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.................................................14.0

Date of Update.................................................December 31, 2018

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.
TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

ASRS reports are submitted voluntarily. Such incidents are independently submitted and are not corroborated by NASA, the FAA or NTSB. 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 clarified by further contact with the individual who submitted them, but the information provided by the reporter is not investigated further. Such information represents the perspective of the specific individual who is describing their experience and perception of a safety related event.

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

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

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

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

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

One thing that can be known from ASRS data is that the number of reports received concerning specific event types represents the **lower measure** of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 2010 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 2010. With these statistical limitations in mind, we believe that the **real power** of ASRS data is the **qualitative information** contained in **report narratives**. The pilots, controllers, and others who report tell us about aviation safety incidents and situations in detail – explaining what happened, and more importantly, **why** it happened. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.
Report Synopses
ACN: 1590209 (1 of 50)

Synopsis
Flight Crew of CE-750 reported detecting smoke in cabin and diverted.

ACN: 1589549 (2 of 50)

Synopsis
B737-800 Captain reported fumes in the cockpit and forward during climb, clearing in cruise, and returning on descent.

ACN: 1588991 (3 of 50)

Synopsis
B757 flight crew reported electrical fumes and diverting to alternate airport.

ACN: 1588862 (4 of 50)

Synopsis
A320 Captain reported after starting the APU and turning an air conditioning pack on, the cabin filled with fumes.

ACN: 1587117 (5 of 50)

Synopsis
A320 Captain reported returning to gate due to fuel smell reported by passengers and flight attendants.

ACN: 1587019 (6 of 50)

Synopsis
B767 flight crew smelled fumes during approach, requested priority, and landed without incident.

ACN: 1586779 (7 of 50)

Synopsis
CRJ200 Maintenance Technician reported an APU fire was observed during aircraft tow.

ACN: 1586618 (8 of 50)

Synopsis
A320 flight crew reported continuing to destination after the cabin crew successfully fought a fire in the forward galley oven.
ACN: 1586460 (9 of 50)

Synopsis
Beech 1900 Captain reported experiencing strong fumes in the cockpit when calling for increased heat at a high altitude.

ACN: 1585050 (10 of 50)

Synopsis
CRJ-200 flight crew reported smoke in the cockpit during descent due to malfunctioning APU, in use because of an MEL'd main generator.

ACN: 1584787 (11 of 50)

Synopsis
B767 Captain reported electrical odor and multiple navigation equipment failures.

ACN: 1584582 (12 of 50)

Synopsis
A320 flight crew reported an engine failure during climb resulted in a return to the departure airport.

ACN: 1584466 (13 of 50)

Synopsis
Two Flight Attendants reported strong fume odors in the aft galley.

ACN: 1584465 (14 of 50)

Synopsis
B737 Flight Attendant reported experiencing extreme fumes in rear of main cabin and galley area.

ACN: 1583737 (15 of 50)

Synopsis
A319 Flight Attendant reported feeling ill after being exposed to fumes in the cabin. Other flight attendants reported similar effects, and three of them went to the hospital.

ACN: 1583096 (16 of 50)

Synopsis
EMB-145 First Officer reported donning oxygen masks in response to an odor, resulting in difficult communications.
ACN: 1581911 (17 of 50)

Synopsis
Fractional flight crew reported the cabin filled with smoke from a faulty APU prior to takeoff.

ACN: 1581849 (18 of 50)

Synopsis
A320 flight crew reported diverting due to smoke and fumes from an avionics cooling blower fan malfunction.

ACN: 1581844 (19 of 50)

Synopsis
B777 flight crew reported a burning electrical smell from the aft galley.

ACN: 1581787 (20 of 50)

Synopsis
B737-700 flight crew reported being notified during taxi of a flaming engine due to oil leaking into the tailpipe.

ACN: 1581674 (21 of 50)

Synopsis
Cessna 210 pilot reported diverting to an alternate airport after experiencing smoke in the cockpit related to overheating hydraulic fluid.

