ASRS Database Report Set

Cabin Smoke, Fire, Fumes, or Odor Incidents

Report Set Description.................................A sampling of air carrier reports concerning cabin smoke, fire, fumes or odor related events.

Update Number.............................................12.0

Date of Update..............................................December 28, 2017

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

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

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.
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.

Linda J. Connell, 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: 1488438 (1 of 50) | **Synopsis**  
Air carrier pilot reported performing an evacuation of the aircraft at the gate during boarding when the cabin filled with smoke from an external fire in the vicinity of the aft cargo compartment. |
|------------------------|------------------------------------------------|
| ACN: 1477412 (2 of 50) | **Synopsis**  
B757 flight crew reported smoke in the cockpit during takeoff. Oxygen masks were donned and the flight returned to the departure airport. |
|------------------------|------------------------------------------------|
| ACN: 1476757 (3 of 50) | **Synopsis**  
A319 Flight Crew reported a strong "dirty sock" odor in the cabin before and during flight which resulted in hospitalization of a Flight Attendant. |
|------------------------|------------------------------------------------|
| ACN: 1475784 (4 of 50) | **Synopsis**  
A First Officer reported that during testing they heard a series of loud bangs and an oil smell in the cockpit, then an engine flamed out so they landed at the nearest airport. |
|------------------------|------------------------------------------------|
| ACN: 1475763 (5 of 50) | **Synopsis**  
SR22 pilot reported that during cruise the Multifunction Display flickered then he smelled electrical burning/arching. |
|------------------------|------------------------------------------------|
| ACN: 1473801 (6 of 50) | **Synopsis**  
A319 flight attendants reported a dirty sock odor and fumes in the cabin. After block in the cabin crew reported exposure to a fume event and went to an urgent care facility. Maintenance inspection discovered an oil leak. |
|------------------------|------------------------------------------------|
| ACN: 1473783 (7 of 50) | **Synopsis**  
CRJ200 Captain reported an APU fire and shutdown just before pushback from the gate. Captain reported passengers were deplaned and aircraft was put out of service. |
|------------------------|------------------------------------------------|
| ACN: 1473000 (8 of 50) | **Synopsis**  

<table>
<thead>
<tr>
<th>Synopsis</th>
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</thead>
<tbody>
<tr>
<td>Airbus Captain reported receiving a SMOKE AFT CARGO ECAM during deplaning. It was later determined the alarm was caused by insecticide sprayed into the compartment by ground personnel.</td>
</tr>
</tbody>
</table>

**ACN: 1472806 (9 of 50)**

<table>
<thead>
<tr>
<th>Synopsis</th>
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</thead>
<tbody>
<tr>
<td>B767-300 flight crew reported smoke from an electrical short in the TCAS display led to an ETOPS diversion.</td>
</tr>
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</table>

**ACN: 1472246 (10 of 50)**

<table>
<thead>
<tr>
<th>Synopsis</th>
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</thead>
<tbody>
<tr>
<td>B737 flight crew reported that they smelled smoke in the cabin right after lift-off.</td>
</tr>
</tbody>
</table>

**ACN: 1471932 (11 of 50)**

<table>
<thead>
<tr>
<th>Synopsis</th>
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</thead>
<tbody>
<tr>
<td>B737 First Officer reported the left engine shut down abruptly after ingesting a large piece of plastic FOD while waiting for their gate on a taxiway.</td>
</tr>
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</table>

**ACN: 1471443 (12 of 50)**

<table>
<thead>
<tr>
<th>Synopsis</th>
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</thead>
<tbody>
<tr>
<td>A319 Captain reported several Flight Attendants were physically affected by unidentified fumes in the aft section of the aircraft. One was sufficiently incapacitated that she was removed by aisle chair at the end of the flight.</td>
</tr>
</tbody>
</table>

**ACN: 1471355 (13 of 50)**

<table>
<thead>
<tr>
<th>Synopsis</th>
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</thead>
<tbody>
<tr>
<td>MD-11 flight crew reported fumes in the cockpit coming from the avionics compartment at cruise and diverted. They highlight the need for training on use of the onboard Centralized Fault Display System.</td>
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</table>

**ACN: 1470793 (14 of 50)**

<table>
<thead>
<tr>
<th>Synopsis</th>
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</thead>
<tbody>
<tr>
<td>Air carrier First Officer reported an electrical fumes in the cabin prior to departure which Maintenance could not locate and dissipated on their own. Enroute the fumes returned and the flight diverted.</td>
</tr>
</tbody>
</table>

**ACN: 1468880 (15 of 50)**
B767-300 Captain reported returning to the gate after the crew's CO2 detector alarmed because of a large quantity of dry ice that had been loaded under waiver.

**ACN: 1468447** *(16 of 50)*

**Synopsis**
BE58 Baron pilot reported a landing gear motor failure and manual extension.

**ACN: 1468167** *(17 of 50)*

**Synopsis**
Lear 31 flight crew reported smoke and heat in the cockpit. The crew returned to the departure airport.

**ACN: 1467819** *(18 of 50)*

**Synopsis**
A319 First Officer reported an aft Flight Attendant was ill from fumes and began rotating forward flight attendants aft. By arrival time all flight attendants required medical attention for shortness of breath, fingertips tingling, and throat dryness.

**ACN: 1467539** *(19 of 50)*

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

**ACN: 1467436** *(20 of 50)*

**Synopsis**
A319 First Officer and a Flight Attendant reported a cabin fire from a passenger battery thermal runaway during taxi-in.

**ACN: 1466735** *(21 of 50)*

**Synopsis**
B767 flight crew experienced an electrical burning odor on departure and elected to return to the departure airport. The Captain’s MFD went blank, soon after the First Officer FMS and CDU display went blank. After landing the lower EICAS screen went blank as well.

**ACN: 1466443** *(22 of 50)*

**Synopsis**
A Flight Attendant reported being informed that the tail of the aircraft was on fire during deplaning. The Flight Attendants commanded the remaining passengers to evacuate and leave their belongings.
ACN: 1466375 (23 of 50)

Synopsis
Air carrier Captain experienced air conditioning smoke in the cockpit and cabin. Several months later the Captain was diagnosed with a neurological issue.

ACN: 1465939 (24 of 50)

Synopsis
A Boeing 737 Flight Attendant reported smoke coming out of an oven in the galley.

ACN: 1465802 (25 of 50)

Synopsis
A320 Captain reported that after an oil smell in the cabin report, there was no effort to clean the pneumatic ducts.

ACN: 1464824 (26 of 50)

Synopsis
B737 Captain reported a burning odor in the cabin that was more prevalent when the throttles were near idle.

ACN: 1464686 (27 of 50)

Synopsis
B757 Captain reported noticing a "dirty socks" odor after takeoff.

ACN: 1463768 (28 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: 1462037 (29 of 50)

Synopsis
A320 Captain reported an APU and one pack had been deferred prior to departure but upon descent, fumes filled the flight deck strong enough that he considered putting on the oxygen masks.

ACN: 1461941 (30 of 50)

Synopsis
A320 flight crew reported receiving an ECAM "BRAKES AUTO BRK FAULT" message. Normal brakes did not function properly and alternate brakes were also ineffective. The Captain was able to stop the aircraft using applications of the parking brake.

**ACN: 1461485 (31 of 50)**

**Synopsis**
CRJ700 First Officer reported an engine fire during taxi. He initially used the in-flight checklist instead of the engine fire on ground checklist.

**ACN: 1461133 (32 of 50)**

**Synopsis**
Dash-8 Captain reported smoke emitted from the APU exhaust port after gate arrival. Passengers were deplaned and the starter contactor was later found to have overheated.

**ACN: 1460068 (33 of 50)**

**Synopsis**
EMB-190 Captain reported a Flight Attendant informed him that the cabin was too warm and that the Captain should take control of the temperature. The temperature remained too warm and eventually smoke was reported in the cabin and detected in the cockpit. The flight diverted to the nearest suitable airport. Passengers were evacuated on a taxiway.

**ACN: 1459139 (34 of 50)**

**Synopsis**
Captain reported noticing odor and fumes from propane bottles loaded as hazmat. The fumes were cleared by descending and depressurizing the aircraft.

**ACN: 1458781 (35 of 50)**

**Synopsis**
CRJ-700 flight crew reported diverting to the nearest suitable airport after departing with one pressurization pack deferred inoperative and losing the other bleed system at FL310.

**ACN: 1457597 (36 of 50)**

**Synopsis**
Falcon 50 Captain reported smoke in the cockpit and cabin shortly after takeoff before returning to the departure airport.

**ACN: 1457336 (37 of 50)**

**Synopsis**
EMB-145 flight crew reported the number one engine failed on landing rollout.
ACN: 1457268 (38 of 50)

Synopsis
B747 flight crew reported diverting due to a FIRE MAIN DECK message during cruise. No evidence of fire was found from an inspection of the entire cabin and E&E compartment.

ACN: 1454582 (39 of 50)

Synopsis
B767 Flight Attendant reported a fume event during takeoff that caused a strong fuel smell to enter the midcabin. The Captain was called and he indicated that a malfunction had occurred during starting, but had now been corrected. Several passengers became ill.

ACN: 1453616 (40 of 50)

Synopsis
A320 flight crew reported a sulfur smell in the aft galley causing the flight attendants to become light headed.

ACN: 1453261 (41 of 50)

Synopsis
Air carrier Flight Attendant reported a burning odor coming from the aft lavatories. No fire was detected but the Flight Attendant reported feeling ill shortly after. The flight then diverted to the nearest suitable airport.

ACN: 1452908 (42 of 50)

Synopsis
A320 Captain reported an odor on taxi in to the gate and air pack overheat alerts. Two flight attendants were taken to the hospital.

ACN: 1452558 (43 of 50)

Synopsis
A320 First Officer reported fumes in the cockpit and cabin with headache and dizziness after starting engine 1.

ACN: 1452549 (44 of 50)

Synopsis
ERJ-145 First Officer reported a tire failed on takeoff causing damage to an engine.

ACN: 1452522 (45 of 50)

Synopsis
B747-400 flight crew reported experiencing a "MAIN CABIN SMOKE" light shortly after takeoff. Crew elected to return to departure airport.

**ACN: 1451248 (46 of 50)**

**Synopsis**
Christen Eagle pilot reported landing safely after experiencing a loss of oil pressure.

**ACN: 1451154 (47 of 50)**

**Synopsis**
CRJ-200 flight crew reported returning to departure airport after experiencing a "SMOKE TOILET" message and the Flight Attendant reported smoke in the cabin.

**ACN: 1451007 (48 of 50)**

**Synopsis**
An air carrier flight crew reported being advised of an engine fire while lining up for takeoff, resulting in an evacuation.

**ACN: 1450875 (49 of 50)**

**Synopsis**
MD11 flight crew reported smoke in the Flight Deck. They donned oxygen masks and ran the appropriate checklist. This resolved the problem and they continued to destination.

**ACN: 1450741 (50 of 50)**

**Synopsis**
B757 flight crew reported a return to departure airport when a hot spot developed at a sidewall panel that was an inbound write up.
Report Narratives
ACN: 1488438 (1 of 50)

Time / Day
Date: 201710
Local Time Of Day: 1201-1800

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

Environment
Light: Daylight

Aircraft
Reference: X
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: Parked

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: 1488438

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Procedural: Published Material / Policy
Detector.Person: Flight Crew
When Detected: Aircraft In Service At Gate
Result.General: Flight Cancelled / Delayed
Result.General: Evacuated
Result.Aircraft: Aircraft Damaged

Assessments
Contributing Factors / Situations: Aircraft
Contributing Factors / Situations: Company Policy
Contributing Factors / Situations: Procedure
Primary Problem: Ambiguous
Narrative: 1

I was one of the four crew members who were all eye witness to the horrible fire which persisted directly under the aft cargo compartment door burning it to charcoal black oblivion. I find it extremely ironic that as of this writing no one from the company or union has contacted me about the incident. I realize that none of us has any training or expertise in determining the cause of the fire however out of the four of us we have over 120 years of aviation experience, some civilian and some military. All four of us performed an evacuation of the aircraft as it filled with smoke fumes. All four of us did a thorough walk around examination of the fires’ aftermath. Several of us obtained videos, dozens of photos and eye witness statements which contradict the theory of the loader catching on fire. All four of us had an extremely difficult time sleeping that night. Several of us had throat irritation from the acidulous, electric smelling fumes. All four of us met in the morning wondering when we were going home because we were told we were going to ferry an obviously severely damaged aircraft back to ZZZ that night. We were in constant question on how to prepare for our next legs crew rest. This is not the airline I hired on with 28 years ago.

Synopsis

Air carrier pilot reported performing an evacuation of the aircraft at the gate during boarding when the cabin filled with smoke from an external fire in the vicinity of the aft cargo compartment.
**Time / Day**

Date: 201708
Local Time Of Day: 0601-1200

**Place**

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

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
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: Takeoff

**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: 4137
ASRS Report Number.Accession Number: 1477412
Analyst Callback: Attempted

**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.Total: 184
ASRS Report Number.Accession Number: 1477764
Human Factors: Confusion
Human Factors: Distraction
Human Factors: Communication Breakdown
Communication Breakdown. Party 1: Flight Crew
Communication Breakdown. Party 2: Flight Crew

Events
Anomaly. Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly. Deviation - Procedural: Published Material / Policy
Detector. Person: Flight Crew
When Detected: In-flight
Result. General: Maintenance Action
Result. Flight Crew: Landed in Emergency Condition
Result. Flight Crew: Returned To Departure Airport

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

Narrative: 1

A few seconds after V1 the cockpit filled with smoke. I called smoke then Captain said continue. Captain [called for] an immediate return and put on his mask. By about 500 feet the Captain had his mask on and I asked him to take controls so I could put my mask on then took controls back. At this point the cockpit really got separated. I noticed a LAV SMOKE EICAS message. I started a right turn for a right downwind while climbing to 1500 feet while managing flight path and speed. Captain performed after takeoff checklist on downwind while doing other stuff. We ran no emergency checklist because there was no time. I performed a visual landing and we were probably airborne no longer than 5 minutes.

The Captain did a great job coordinating everything in such a short period of time. Once we had the aircraft stopped on the runway I made the remain seated PA and we evaluated the situation with FAs, fire rescue, and ATC. We concluded there was no fire at this point and performed a normal taxi to gate. At the gate maintenance came on board and immediately indicated they knew what the problem was. They said the engines were borescoped last night and too much of some compound or chemical was put in the engine. This excessive compound/chemical started to burn off just after V1 producing the smoke. If this turns out to be the cause then maintenance needs to update their SOP to include a high power engine run after performing that procedure. This will ensure this will never happen again on a flight full of passengers.

Narrative: 2

Unfortunately the cockpit really got separated. Communication in the cockpit became difficult. FO speaker was not on, so he couldn't really hear me over the intercom and some communication meant for intercom may have gone out instead over ATC frequency. Luckily we could still see each other so a lot of body language was used. At that point FO was solely concentrating on flying VFR pattern back. FO started a right turn for a right downwind while climbing to 1500 feet while expertly managing flight path and speed. As the engines spooled back after level off the smoke concentration seemed to reduce and the ECIS LAV SMOKE indication went out. FO expert concentration/performance on flying our return approach to ZZZ allowed me to turn my concentration on the other 2 priorities, namely talking to ATC and trying to access situation in cabin from the FAs.

I started getting a cascade of chimes from all FA stations in the back. When I had time to
pick up interphone to assess cabin situation everyone was trying to talk to me and each other at the same [time]. It was total confusion. Communication with cabin crew was impossible while airborne I was not able to garner any useful information from them until after I got on the ground and brought the plane to a stop. There should really be a procedural protocol where only LEAD FA [assess] cabin situation and then only LEAD FA calls the cockpit with information, otherwise there is great potential for confusion. I normally brief LEAD FA of this preference, but that day for some odd reason I didn't.

Synopsis

B757 flight crew reported smoke in the cockpit during takeoff. Oxygen masks were donned and the flight returned to the departure airport.
Time / Day
Date: 201708
Local Time Of Day: 1201-1800

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: A319
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Parked

Component
Aircraft Component: Air Conditioning and Pressurization Pack
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
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1476757

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1476759

Events
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : Aircraft In Service At Gate
When Detected : In-flight
Result.General : Flight Cancelled / Delayed

Assessments

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

Narrative: 1

Upon entering the jet bridge the F/As (Flight Attendants) and I noticed a strong "dirty sock" odor approximately 30 ft from entering the main cabin door and upon entering the aircraft the odor was very intense. I immediately turned off the APU bleed that was on as I entered the aircraft. The FAs opened both rear exit doors to help with ventilation. I notified Maintenance Control and the APU was deferred before departure. Rain was occurring during the event. A pack burnout was not performed prior to our departure. We departed with the odor no longer present until we started our descent at approximately 12,000 ft with rain showers along the approach. I turned off Pack 1 with no change to the odor in the cockpit and then Pack 2 with the odor still present in the cabin. [Medical assistance] was called for the crew members at that time who were not feeling well. It included myself, the first officer and a flight attendant. After consultations we were removed from working the return flight and were on passenger only status. While waiting for hotel accommodations, my flight attendant fainted and the paramedics were called and she was taken to the emergency room for the evening for medical care. The return flight was canceled.

