at Mulino State Airport after requesting information several times over the CTAF frequency.
ACN: 1463768 (48 of 50)

**Time / Day**
- Date: 201707
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 8000

**Environment**
- Flight Conditions: VMC

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B737 Undifferentiated or Other Model
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Climb
- Airspace.Class B: ZZZ

**Component**
- Aircraft Component: Normal Brake System

**Person: 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Experience.Flight Crew: Type: 3456
- ASRS Report Number.Accession Number: 1463768

**Person: 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Pilot Not Flying
- Function.Flight Crew: First Officer
- Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 2187
ASRS Report Number.Accession Number : 1463782

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Diverted
Result.Flight Crew : Landed As Precaution

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Environment - Non Weather Related

Narrative: 1
Climbing out of 8000 ft had a bird strike to the right engine. N1 on the right engine had a momentary drop of 10%. Then came back to normal. Very strong dead bird smell in cabin. We [returned] and landed (overweight landing). Taxied off the runway and fire trucks pulled up and said there was no damage. We asked to taxi back to a gate. Aircraft would not move; brakes were locked. Vans were sent out and passengers deplaned via air stairs.

Narrative: 2
Out of an abundance of caution, we selected MAX Autobrakes since ACARS returned a "Flight Not Found" error when Landing Data was requested.

Synopsis
B737 flight crew reported a bird strike on climbout that resulted in momentary power reduction. After an overweight landing, the crew encountered locked brakes.
ACN: 1460855 (49 of 50)

Time / Day
Date: 201706
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 1000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: Regional Jet 200 ER/LR (CRJ200)
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Final Approach
Flight Phase: Initial Approach
Airspace.Class B: ZZZ

Component
Aircraft Component: Oxygen System/General
Aircraft Reference: X
Problem: Design

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1460855
Human Factors: Distraction
Human Factors: Situational Awareness
Human Factors: Workload

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Narrative: 1

On final, shortly after autopilot was disconnected a mosquito appeared in the cockpit. This was a great distraction to my First Officer (FO) who was pilot flying. They repeatedly tried swatting at the mosquito while hand flying the aircraft. I grabbed the rolled up release and smashed the mosquito so that my FO would no longer be distracted. After swatting the mosquito a ding was heard for caution message and the caution switch light illuminated. There was a PAX OX ON message. I instructed the FO to continue the landing. After exiting the runway and completing the after landing check I instructed to the FO to speak with the Flight Attendant (FA) to assess the situation. We continued to the hold pad since our gate was not open. In the hold pad I spoke with the FA about the passengers and the masks. She informed me that no passenger donned the masks as she made an announcement that they had deployed in error. Once our gate opened we taxied over and deplaned the passengers. All passengers appeared in good spirits despite the wait in the hold pad and the masks. I notified Maintenance of the deployment and they arrived at the aircraft. I informed them of what occurred and showed them that the guard did not function properly to protect the switch from inadvertent activation.

The cause of this event was the distraction caused by the mosquito in the cockpit and the failure of the switch guard on the passenger oxygen switch.

More training or awareness that this switch guard failure is a known issue and to avoid the switch as much as possible or refit or repair those guards which do not function properly.

Narrative: 2
During the final approach phase as the Pilot Flying I identified a mosquito in my field of view. It is my understanding that the Pilot Monitoring attempted to remove the Mosquito from my field of view. During this attempt, the Guarded Passenger oxygen mask switch was inadvertently contacted issuing a single chime followed by a yellow master caution 'Pass Oxy on'. We continued without incident given the nature of time associated with the threat. Captain notified Maintenance on landing.

The cause of the event is the Crew's untimely handling of removing the mosquito from the field of view.

Follow Company SOPs to avoid participating in activities or resolving issues in the cockpit while in the approach phase of flight unless such issues become a flight risk or pose a safety risk to any or all persons on board.

**Synopsis**

CRJ 200 flight crew reported accidentally deploying the passengers oxygen masks after being distracted by a mosquito in the cockpit.
ACN: 1458832 (50 of 50)

**Time / Day**
- Date: 201706
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.AGL.Single Value: 800

**Environment**
- Flight Conditions: VMC

**Aircraft**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: A319
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Climb

**Component**
- Aircraft Component: Turbine Engine
- Aircraft Reference: X
- Problem: Failed

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1458832

**Events**
- Anomaly.Aircraft Equipment Problem: Critical
- Anomaly.Inflight Event / Encounter: Bird / Animal
- Detector.Person: Flight Crew
- When Detected: In-flight
- Result.Flight Crew: Inflight Shutdown
- Result.Flight Crew: Landed As Precaution
- Result.Flight Crew: Returned To Departure Airport
- Result.Flight Crew: Landed in Emergency Condition

**Assessments**
Contributing Factors / Situations: Aircraft
Contributing Factors / Situations: Environment - Non Weather Related
Primary Problem: Environment - Non Weather Related

Narrative: 1

Takeoff gross weight of 138,XXX. Weather was scattered / broken clouds, winds 240 12G19, temperature 30c. The Captain was the flying pilot and briefed all required items for the departure including engine failure according to [Company] standards and SID engine failure procedures.

Tower cleared us for takeoff and gave no indication of any bird activity in the area. We both visually cleared the runway environment to include the departure path and no signs of any bird activity. Normal FLEX takeoff procedures and landing gear retraction. At 800 ft AGL during takeoff we saw a group of 3 very large birds pass the left side and impact the aircraft and the Number 1 engine. From the impact noise and excessive vibration from the Number 1 engine, it was apparent catastrophic engine failure. Engine Number 1 had ingested at least 1 bird and possibly impacted others on the aircraft.

The FO immediately announced Number 1 engine failure, loss of thrust, and EGT overtemp. The Captain commanded for ECAM ACTION and continued the climb to 1000 AGL / 1900 MSL. Following the ECAM directing engine shutdown and securing the engine, the mishap engine continued with loud vibrating / grinding noise. Because of this excessive noise / vibration and unsure about the condition of the wing we elected not to retract the flaps and to maintain VFR flying conditions. This required that we deviate from the published engine failure procedures and turned north heading 360 degrees in order to maintain VFR and the airfield in visual range.

Once stable northbound the loud vibration continued even though the Number 1 engine had successfully shut down. We decided we needed to land ASAP and not continue with more checklist procedures and impending IMC conditions. We started the APU decided on flaps 3 for landing configuration. The FO informed tower we were an emergency aircraft and needed an immediate landing runway. Tower gave clearance for any runway we needed. Because of aircraft slow performance and unknown damage we elected for a wide shallow base turn to final. The only information we were able to give the flight attendants and passengers during the final approach was "prepare for immediate landing". The loud impact and excessive vibration made it apparent to all passengers something catastrophic had happened.

Tower was informed of all emergency specifics and told we would be stopping on the runway and shut down. Final approach and landing was as planned and completed without further incident. The aircraft was stopped [on the runway]. We gave the passengers "remain seated" announcement and finished all checklists. We received the fire department report saying no other external hazards exist except the engine damage. The passengers were then informed that all was safe and to remain seated until we return to the gate. We kept the APU running to keep air conditioning and informed Operations we wanted to be towed back to the gate.

This flight and all procedures were followed professionally in accordance with all company and safety directives. The flight attendants were particularly instrumental ensuring the safety of all passengers with the little information they were given.

Synopsis
A319 Captain reported returning to departure airport after birds were ingested into Number 1 engine shortly after takeoff, resulting in catastrophic engine failure.