ACN: 1581223 (22 of 50)

Synopsis
CRJ-900 Captain reported evacuating the aircraft on a taxiway after smoke was reported in the cabin.

ACN: 1580918 (23 of 50)

Synopsis
Challenger 350 Captain reported electrical fumes in the aircraft during taxi for takeoff resulted in the passengers being deplaned on the taxiway.

ACN: 1579651 (24 of 50)

Synopsis
B787 flight crew reported a cabin air compressor failure resulted in cabin fumes and a diversion.
ACN: 1578689 (25 of 50)
Synopsis
Boeing 777 flight crew reported detecting faint electrical fumes in the business class section, later attributed to an iPhone which had been crushed under a seat.

ACN: 1578167 (26 of 50)
Synopsis
A319 Flight Crew reported smoke entered the cockpit during climb that dissipated when Pack 1 was selected to off.

ACN: 1574897 (27 of 50)
Synopsis
Airbus flight crew reported smelling residual fumes from an APU oil leak repair upon entering the aircraft.

ACN: 1574140 (28 of 50)
Synopsis
B-767 flight crew reported a brake fire had been extinguished after gate arrival.

ACN: 1574128 (29 of 50)
Synopsis
B737 flight crew reported fuel fumes/odor in the aft cabin resulted in a direct approach and landing at the planned destination.

ACN: 1573630 (30 of 50)
Synopsis
B757-200 flight crew reported diverting due to smoke in the cockpit.

ACN: 1573106 (31 of 50)
Synopsis
B767 flight crew reported an engine failure and return to the departure airport.

ACN: 1572985 (32 of 50)
Synopsis
B777 Captain reported diverting to an alternate after the Purser reported electrical burning odors related to hot chargers in the cabin.
ACN: 1572478 (33 of 50)

Synopsis
Learjet 55 Captain reported leaving runway during rejected takeoff for tire failure. Flight crew discovered fire in gear area and used portable extinguishers to fight it prior to calling for assistance.

ACN: 1571858 (34 of 50)

Synopsis
Small transport aircraft Captain reported extreme conditions and loss of control on approach due to wild fire.

ACN: 1571806 (35 of 50)

Synopsis
B767 First Officer reported enroute diversion due to several Flight Attendants experiencing symptoms similar to hypoxia caused by unknown source. Further investigation by Maintenance determined fumes of cargo shipment of glue and shoes was the probable cause.

ACN: 1570862 (36 of 50)

Synopsis
A320 pilot reported "dirty sock smell" detected by First Officer in the cockpit and Flight Attendants in the cabin.

ACN: 1570516 (37 of 50)

Synopsis
A Flight Attendant reported feeling ill from odors in the cabin.

ACN: 1570471 (38 of 50)

Synopsis
B737-800 flight crew reported that a Flight Attendant reported a fire under a passenger seat in the cabin.

ACN: 1570426 (39 of 50)

Synopsis
EMB-145 Captain reported that after takeoff there was an odor of oil fumes in the cockpit.

ACN: 1570377 (40 of 50)

Synopsis
A320 Captain reported a passenger's e-cigarette in their carry-on caused concern which resulted in deplaning and a smoke and fume investigation.

<table>
<thead>
<tr>
<th>ACN: 1569561 (41 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
EMB-145 flight crew reported diverting to an alternate airport and evacuating on the runway after experiencing smoke in the cabin enroute.

<table>
<thead>
<tr>
<th>ACN: 1568692 (42 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
A321 Flight Attendant reported noticing a frequent problem with fumes in the cabin on taxi in.

<table>
<thead>
<tr>
<th>ACN: 1568166 (43 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
Flight Attendant reported illness due to carbon monoxide inhalation while preparing the galley for flight.

<table>
<thead>
<tr>
<th>ACN: 1568150 (44 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
A321 Flight Attendant reported after engine start, fumes entered the cabin aft galley area.

<table>
<thead>
<tr>
<th>ACN: 1568089 (45 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
A330 Captain and Relief First Officer reported odor in cabin causing a return to departure airport.

<table>
<thead>
<tr>
<th>ACN: 1567987 (46 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
B737 Captain reported "acid oily smell" on rotation and returned to departure airport.