Perform a pack burnout before returning the aircraft to service. Are we tracking when these incidents occur most often? Is it occurring in the first flight of the day or on the third or fourth leg of the day for that aircraft? Also what are the weather conditions when these happen, such as higher humidity levels or rain present? Appears just immediately deferring the APU is not solving these issues when I talked to other pilots that have had these issues.

Narrative: 2

Maintenance only action was [deferred maintenance] of APU. No venting of pack was performed. Odor on approach was stronger than before.

Synopsis

A319 Flight Crew reported a strong "dirty sock" odor in the cabin before and during flight which resulted in hospitalization of a Flight Attendant.
ACN: 1475784

Time / Day
Date: 201708
Local Time Of Day: 1201-1800

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

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Corporate
Make Model Name: Medium Large Transport
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Test Flight
Airspace.Special Use: ZZZ

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: Corporate
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 3270
Experience.Flight Crew.Last 90 Days: 78
Experience.Flight Crew.Type: 134
ASRS Report Number.Accession Number: 1475784

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector.Automation: Aircraft Other Automation
Detector.Person: Flight Crew
When Detected: In-flight
Result. Flight Crew: Took Evasive Action
Result. Flight Crew: Requested ATC Assistance / Clarification
Result. Flight Crew: Diverted
Result. Flight Crew: Overcame Equipment Problem
Result. Flight Crew: Landed in Emergency Condition
Result. Flight Crew: Inflight Shutdown
Result. Air Traffic Control: Provided Assistance
Result. Aircraft: Aircraft Damaged

Assessments

Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1

The aircraft was on a test flight, operating with VFR Flight Following from Center, and conducting numerous symmetric and asymmetric thrust test points at V2min and Vac. When the incident occurred the aircraft was stabilized in a test point with Flaps 20 Gear Up at 123 KCAS with left engine at 85.3%N1 and the right engine at idle. After just under 5 minutes of stable flight, climbing at approx 500 fpm, there were a series of loud bangs from the left engine and a smell of oil entered the cockpit. Engine indications in the cockpit showed a rapid decay of N1, N2 and ITT. The engine was fully instrumented for performance flight test and an [aerospace company] engineer on board was able to confirm a significant engine stall event and that the engine was shutting down.

The aircraft was turned direct [to the nearest airport], leveled at 7,000 ft MSL, accelerated to 200 KCAS with Flaps Up, and the ENG FAIL L checklist was executed to completion. A PAN PAN PAN call was made on the current frequency. During the transit to [the airport] the trailing cone static system was retracted and water ballast moved to adjust CG to approximately 10%. Communication was established with Company Dispatch using a satellite phone. The One-Engine Inoperative Landing checklist was used and the aircraft landed from a visual approach.

During the landing roll BRAKE DEGRADE R advisory message appeared momentarily and braking action was poor from the right side. During taxi to the FBO brake temperatures peaked around 550 C on the left side, 200 C on the right (both well below expected fuse plug release). Thrust reverser was not used for the landing as it had been inhibited due to the instrumentation suite installed in both engines.

Preliminary inspection post-flight indicated probable contained blade failure in the HP (High Pressure) compressor section and possibly some damage in the LP (Low Pressure) compressor too.

One learning point from the event was with the electronic checklist that was used on an iPad. A hard copy QRH was available on the flight deck, but it was in the PF (left seat) cockpit side bin and the PM (right seat) was in the habit of using a pdf reader app on an iPad for Normal checklists so forgot to ask for the hard copy. The Index of CAS (Crew Alerting System) messages in the iPad QRH was not hot-linked to the corresponding pages in the QRH so the PM resorted to using the word search function to skip as quickly as possible to the appropriate procedures. It would have been much more convenient in a high stress & high workload situation if hot-links were available in the index, and to jump quickly from the ENG FAIL procedure to the Landing procedure.
A CRM learning point was that both pilots were unaware that the current aircraft configuration meant that auto ground spoiler would not deploy on landing. There was no mention of this in the QRH Landing procedure. Normal cockpit procedures, with the PM watching for ground spoiler deployment on touchdown, identified the issue immediately and the spoilers were manually deployed using the speed brake handle. In post-flight discussions it was found that the Flight Test Engineers on board were aware of the functionality, but assumed the pilots knew it.

Synopsis

A First Officer reported that during testing they heard a series of loud bangs and an oil smell in the cockpit, then an engine flamed out so they landed at the nearest airport.
Time / Day
Date: 201707
Local Time Of Day: 0601-1200

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude.MSL.Single Value: 10000

Environment
Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 10
Light: Daylight
Ceiling.Single Value: 1600

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Personal
Make Model Name: SR22
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Personal
Flight Phase: Cruise
Route In Use: Direct
Airspace.Class E: ZZZ

Component
Aircraft Component: Navigational Equipment and Processing
Aircraft Reference: X
Problem: Malfunctioning

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.Total: 1905
Experience.Flight Crew.Last 90 Days: 28
Experience.Flight Crew.Type: 1260
ASRS Report Number.Accession Number: 1475763
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 : Weather / Turbulence  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Diverted  
Result.Flight Crew : Landed As Precaution  
Result.Flight Crew : Landed in Emergency Condition  
Result.Flight Crew : Requested ATC Assistance / Clarification  
Result.Air Traffic Control : Provided Assistance  

Assessments  
Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft  

Narrative: 1  
In cruise, having just passed over ZZZ airport. Was navigating to fly through a wide gap in thunderstorms approximately 40 nm south of position. Noticed the Avidyne Multifunction Display (MFD) flicker, followed immediately by the smell of electrical burning/arching. Elected to turn 180 deg immediately and informed ATC my intention to land at ZZZ with priority handling. I had my copilot get the ATIS for landing information while I descended rapidly through the OVC layer. No fire, no smoke. Display remained on during descent, but smell continued. Due to altitude and short distance to ZZZ, I overshot airport and had to spiral back, all in IMC. Broke out of OVC on downwind to runway, saw runway and landed visually. Was able to taxi to the ramp and shut down without further incident. Call made to ZZZ tower as requested.  

In hindsight, I could have pulled the breaker for the MFD and relied on my GPS or iPad for navigation to ZZZ. The display continued to function without smoke, however, and I used it to locate the airport as I spiraled down in IMC.  

Synopsis  
SR22 pilot reported that during cruise the Multifunction Display flickered then he smelled electrical burning/arching.
**Time / Day**
Date: 201708
Local Time Of Day: 1201-1800

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

**Environment**
Light: Daylight

**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
Nav In Use: FMS Or FMC
Flight Phase: Landing
Flight Phase: Final Approach
Airspace.Class B: ZZZ

**Component**
Aircraft Component: APU
Aircraft Reference: X
Problem: Malfunctioning

**Person : 1**
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: General Seating Area
Reporter Organization: Air Carrier
Function.Flight Attendant: Flight Attendant In Charge
Qualification.Flight Attendant: Current
ASRS Report Number.Accession Number: 1473801

**Person : 2**
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Galley
Reporter Organization: Air Carrier
Qualification.Flight Attendant: Current
ASRS Report Number.Accession Number: 1473803

**Events**
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector.Person : Flight Attendant
When Detected : In-flight
Result.General : Maintenance Action

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
When we leaving [the departure airport] and performing demo, we smelt a faint odor of dirty socks. It quickly disappeared once we started pushback. During the flight we did not smell any weird odors. When we were landing, wheels went down, and immediately we all three smelt a very strong dirty sock odor. I immediately grabbed a coffee pack and stayed as low to the floor as possible so as to not breathe in many chemicals. Once we performed our door duties, I called the captain to inform him I would be opening the doors to get air in the cabin. All 3 of us went to urgent care on recommendation of the fire department that met the plane. Mechanicals also did find an oil leak in the APU. They MEL'd it and had another crew work our next flight.

Narrative: 2
During push back, we smelled a faint odor of dirty socks around row 8. It was not too strong so we continued on. The flight proceeded without incident. At final approach, a VERY strong “dirty sock” odor filled the cabin. The smell was even stronger as I came to the back galley after doing my final cabin check. The “C” FA and I covered our mouths and noses with coffee bags and paper towels. The fumes were very nauseating. I then called the “A” FA to inform her of our situation. Before I could utter a single word, she said "you guys smell it too?" I told her that we think it's a fumes event. She said she would call the flight deck.

We got to the gate, did our disarming procedures, and the passengers started to deplane. The C FA called up front and got the ok from the captain to open 2R so we could seek fresh air. We waited for all the passengers to leave and then exited the aircraft as soon as possible. Before we left, there were 3 maintenance guys that came to the back galley. As soon as they were back there, one said out loud. "Oh yeah. I smell the oil."

We gathered our belongings and left the aircraft. We sat behind the gate area as the [cabin manager], pilots, and gate personnel talked to us. About 1 ½ hours later the maintenance guy came out and verbally confirmed with us that yes we were in a fumes event. They had found that the APU was definitely leaking oil and that it transferred into the cabin. He then told us that they are going to MEL the APU. So that the aircraft could fly again. We told the [cabin manager] that we were very foggy and not feeling well and we would like to be looked at. The paramedics came to check us out and recommended that we should go to urgent care. The FSM put us in a [cab] and we went to the urgent care. The urgent care took 2 1/2 hours to get us in. We then got checked out and they drew blood to test for carbon monoxide poisoning. We left, went to the hotel and deadheaded home the next morning.

Synopsis
A319 flight attendants reported a dirty sock odor and fumes in the cabin. After block in the cabin crew reported exposure to a fume event and went to an urgent care facility. Maintenance inspection discovered an oil leak.
**Time / Day**
- Date: 201708
- Local Time Of Day: 0601-1200

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

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

**Aircraft**
- Reference: X
- ATC / Advisory: Ramp: 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: Taxi

**Component**
- Aircraft Component: APU
- 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: 1473783

**Events**
- Anomaly.Aircraft Equipment Problem: Less Severe
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Detector.Person: Ground Personnel
- Detector.Person: Flight Crew
- When Detected: Taxi
- Result.General: Flight Cancelled / Delayed
- Result.Aircraft: Aircraft Damaged

**Assessments**
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

About to push out of gate and then I smelt smoke in the flight deck and asked the FO (first officer) if he smelled anything as well and he said yes and then the aircraft had a power surge. At the time I thought the APU gen just went offline but then the whole aircraft shook and APU RPM went from 100 to 0 in a matter of seconds, less than 2. At this time the FO called the FA (Flight Attendant) to ask if there was any smoke and she said no not at this time. At the same time, ramp told us that we were on fire and [there was] smoke coming from the APU and I asked the ramp to repeat himself. He said well it's not on fire anymore but a lot of smoke coming out; still the FO called the FA again and asked if there was any smoke in the cabin she said yes there is now some smoke and a few passengers said there was a lot of smoke on the right side outside of the aircraft. At this time I'm looking up the ramp frequency because we are on battery power and only the standby radio works. While doing so I hear in my headset another ramp person said there's still smoke coming from the APU.

I called ramp and I told them we need ARRF/airport fire department to the aircraft immediately. Ramp responded with roger. I also called maintenance to tell them to get to [the gate] for APU severe failure. As I'm looking on the EICAS I'm trying to figure out what the heck is going on because there is no APU fire warning bell going off but I put it together that the APU had a severe internal breakage. I think it was a fan blade inside the APU that was loose that caused the APU to seize up which made the APU violently turn off. That was what shook the aircraft violently and the turning off of the APU is why we were on battery power but the no APU fire bell I'm still scratching my head. One pilot did tell me that the APU has to be able to get power to alarm but that's what he told me. I think it still would because it's off the hot battery bus but that's for maintenance to figure out. Keep in mind this all happened in less than 60 seconds.

I went outside the aircraft to go find out for myself because the aircraft reporting system is not reporting what the ramp is telling me. I went to the back of the aircraft and I saw no smoke or fire. That is when approximately 7 airport fire trucks showed up lights on police cars and fire chief cars while I was outside I talked to the fire fighters, fire chiefs, police and maintenance about what just happened. We went all went to the aft bay and opened up the hatch to see if we see anything which I did not. I called dispatch, maintenance control, and the supervisor on the bridge I was then told there's a reposition flight coming from [another airport] to swap our aircraft because everyone said yeah this thing needs a full check if not a replacement of the APU. So as I talk to the first maintenance personal I ran into I told them what happened there response oh we can just defer it I told them well you can but I will not be flying it find someone else to fly this thing the APU is destroyed. Then some senior maintenance personal came over and said no we have to check this thing spin the blades and make sure the failure was contained.

Then I went back up to the aircraft told the passengers we are going to deplane take all their belongings with them I gave a short reason why it was because our APU failed and once everyone is at the gate I will come up and tell you further details. I told the [operations agent] that we are going to deplane she said ok thanks, and helped with the deplaning process. I then wrote this failure up [and] took a picture of the write up and sent it to [Maintenance Control]. Then the chief pilot was on the bridge wanting to know info I told him and he said he'll contact dispatch to see if we can go on this aircraft for maintenance to defer it. I stopped him right in his tracks and said no they will not defer the APU if they do I'm not flying it. There was fire and smoke coming from this aircraft it
needs to be fully inspected for major damage. We discussed this situation and after he was satisfied he thanked us and went on with his day and then I called dispatch back asking for another airplane. They said give them a little bit so I called back a bit later and they said there's an airplane [waiting] for us and on our way we went to finish our day with 3 legs left.

Synopsis

CRJ200 Captain reported an APU fire and shutdown just before pushback from the gate. Captain reported passengers were deplaned and aircraft was put out of service.
ACN: 1473000 (8 of 50)

**Time / Day**
- Date: 201708
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: MHLM.Airport
- State Reference: FO
- Altitude.AGL.Single Value: 0

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

**Aircraft**
- Reference: X
- ATC / Advisory.Ground: MHLM
- Aircraft Operator: Air Carrier
- Make Model Name: Airbus Industrie Undifferentiated or Other Model
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Parked

**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: Captain
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1473000
- Human Factors: Confusion
- Human Factors: Physiological - Other
- Human Factors: Situational Awareness
- Human Factors: Time Pressure
- Human Factors: Workload
- Human Factors: Communication Breakdown
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: Ground Personnel
- Analyst Callback: Attempted

**Events**
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Detector.Person: Flight Crew
- Were Passengers Involved In Event: Y
- When Detected: Aircraft In Service At Gate
- Result.General: Evacuated
Result. Flight Crew: Took Evasive Action
Result. Flight Crew: FLC complied w/ Automation / Advisory
Result. Flight Crew: Became Reoriented
Result. Air Traffic Control: Provided Assistance

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

Narrative: 1
After parking at the gate, ECAM: "SMOKE AFT CARGO SMOKE". Followed Airbus procedural steps with FO, identified as ECAM action checklist, followed ECAM and noted 'if aft cargo closed' step. Aft cargo indicated closed, so proceeded to 'agent discharge' and then 'Passenger disembark'. I contacted Purser and ordered FAs to initiate emergency deplaning via Jet Bridge and aft stairs (Passengers on ramp were escorted to immigration via terminal door). I called Tower and in plain English stated 'request fire truck to aircraft', was advised no smoke seen and truck on the way. I completely shut aircraft down after last passenger and FA was off (I walked aisle to check) and Fire Chief opened aft cargo door. No sign of any fire in compartment. Two FAs treated at scene for fume inhalation, no other injuries reported.

Afterwards, station personnel came to me and informed me that it is normal procedure in MHLM after engine shutdown for them to open cargo compartments and spray insecticide (sitracsum) into bay, then shut the cargo door again. Apparently, this has caused warnings before, but there has been no notification to crews about this, nor are there any messages or anything to inform crews about this. This puts the crew in the impossible position of having to decide if the smoke warning is real or not, with disturbing implications for other similar scenarios.

INFORM CREWS OF THIS! This is a classic breakdown in chain of information distribution that could have led to serious injuries. I suggest that this insecticide procedure be halted at once until further tests and/or Airbus manufacturer approval be obtained for this substance.

Synopsis
Airbus Captain reported receiving a SMOKE AFT CARGO ECAM during deplaning. It was later determined the alarm was caused by insecticide sprayed into the compartment by ground personnel.
**ACN: 1472806 (9 of 50)**

**Time / Day**
Date: 201708
Local Time Of Day: 1801-2400

**Place**
Locale Reference, ATC Facility: KZAK.ARTCC
State Reference: HI
Altitude, MSL, Single Value: 37000

**Environment**
Flight Conditions: VMC
Light: Dusk

**Aircraft**
Reference: X
ATC / Advisory, Center: KZAK
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
Mission: Passenger
Nav In Use: FMS Or FMC
Nav In Use: GPS
Flight Phase: Cruise
Route In Use: Oceanic
Airspace, Class A: KZAK

**Component**
Aircraft Component: Traffic Collision Avoidance System (TCAS)
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: 1472806

**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)
ASRS Report Number: Accession Number : 1472807

Events
Anomaly: Aircraft Equipment Problem : Critical
Anomaly: Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector: Person : Flight Crew
When Detected : In-flight
Result: Flight Crew : Diverted
Result: Flight Crew : Landed in Emergency Condition

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
At FL370, smoke was observed emanating from the forward center console. Followed SOP related to phase 1 event and initiating diversion to ETOPS alternate, notified ATC via CPDLC obtaining clearance, briefed and coordinated with Cabin Crew, briefed passengers, coordinated diversion with dispatch via HF phone patch. Smoke ceased and was clear within 2 minutes following circuit breaker E-12 automatically opening. Normal precautionary landing executed.