<table>
<thead>
<tr>
<th>ACN: 1566632 (47 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
B737-800 flight attendants reported feeling ill from fumes in the cabin that smelled like jet fuel.

<table>
<thead>
<tr>
<th>ACN: 1565148 (48 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**
Flight Attendant reported fumes in cabin prior to pushback.

<table>
<thead>
<tr>
<th>ACN: 1564692 (49 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Ground personnel reported a fuel leak/spill from pc unit on jet bridge.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1563332 (50 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>A321 Flight Attendant reported feeling ill from exposure to fumes in the cabin during descent.</td>
</tr>
</tbody>
</table>
Report Narratives
ACN: 1590209 (1 of 50)

Time / Day
Date: 201810
Local Time Of Day: 0601-1200

Place
Locale Reference, ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude, MSL, Single Value: 40000

Aircraft
Reference: X
ATC / Advisory, Center: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Citation X (C750)
Crew Size, Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Passenger
Flight Phase: Cruise
Airspace, Class A: ZZZ

Component
Aircraft Component: Cabin Entertainment
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: Pilot Not Flying
Qualification, Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number, Accession Number: 1590209

Person: 2
Reference: 2
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: Air Transport Pilot (ATP)
ASRS Report Number, Accession Number: 1590210

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector.Person : Passenger
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Diverted
Result.Flight Crew : Took Evasive Action

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
We experienced a very loud noise at FL400. It sounded like an alarm at first or high pitch squealing sound. After a few minutes the passengers had said they detected an odor that they thought was electrical and hydraulic in nature. At that time we started to turn around and divert the aircraft. Weather was 2,600 Broken, 12 degrees C, 29.78, and winds of 360 at 17 knots. The loud sound in the aircraft did subside some in the descent and then returned, but not as loud. Also, the smell did change some as reported by the passengers. Once we were in the vicinity of [the airport] I actually did start to smell the odor as well. It reminded me of smells associated with both electrical and failed PACs. We requested the ILS XY, but were able to get a visual approach about 7 miles from the airport. The landing was approximately [30 minutes later]. We parked the aircraft, shut down, got passengers out and away from aircraft and then met with fire department and evaluated aircraft.

Narrative: 2
Took off and climbed to altitude. Approximately 10 minutes into cruise we heard a loud modulating alarm like noise coming from the cabin. So loud we could hear it despite wearing noise cancelling headsets. My initial thought was a medical alarm or similar from a device carried by a passenger. The modulating sound ended and was then replaced by a very loud squeal. I then guessed we had a bad pressure seal from the main door or emergency plug exit in the rear. I told the Pilot Not Flying (PNF) that I would fly the plane and he would turn to the passengers and see if they could tell where the sound was coming from. I checked the pressurization indications and found them to be normal. We both took out our oxygen masks and set them in our laps in case this was only the first step in a depressurization event. The PNF called back to our maintenance people to get input on the suspected seal failure. As he was speaking to maintenance to see if they had any alerts from the maintenance computer through datalink (they had not) the passengers communicated to us that they could smell an electrical burning followed by what they described as hydraulic fluid and or burning plastic smells. At this point both the PNF and I quickly agreed we were diverting. While he talked to the passengers I conveyed to ATC we had loud noises and smells coming from the back and needed to divert. Once the PNF put his headset back on and told me the smell was getting stronger we decided to divert to the nearest runway with at least 7000 feet. ATC gave us vectors and a descent and asked if [we were requesting priority handling] and we said yes. We still had no CAS or other abnormal indications in the cockpit as to what might be wrong. We descended at around 4000 feet/minute and kept the speed near VMO not knowing what we were dealing with. We went through all pages of aircraft systems looking for any indication of abnormal with particular emphasis to electrical and hydraulic. It then occurred to me it might be the Automatic Electronic Defibrillator (AED) we carried in the aft cabin. The alarm sound and electrical burning might be from a malfunctioning AED. Checking with the passengers they
said the smell had stabilized and had not got worse and there was no evidence of smoke. We in the cockpit could not smell it. Before we went below 10,000 feet we discussed going more than 250 knots and decided there was no need since the smell had stabilized and had no evidence of fire and higher than normal speed might lead to mistakes on the approach by doing things too fast. We called the field in sight and landed without further incident. Deciding the aircraft was safe to taxi we cleared the runway and arrived at the FBO. As I secured the engines and shut the plane down the PNF calmly deplaned the passengers and led them to the FBO while I met the Fire Department. They inspected the aircraft and removed the AED and found it to be normal. As I went into the cabin it did smell of burnt plastic/melted wire casing and it seemed as if the cabin had a very slight haze to it. We emptied the baggage compartment and checked all Circuit Breakers (CBs) we could find with the help of the firefighters. We found no CBs popped. We then disconnected the ship’s batteries at the direction of the firefighters. The firefighters checked the plane with their Forward-Looking Infrared (FLIR) device and confirmed the only heat hot enough to worry about was the brakes. I called home base and signed the paperwork for the fire department and got the passengers on their way in rental cars. Cessna dispatched a maintenance team and our flight department sent a team over also. It was discovered later that day that the In Flight Entertainment (IFE) audio box had "melted down" and shorted out.