Of note related to operational challenges were:

1) Faulty cockpit/cabin interphone system causing difficulty in communicating with cabin crew at all stations. Cabin crew could hear and understand statements from the cockpit crew but the cabin crew statements were broken (suspect faulty jacks at FA handsets).
2) Failure of voice communications to make or receive calls to/from dispatch.
3) Failure of ACARS printer related to receiving fully useable re-release and landing data. This information as presented on the MCDU is all but unusable.
4) First flight attendant reported that initial PA made by captain was difficult to hear by passengers. She made a subsequent PA announcement generally repeating the information that had been provided.

Suspect electrical short related to TCAS display unit located in forward center console.

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

Synopsis
B767-300 flight crew reported smoke from an electrical short in the TCAS display led to an ETOPS diversion.
**Time / Day**
- Date: 201708
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference, ATC Facility: ZZZ.Tower
- State Reference: US
- Altitude, AGL, Single Value: 100

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

**Aircraft**
- Reference: X
- ATC / Advisory, Tower: 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: 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: First Officer
- Function, Flight Crew: Pilot Flying
- Qualification, Flight Crew: Air Transport Pilot (ATP)
- Experience, Flight Crew, Total: 720
- Experience, Flight Crew, Last 90 Days: 220
- Experience, Flight Crew, Type: 710
- ASRS Report Number, Accession Number: 1472246
- Human Factors: Situational Awareness

**Person: 2**
- Reference: 2
- Location Of Person, Aircraft: X
- Location In Aircraft: Flight Deck
Sleep, layover, and crew brief all uneventful beginning day 2 of a 2 day pairing with the same flight crew. [Maintenance release] listed engine swap out for Number 1 engine and ETOPS verification required. We briefed the engine change, examined on preflight and found no issues. Further preflight briefing discussed monitoring the engine for any abnormalities. Preflight and engine start normal and pushed from gate a few minutes early. Started both engines due to short taxi and the fact that the engine had been changed out so we wanted time to assess how it was doing. No issues for engine start or before takeoff checks. All indications and smells appeared normal. Cleared for takeoff. Engine spooled normally. At rotation (above V1), I smelled a faint odor from what appeared to be the FO (First Officer) air vent and determined I would safely get the aircraft airborne and out of a critical phase of flight before further assessment. There were no other cockpit indications or lights that I observed. Approximately 100 feet off the ground the flight attendant call button rang twice to notify the PM (Pilot Monitoring) of a smell in the main cabin. The smell went from faint to noticeable. The odor smelled like a burning fluid vice electrical type smells. We [advised ATC] with departure and complied with critical action items for smoke and fumes in the cockpit. ATC leveled us at 5000 ft and
set us up for a downwind to return for a visual arrival. As part of troubleshooting and seeing no visual smoke or fumes, we checked and the smell dissipated within approximately 2-5 minutes. Our CRM and piloting focus was on getting an aircraft safely on the ground, rather than running further items in the QRH beyond critical actions. The aircraft was airborne for 11 minutes total. I continued to fly the aircraft while the Captain worked radios and consultation with the flight attendants. They felt the odor subsided as well. I landed the aircraft on speed and softly (albeit overweight due to the nature of the emergency) and cleared [the runway] where we were met by emergency crews.

After touchdown, we instructed the passengers to remain seated and continued with the smoke/fumes checklist in the QRH. I then discovered that the recirculation fans had been off (incorrectly), but I don't suspect that any increased load on the packs caused the odor that subsided. Airflow volume remained normal throughout. We left them off per the QRH. We opted to not troubleshoot isolating each packs in latter steps of the checklist. No further smells on flight deck or cabin other than some lingering odor. Shut down engines and ran the APU for fire crews to assess. No further indications of a problem inside or outside the aircraft.

We consulted with maintenance, who suspected residual fluids due to the engine change. Maintenance approved a single engine taxi on the number 2 engine back to parking. We returned to the gate without incident and deplaned the passengers after appropriate checklists.

After parking checklist we were met by maintenance. One member speculated that the engine change had not had a full test cell engine run due to a change in company or practices. I have no way to personally corroborate this, but it seems quite reasonable that IF this is correct, such an odor would have been detected prior to flying it with passengers on board.

**Narrative: 2**

At rotation there was a strong fume/smoke smell. Immediately upon lift off flight attendants in rear reported the same. I donned oxygen masked [advised ATC]. Fume/smoke smell dissipated around the pattern. Immediately returned to [the airport] for a smooth, minimal sink rate overweight landing. Fire Crews met us, no evacuation.

**Narrative: 3**

During flight we smelled smoke and made a quick return to [the airport]. We deplaned and the crew also left the plane with our suitcases and belongings left on board. We switched aircraft and another flight attendant had grabbed my belongings from [the aircraft]. I completed the flight and upon arrival received a call inflight that my [manual] had been found on [another aircraft] by the new crew. I had no idea my [manual] was not on me because I had my link case as well as my sled where I always keep my [manual]. Upon arrival I immediately contacted [the base] inflight as well as the crew who was bringing my [manual] with them to return to me.

**Synopsis**

B737 flight crew reported that they smelled smoke in the cabin right after lift-off.
Time / Day
Date: 201708
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: Daylight

Aircraft
Reference: X
ATC / Advisory.Ground: 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
Flight Phase: Taxi

Component
Aircraft Component: 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: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Type: 1205
ASRS Report Number.Accession Number: 1471932
Human Factors: Situational Awareness
Analyst Callback: Attempted

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Ground Event / Encounter: FOD
Detector.Person: Flight Crew
When Detected: Taxi
Result: General: Maintenance Action  
Result: Flight Crew: Requested ATC Assistance / Clarification  
Result: Aircraft: Aircraft Damaged

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

Narrative: 1

After landing at ZZZ Ground Control directed us to wait on taxiway B short of Q1, then turn and stop on taxiway A to wait for our gate. While stopped at the Taxiway A location pointing east, with throttles in idle thrust awaiting our gate to open, a loosely wadded roll of clear plastic approximately 15 feet in width and 3 feet in diameter driven by the wind tumbled and rolled (reported surface winds were 290/19) toward the aircraft from our 1 o’clock position across our nose (about 50 feet in front of the nose) toward the left wing. As it passed in front of the aircraft nose, I asked the Captain, “Does it look like that FOD will go in the engine?” Radio chatter prevented a timely verbal reply, and seconds later, as the Captain turned his head to look at the left engine nacelle, the number 1 engine (left nacelle) shuddered and stopped with an amber "engine fail" indication on the center display panel.

The Captain remarked that the plastic had just entered the engine intake. The Captain then directed me to cut off the number one engine after transferring the electrical bus to the APU, which was already running. No fire warnings or high EGT indications happened. The engine shuddered and stopped abruptly. While we were executing the engine failure checklist in the QRH, a regional jet behind us reported small flames at the bottom back section of our left engine on Ground Control radio frequency. We then coordinated with responding fire department, maintenance, operations, and ground control to 1) verify the fire was out, 2) that the jet was safe to move to the gate, and 3) that no evacuation was needed. After getting the needed approval by the fire department and maintenance representatives, we then taxied into parking and deplaned the passengers without further incident. We also pointed out other multiple similar pieces of nearby drifting rubbish to field operations personnel and request that they clean them up before they created another similar hazard.

Synopsis

B737 First Officer reported the left engine shut down abruptly after ingesting a large piece of plastic FOD while waiting for their gate on a taxiway.
Time / Day
Date: 201707
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 37000

Environment
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: 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: Cruise
Airspace.Class A: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1471443
Human Factors: Physiological - Other
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Attendant

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
Detector.Person: Flight Attendant
When Detected: In-flight
Result.General: Physical Injury / Incapacitation

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1
One hour and fifteen minutes into the flight and leveled at FL370 the aft FA called the flight deck via the interphone system to report that she was smelling a pungent odor in the aft section of the aircraft and that she was made ill by it. I tried to identify exactly what it was that she was smelling but she was unable to give me any helpful description. I called the "A" FA and asked her to investigate the odor that the aft FA was trying to describe. After fifteen minutes or thereabouts she came back on the interphone and explained that she had gone to the rear of the airplane and that she was also feeling sick.

After inquiring of her she advised that her eyes and throat were burning and that she felt dizzy. Again she was unable to identify a precise odor. I proceeded with the suggestion of having medical personnel meeting the aircraft to have all FAs evaluated. The lead FA responded that it was unnecessary to do so. We suggested that the aft FA be put on portable O2 which they did and that she be moved out of the aft aircraft section. After ten more minutes we called back again to verify how she was doing and the O2 seemed to have helped.

By now we were 25 minutes from landing. During the arrival cabin prep and the FAs having to clean and clear the cabin for landing all three FAs were back busy in the aft cabin preparing the aircraft for our arrival. With less than 20 minutes left before touchdown I checked with the lead FA once more to see if any passengers had experienced any symptoms of illness and she verified that no one had but that all three of them (FAs) were now feeling very ill with irritated throats, itchy eyes and trouble breathing properly. By now we're 10 minutes from touchdown so we contacted company to have medical personnel meet the aircraft at the gate to evaluate and help our flight attendants. Upon landing with a fast taxi to our gate we were met by paramedics, FBI, maintenance and ground personnel.

By the time I had a chance to leave the flight deck and check on my flight attendants I saw the aft FA being carried out on an aisle chair quite incapacitated. The other two FAs also looked flushed and in a great deal of distress. I walked to the back of the aircraft to ascertain for myself what they might have been exposed to and found my FO attending to their needs along with the first responders. As I walked past row 24 of the aircraft a very strong pungent smell, like acid, stopped me on the spot. I also instantly experienced burning of the eyes and throat.

I walked back towards the front of the aircraft to see if the smell would change and indeed realized as I walked past row 16 that I could not smell the odor anymore. I turned again toward the rear of the aircraft and walking past row 24 once more was hit by the pungent odor identified earlier. Again my throat and eyes were burning and I saw our maintenance technician who was also trying to identify the odor in the aft galley suffering from the same symptoms I was experiencing. At this time all crew members and maintenance staff left the aircraft so that the proper authorities could investigate.

**Synopsis**

A319 Captain reported several Flight Attendants were physically affected by unidentified fumes in the aft section of the aircraft. One was sufficiently incapacitated that she was removed by aisle chair at the end of the flight.
ACN: 1471355 (13 of 50)

Time / Day
Date: 201708
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZZ.Airport
State Reference: FO
Altitude.MSL.Single Value: 29000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: ZZZZ
Aircraft Operator: Air Carrier
Make Model Name: MD-11
Crew Size.Number Of Crew: 4
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Cargo / Freight
Flight Phase: Cruise
Route In Use: Oceanic

Component
Aircraft Component: Cooling Fan, any cooling fan
Aircraft Reference: X
Problem: Failed

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Crew Rest Area
Reporter Organization: Air Carrier
Function.Flight Crew: Relief Pilot
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 11912
Experience.Flight Crew.Last 90 Days: 104
Experience.Flight Crew.Type: 3407
ASRS Report Number.Accession Number: 1471355

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)  
Experience.Flight Crew.Total : 12000  
Experience.Flight Crew.Last 90 Days : 13  
Experience.Flight Crew.Type : 6000  
ASRS Report Number.Accession Number : 1471361

**Person : 3**

Reference : 3  
Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Flight Crew : First Officer  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Experience.Flight Crew.Last 90 Days : 46  
Experience.Flight Crew.Type : 3000  
ASRS Report Number.Accession Number : 1471358

**Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Diverted  
Result.Flight Crew : Landed As Precaution  
Result.Flight Crew : FLC complied w / Automation / Advisory

**Assessments**

Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft

**Narrative: 1**

The Captain (pilot flying) and IOE instructor (pilot monitoring) noticed a loud noise and vibration coming from the avionics compartment. This was followed by very strong electrical (burning) fumes requiring the use of oxygen on the flight deck. At the time of occurrence, I was an hour into my break, asleep in the crew bunk. The "FO2" (scheduled on the flight due to IOE) was awake and sitting in the courier area. There were no fumes in either the bunk or the courier area. We advised ATC, coordinated with dispatch, and diverted to ZZZZ. Although as we approached ZZZZ, the fumes seemed to subside somewhat, we maintained our urgent status. ARFF and equipment were out at the runway, standing by for our arrival and followed us in to parking. The divert, landing, and taxi-in were uneventful.

After block-in, our maintenance technician jumpseater informed us that the avionics cooling fan #2 had failed and was likely the cause of the fumes. He had obtained this information from the aircraft health management system. It was also available through CFDS (Centralized Fault Display System) on the aircraft. While we had suspected an avionics cooling fan, we had no way to confirm it as we had no alerts displayed and all circuit breakers remained closed. It would have been helpful to know that avionics cooling fan #2 was the probable cause of the fumes. Had the situation become worse (fan actively burning, for example) this information would have been absolutely critical. When a crew contacts dispatch with an urgent or emergency situation, part of the dispatcher's
"checklist" should be to coordinate with Maintenance Control to provide any relevant information to the crew. In addition, flight crews should have basic instruction and familiarity with CFDS so they can identify problem components in situations such as this. The smoke/fire/fumes checklist in our aircraft states that if you can identify a problem component, attempt to isolate it. We have the ability, in many cases, to do just that. The information is at our fingertips but we are not trained to access it. This needs to be fixed.

**Narrative: 2**

[Report narrative contained no additional information.]

**Narrative: 3**

[Report narrative contained no additional information.]

**Synopsis**

MD-11 flight crew reported fumes in the cockpit coming from the avionics compartment at cruise and diverted. They highlight the need for training on use of the onboard Centralized Fault Display System.
**Time / Day**
- Date: 201708
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference: Airport: ZZZ.Airport
- State Reference: US
- Altitude MSL Single Value: 9000

**Environment**
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory: TRACON: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: EMB ERJ 145 ER/LR
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Descent
- Airspace Class E: ZZZ

**Component**
- Aircraft Component: Electrical Wiring & Connectors
- 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
- Function: Flight Crew: First Officer
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number: Accession Number: 1470793

**Events**
- Anomaly: Aircraft Equipment Problem: Less Severe
- Anomaly: Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Detector: Person: Flight Attendant
- When Detected: In-flight
- Result: General: Maintenance Action
- Result: Flight Crew: Landed in Emergency Condition
- Result: Flight Crew: Diverted

**Assessments**
Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft

**Narrative: 1**

I was pilot flying on this flight. Before departing an electrical smell was noted in the cabin by the FA (Flight Attendant) and CA (Check Airmen). Maintenance searched for the source and could not duplicate it. Enroute, the cockpit PA /CALL/ EMER lights illuminated simultaneously on the PA module. We had no communication with the cabin at that point due to the PA system malfunction. Moments later the FA knocked on the flight deck door to inform us that the smell returned. We were at 9000 ft. The CA and I decided to land at [the nearest suitable airport]. The landing was normal.

**Synopsis**

Air carrier First Officer reported an electrical fumes in the cabin prior to departure which Maintenance could not locate and dissipated on their own. Enroute the fumes returned and the flight diverted.
Narrative: 1

During preflight we were notified of total dry ice of 1229 KG and a waiver was issued. Maximum dry ice without waiver is 966 kg. FO preflight and wore the CO2 detector. On pushback with packs off and starting engines his detector alarmed level 1 with .8 registering. Just to make sure it was not malfunctioning we turned the extra monitor on and it too alarmed. Told pushback crew to bring us back in gate and we shut down engines. Turned AC packs on
and opened FOs window for ventilation as towed back in gate. Conferred with the HazMat specialist, maintenance, Ground operations, and Dispatch. Concluded to take off pallet position 3L which had majority of dry ice containing 861.7 kg. Continued on flight after receiving proper paperwork and redoing our preflight duties. No further issues.

Excessive dry ice near cockpit causing monitor alarms to go off. I've carried a lot of dry ice using waivers and never had this problem. Not sure why this time it set alarms off. Prevention methods would be to carry less and maybe move it further back from flight crew, or in belly.

**Synopsis**

B767-300 Captain reported returning to the gate after the crew's CO2 detector alarmed because of a large quantity of dry ice that had been loaded under waiver.
**ACN: 1468447 (16 of 50)**

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

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Relative Position.Distance.Nautical Miles: 1
- Altitude.MSL.Single Value: 1400

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 30
- Light: Daylight
- Ceiling.Single Value: 20000

**Aircraft**
- Reference: X
- ATC / Advisory.CTAF: ZZZ
- ATC / Advisory.TRACON: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Baron 58/58TC
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Initial Approach
- Airspace.Class E: ZZZ

**Component**
- Aircraft Component: Gear Extend/Retract Mechanism
- Aircraft Reference: X
- Problem: Failed

**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: Commercial
- Qualification.Flight Crew: Multiengine
- Experience.Flight Crew.Last 90 Days: 69
- Experience.Flight Crew.Type: 163
- ASRS Report Number.Accession Number: 1468447
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Landed in Emergency Condition

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
I was approaching ZZZ airport from the west for landing. I had been making radio calls over the CTAF from 15 miles west of the airport all the way into the downwind for runway 30. No other aircraft seemed to be in the vicinity or at least nobody made any radio calls that they were in that vicinity.

When I moved the gear selector to the down position I heard the gear move but did not receive three green lights. I confirmed the lights with the light annunciator button and verified the lights were in working condition. I then cycled the gear back up and after a period of waiting put the selector back into the down position. At this time I began to smell a slight burning odor and noticed a small amount of smoke coming from under the pilot/co-pilot seat. I reached over to pull the gear motor circuit breaker, but realized it had already tripped. At this point I called Approach to notify them of my situation and explained to them I just wanted to make contact with them in case I needed some help, but for the time being I would be performing a manual extension.

I departed the airport pattern to the north-west and used the auto pilot in heading and altitude hold modes while I pulled out the POH and referred to the gear manual extension section. I explained to my passenger to help me scan for traffic while I was multi-tasking. Upon execution of the POH instructions I was unsuccessful in producing three green lights. I decided to call [a relative] via cell phone and have him drive to the airport so I could perform a low approach and he could attempt a visual look at the landing gear. Upon his arrival another very experienced commercial pilot who was at the field helped him to look at the landing gear while I flew the low approach. They were both confident all three gears were down and locked. I then decided to attempt and turn the manual extension handle more, but could still not get three green lights. With plenty of time I then did a second low approach to confirm again all three gears looked down and locked. They confirmed once again that the gear looked down and locked.

I referred to the POH on a gear-up landing and had the plane configured and/or ready for a possible gear collapse upon landing. I made a normal approach to landing and was very careful to set the plane onto the runway softly. After touch down the airplane reacted normal and we were able to exit the runway without incident.

All worked out well in this situation, but we were prepared for the worse.

Synopsis
BE58 Baron pilot reported a landing gear motor failure and manual extension.
Time / Day
Date: 201707
Local Time Of Day: 1201-1800

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

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Corporate
Make Model Name: Learjet 31
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Passenger
Flight Phase: Initial Climb
Route In Use: Vectors
Airspace.Class C: ZZZ

Component
Aircraft Component: Compressor Bleed Valve
Aircraft Reference: X
Problem: Malfunctioning

Person: 1
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: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 3400
Experience.Flight Crew.Last 90 Days: 40
Experience.Flight Crew.Type: 300
ASRS Report Number.Accession Number: 1468167
Analyst Callback: Completed

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
ASRS Report Number.Accession Number : 1468190

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
After receiving clearance we departed. The route description is to climb on a heading of 210 to cross ZZZZZ at or below 1750 ft. At approximately 1500 ft I engaged the NAV function and autopilot. The plane immediately started a turn to the left away from the course in the FMS. I disengaged the auto pilot and began a turn to the right on course when ATC queried me and then gave me vectors. At approximately 3000 ft the cockpit and cabin began to get hot and fill with smoke. We [advised ATC] and landed on Runway XX. It is not clear at this time if there was a malfunction of the autopilot due to the cause of the smoke. We expedited what we thought was the appropriate action to stay on course without causing an air incident while dealing with the [smoke and heat].

Callback: 1
Reporter stated that post flight maintenance inspection revealed a stuck bleed valve on one of the engines pumped bleed air into the aircraft which caused the heat and smoke.

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

Synopsis
Lear 31 flight crew reported smoke and heat in the cockpit. The crew returned to the departure airport.
ACN: 1467819 (18 of 50)

**Time / Day**
- Date: 201707
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 37000

**Environment**
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory.Center: 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
- Nav In Use: GPS
- Nav In Use: FMS Or FMC
- Flight Phase: Cruise
- Airspace.Class A: ZZZ

**Person**
- 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: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1467819
- Human Factors: Communication Breakdown
- Human Factors: Physiological - Other
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: Ground Personnel

**Events**
- Anomaly.Aircraft Equipment Problem: Less Severe
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
- Detector.Person: Flight Attendant
- When Detected: In-flight
- Result.General: Physical Injury / Incapacitation
- Result.General: Maintenance Action
- Result.Flight Crew: Took Evasive Action
Assessments

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

Narrative: 1

At 37,000 MSL and approximately 380 NM from destination received communication from Flight Attendant Number 3 (FA3) in Aft Galley that she was not feeling well due to an apparent odor/fume. CA/FO immediately asked for more information specific to the nature of the smell and if she could identify the location, source and severity of the situation. FA3 did not believe the problem was serious enough for medical attention but wanted to keep the aircrew informed of the abnormality. CA/FO informed dispatch via ACARS Free Text Message and spoke to FA1 directly, asking her to keep an eye on the situation and inform CA/FO of any updates. Approximately 15-20 min later, FA1 informed the CA/FO that she has rotated the flight attendant crew through the aft-most station and the situation seemed to be contained but an obvious write-up would be necessary for the next crew. Approximately 15-20 min later, all flight attendants were beginning to feel ill due to fumes in the aft galley. Shortness of breath, tingling in fingertips, and dryness of throats were the most common symptoms amongst the FA Crew. Passengers did not appear to be affected but FA1 now believed medical attention would be required upon arrival for her and her crew. At this point we were approximately 20 min from landing.

CA maintained aircraft control and managed arrival into our destination, FO communicated intentions to begin descent as soon as practical, informed FA1 to put any affected crew members on oxygen as discreetly as possible and immediately notified dispatch via ACARS that medical attention is required upon arrival. After landing with all flight attendants near incapacitation the FO made multiple attempts to convince the paramedics to board and treat the most seriously injured FA as soon as possible. Paramedics refused to board the plane for fear of also succumbing to any toxic gas/fumes present. At this point FO elected to deplane all passengers and asked the CA to make a public address announcement that one of the Flight Attendants was very ill in the back of the plane and medical staff would be seen upon their deplaning. After multiple Airlines Service and Maintenance Support Personnel boarded to help the ailing FA, FO was able to convince one of the medics to proceed to the aft galley and help the most seriously impaired FA. With passenger and FA deplaning complete, CA/FO went to back of plane and noticed a very obvious, toxic, chemical-like smell immediately aft of row 24.

Synopsis

A319 First Officer reported an aft Flight Attendant was ill from fumes and began rotating forward flight attendants aft. By arrival time all flight attendants required medical attention for shortness of breath, fingertips tingling, and throat dryness.
ACN: 1467539

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.
**ACN: 1467436** (20 of 50)

**Time / Day**
- Date: 201707
- Local Time Of Day: 0601-1200

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

**Aircraft**
- Reference: X
- ATC / Advisory.Ground: 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: Taxi

**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: Air Transport Pilot (ATP)
- Experience.Flight Crew.Type: 1212
- ASRS Report Number.Accession Number: 1467436

**Person: 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: General Seating Area
- Cabin Activity: Service
- Cabin Activity: Safety Related Duties
- Reporter Organization: Air Carrier
- Qualification.Flight Attendant: Current
- Experience.Flight Attendant.Total: 17
- Experience.Flight Attendant.Airline Total: 17
- Experience.Flight Attendant.Type: 60
- ASRS Report Number.Accession Number: 1468226

**Events**
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Anomaly.Flight Deck / Cabin / Aircraft Event: Passenger Electronic Device
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Detector.Person : Passenger
Detector.Person : Flight Attendant
Were Passengers Involved In Event : Y
When Detected : Taxi
Result.General : Physical Injury / Incapacitation
Result.Flight Crew : Overcame Equipment Problem

Assessments
Contributing Factors / Situations : Equipment / Tooling
Contributing Factors / Situations : Human Factors
Primary Problem : Ambiguous

Narrative: 1
During taxi in to the gate, I answered a cabin call from [the lead flight attendant]. He informed me that there was a fire in the cabin. I told the captain immediately after. The captain stopped the airplane quickly and he set the brake. There was ramp construction in front and to the right of the aircraft that would be blocking a possible evacuation of the aircraft (heavy equipment, personnel, etc.). The captain asked me to call ground and inform them we have a fire and to roll the emergency equipment. I informed ground that we had a fire in the cabin, that we had stopped the aircraft, to roll the emergency equipment, and to standby for a possible evacuation of the aircraft. The captain asked me to pull up the evacuation checklist in the QRH, which I did in Content Locker on my iPad. [The flight attendant] called us back and told us the other flight attendants were fighting the fire and that a laptop was having a runaway battery fire. We told him that we had emergency equipment on the way to the aircraft and to let us know if we needed to evacuate the aircraft. I had started the APU upon landing, and it was available for power and air. The captain asked me to shut down the engines in case we needed to run the evacuation checklist. I shut down both engines and we remained on APU power. I relayed souls on board and fuel on board to ATC when they asked. [The flight attendant] called back and said that the fire was out, but that one or possibly both of the aft flight attendants had sustained injuries. I believe the captain asked if the situation was under control and if we could taxi to the gate. There were still people up in the aisle of the aircraft. While the flight attendants got everyone re-seated, we started up the number one engine. [The flight attendant] called back and said everyone was seated and we advised ground that we could taxi to the gate and that we would need medical assistance as soon as we parked at the gate. As we started to taxi in, I advised company on the ops frequency what happened and that we would be requiring medical assistance for our flight attendants and possibly some passengers. The captain made a PA to advise everyone to remain seated and that emergency personnel would be entering the cabin. We taxied into the gate uneventfully and parked the aircraft. We completed the parking checklist, and I opened the flight deck door to render any assistance in the cabin (by this time the EMT's and firefighters had already entered the cabin and were rendering assistance). Once the item that had caught fire was removed, and the flight attendants were given aid, we had the passengers deplane the aircraft normally. I called the Duty Manager to inform them what had happened and the captain coordinated with Maintenance as well our Chief Pilot.

Narrative: 2
We landed normal and taxiing in when a passengers got up. I reminded them they all had to be seated and that is when they yelled fire! This is when I noticed smoke in the cabin, I immediately called the flight deck to tell them we had a cabin fire and to stop the plane.
I grabbed an H2O extinguisher and proceeded to fight the fire. My number 2 Flight Attendant had already extinguished the suspect item. Went back to phone to call flight deck to tell them it was out and that we had 2 hurt flight attendants and a hurt passenger from the immediate stop. #2 flight attendant had put water and then ice to cool and put out the fire. We discovered that they were lithium batteries!

How did these items get through security and why was he carrying them as a carry on?

This is going to become more of a threat the more and more electronic devices that we have or allow on board the planes.

**Synopsis**

A319 First Officer and a Flight Attendant reported a cabin fire from a passenger battery thermal runaway during taxi-in.
ACN: 1466735 (21 of 50)

Time / Day
Date: 201707
Local Time Of Day: 1801-2400

Place
Locale Reference.ATC Facility: ZZZ.TRACON
State Reference: US
Altitude.MSL.Single Value: 11000

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
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
Airspace.Class E: ZZZ

Component
Aircraft Component: Navigational Equipment and Processing
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: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1466735

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
ASRS Report Number.Accession Number: 1466736

Events
Assessments

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

Narrative: 1

As a brief history, on our flight the day before on [this aircraft], upon landing an electrical burning smell was present in the flight deck. The mechanic who was riding with us said that he had been on the aircraft previously and the crew noted the same smell on a prior flight. After block-in, we wrote up the smell in the logbook and it was checked by maintenance.

Regarding this flight, loading, push, taxi, and takeoff were uneventful. Captain (CA) was Pilot Flying (PF) and I was Pilot Monitoring (PM). Upon reaching 11,000 feet, we detected the same electrical odor again. The CA's MFD began to cycle on and off with an associated clicking sound. After approximately a dozen cycles, the CRT screen made a loud "pop" and went blank. The burning smell increased at that time. We asked the mechanic to pull the Circuit Break (CB) for that screen in the interest of safety and he found it had popped on its own. We requested a level off at 16,000 feet and slowed to 250 KIAS in preparation for return. After discussing the matter we agreed that it would be prudent to return and the Captain requested the Smoke, Fire, Fumes QRH. We informed Center and were vectored back to the airport. On base, the First Officer's FMS CDU display showed a few random characters on the screen and then went completely blank. After turning off the runway, the lower EICAS screen went blank as well. The mechanic pulled the CB's for those two screens. We taxied to the north ramp without further incident.

Talking with other pilots that have flown this particular airframe, it seems to have a distinct history of these types of failures in recent weeks. Several entries in the logbook confirm that. The cause for these failures needs to be definitively identified and fixed.

Narrative: 2

I brought this aircraft in the day prior. This was the flight prior to irregularity. While taxiing in, we noticed an electrical burning odor just as we were arriving into the blocks. We wrote this up on the previous log page. Prior to this flight, I had checked the previous log pages and spoken with other Captains that had had the same irregularity in the week; or, weeks prior. On this day the previous FMC deferral was cleared and we were told they replaced the First Officer (FO) CDU. During my departure briefing, I placed an emphasis on our assessment of the maintenance status of the aircraft, the previous write ups and aircraft history. I brought up the electrical odors that we had noticed on the previous morning's block in and briefed that if we were to experience any electrical burning odors after takeoff, we would make an air turn back, run the electrical smoke or fumes QRH and get the aircraft on the ground as soon as possible. The First Officer was in full agreement with the game plan that I presented to Him in my briefing. We departed on the RNAV
departure. At approximately 11 thousand feet, my navigational display began to cycle on and off with a loud relay opening and closing sound; this was associated with a strong electrical burning odor. I requested an immediate level off at 16 thousand feet and a turn back to [departure airport] which we were granted by the controller. We ran the smoke, fire or fumes QRH. While running the QRH, our flight mechanic was pulling the associated CB's and as a result, the electrical fumes dissipated quite considerably. By this point, we had been switched over to approach and they asked us the nature of our emergency. I stated that we had experienced electrical fumes; we had run checklist and pulled CB's and the situation was under control; but, we are still returning and requested the visual. On the descent, we programmed the aircraft for the return, ran the descent checklist and went over any remaining items that we might have missed just to double check our work. On the base turn, we lost the FO's CDU and then after landing, we lost the Lower EICAS CRT screen. We had contacted [our handler] during our turn back to coordinate our parking and they were waiting for us when we taxied back to the ramp. After landing, the taxi back to the apron was uneventful.

My primary concern for this irregularity is the history of this aircraft and the repeat write ups associated with the irregularities.

Synopsis

B767 flight crew experienced an electrical burning odor on departure and elected to return to the departure airport. The Captain's MFD went blank, soon after the First Officer FMS and CDU display went blank. After landing the lower EICAS screen went blank as well.
Time / Day
Date: 201707

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

Aircraft
Reference: X
Aircraft Operator: Air Carrier
Make Model Name: A320
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Phase: Taxi

Component
Aircraft Component: APU
Aircraft Reference: X
Problem: Malfunctioning

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Galley
Cabin Activity: Deplaning
Reporter Organization: Air Carrier
Qualification.Flight Attendant: Current
ASRS Report Number.Accession Number: 1466443
Human Factors: Other / Unknown

Events
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector.Person: Ground Personnel
When Detected: Aircraft In Service At Gate
Result.General: Evacuated
Result.General: Maintenance Action
Result.Aircraft: Equipment Problem Dissipated

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

Narrative: 1
During the deplaning process catering came on board and provisioned the aircraft. After removing the last cart the catering person said our airplane is on fire and pointed to the tail of the aircraft. She hurried to close the door. At that moment Flight Attendant (FA) A called to the aft galley and I informed him that catering said the aircraft is on fire and we need to get everybody off the plane. I started shouting commands to the passengers to leave belongings and get off the airplane and FA C got on the PA from the aft galley and informed people to leave everything and get off the plane due to a fire in the back of the airplane.

3/4 of the passengers had already deplaned however, we had two wheelchair passengers seated in the back that slowed down the deplaning process. Unfortunately because there were two Flight Attendants in back of the airplane and only one upfront we were unable to assist the wheelchair passengers. Passengers continued to retrieve their bags out of the overhead compartments and we continued to shout commands to leave everything and get off the airplane. FA A made a PA from the front of the plane trying to get passengers to leave their belongings and get off as quickly as possible due to a fire. After the last passenger deplaned the aircraft we spoke to the maintenance in the flight deck and he informed us it was safe to get our bags and get off. The three of us checked the cabin to make sure everyone was off and removed all the passengers bags that were left on board and took them up the jetway for the passengers to receive their bags back. We were informed that the back of the airplane was on fire and it had a very strong odor of fuel and smoke.