**Synopsis**

Flight Crew of CE-750 reported detecting smoke in cabin and diverted.
Time / Day
Date: 201810
Local Time Of Day: 0601-1200

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

Environment
Flight Conditions: Mixed
Weather Elements / Visibility: Rain
Weather Elements / Visibility: Thunderstorm
Weather Elements / Visibility: Icing

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

Component
Aircraft Component: Compressor Bleed Valve
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: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1589549
Human Factors: Workload
Human Factors: Troubleshooting

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 : Landed in Emergency Condition

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

Narrative: 1
During takeoff detected odor during climbout. It didn't last long in the climb and was not noticeable during cruise flight, during descent into ZZZ passing 26,000 or so we started smelling this odor again, while descending further the smell became stronger. The flight attendants in the forward cabin called to say they were smelling a strong odor / fume up in the forward galley area by the cockpit door. Stated it did not extend into the passenger cabin area. As the odor / fume became stronger in the cockpit. I [notified ATC] and we donned our oxygen masks and ran the QRH.

We were in significant weather deviating around thunderstorms moderate turbulence, and moderate rain with icing.

Note: engine anti-ice was on throughout our descent. Wing anti-ice was on for approx. 5-10 minutes during descent. Odor and fumes seemed confined to the cockpit and forward galley only. Once down around 3-4,000 most of the fume/odor was gone. Successful landing on Runway 4R with winds 080 feet at 26 gusts 34 knots.

Aircraft just came from ZZZ1 after a heavy check. It was ferried before this flight. I suspected a left engine bleed issue or fume due to its presence primarily in the cockpit and its recent heavy check. Smell was similar to paint on an exhaust pipe or a BBQ that gets very hot for the first time. No visible haze or smoke was present but the fume was definitely strong enough to require use of the quick don masks for safety. Some mild eye irritation was noted in the last 30 minutes of flight. The cabin crew reported that the fumes were not affecting them or present in the main cabin.

Would like to extend our sincere thanks to Center, Approach control and tower/ground controllers for their outstanding support during this event. Also the ready support by ZZZ's crash fire rescue team that responded to our [situation]. They were with us until all the passengers were off the aircraft.

I also would like to commend my crew, starting with my First Officer, for his professional performance during this inflight event that was as complicated as it gets, trying to evaluate the source, coordinate with ATC when needed, working with flight attendants and assistance with avoiding severe weather. He was the most important player in this event and his skillset and training was evident all along the way. Kudos for a job well done. Secondly, appreciation for an outstanding job by our flight attendant crew for their exceptional job of preparing our passengers and the cabin for our arrival in this situation. It was a total team effort to get us all to the gate safely.

Synopsis
B737-800 Captain reported fumes in the cockpit and forward during climb, clearing in cruise, and returning on descent.
ACN: 1588991 (3 of 50)

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

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

Environment
Flight Conditions: IMC
Weather Elements / Visibility: Rain

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B757-200
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Climb
Airspace.Class A: ZZZ

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Type: 6808
ASRS Report Number.Accession Number: 1588991

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 3281
Experience.Flight Crew.Type : 1181
ASRS Report Number.Accession Number : 1588995

Events
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 : Diverted
Result.Flight Crew : Landed As Precaution

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
During climb through FL250 we noticed a very strong odor that we thought was an electrical fire. We completed the appropriate checklists and then requested the lead FA (Flight Attendant) to come to the cockpit. Upon entering the cockpit the FA stated "what's burning" which helped us verify our suspicions of an electrical fire. The odor did diminish some but not completely after running the checklists. We then decided to divert and make an overweight landing.

Narrative: 2
Upon climbing from FL230 to FL310 approximately 20 minutes into flight, FO (Flight Officer) smelled a strong odor of electrical fumes (acrid odor) with no associated smoke. Captain also smelled it. Flight Attendant was called up to cockpit and confirmed the smell. Smoke/Fire/Fumes QRC/QRH was performed. Odor subsided after checklist was performed and crew decided to divert. Dispatch was notified via ACARS. Captain performed an overweight landing at 224K lbs and taxied to gate uneventfully. Flight conditions were IMC in rain at night near thunderstorms (with occasional St Elmo's fire phenomena across the windscreen) for most of the flight until weather improved enough for a visual approach. Once parked, Maintenance noticed the residual smell upon entering cockpit.

Synopsis
B757 flight crew reported electrical fumes and diverting to alternate airport.
ACN: 1588862 (4 of 50)

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

**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 Plan: IFR
- Mission: Passenger
- Flight Phase: Parked

**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: Pilot Flying
- Function.Flight Crew: Captain
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1588862
- Human Factors: Physiological - Other
- Human Factors: Troubleshooting

**Events**
- Anomaly.Aircraft Equipment Problem: Less Severe
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Detector.Person: Flight Attendant
- Detector.Person: Flight Crew
- Were Passengers Involved In Event: Y
- When Detected: Aircraft In Service At Gate
- Result.General: Evacuated
- Result.General: Flight Cancelled / Delayed
- Result.General: Physical Injury / Incapacitation
- Result.General: Maintenance Action

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

Narrative: 1

Upon starting APU and turning on bleed air, we immediately noticed on flight deck a medium/strong smell of burning oil/stale smell. I asked [the] First Officer to concur which he did while opening his flight deck window. I turned off pack #1 and I started to call B Flight Attendant in back, but before I could she called me and stated that they had a very oily suffocating smell in back of aircraft. I immediately turned off APU bleed air and pack #2. I pulled up the odor removal checklist in FOM and told flight attendants to open up back doors to get air flow through cabin. Contacted Maintenance Control and Dispatch. Flight attendants complained of headache, sore throat, stinging eyes. My First Officer and I only experienced sore throat and stinging eyes. We de-boarded aircraft per [Operations Control]. Passengers were sent to another aircraft. EMS responded to check out crew. I told [the] flight attendants they certainly could go to hospital to be further evaluated-they did not. I completed the odor/fumes report. Crew was released as they had replaced all of us. These events are occurring far too frequently. The pack burnout procedures are not always being followed correctly. This is a safety issue for both crews and passengers. Once a pack is contaminated with oil, in my opinion it needs to be replaced, even though this is a huge economic constraint. You can’t get much of the contaminants out of system.

Synopsis

A320 Captain reported after starting the APU and turning an air conditioning pack on, the cabin filled with fumes.
ACN: 1587117 (5 of 50)

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

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

**Environment**
Flight Conditions: VMC

**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

**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)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multieengine
ASRS Report Number.Accession Number: 1587117
Human Factors: Troubleshooting

**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
Detector.Person: Flight Attendant
Were Passengers Involved In Event: Y
When Detected: Taxi
Result.General: Maintenance Action
Result.Flight Crew: Returned To Gate

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

**Narrative: 1**

The flight blocked out two minutes late. After starting Engine 2, an ECAM message for AUTOFLT RUD TRIM 2 FAULT appeared. ZZZ Ground Control was advised that we needed some time to address a mechanical discrepancy and they requested that we move out of their way and taxi southeast on Z holding short of C. The ECAM message was addressed by calling Dispatch, being transferred to [Maintenance Control], and deferring the fault via the MEL (two MEL's, one being a CAT downgrade). The MEL Operations Procedure was lengthy and required some extra minutes to complete.