**Synopsis**

A Flight Attendant reported being informed that the tail of the aircraft was on fire during deplaning. The Flight Attendants commanded the remaining passengers to evacuate and leave their belongings.
Time / Day
   Date : 201607
   Local Time Of Day : 1801-2400

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

Aircraft
   Reference : X
   Aircraft Operator : Air Carrier
   Make Model Name : Commercial Fixed Wing
   Crew Size.Number Of Crew : 2
   Operating Under FAR Part : Part 121
   Mission : Passenger
   Flight Phase : Parked

Component
   Aircraft Component : APU Pneumatic System & Ducting
   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 : Captain
   Function.Flight Crew : Pilot Flying
   Qualification.Flight Crew : Air Transport Pilot (ATP)
   ASRS Report Number.Accession Number : 1466375
   Human Factors : Physiological - Other

Events
   Anomaly.Aircraft Equipment Problem : Less Severe
   Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
   Detector.Person : Flight Crew
   When Detected : Pre-flight
   Result.General : Maintenance Action

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

Narrative: 1
We were not boarded. We started smelling a fumes smell, getting stronger. We looked back in the cabin and it was very thick with smoke/fumes. We contacted Maintenance and they come out and did some trouble shooting. It was apparently the bleed valve for the APU leaking Oil. Maintenance took the Plane out of service. We were in the cockpit quite some time trying to figure out what to do. I did not think anything of it at the time, but some months later I starting getting a Neurological Disorder called Bulbar Palsy affecting my speech. That was the only event that happened in those months. APU leaking oil into the Air Conditioning manifold. Be every aware of smoke and fumes and remove yourself immediately.

**Synopsis**

Air carrier Captain experienced air conditioning smoke in the cockpit and cabin. Several months later the Captain was diagnosed with a neurological issues.
**Time / Day**
- Date: 201707
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 10000

**Environment**
- Weather Elements / Visibility: Turbulence
- Light: Daylight
- Ceiling: CLR

**Aircraft**
- Reference: X
- 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
- Nav In Use: FMS Or FMC
- Flight Phase: Climb
- Airspace.Class B: ZZZ
- Number Of Seats.Number: 160
- Passengers On Board.Number: 154
- Crew Size Flight Attendant.Number Of Crew: 6

**Component**
- Aircraft Component: Galley Furnishing
- Aircraft Reference: X
- Problem: Malfunctioning

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Galley
- Cabin Activity: Service
- Cabin Activity: Boarding
- Cabin Activity: Deplaning
- Cabin Activity: Safety Related Duties
- Reporter Organization: Air Carrier
- Experience.Flight Attendant.Total: 2
- Experience.Flight Attendant.Airline Total: 2
- Experience.Flight Attendant.Number Of Acft Qualified On: 8
- Experience.Flight Attendant.Type: 60
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Attendant
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Diverted
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
Taking off from ZZZ, Captain informed us to stay in our seats until he calls. After we crossed 10,000 feet and the chime went off. We remained in our seats as instructed. The Number one pointed me to the oven and there was smoke coming out. I took my seat belt off and got up to turn the oven off and didn't open it and got back to my jump seat and strapped in. There was a lot of turbulence. Then we heard a noise like when the wheels dropped for landing, the plane was still climbing and then it started turning. No 1 and I realized that this was not normal. [We] immediately called the cockpit and they told us that they will get back to us in a second, we realized something was up. Captain called and instructed [us] with info: 10 mins, Fire trucks were going to meet the flight and there was a issue with the flaps. [We] spoke to the number 2 and asked him if he had listened to the instructions that we need to run the Emergency checklist. I was concerned about that but also the smoke coming out of the oven. [We] went through the tablet Check list. [Number 1] made all the necessary PAs from the check List and kept giving me instructions. It was extremely turbulent. [Another flight attendant] got up from her jump seat and went to Exit rows to move some of the Deadhead FAs to the exit row. I couldn't leave the 1L-1R and forward galley area because we were close to the ground and turbulence was very strong. Plus the smoke from the oven continued but was dissipating it was mild but I did not want to leave it unattended. We returned to our jump seats and conducted our 30 second reviews, together which included our handicapped passengers and our Unaccompanied Minor onboard. We touched down, the plane took a long time to stop and we were expecting an impact any minute. I said get ready 'this is real, it's happening'. Finally the plane came to a stop and the Captain made a PA. This is the Pilot remain seated, followed by a PA about the Fire department checking the tires because the aircraft had a heavy landing. Then we started to move to the gate and we deplaned by jet bridge.

Synopsis
A Boeing 737 Flight Attendant reported smoke coming out of an oven in the galley.
**ACN: 1465802 (25 of 50)**

**Time / Day**
Date: 201707

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

**Environment**
Weather Elements / Visibility: Rain

**Aircraft**
Reference: X
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: Parked

**Component**
Aircraft Component: Air Conditioning Distribution Ducting, Clamps, Connectors
Aircraft Reference: X
Problem: Improperly Operated

**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: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1465802
Analyst Callback: Completed

**Events**
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Procedural: Published Material / Policy
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: Maintenance Action

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

Narrative: 1

In my case [on two separate incidents] the solution [the company] applied to an oily fumes event was to address the source of the oil leak, then change the cabin ozone filters. From what I can tell, no effort was made in either case to clean the ducts through what Airbus calls a "pack burn."

I attended [an industry safety forum] and the manufacturer of pack filters was there. He said the original filter is not designed to filter out oily fumes. They have a version available that does that, same part number, no STC required, that contains a carbon filter element.

So what [the company] is doing, then, is temporarily covering up the oil fumes until it saturates & overcomes the new filters. I believe this may have, in part, contributed to fume events I had on the ground, at the gate.

I am not completely sure about the oil-saturated filter theory because one of them also involved over-servicing of the APU oil. But in all three cases, heavy rain immediately preceded the fume event. I believe in some cases, oil was already in the packs & filters, but in "nooks and crannies" and was released when the air density became much heavier almost immediately with the advent of the heavy rain.

Anyway, I am concerned that due to lack of cleaning ("pack burns"), we are continuing to subject crews and passengers to continuous low-doses of oil fumes (known carcinogen), and then also large doses during fume events.

Callback: 1

The reporter stated that there is a concern for his health that flying an aircraft after oil smell has been reported and repaired that the ducts still have residual oil and the fumes are still present. The reporter stated he has no way of knowing what kind of repairs maintenance accomplished to resolve the issue or if a "burnout" of the ducts was accomplished to burn all the oil out. The reporter also stated, too often the source of the oil smell is deferred, ("ie; APU over serviced") but the odor remains. The reporter added he would like more information of any maintenance action that has taken place and would be happy to take a delay in order to ensure all the proper steps have been taken to resolve the issue of the oil smell.

Synopsis

A320 Captain reported that after an oil smell in the cabin report, there was no effort to clean the pneumatic ducts.
Events
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector.Person : Flight Attendant
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition
Result.Air Traffic Control : Provided Assistance

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
About 45 minutes into the flight our flight attendants reported they smelled an odor possibly like burning electrical wires, but they also said some passengers reported a burnt
rubber smell and one reported an odor like a burning clutch. We were cruising at around FL350. The odor seemed to be originating in the aft, right cabin area but the exact location could not be determined, and the odor was evident in varying degrees throughout the cabin. However, the odor dissipated rapidly, before any checklists were run. An ACARS report was sent to Maintenance Control. I asked the flight attendants to remain vigilant and report if anyone smelled this again. In the latter portion of the descent, I believe around FL250 or lower, they again reported similar odors, including a sulfur smell, and this time the odors were not dissipating. I ran the Smoke, Fire or Fumes checklist and [advised ATC]. Flight attendants were briefed. We were given traffic priority for landing in ZZZ, which was the nearest airport. As the checklist was run and switches were being turned off, the flight attendants reported the odor was diminishing but not very quickly. The odors were not reported as harmful so did not attempt to run a Smoke or Fumes Removal checklist. Because the time to landing was so short I was only able to accomplish the first 20 steps of the Smoke, Fire or Fumes checklist. The visual approach and landing to Runway XX was uneventful. After having the fire department inspect the outside of the aircraft just off the runway, where they saw no unusual indications, we continued taxi to the gate. A post flight exterior inspection by the FO confirmed nothing unusual. A conference call with the Dispatcher and Operations Manager was made after arrival at the gate.

In retrospect, the FO and I considered the fact that ATC had issued a climb reversal after climbing through FL350 towards FL370. We had gotten to about FL353 then went back down. About five to ten minutes later we had gotten the first notice of an odor. The second notice was also associated with a descent, our final descent, which lasted much longer and had more significant lasting odors. Thoughts are this could be engine related, possibly something in the pneumatic system, that only presented itself when the engines were retarded towards idle.

**Synopsis**

B737 Captain reported a burning odor in the cabin that was more prevalent when the throttles were near idle.
ACN: 1464686 (27 of 50)

Time / Day
Date: 201707

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

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.Tower: ZZZ
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: Initial Climb
Airspace.Class B: ZZZ

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: 7682
ASRS Report Number.Accession Number: 1464686

Events
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: Maintenance Action

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1
We were cleared for takeoff. I advanced the throttles per normal procedure. Once we lifted off, we could smell a slight odor. As we climbed higher, the odor got stronger. It was the worst between 3,500 to 12,000 feet. This odor would be characterized as "musty, smelly
gym socks". As we climbed higher (through 15,000 feet MSL), the odor went away. I checked with the flight attendants. They said they could smell it too. I considered this a fume event. There was a previous write up for the same occurrence. The last crew stated it happened on descent. We also experienced the same fumes on descent, but not to the extent of departure.

**Synopsis**

B757 Captain reported noticing a "dirty socks" odor after takeoff.
ACN: 1463768

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: First Officer
Function. Flight Crew: Pilot Not Flying
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: 1462037 (29 of 50)**

**Time / Day**
- Date: 201707
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US

**Environment**
- Flight Conditions: Mixed

**Aircraft**
- Reference: X
- ATC / Advisory.Center: 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
- Nav In Use: FMS Or FMC
- Flight Phase: Descent
- Airspace.Class A: ZZZ

**Component : 1**
- Aircraft Component: APU
- Aircraft Reference: X
- Problem: Malfunctioning

**Component : 2**
- Aircraft Component: Air Conditioning and Pressurization Pack
- 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: Captain
- Function.Flight Crew: Pilot Not Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1462037

**Events**
- Anomaly.Aircraft Equipment Problem: Critical
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight

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

Narrative: 1

Upon selection of APU Bleed at gate in [departure airport], I noticed a flickering of the APU bleed switch light, then steady illumination. With a couple seconds, the smell of oil became so strong in the cockpit, you would have thought it was poured directly on the flight deck floor. As that subsided, the "wet sock" smell became very prevalent. I notified Line maintenance, and as a result of an investigation, the mechanics deferred the APU, as well as the left air conditioning pack. The flight proceeded without incident until Top of Descent into ZZZ. Once power came to idle, the wet sock smell again filled the flight deck. This time, I felt my eyes wanting to cross on two occasions and I told my First Officer (FO) that we may need to put the oxygen masks on. I could not switch off the right pack as the procedure would suggest as we would become unpressurized and still in the low 30s to high 20s flight levels. The smell did subside as we got closer to the ground, and after landing and clearing all runways, I requested my FO to turn off the right pack. After parking, the flight attendants notified me the "wet sock" smell began again on descent. By that point, I had already made another entry in the aircraft maintenance log. The rest of the evening I did have a headache and felt very lethargic; but as I awoke this morning I feel 100% back to normal.

Not much that I can suggest, but I would like clarification regarding our procedure as it stands to turning off packs. If I had done that, it obviously would have made the night much more interesting.

Synopsis

A320 Captain reported an APU and one pack had been deferred prior to departure but upon descent, fumes filled the flight deck strong enough that he considered putting on the oxygen masks.
**Time / Day**
- Date: 201707
- Local Time Of Day: 0601-1200

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

**Environment**
- Flight Conditions: VMC

**Aircraft**
- Reference: X
- ATC / Advisory.Tower: 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: Landing

**Component**
- Aircraft Component: Brake System
- 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: 6627
- ASRS Report Number.Accession Number: 1461941

**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)
Upon landing gear extension, we received an ECAM "BRAKES AUTO BRK FAULT" message. No auto brakes had been selected. We also noted that the three gear down-lock indicators (green triangles) were not illuminated. The gear UNLK lights on the panel were also not illuminated. With flaps full selected, I confirmed that the Landing Memo was green, which includes the gear down lock notation. We both felt that the gear was in fact down and locked, but I was contemplating a go-around to give us some time to look at the QRH in order to gain some more knowledge of what might have occurred. (I had yet to check the WHEEL page for green gear confirmation.) Prior to 500 feet AGL, the ECAM message cleared itself, and the three gear down-lock indicators illuminated green. We both agreed that it was safe to continue the approach and landing. My thoughts were that this might just be an Airbus anomaly. After a normal landing on runway XYL, I selected full reverse thrust. At 80 knots, I came out of reverse, and then applied the brakes to exit at [the] taxiway. The brakes felt very soft and abnormal (mushy at best). I could tell that something was definitely wrong. I applied additional pressure to the brakes and realized that I would not make the high-speed taxiway, and focused on making the next turn-off. Once again the brake effectiveness was not going to slow adequately for that exit. I was communicating all of the braking issues with my First Officer. Noting that the normal brakes were not working properly, I reached over and turned the A/SKID; Nose Wheel steering switch off to revert to alternate brakes. I applied several applications, remembering that I was supposed to limit the pressure to 1000 PSI to prevent wheel lock-up. This was not working like the simulator, and the braking effectiveness was nearly nil. I applied considerably more pressure to the brakes in a normal reaction to try to stop the airplane. Realizing that the end of the runway was getting closer, I reverted to using full reverse thrust. My thoughts were to get as slow as I could, and then resort to my final option of using the parking brake to stop the airplane. My First Officer then stated, "What about the parking brake?" I asked him to go ahead and cycle it. He applied several applications, and the airplane came to a complete stop, slightly off the runway center line but still completely on the runway. We were several hundred feet short of the end of the runway. My First Officer instinctively instructed the passengers to "remain seated". We told the Tower of our condition, and they instructed us to hold our position on the runway, and then they began coordinating our tow to the gate. The tower controller asked if we needed emergency equipment do to the potential of hot brakes, but the hottest indication peaked at 240 degrees (a normal green indication). Obviously on a 90 degree day with the amount of braking that had been applied, these were very abnormal brake temperatures. All hydraulic system indications were normal. I discussed the situation with the Purser and made several announcements to our passengers to ensure that we were safely parked on the runway, and that we would be towed to our gate. Maintenance arrived and towed us to
our gate, where I briefed them on the event. I submitted several reports to provide Maintenance with a history of what we encountered.

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

A320 flight crew reported receiving an ECAM "BRAKES AUTO BRK FAULT" message. Normal brakes did not function properly and alternate brakes were also ineffective. The Captain was able to stop the aircraft using applications of the parking brake.
ACN: 1461485  (31 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

Environment
Flight Conditions : VMC
Light : Daylight

Aircraft
Reference : X
ATC / Advisory.Ground : 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 : Taxi
Airspace.Class B : ZZZ

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
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1461485
Human Factors : Confusion
Human Factors : Time Pressure

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected: Taxi
Result: Flight Crew: FLC complied w/ Automation / Advisory

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

Narrative: 1
We had a left engine fire on taxiway just off [the] runway. I read through the Left engine fire in flight procedure on the QRC. After realizing my mistake we completed the engine fire on ground procedure. The intensity of the emergency made me feel rushed and I didn't read the QRC procedure title before following the procedure.

Synopsis
CRJ700 First Officer reported an engine fire during taxi. He initially used the in-flight checklist instead of the engine fire on ground checklist.
ACN: 1461133 (32 of 50)

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

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: Dash 8 Series Undifferentiated or Other Model
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Parked

Component
Aircraft Component: APU Electrical
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: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1461133

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector.Person: Ground Personnel
When Detected: Aircraft In Service At Gate
Result.General: Maintenance Action
Result.Aircraft: Aircraft Damaged

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft
**Narrative: 1**

After taxiing into the gate I noticed the APU hadn't started. The FO thought he hit the start button. After waiting, it appeared the APU panel was off, so I powered it down/up and began the start sequence again. The cabin door was open and a ramp manager said smoke was coming out of the APU exhaust port. I powered off the APU. Seeing no fire indications on our cockpit panel, I told the ramp supervisor to tie the prop and FA to begin deplaning without delay. There was no gate agent available after several calls. When the last few passengers were just about off, the APU check fire detect warning light illuminated but no fire light illuminated. I told the FO to call for fire trucks, depowered the aircraft, and got the remaining crew off. I confirmed the black smoke coming from the APU exhaust port which quickly dissipated. No fire had initiated, just smoke and the fire bottle and discs did not discharge.

The APU starter/generator had a welded starter contactor that overheated and began smoking. It was a mechanical issue. We have significant APU issues amongst the Dash 8 fleet.

Recommend better APUs and gate agents ready at the gate when we arrive. We took an unnecessary delay getting people off the plane because a gate agent wasn't there to receive passengers. Had we taken any more delay I was on the brink of ordering an emergency evacuation had it actually caught on fire.

**Synopsis**

Dash-8 Captain reported smoke emitted from the APU exhaust port after gate arrival. Passengers were deplaned and the starter contactor was later found to have overheated.
**ACN: 1460068 (33 of 50)**

**Time / Day**
- Date: 201706
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference: Airport: ZZZ.Airport
- State Reference: US
- Altitude: MSL. Single Value: 38000

**Environment**
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory Center: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: EMB ERJ 190/195 ER/LR
- 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: Air Conditioning and Pressurization Pack

**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 Not Flying
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Experience: Flight Crew: Total: 7895
- Experience: Flight Crew: Last 90 Days: 151
- Experience: Flight Crew: Type: 2978
- ASRS Report Number: Accession Number: 1460068

**Events**
- Anomaly: Aircraft Equipment Problem: Critical
- Anomaly: Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Anomaly: Flight Deck / Cabin / Aircraft Event: Illness
- Anomaly: Deviation - Procedural: Published Material / Policy
- Detector: Person: Flight Attendant
Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

The aircraft had a few MELs, one of which was the Recirculation Fans, which may be significant to this narrative. We ended up taking off late, with no significant issues noted on climb out. About 35 minutes into the flight, the Number 1 Flight Attendant called to say the cabin was uncomfortably hot and asked us to take control, which we did. I asked her to call back in 15 minutes with an update. When she called back, she said that it was still uncomfortable and that a young female customer was sick, but didn't think it was entirely due to the elevated temperature in the cabin. I then set the cockpit temp knob to full cold and ensured the cabin temp knob was still in full cold. I asked her to call back in another 15 minutes with another update. When she called back, she said it was still uncomfortable but perhaps was getting a bit better. I asked her to set up so that I could leave the cockpit and evaluate the situation. The FO suggested that climbing to FL380 (at the time were at FL360) might also help and I agreed. I gave him control and I went out into the cabin. I didn't think the temperature was unbearable, but it was definitely warmer than indicated (indicated 17 degrees C (63F), but was easily 27C (80F). I spoke with entire crew about continuing unless the temperature causes a medical issue, in which case we would divert. We all were in agreement with that plan.

I took a picture of the synoptic page to help remember the temp settings and indications. I entered the write up into the logbook then notified dispatch and maintenance of the issue via ACARS. Shortly after that was completed, a RECIRC SMOKE EICAS Caution message appeared and the QRH was accomplished down to "land at nearest suitable airport." The light extinguished and we discussed divert options. The #1 Flight Attendant called soon after and stated there was smoke in the cabin (the Caution message was no longer displayed on the EICAS display). The FO and I had already discussed divert options and I chose ZZZ for its proximity and length of runways. I informed ATC, gave a code "yellow" to the flight attendants and the FO began an emergency descent. Fumes became apparent and the FO and I donned our O2 masks. I reviewed the Rapid Descent QRH, ensured that all items for it were completed (changed our descent clearance from 14,000 to 10,000 as per the QRH), and noted our flight path and descent parameters (right direction, right speed, aircraft configured properly). I called the flight attendants and upgraded to a code "red", with the time on runway being (15 mins). The FO and I were having a hard time viewing displays and the QRH due to the fogginess of our oxygen mask face shields (extremely cloudy due to what I believe was the previously noted by company use of alcohol wipes to clean the masks by some pilots). I had to take mine off and put it back on several times to read the QRH, see my iPad and PFD/MFD/EICAS/MCDU displays. I had begun the cockpit/cabin/smoke and fume removal checklist but didn't finish due to task overload (mask buffoonery in conjunction with trying to manage event and back up FO), reassessment of smoke event in cabin (called the First Flight Attendant back to ascertain conditions), multiple frequency changes (seeming to always need the same information for some reason (FO handled mostly, but it was still distracting)), and eventually weighing the QRH tasks with time until safely landing at the airport. The FO and I took our masks off once the acrid burning smell was tolerable, and we concentrated on the approach and
landing phase. We discussed the evacuation scenario and decided not to blow the engine fire bottles (as per QRH) since we didn't have any indications of an engine fire. The FO had got the weather, set up the approach for both me and himself, and managed the flight path perfectly. My main concern was always to get the aircraft safely on the ground as fast as possible, let the ARFF team assess the possible fire location (if any) and attack it, and evacuate all customers and crew as safe as possible.

We landed with the FO as PF. I took control at approximately 100 kts and exited the runway onto taxiway A, to get as close to the ARFF trucks as possible. I set the parking break, gave the "cabin crew at stations" call, called for the Evacuation QRH, and ended with a call. I couldn't contact the Fire Chief on tower frequency, so they had me switch to ground (not optimum in that situation that the Fire Crew wasn't monitoring both frequencies). All safely evacuated the aircraft.

Immediate Corrective Actions: Inspect all Embraer 190 oxygen mask face shields and replace if not totally clear. Not doing so makes a difficult situation potentially life threatening based on the abnormal situation, crew stress levels, reaction times, and experience.

Synopsis

EMB-190 Captain reported a Flight Attendant informed him that the cabin was too warm and that the Captain should take control of the temperature. The temperature remained too warm and eventually smoke was reported in the cabin and detected in the cockpit. The flight diverted to the nearest suitable airport. Passengers were evacuated on a taxiway.
ACN: 1459139 (34 of 50)

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

Place
Locale Reference.ATC Facility: ZAN.ARTCC
State Reference: AK
Altitude.MSL.Single Value: 27000

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.Center: ZAN
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: Cargo / Freight
Flight Phase: Cruise
Airspace.Class A: ZAN

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: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)

ASRS Report Number.Accession Number: 1459139
Human Factors: Situational Awareness
Human Factors: Training / Qualification

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Procedural: Hazardous Material Violation
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Overcame Equipment Problem

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

Narrative: 1
We loaded two pallets of hazmat (propane bottles) on as part of our [cargo load]. All propane bottles had screw-in type plugs installed, and no smell of propane [was] present at the time of loading. After departure and as altitude and pressure increased, we smelled propane fumes in the aircraft cockpit/cabin. I sent the cargo load handler into the main cabin to check the propane bottles. I understand he was able tighten some valves closed further. This diminished the fumes somewhat. At the top of climb (FL270) the fumes were not increasing any longer but they were also not decreasing. We elected to perform the "smoke removal" checklist. Even though there was no smoke or fire, this was the most logical choice to clear the cabin of fumes.

The initial portion of the checklist diminished the fumes, but not well enough. We requested and received from Center a descent to lower than 14,000 ft so that we could continue the checklist by depressurization of the aircraft. This cleared the fumes to our satisfaction. After calculating fuel left on board and our ground speed compared to our fuel consumption, it was decided that we were safe to continue to our destination. The rest of the flight passed uneventfully.

I'd like to suggest a safety bulletin to all flight crew and outstations; highlighting the necessity for more consistent vigilance on matters such as "propane bottle preparation for shipment". This information could also be included in all future recurrent training.

**Synopsis**

Captain reported noticing odor and fumes from propane bottles loaded as hazmat. The fumes were cleared by descending and depressurizing the aircraft.
ACN: 1458781 (35 of 50)

Time / Day
Date: 201706
Local Time Of Day: 0601-1200

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude.MSL.Single Value: 31000

Environment
Flight Conditions: IMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: 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: Cruise
Airspace.Class A: ZZZ

Component
Aircraft Component: Pressurization System
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)
ASRS Report Number.Accession Number: 1458781

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
Narrative: 1
The airplane already had the R PACK [deferred inoperative under an] MEL. After reaching FL310, we were there for no more than 10 minutes deviating around for some weather when the warning L BLEED DUCT message started going off. At this point I transferred the controls to the first officer and I reached for the QRH and asked ATC to descend to lower altitude. As soon as I opened the QRH, the fwd FA called me to notify me that there was a medical emergency in the back and there was an unresponsive passenger. I told the FA that we had a situation upfront and that I was going to call her back shortly. As soon as we got off the intercom, the CABIN ALT warning message came on followed by PASS OXY ON message and soon after that the brake overheat warning message came on as well. The indications were going from 12 to 16 in the red box. At this point we notified ATC and we needed to divert to [a nearby alternate].

I called the FA to ask her if she can see any smoke and she said yes, there is smoke in the cabin and [it] is burning her eyes. At the same time strong fumes got into the cockpit and the FO and I decided that [the nearby alternate] was not going to be a good alternate airport and we needed to put it down quick in the nearest suitable airport, which was only less than 10 NM away and [our first selected alternate] was about 44 NM out. [The newly selected alternate was] perfect for the weather we were in. I informed the FA of what we were doing and gave her special instructions for the evacuation. On short final I gave the order for brace and after landing we evacuated the airplane. Everything went smooth past this point with EMS and the incident response team.

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

Synopsis
CRJ-700 flight crew reported diverting to the nearest suitable airport after departing with one pressurization pack deferred inoperative and losing the other bleed system at FL310.
ACN: 1457597 (36 of 50)

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

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 10
Altitude.MSL.Single Value: 10000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Falcon 50
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Ferry
Flight Phase: Initial Climb
Airspace.Class E: ZZZ

Component
Aircraft Component: Air Conditioning and Pressurization Pack
Aircraft Reference: X
Problem: Malfunctioning

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Total: 4700
Experience.Flight Crew.Last 90 Days: 35
Experience.Flight Crew.Type: 280
ASRS Report Number.Accession Number: 1457597

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
Experience.Flight Crew.Total: 3900
Experience.Flight Crew.Last 90 Days: 40
Experience.Flight Crew.Type: 300
ASRS Report Number.Accession Number: 1457620
Human Factors: Workload
Human Factors: Time Pressure

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: Evacuated
Result.Flight Crew: Landed in Emergency Condition
Result.Flight Crew: Returned To Departure Airport

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1
We departed without incident. On the initial climb, smoke entered the cockpit and cabin. We performed memory items, [advised ATC], and returned to the departure airport. Upon landing, we evacuated the aircraft.

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

Synopsis
Falcon 50 Captain reported smoke in the cockpit and cabin shortly after takeoff before returning to the departure airport.
ACN: 1457336 (37 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: 0

Environment
  Flight Conditions: VMC
  Light: Daylight

Aircraft
  Reference: X
  Aircraft Operator: Air Carrier
  Make Model Name: EMB ERJ 145 ER/LR
  Crew Size.Number Of Crew: 2
  Operating Under FAR Part: Part 121
  Flight Plan: IFR
  Mission: Passenger
  Flight Phase: Landing

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: First Officer
  Function.Flight Crew: Pilot Flying
  Qualification.Flight Crew: Air Transport Pilot (ATP)
  Experience.Flight Crew.Total: 6500
  Experience.Flight Crew.Last 90 Days: 225
  Experience.Flight Crew.Type: 450
  ASRS Report Number.Accession Number: 1457336
  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
I was the flying pilot. CA was the pilot monitoring. Uneventful landing and transition from pilot monitoring to pilot flying at 80 knots. Between 80 knots and 60 knots the Number 1 engine failed. Immediately after, there was a strong odor in the cockpit of something burning.

CA continued the landing rollout and exited the runway via the highspeed exit at taxiway Delta and brought the aircraft to a stop at the intersection of Delta and Lima. We ran the QRH and let ATC know that we had an engine fail on landing. The FA said that she also had an odor in the front of the cabin, but not in the rest of the cabin. She said the smell was only evident to her and possibly the passengers in the first 2 rows.

Since we were unsure if we had an active fire, CA requested that the tower send the fire trucks to inspect the airplane. In case of a potential evacuation, CA elected to pull the airplane forward onto the open ramp area, so there would be access to the airplane from all sides. CA made an announcement to the passengers. The fire trucks came and inspected the airplane and told us that there were no outward signs of fire or damage. We then proceeded to the gate and deplaned without incident.

EMB-145 flight crew reported the number one engine failed on landing rollout.
Time / Day
Date: 201706
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZZ.Airport
State Reference: FO
Altitude.MSL.Single Value: 39000

Environment
Flight Conditions: VMC
Light: Night

Aircraft
Reference: X
ATC / Advisory.Center: ZZZZ
Aircraft Operator: Air Carrier
Make Model Name: B747 Undifferentiated or Other Model
Crew Size.Number Of Crew: 4
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Ferry
Flight Phase: Cruise
Route In Use: Oceanic

Component
Aircraft Component: Fire/Overheat Warning
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: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 6184
Experience.Flight Crew.Type: 4835
ASRS Report Number.Accession Number: 1457268

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.Total : 5224
Experience.Flight Crew.Type : 324
ASRS Report Number.Accession Number : 1457069

Person : 3
Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Crew Rest Area
Reporter Organization : Air Carrier
Function.Flight Crew : Relief Pilot
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 6670
Experience.Flight Crew.Type : 1014
ASRS Report Number.Accession Number : 1457063

Person : 4
Reference : 4
Location Of Person.Aircraft : X
Location In Aircraft : Crew Rest Area
Reporter Organization : Air Carrier
Function.Flight Crew : Relief Pilot
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 14568
Experience.Flight Crew.Type : 3157
ASRS Report Number.Accession Number : 1457066

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Diverted
Result.Air Traffic Control : Issued New Clearance

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
While at cruise on a Maintenance Ferry Flight, (4 pilots, no FAs or passengers) FL390, 350 NM east of ZZZZ, we received "FIRE MAIN DECK" message on primary EICAS, coupled with two CAUTION messages, and five STATUS messages. Captain immediately reviewed QRH for relevant checklist, discovering there was none for FIRE MAIN DECK. Captain [advised ATC] as well as sent a report via CPDLC. Due to delay receiving clearance to divert to ZZZZ (nearest suitable airport) we began a 180 degree turn off track to the left, descending. 500 feet after cleared track 10 NM. I began broadcasting in the blind on 121.5, our call sign, position, our 180 degree turn north off track, nature of our problem, all whilst turning on all external lighting. A flight came on frequency and offered assistance; I asked he relay to ATC we needed an immediate clearance to ZZZZ as we were a aircraft in distress due to cabin fire warnings. We awoke Relief Pilots (who were on
break) and informed of situation. They immediately proceeded to the cabin armed with PBE (Personal Breathing Equipment) and flashlights to investigate. They thoroughly searched entire cabin, felt for heat on floors, walls, looking for smoke and searched the E&E compartment, finding no evidence of fire. Shortly thereafter, we received clearance from ATC for direct ZZZZZ intersection, FL390. Captain contacted Dispatch and Maintenance Control to inform and obtain assistance on our warnings, cautions and messages. I handled ATC comms and flew max speed to ZZZZ. Relief Pilots took turns in each individually searching cabin for evidence of fire, smoke or heat, until we began descent for landing. Enroute to ZZZZ we reviewed Ditching Checklist and discussed Fire/Smoke removal Checklists should we discover a fire onboard. Upon beginning our descent for landing, we flew max speed for the arrival and ILS to runway XXR at ZZZZ. We landed without incident and were able to immediately clear runway whereupon ZZZZ Fire Department assessed our aircraft for evidence of fire. Finding none we were cleared to taxi to the gate.

**Narrative: 2**

[Report narrative contained no additional information.]

**Narrative: 3**

[Report narrative contained no additional information.]

**Narrative: 4**

[Report narrative contained no additional information.]

**Synopsis**

B747 flight crew reported diverting due to a FIRE MAIN DECK message during cruise. No evidence of fire was found from an inspection of the entire cabin and E&E compartment.
Time / Day
Date: 201706
Local Time Of Day: 0601-1200

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

Environment
Light: Daylight

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
Mission: Passenger
Flight Phase: Initial Climb
Airspace.Class B: ZZZ

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

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Cabin Jumpseat
Cabin Activity: Safety Related Duties
Reporter Organization: Air Carrier
Qualification.Flight Attendant: Current
ASRS Report Number.Accession Number: 1454582
Human Factors: Physiological - Other

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
Anomaly.Deviation - Procedural: Published Material / Policy
Detector.Person: Flight Attendant
When Detected: In-flight
Result.General: Physical Injury / Incapacitation
Result.Flight Crew: Overcame Equipment Problem
Assessments
Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Human Factors
Primary Problem : Aircraft

Narrative: 1

Upon [gate] departure the midsection of the cabin filled with powerful, severe fumes of jet fuel. Not like exhaust, but as though jet fuel was being pumped directly into the cabin. It was profoundly more intense than we had ever experienced before. FA#7 and I were in the immediate area and started coughing, eyes burning, and we covered our faces while I called the cockpit. Through the coughing, I mis-dialed and called the purser, who said the fumes had just started reaching the front of the plane. I then redialed and was telling a pilot what was occurring. He realized it was severe and put the Capt on the phone. I was told there was a problem with the left engine but it was fixed and we were good to go. The passenger adjacent to the left engine had boarded not feeling well, but started vomiting immediately after this event. We took off, did our service, and I was on first break. When I came to the back of the plane after my break, a girl was standing at 4R, saying she didn't feel well. She stayed for maybe an hour to 90 mins, vomiting, nauseated. As time went on, another passenger said she felt overheated. The cabin was unusually cold. She didn't know why she couldn't cool down. A passenger near her completely lost her voice. Said she had had a cold, but I did notice she had a voice earlier when I was serving her. Putting two and two together, I went to the cockpit for a discussion about this matter. My concerns were dismissed. FO told me that when the engine failed they "blew out" the engine and the fumes came through the cabin. "Happens every day." I said we had 3 people who felt ill and I don't know if it was related to the fumes but that I was going to report the plane to the FAA as I felt it needed to be checked out. This seemed to anger the pilots. One said that "some people are just irritated by smelly things" and if someone were to vomit right there in the cockpit, well, it would bother him too. I assured him that vomit and toxic fumes from jet fuel were two separate and distinct substances and we (the passengers and crew) need to be sure we aren't being harmed by the fumes. I was then asked, "What do you want me to do? Turn around and go back?" And then he called the purser, had her wake the Capt and said we'll be landing in ZZZ. It seemed not out of concern but in retribution for my comments. A PA was made summoning the assistance of a physician to check on the girl vomiting by 4L. The physician asked her questions and I took notes. It was determined she was well enough to continue to ZZZ1. The passenger near the engine felt better also. Of course, the physician didn't know what she was looking for and no tests for carbon monoxide, or any other, poisoning were performed. We didn't know if we had just experienced a fume event, per se, but it was an event of sufficient magnitude to affect our breathing and cause great concern.