While we were waiting [on the documentation] for the MELs plus a reduction in brake release fuel, Flight Attendant C contacted the flight deck to report a passenger in or near the exit rows had flagged her down to report an unusual smell of "burning fuel." Flight Attendant C stated she also smelled it and agreed with "burning fuel." I requested all flight attendants assess the odor. Three of the four flight attendants stated they could smell it with Flight Attendant B saying it burned her nose slightly and Flight Attendant A saying it irritated his throat somewhat. There was no rush to judgment at this time because we were still waiting for the [documents] anyway. The APU was started and the APU Bleed was switched on and off with Pack 1 and Pack 2 turned off alternately with the intent to eliminate the odor or isolate the source. Eventually more passengers reported smelling the odor too. The flight attendants reported that the smell would go away and then they would call back shortly thereafter to say the odor was back. Overall the odor was persistent and we had delayed somewhat hoping it would go away. No odor was apparent in the flight deck at this time. At this point, Dispatch was contacted, the transfer to Maintenance Control was made, and a decision to return to the gate was made.

Upon arrival at the gate with the flight deck door opened, Flight Attendant C forward to tell us she wasn’t feeling well. When I asked if she needed medical assistance she said yes because she was feeling light headed and having some difficulty in breathing. I asked the First Officer to phone STAT-MD while I advised the gate agent to request EMTs to come to the aircraft. STAT-MD told the First Officer to call back when the EMTs arrived and to provide the vital signs. Then, I inquired about the fitness of the other flight attendants and all reported they were okay. Dispatch was advised of Flight Attendant [C] illness. At no time was I aware of any passengers showing any symptoms or claiming to be affected by the odor.

Paramedics arrived at the gate took Flight Attendant C to a medical facility for further treatment.

Because pilots are prohibited from going to the cabin to assess odors, perhaps more training for flight attendants to assess and better identify the intensity and effect of these odors could provide pilots with better info to make a "go" or "no go" decision.

**Synopsis**

A320 Captain reported returning to gate due to fuel smell reported by passengers and flight attendants.
ACN: 1587019 (6 of 50)

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

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

**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: Cargo / Freight
Flight Phase: Initial Approach
Airspace.Class B: ZZZ

**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
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1587019
Human Factors: Troubleshooting

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

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

20 miles southwest [of] ZZZ below 10,000 feet, an acrid smell of something burning entered cockpit. No secondary indications, warnings or cautions presented. Performed Phase 1 for smoke/fire. [We requested priority] and landed, Runway XXC at ZZZ. Crash crew visually inspected after we came to stop. Smell had dissipated by the time we were stopped.

Crew detection of acrid (burning) smell in cockpit. [The] cause remains unknown.

Synopsis

B767 flight crew smelled fumes during approach, requested priority, and landed without incident.
**ACN: 1586779** (7 of 50)

**Time / Day**

Date: 201810
Local Time Of Day: 0601-1200

**Place**

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

**Environment**

Light: Dawn

**Aircraft**

Reference: X
Aircraft Operator: Air Carrier
Make Model Name: Regional Jet 200 ER/LR (CRJ200)
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: Flight Deck
Reporter Organization: Air Carrier
Function.Maintenance: Technician
Qualification.Maintenance: Airframe
Qualification.Maintenance: Powerplant
ASRS Report Number.Accession Number: 1586779

**Events**

Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector.Person: Maintenance
Were Passengers Involved In Event: N
When Detected.Other
Result.General: Maintenance Action

**Assessments**

Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

**Narrative:** 1
While the aircraft was being towed and I received the signal, I started the APU in accordance with CRJ 200 [Maintenance Procedure]. The EGT was around 350 but the RPM only went to 24. [Maintenance personnel] opened the door and told me to shutdown, we have an APU fire. (No fire indication was indicated on displays) I properly shutdown, set brakes, and got out of the aircraft.