It seems that if an engine fails and it needs to be "blew out", whatever that means (but obviously entails pushing fumes through the cabin), then it would make sense that the passengers and crew would be deplaned for the process. Especially when the plane is still at the gate. This fume event lasted no longer than 3-8 minutes, but was so intense that it undoubtedly was harmful to everyone's health. Deplane all passengers and crew for the flushing of the failed engine. Simply acknowledging what happened, especially when the pilots had foreknowledge of how this engine failure would be handled, is insufficient. Nothing was done to prevent exposure. The FO had suggested landing in ZZZ. In hindsight, perhaps that is exactly what we should have done. And gotten everyone, including the crew, medical attention.

Synopsis
B767 Flight Attendant reported a fume event during takeoff that caused a strong fuel smell to enter the midcabin. The Captain was called and he indicated that a malfunction had occurred during starting, but had now been corrected. Several passengers became ill.
Time / Day
Date: 201706
Local Time Of Day: 1201-1800

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

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.Center: 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
Nav In Use: FMS Or FMC
Flight Phase: Cruise
Airspace.Class A: 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: 1453616
Human Factors: Troubleshooting

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: 1453617
Human Factors: Troubleshooting

Events
Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
When we reached cruise and about 15 later the aft Flight Attendant (FA) called to report a sulfur smell in the aft galley. He also mentioned that his throats was itching. I asked him to have another FA verify what he smelled, which they did. Then I had them move through the cabin to see if it was anywhere else. They said they smelled it as far forward as row three. No passengers were complaining.

We (in the cockpit) started discussing options in case a source could not be found, ZZZ was coming up on our right wing so we decided that would be our go to airport. During this time we exchanged several calls with the FAs and they thought it was getting worse, we decided to begin the divert process ZZZ, we informed dispatch what was going on and asked for a mechanic to see if they had any thoughts. Since we had lots of gas we asked to descend to start burning fuel.

Again the FAs kept calling informing us the smell had changed to a propane smell and there symptoms were getting worse. At this point we [advised ATC] and expedited to ZZZ. We headed to ZZZZZ Intersection on the ILS to hold and burn fuel at 10000 feet. We kept checking with dispatch via ACARS and communicating with the FAs during the entire descent. We ran the overweight landed checklist just in case. When the FAs called and told us that they were feeling lightheaded and a haze was forming we decided to land overweight. We informed ATC that we wanted emergency vehicles to follow us down runway and to gate, also told them we planned a normal landing but we were overweight.

We flew in visually and landed uneventfully, taxied to gates and the EMTs came on board. We elected to take everyone off the aircraft including a FAs to be checked out in the passenger waiting area. No passengers needed attention and the FAs checked out just fine. We spoke with Maintenance, dispatch, and the duty phone, scheduling had rooms for us and the night chaos ended! Everyone involved did a great job of communicating and having things ready, we were very impressed. We used all our resources except STAT-MD, which we thought of later. CRM was great, FAs did a great job.

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

Synopsis
A320 flight crew reported a sulfur smell in the aft galley causing the flight attendants to become light headed.
**Time / Day**
- **Date:** 201705
- **Local Time Of Day:** 0001-0600

**Place**
- **Locale Reference.Airport:** ZZZ.Airport
- **State Reference:** US

**Aircraft**
- **Reference:** X
- **ATC / Advisory.Center:** ZZZ
- **Aircraft Operator:** Air Carrier
- **Make Model Name:** Commercial Fixed Wing
- **Operating Under FAR Part:** Part 121
- **Flight Plan:** IFR
- **Mission:** Passenger
- **Nav In Use:** FMS Or FMC
- **Flight Phase:** Cruise
- **Airspace.Class A:** ZZZ

**Person**
- **Reference:** 1
- **Location Of Person:** Company
- **Location In Aircraft:** Lavatory
- **Reporter Organization:** Air Carrier
- **Function.Flight Attendant:** Flight Attendant (On Duty)
- **Qualification.Flight Attendant:** Current
- **ASRS Report Number.Accession Number:** 1453261
- **Human Factors:** Physiological - Other

**Events**
- **Anomaly.Aircraft Equipment Problem:** Less Severe
- **Anomaly.Flight Deck / Cabin / Aircraft Event:** Smoke / Fire / Fumes / Odor
- **Anomaly.Flight Deck / Cabin / Aircraft Event:** Illness
- **Anomaly.Deviation - Procedural:** Published Material / Policy
- **Anomaly.Inflight Event / Encounter:** Other / Unknown
- **Detector.Person:** Flight Attendant
- **When Detected:** In-flight
- **Result.Flight Crew:** Diverted
- **Result.Flight Crew:** Landed As Precaution

**Assessments**
- **Contributing Factors / Situations:** Aircraft
- **Primary Problem:** Aircraft

**Narrative: 1**

About an hour into cruise the flight crew noticed a strong chemical, electric, metallic, burning odor coming from both aft lavatories.
After briefing as a crew and calling the FD, we searched trash cans, and felt for fire all over the lavatories. After realizing there was no obvious fire, we had the FD pull the circuits of the aft lav water heaters. We waited 20 more minutes and re checked, but the smell became worse.

We locked both aft lavatories and completed a beverage service, while checking the lavatories as much as possible throughout, as requested by FD. B FA was in and out at least 10 times, and C probably 8 times. D and A 5 times or less.

When we realized our minds were becoming affected, and when our throats burned, eyes watered, and head hurt, we all decided to emergency land in ZZZ. Upon cabin prep, my mind was very dull, overcome by fumes. I felt VERY intoxicated and confused. Registered 4.5% CO almost 5 hours after breathing 20% O2 as administered by EMT crew and at hospital. Still feel dull 4 days later.

Monitor air quality in flight. Do not let cabin crew breathe toxic fumes. After accidents, assign helper to affected crew. Do not bombard crew with instructions after air quality incident. Give them time of 3-5 days to recover brain function.

**Synopsis**

Air carrier Flight Attendant reported a burning odor coming from the aft lavatories. No fire was detected but the Flight Attendant reported feeling ill shortly after. The flight then diverted to the nearest suitable airport.
ACN: 1452908 (42 of 50)

Time / Day
Date: 201705
Local Time Of Day: 1801-2400

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

Environment
Light: Night

Aircraft
Reference: X
ATC / Advisory.Ground: 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: Taxi

Component
Aircraft Component: Air Conditioning and Pressurization Pack
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: Captain
Function.Flight Crew: Pilot Flying
qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1452908

Events
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
Detector.Person: Flight Crew
When Detected: Taxi
Result.General: Physical Injury / Incapacitation
Result.Flight Crew: Requested ATC Assistance / Clarification

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1

During taxi-in to the ramp the FO and I noticed a mild burning smell with no cockpit indications of fire or overheat. Shortly thereafter, the D FA called the cockpit and notified us of the same burning smell but without the presence of any smoke. The burning odor began increasing in intensity as we pulled abeam the Deice pad. We notified the ramp of the burning odor and told the controller that we wanted to proceed directly to the gate and requested that the controller move aircraft out of our way as both taxiways were blocked by company aircraft awaiting gates. I called for the QRH smoke/fumes and we opened a cockpit window to evacuate the fumes. As we began the smoke/fumes checklist we received an ECAM for AIR PACK 1 OVHT this was quickly followed by AIR PACK 1 and 2 FAULTS. As the overheating pack was the most likely source of the fumes, we stopped the QRH and completed the ECAM. The fume odor, which smelled like burning oil or strong, acidic exhaust, began to dissipate. The D FA called the flight deck and reported that she, the C FA, and some passengers were feeling nauseous. I again notified ramp tower to move all aircraft out of our way so that we could get to a gate. I requested EMS to meet the aircraft. As the aircraft began to move, we began the smoke/fume removal checklist in the QRH.

At this point, all checklists have been completed and I have very few options to remove the fumes from the cabin due to the inadequacies of the smoke/fumes removal checklist. The checklist is designed for an aircraft in flight and both of my packs have been shut down. My best and most reasonable option, the course of action I elected, was to get to proceed to the gate as quickly as possible.

We were able to get to the gate quickly and the passengers were offloaded. The firefighters that met the aircraft ordered that all bags be left on the aircraft and assisted in expediting the offloading of the aircraft. I do not believe that any passengers sought medical attention. However, both the C and D flight attendants were taken to the hospital after evaluation by EMS.

Synopsis

A320 Captain reported an odor on taxi-in to the gate and air pack overheat alerts. Two flight attendants were taken to the hospital.
**ACN: 1452558 (43 of 50)**

**Time / Day**
- Date: 201705
- Local Time Of Day: 0601-1200

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

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

**Aircraft**
- Reference: X
- 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: Taxi

**Person**
- Reference: 1
- Location Of Person: Company
- 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: 1452558
- Human Factors: Physiological - Other

**Events**
- Anomaly.Aircraft Equipment Problem: Less Severe
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
- Anomaly.Ground Event / Encounter: Other / Unknown
- Detector.Person: Flight Crew
- Were Passengers Involved In Event: Y
- When Detected: Taxi
- Result.General: Flight Cancelled / Delayed
- Result.Flight Crew: Returned To Gate

**Assessments**
- Contributing Factors / Situations: Aircraft
- Primary Problem: Aircraft
Narrative: 1

We started up engine 1 during push-back and could smell a hint of an exhaust like smell. The smell is usually normal but the smell never went away. We then started engine number 2. We received an ECAM regarding Auto-Thrust.

We began dealing with the ECAM and contacted maintenance via cell phone. As the captain was speaking with maintenance over the phone we began noticing symptoms of headache and started to feel dizzy. Maintenance control advised us to shut down the engines and re-start both engines for the ECAM action we were accomplishing. As we complied I found it hard to concentrate and read the checklist.

Focusing was tough. We shutdown both engines and restarted them. The smell, as before, was evident and present. We could not fix our ECAM, and maintenance instructed us to return to gate so they could look at the ECAM issue.

The captain then called back to the cabin to advise the Flight Attendants (FA) that we would be returning to the gate. All FAs immediately said they smell a very strong odor in the entire cabin. As we began to return to the gate, and waiting on Ramp personnel to move into position to marshal us back in to gate. The symptoms of Headache, dizziness, lack of concentration were evident.

The captain had closed the APU bleed valve and shut-off both aircraft packs to hopefully stop the smell from continuing in cabin. After we parked we opened all doors and windows to "air out" the aircraft. All flight attendants had identical symptoms to both the captain and I.

Synopsis

A320 First Officer reported fumes in the cockpit and cabin with headache and dizziness after starting engine 1.
**ACN: 1452549 (44 of 50)**

**Time / Day**
- Date: 201705
- Local Time Of Day: 0601-1200

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

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

**Aircraft**
- Reference: X
- ATC / Advisory: Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: EMB ERJ 145 ER/LR
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Initial Climb
- Airspace.Class C: ZZZ

**Component**
- Aircraft Component: Main Gear Tire
- 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: First Officer
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1452549

**Events**
- Anomaly.Aircraft Equipment Problem: Less Severe
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Detector.Person: Flight Crew
- When Detected: In-flight
- Result.General: Maintenance Action
- Result.Flight Crew: Landed in Emergency Condition
- Result.Aircraft: Aircraft Damaged
Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

On takeoff I was pilot flying. After gear retraction I called for the autopilot on at 500 AGL and noticed a burning smell. I asked the Captain if he smelled it and no sooner [did] I ask, the cabin emergency call button illuminated. We took the call from the cabin and the FA mentioned an odd smell, almost that of burning rubber. We told her we would investigate and call her right back. We continued to clean up the aircraft (flaps up, after takeoff checks, etc.). After doing these things we noticed the smell went away. The Captain had thought that it might have been the tire plant in the area emitting the smell. I entertained the possibility but also mentioned the possibility of blowing a tire because of weird feeling on rotation and was wondering if it could be a blown tire. We continued on. About 20 minutes into the flight after climbing above the weather we gave the FA one chime indicating it was safe to serve. Shortly after she called and said a lady saw something fly off the aircraft and hit the fuselage just below her window. This confirmed my suspicion of a possible blown tire. I suggested we call ATC and have them contact the airport to see if they could find any parts of our tire on the runway. About 2 Controllers down line, it was confirmed they found pieces of our tire tread on the runway. The Captain and I discussed and determined the best way to handle this was to [advise ATC], contact the company and have the FA have passengers brace for landing.

We also looked for procedures for this type of landing. There were none. I completed a flaps 45 landing with no issues. We stopped on the runway, had the plane inspected and were cleared for taxi to the gate after confirming the tire treads had separated from the right inboard tire. After returning to gate, maintenance discovered the engine would need changed because of tire tread going through it. Engine gave no abnormal indications.

Synopsis

ERJ-145 First Officer reported a tire failed on takeoff causing damage to an engine.
**ACN: 1452522 (45 of 50)**

**Time / Day**
- Date: 201705
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference: Airport: ZZZ.Airport
- State Reference: US
- Altitude: MSL. Single Value: 12000

**Environment**
- Flight Conditions: Mixed
- Weather Elements / Visibility: Visibility: 10
- Light: Daylight
- Ceiling: Single Value: 7000

**Aircraft**
- Reference: X
- ATC / Advisory: TRACON: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B747-400
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Cargo / Freight
- Nav In Use: FMS Or FMC
- Flight Phase: Climb
- Route In Use: Vectors
- Airspace: Class E: ZZZ

**Component**
- Aircraft Component: Cargo Compartment Fire/Overheat Warning
- 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)
- Experience: Flight Crew: Total: 10000
- Experience: Flight Crew: Last 90 Days: 60
- Experience: Flight Crew: Type: 1800
- ASRS Report Number: Accession Number: 1452522
- Human Factors: Troubleshooting

**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)
Experience.Flight Crew.Total: 10000
Experience.Flight Crew.Last 90 Days: 80
Experience.Flight Crew.Type: 3000
ASRS Report Number.Accession Number: 1452526
Human Factors: Troubleshooting

Events
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Inflight Event / Encounter: Fuel Issue
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Returned To Departure Airport
Result.Flight Crew: Landed As Precaution
Result.Air Traffic Control: Provided Assistance

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1
Climbing out of 12,000 to 23,000 I (monitoring pilot) heard a sound like a CB popping. I looked up and noticed "MAIN CABIN SMOKE" light on the overhead panel, I informed the First Officer (fly pilot) and directed him to level off while I talked with ATC and called the dead heading pilot (aircraft qualified) up to the cockpit. I asked dead heading crew member to look in the main cargo area for smoke or fire he grabbed portable O2 bottle and went downstairs. While rider was checking, the First Officer (FO) turned back and I talked with ATC. When jump seat pilot returned reporting no smoke or fire visible we (jump seat pilot and I) ran the "MAIN CARGO FIRE" checklist while FO handled communications with ATC. "MAIN CARGO LIGHT" extinguished before we depressurize aircraft so checklist was stopped. We as a crew discussed and agreed we had no visual indication of smoke or fire to dump fuel and return without [advising ATC of an] emergency. We advised ATC we would need to dump fuel and it would be 24 mins to dump 117k pounds. On completing dumping of fuel we had a fuel imbalance of 3000. We asked ATC for more vectors to run checklist. When all checklist complete, FO flew a coupled approach ILS 15 to a full stop.

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

Synopsis
B747-400 flight crew reported experiencing a "MAIN CABIN SMOKE" light shortly after takeoff. Crew elected to return to departure airport.
ACN: 1451248 (46 of 50)

Time / Day
Date: 201705
Local Time Of Day: 1201-1800

Place
Locale Reference: Airport: ZZZ.Airport
State Reference: US
Altitude: MSL: Single Value: 2500

Environment
Flight Conditions: VMC
Light: Daylight
Ceiling: CLR

Aircraft
Reference: X
ATC / Advisory: Tower: ZZZ
Aircraft Operator: Personal
Make Model Name: Amateur/Home Built/Experimental
Crew Size: Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Aerobatics
Flight Phase: Cruise
Route In Use: None
Airspace: Class E: ZZZ

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

Person
Reference: 1
Location Of Person: Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function: Flight Crew: Single Pilot
Qualification: Flight Crew: Private
Experience: Flight Crew: Total: 1178
Experience: Flight Crew: Last 90 Days: 19
Experience: Flight Crew: Type: 670
ASRS Report Number: Accession Number: 1451248

Events
Anomaly: Aircraft Equipment Problem: Critical
Anomaly: Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector: Person: Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed in Emergency Condition

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
While out doing air work approximately 10 miles from my airport, I noticed smoke in my cockpit. I immediately made towards the airport, reported my position, and that I had smoke in the cockpit. I was given number one clearance to land. I was able to determine that I did not have a fire in the cockpit, and the oily smelling "smoke" was likely oil mist. My oil pressure was substantially below normal operating pressure. Normal would be 60 psi or better, I had about 48 psi. The in-cockpit "smoke" dissipated fairly quickly, but my oil pressure continued to drop, and I advised the Tower of its status. The Tower asked how much fuel I had on board, and I reported I had 14.5 gallons. I was offered [a runway], but I declined due to a significant crosswind, and I was concerned at the prospect of making a dead stick landing in that much crosswind. I continued for [another runway] and continued looking for potential landing spots should the engine fail. At about 2 miles out, I was down to 9 lbs of oil pressure. Aiming directly for the end of [the runway], I maintained close to 2000 MSL until I was sure I had the runway made even if the engine did quit, and then began my descent. I was able to land without incident, and the engine quit shortly after touchdown. With the help of the Airport Manager we pushed my plane off the runway, and eventually back to my hangar. Fire trucks had been scrambled, and after determining I needed no further help, took my name, tail number, and phone number. After removing the engine cowl in the hangar it was discovered the #1 cylinder had cracked the case, causing a complete loss of oil. The engine has been pulled and will be replaced.

Synopsis
Christen Eagle pilot reported landing safely after experiencing a loss of oil pressure.
**ACN: 1451154 (47 of 50)**

**Time / Day**
- Date: 201705
- Local Time Of Day: 0601-1200

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

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

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: 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: GPS
- 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: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1451154

**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: 1451151

**Events**
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Attendant
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Gate
Result.Flight Crew : Returned To Departure Airport

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
After takeoff we were in a right hand turn to a heading and roughly climbing from 2000 to 5000 when we received a SMOKE TOILET EICAS indication. Shortly after we received a call from the FA, I then transferred the controls to the First Officer and told him to set up for an approach to return to the airport. I then [advised] ATC. I then spoke with the Flight Attendant and he stated that an alarm was going off in the lavatory and that there was visible smoke in the cabin. I told him that we will be returning to the airport. I proceeded to give the FA a briefing. I then proceeded to run the QRH for SMOKE TOILET. The First Officer had us set up on final approach as the controls were transferred back to me for landing. I informed the First officer that I told the Flight Attendant to anticipate an expedited deplaning upon landing and that we would further evaluate the cabin condition after landing. We landed and exited on an intersecting runway. Fire and Rescue determined that there were not any hot spots from both inside and outside the aircraft. The Flight Attendant had also indicated that the smoke had cleared so we decided to keep the passengers on the aircraft. We then proceeded to return to a gate and deplaned the passengers.

The cause of the event is unknown as the source of the smoke was not found. The aircraft had shown a history of the same indications twice in the last two months. I would suggest further maintenance diagnosis when there is visual indications of smoke.

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

Synopsis
CRJ-200 flight crew reported returning to departure airport after experiencing a "SMOKE TOILET" message and the Flight Attendant reported smoke in the cabin.
**ACN: 1451007 (48 of 50)**

**Time / Day**
- Date: 201705
- 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
- ATC / Advisory.Tower: 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: Taxi

**Component**
- Aircraft Component: Powerplant Fire/Overheat Warning
- Aircraft Reference: X
- Problem: Improperly Operated

**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: 25300
- Experience.Flight Crew.Type: 1475
- ASRS Report Number.Accession Number: 1451007
- Analyst Callback: Completed

**Person: 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: First Officer
Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Fluid Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Other Person
Detector.Person : Flight Crew
When Detected : Taxi
Result.General : Evacuated
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Prior to take off from ZZZ we experienced a long delay due to heavy bank of departures. I asked the First Officer (FO) to shut down the right engine to save fuel. We were to follow [another aircraft] to the runway and we were advised by the ground controller that we should stay with him. When we asked about our sequence we were told that we were number 20.

As we moved closer to departure runway it appeared to me that we would be taking off soon, but the controller had not switched us to the tower. I asked the First Officer to restart the right engine at this time. Meanwhile, the ground control frequency had been busy the whole time and it was hard to get a word in. We finally asked the ground controller if he needed us to switch to tower. He replied in the affirmative and DID NOT say that he had asked us to do that earlier, as I was concerned we had missed his call.

As we switched to tower the [preceding aircraft] that we were following was turning onto the runway. First Officer started to run the before takeoff checklist below the line as the tower was giving us instructions to get on the runway. I was observing EICAS indications relating to the right engine, and I said something like "that's not right" as I observed no N1 on the right engine. All other indications except N1 appeared normal. I advised the tower that we had an engine issue and that we would not be ready to take off.

Tower then gave us instructions to turn right on XYR, turn left on Yankee and left on Papa. We acknowledged the clearance and started to taxi. As we taxied, a couple of aircraft started mentioning that the right engine was on fire, however, we had no cockpit fire or overheat indications other than the mentioned abnormal start indications. I continued to taxi and as I turned onto taxiway Papa I stopped the airplane and set the brakes. Other aircraft kept advising us that the fire was still going. Since we had no indications in the cockpit, I was thinking "Engine Torching" vs. the correct term Tailpipe fire. I was about to call for that checklist when to me, it sounded like someone said over the radio that we should do an evacuation.

Since we had several reports of a fire, at this time I advised the tower that we were starting an Evacuation and asked the First Officer to run the Evacuation check list. Again,
we had no cockpit indications of a fire. As a caution and because time was of essence I wanted to tell the Flight Attendants to prepare for possible evacuation. Since the last [aircraft] we flew [had] a different flight inter-phone, I was not immediately sure which button was for talking to the back. So, I decided to make a PA announcement to the flight attendants to "Prepare for Evacuation". My intent was to have them prepare and assess the situation from their vantage point. By this time, I believed, because the FO was running the Evacuation checklist, that she had actuated the evacuation signal. I then started hearing the sounds of the evacuation going on and made a PA announcement to "evacuate on the left side only". As I put my attention back in the cockpit the FO was at the point on checklist where we needed to pull the fire handles. I said something to the effect that we needed to pull them, but she pointed me to a statement that said "illuminated fire handle". We both decided that there was no illuminated handle and elected not to pull them. I now realize that was procedurally incorrect. However, in the rush of the moment we thought we did the correct procedure, and by this time the Evacuation was almost complete. We proceeded to do a sweep, and verify that all passengers and Flight Attendants had evacuated the airplane. And then we used the slides to exit the airplane.

Thankfully, the evacuation went smoothly except for a few minor injuries. Our inflight crew did an excellent job of herding all passengers away from the aircraft.

**Callback: 1**

The reporter stated that they didn't realize they had a fire until other aircraft informed them. The reporter stated that they did not have any indications in the cockpit of a fire except that the #2 engine appeared to have a hung start. The reporter stated that he suspects the First Officer may have introduced fuel into the engine a little too early therefore the fuel did not light off as it normally would and fuel was just pouring into the tail pipe. The reporter stated they went through the QRH and started the checklist for engine fire. The reporter stated it was very busy in the cockpit due to the fact they were lined up for takeoff with ATC very busy with multiple aircraft in line waiting for takeoff. The reporter stated they may not have pulled the fire handle because it’s only called for if the handle is lighted. The reporter also stated that they decided to get off the runway and evacuate the aircraft. The reporter stated that while accomplishing the evacuation procedure and attempting to deal with the fire, the First Officer may have accidentally turned off the APU causing the starter cutout message on EICAS. The reporter stated that by time the Airport Rescue and Fire Fighting arrived the fire had gone out, but it was still smoldering. Smoke was coming out the front and back of the engine. The reporter stated that there was black soot all over the pylon area and when they water washed the engine all the black soot came off. The reporter stated that after the water wash they could not find any damage to the engine or the wing.

The reporter stated that the company is constantly changing the checklists and it makes it difficult to ensure you are following the proper procedure.

**Narrative: 2**

On taxi-out to runway XYR/W we realized there would be a long delay for takeoff. We were told to remain with ground and follow [another aircraft]. I queried as to our sequence and was told number 20 for departure.

After reviewing the release, we realized that we were only planned for 20 min of taxi fuel, so the Captian asked me to shut down number 2. We started the APU so there would be no interruptions in the cabin for power.
Captain asked me to send a message to the dispatcher alerting them of our on time off the gate, and our subsequent delay.

The ground frequency was very congested, but we kept hearing other aircraft transferred to tower "number nine for departure," but they never switched us. The captain made an announcement that we were number 20 for departure and talked with the flight attendants and advised them of the delay. As we inch closer to taxiway W he asks me to again query Ground for our sequence because we needed to start the right engine... because of the congestion, I could not, and so he tells me to start number 2. It appeared to be a normal start, with a rollback around 350 (all engine indications similar to the left engine). While I was starting the engine, I was finally able to ask Ground if he wanted us to monitor tower. He said yes, I checked in with tower, and at the same time noticed "STARTER CUTOUT-R" and no N1 indication on the right engine. Tower cleared us to line up and wait, to which we replied unable.

I did the obvious corrective action of ENG START selector to Auto, and the message disappeared. At that point we were unaware of any fire indications. Hindsight, if someone would have told us about the flames, I should have performed the Tailpipe Fire checklist. We had no fire or overheat indications at any time.

I had already completed all other checklists to the line. They again cleared us for takeoff, and the captain confirmed we had power to the right engine, but no N1 indications so he came on the radio telling tower we were unable to takeoff due to an engine issue. Tower then gave us instructions to turn right on XYR, left Y, left P. I read back the instructions. As I was pulling out the QRH, that is when other aircraft on frequency advised us that we had flames coming out of the right engine.

Multiple aircraft stated our right engine was still on fire and tower asked our intentions. One of the transmissions from another aircraft at that time said something to the effect of "you guys need to be clear when talking about fire, because if they still have a fire they will be evacuating based on your observations." I believe I came on frequency and asked if there were still flames since we had no fire indications, bells, or lights, nor did we even have a hot start. Aircraft or tower confirmed our engine was on fire. We asked to have the equipment rolled, and the captain commanded the evacuation checklist.

I read it slowly, and performed the first 5 steps. The Captain did the PA to prepare for evacuation and then asked me about pulling the fire handles. I misunderstood him, and thought he wanted me to discharge the bottles. We went through the checklist and both confirmed that step 7 said we did not have any fire warning indications so I didn't want to discharge the bottles.

That is when I heard the slides deploy, the EVAC light illuminate, and the flight attendants giving their commands. The captain quickly made a PA to only evacuate on the left side.

Airport Rescue and Fire Fighting (ARFF) had not arrived by that point, and with an unknown confirmed fire, I believe our crew performed the safest action based on the information we had, rather than wait for a confirmation of the fire extinguished or worsening.

By the time we finished the remaining checklist items, only one flight attendant was on board. We did a final sweep of the aircraft to make sure no other people were on board and then we came down the slide. We talked with ARFF while performing the final walk.
Synopsis

An air carrier flight crew reported being advised of an engine fire while lining up for takeoff, resulting in an evacuation.
ACN: 1450875 (49 of 50)

**Time / Day**
Date: 201705
Local Time Of Day: 1801-2400

**Place**
Locale Reference. ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude. MSL. Single Value: 3000

**Environment**
Flight Conditions: VMC

**Aircraft**
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: MD-11
Crew Size. Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Cargo / Freight
Flight Phase: Cruise
Airspace. Class A: ZZZ

**Component**
Aircraft Component: Air Conditioning and Pressurization Pack
Problem: Malfunctioning

**Person**
Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function. Flight Crew: Captain
Qualification. Flight Crew: Air Transport Pilot (ATP)
Qualification. Flight Crew: Instrument
Qualification. Flight Crew: Multiengine
ASRS Report Number. Accession Number: 1450875

**Events**
Anomaly. Aircraft Equipment Problem: Less Severe
Anomaly. Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector. Person: Flight Crew
When Detected: In-flight
Result. General: Maintenance Action
Result. Flight Crew: Landed in Emergency Condition
Result. Flight Crew: Overcame Equipment Problem
Result. Aircraft: Equipment Problem Dissipated
**Assessments**

Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft

**Narrative: 1**

Just before descent at FL300, on the Arrival, I noticed an acrid smell and then saw smoke pouring into cockpit from what seemed like "everywhere". First Officer (FO) and I simultaneously reached for and donned our O2 masks. I was Pilot monitoring (PM) and took aircraft control. I coordinated with ATC for vectors direct [destination] and a descent. The FO established cockpit communication and we troubleshooted the problem.

The arrival and approach had been briefed. We had no warnings, or cautions, just smoke. We turned the #2 Pack off and turned the air temperature down. The smoke stopped billowing out and began to dissipate. We checked on the [passengers] and they had no indications of fire, or smoke. We briefed them what was going on and what our plan was. After 5-10 minutes no smoke was visible, or smelled. We stowed our O2 masks and continued without them.

The HUD was MEL-ed and proved distracting because of bad information on the previous flight. We transferred control back to the FO during the descent. He made an uneventful approach and landing, taxied clear to taxiway S via S4. Emergency vehicles met and inspected us, then led us to parking. Aircraft Maintenance was debriefed at the jet as was the duty officer telephonically. The maintenance write up stated that 3 water separators were changed and the aircraft was returned to service. Change water separators, or inspect more frequently.

**Synopsis**

MD11 flight crew reported smoke in the Flight Deck. They donned oxygen masks and ran the appropriate checklist. This resolved the problem and they continued to destination.
ACN: 1450741 (50 of 50)

Time / Day
Date: 201705
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 37000

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B757 Undifferentiated or Other Model
Crew Size.Number Of Crew: 3
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Cruise
Route In Use: Oceanic
Airspace.Class A: ZZZ

Component
Aircraft Component: Electrical Wiring & Connectors
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: 974
ASRS Report Number.Accession Number: 1450741

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
As we boarded the aircraft for preflight, I saw 5 mechanics around seat 20A inspecting an inbound write up, regarding reported excessive heat at the sidewall panel. There was also an accompanying mark on the spot that appeared to be a scuff mark, (surface only), rather than a deterioration of the composite material. The chief mechanic explained that by the emergency exit windows there were heat strips in the panel that would get warm, but should not produce excessive heat, as the write up suggested. I encouraged them to find the person who wrote up the aircraft, but they were unable to contact him. [Company maintenance] and local maintenance concurred that the aircraft could be released, finding no related damage, and my crew and I felt comfortable with that decision. All flight attendants were briefed and vigilant to this write up. At 2+20 into flight, a passenger reported the sidewalk was very hot, at the same spot, and she was unable to put her head against it, due to the heat. The International Reserve Officer (IRO) was coming off of break, so the First Officer (FO) went back to observe and assess, and returned, reporting it was hot, but he could place his hand on it (describing it as coffee pot hot). After consulting with Dispatch and Maintenance, to discern if we could control the heaters with any circuit breakers (inaccessible in flight), I decided we would [advise ATC of emergency situation], and if possible, return to ZZZ, although diversion enroute might occur if the heat at the hot spot continued to increase significantly. The FO coordinated with ATC via HF, and announcements were made as we turned off track Y. We received an initial clearance to ZZZ via Controller Pilot Data Link Communications (CPDLC), with a load prompt, but that point was 3000 miles in the opposite direction of ZZZ. After a few messages, we were cleared to ZZZ, FL370. The IRO ran the diversion checklist, we
obtained the weather for all possible enroute diversion airports, and kept a close eye on
the nearest alternate choices, in case of deteriorating conditions. I briefed the lead flight
attendant of our plan and of the possibility of divert if conditions deteriorated. A second
hot spot, 6 inches below the first, was reported by the flight attendant stationed at that
seat. As we descended through FL180, the flight attendant reported that the hot spot was
getting hotter. There was no visible smoke or odor throughout the flight. We landed
uneventfully, flaps 30, and taxied to the gate.

The coordination of clearances via CPDLC was a distraction. Upon coast out, before the
emergency, we were given a new route clearance with a load prompt direct to 40W. We
queried, and the next clearance eliminated the 30W position in the load route prompt.
Querying again, we received the full route clearance as expected. We were careful during
the coordination for the turn off the track to make sure we received the correct clearance,
after the previous confusion.

**Narrative: 2**

[Report narrative contained no additional information.]

**Narrative: 3**

[Report narrative contained no additional information.]

**Synopsis**

B757 flight crew reported a return to departure airport when a hot spot developed at a
sidewall panel that was an inbound write up.