**Synopsis**

CRJ200 Maintenance Technician reported an APU fire was observed during aircraft tow.
Time / Day
Date: 201810
Local Time Of Day: 0001-0600

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude.MSL.Single Value: 23000

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
Flight Phase: Climb

Component
Aircraft Component: Galley Furnishing
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: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Last 90 Days: 230
Experience.Flight Crew.Type: 1047
ASRS Report Number.Accession Number: 1586618

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function: Flight Crew: Pilot Not Flying
ASRS Report Number: Accession Number: 1586899

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: Flight Crew: Overcame Equipment Problem

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1
On climbout passing FL230, the Purser called the flight deck and said that when she opened the oven door some smoke came out of it. As she was talking she said she could now see flames at the back of the oven. I gave the pilot flying and ATC communication responsibilities to the First Officer and got on the interphone with the Purser. As she provided more details, one of the aft galley flight attendants was coming forward, saw the smoke and flames, grabbed the halon extinguisher from overhead row 1 on right side (1EF) and extinguished the fire. The other aft Flight Attendant saw the fire extinguisher being taken down and came forward with her handheld device and assisted by running their fire checklist. It happened fast and I was impressed by how quickly they assumed the roles of fire fighter, dedicated communicator and assisting crew member. I heard them clearly over the interphone working together. The flight attendants notified me that the fire was out and pulled the oven circuit breaker. They said it looked like a piece of paper on the side of the oven ignited when the oven door was opened. We got out the QRC and referenced the SMOKE/FUMES and REMOVAL OF SMOKE/FUMES checklists although we had no indications in the cockpit and there was no longer fire or smoke. We discussed whether to declare an emergency, but decided it was not necessary. The fire was extinguished quickly and the smoke did not persist. I contacted Dispatch via ACARS and received a radio frequency. I told Dispatch that we had an oven fire, that it was caused by a piece of paper in the oven, that it was extinguished and that there appeared to be no damage. I had the First Officer go back to confirm this. He took pictures for me and concurred that there was no damage. It appeared to have been caused by a piece of paper taped to the outside of the oven insert that the meals come in. The paper was in contact with the heating elements on the left side of the oven. No damage was observed to the oven either internally or externally. No smoke remained, but the odor from the burned paper lingered in the cabin. We cleared it by following the CABIN AIR POOR QUALITY procedure. I was concerned that we would not have something to feed the first class passengers, as the hot breakfast items were ruined by the halon. The purser said she had plenty of cold items as well as anything from the aft galley to offer them and the passengers were happy with that, appreciative and seemed to be impressed by how the flight attendants handled the incident. I asked the flight attendants how they felt. They said that, aside from a bit of an adrenaline rush from the excitement, they were comfortable continuing on. I conferred with Dispatch and decided that, since there was no damage and we had the ability to care for the passengers, the aircraft was safe and comfortable and we could continue. I then made an announcement to the cabin. I explained that the smell in the cabin came from the burnt paper in the galley oven, that it would go away shortly, that there was no damage and we were safe to continue.

Narrative: 2
[Report narrative contained no additional information]

**Synopsis**

A320 flight crew reported continuing to destination after the cabin crew successfully fought a fire in the forward galley oven.
ACN: 1586460 (9 of 50)

**Time / Day**
Date: 201810

**Place**
Altitude.MSL.Single Value: 22000

**Environment**
Flight Conditions: IMC

**Aircraft**
Reference: X
ATC / Advisory.Center: ZZZ
Make Model Name: Beech 1900
Crew Size.Number Of Crew: 2
Flight Plan: IFR
Flight Phase: Cruise
Airspace.Class A: ZZZ

**Person**
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1586460

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

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

**Narrative: 1**

During cruise we were at 22,000, we climbed high to avoid moderate icing. We were above the clouds and the temperature had dropped significantly so we began to add more and more heat from the bleed system. As we added heat a noticeable smell began and grew stronger and stronger. After a little while it began to burn our eyes and throat. We discussed the matter and began our descent. I elected to set the pressurization to 10,000 feet to slowly de-pressurize hoping it would draw the smell out of the cabin. This was mildly successful. We landed without further incident and squawked the aircraft. We never
had any visual sign of smoke but the smell was acrid enough that we wanted Maintenance to look into the source. The smell resembled a Sharpie marker.

No clue [what caused it], something in the bleed system was aggravated by the heat.

**Synopsis**

Beech 1900 Captain reported experiencing strong fumes in the cockpit when calling for increased heat at a high altitude.
**ACN: 1585050** (10 of 50)

**Time / Day**
- Date: 201810
- Local Time Of Day: 0001-0600

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 7700

**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
- Flight Phase: Descent
- Airspace.Class E: ZZZ

**Component : 1**
- Aircraft Component: Generator Drive
- Aircraft Reference: X
- Problem: Failed

**Component : 2**
- Aircraft Component: APU
- 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)
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
- ASRS Report Number.Accession Number: 1585050

**Person : 2**
I noticed an odd smell. I asked the Captain if he smelled anything and he did, and then he noticed heavy smoke coming from my air vent. He pointed it out and I noticed it as well, and we donned our oxygen masks. We then received an APU OIL PRESS. The Captain shut the APU down and as a result of having Generator 2 deferred, we went single generator. This caused my PFD and MFD to turn off, caused several caution messages (AC SERV BUS is all I remember), and disconnected the autopilot. The autopilot was leveling the aircraft at 8,000 feet as this occurred. By the time I had my oxygen mask on, communications established, and my PFD was back on, we were at approximately 7,700 feet and descending. I took control of the aircraft and leveled it, took the radios, and called for the procedure for smoke. I [notified] Approach who gave us 8,000 feet again and cleared us direct to [destination] airport. They did offer us [another airport] which was much closer to our position, but we agreed that [destination] was a better option.

We were initially confused as to the location of the smoke procedure and so we transferred controls and I found it on the emergency action card. I completed the procedure and there was still thick smoke present in the flight deck. We determined that all other cautions present (SMOKE TOILET, R WINDOW and WSHLD HEAT, etc.) were associated with the fire or single generator condition. I confirmed with ATC that fire trucks would be standing by, and we decided to land and stop on the runway for an inspection. We briefed the Flight Attendant who informed us that there were no issues in the back and that the smoke wasn't too bad, no one was having trouble breathing. We did exceed 250 knots for a few minutes under 10,000 feet after we agreed that we needed to expedite our landing as we were still over 10 minutes [out]. Upon landing, ARFF (Airport Rescue and Fire Fighting) inspected the aircraft and found no evidence of fire or smoke external to the aircraft. We
checked with the Flight Attendant and all agreed that we could taxi to the gate, which we
did after requesting ATC to expedite our taxi. ARFF followed us to the gate and we had no
further issues. I felt that the Captain and I worked very well together to identify and
quickly solve the issue, and utilized both internal and external resources very well as we
worked with ATC to form a plan and notified dispatch of our condition.

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

CRJ-200 flight crew reported smoke in the cockpit during descent due to malfunctioning
APU, in use because of an MEL'd main generator.
ACN: 1584787 (11 of 50)

**Time / Day**

Date: 201810
Local Time Of Day: 1801-2400

**Place**

Altitude.MSL.Single Value: 38000

**Environment**

Light: Night

**Aircraft**

Reference: X
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: Cargo / Freight
Flight Phase: Cruise

**Component : 1**

Aircraft Component: Attitude Indicator(Gyro/Horizon/ADI)
Aircraft Reference: X
Problem: Failed

**Component : 2**

Aircraft Component: AHRS/ND
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: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1584787
Human Factors: Time Pressure
Human Factors: Distraction

**Events**

Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While in cruise enroute to ZZZ, the Captain side Attitude Direction Indicator (ADI) went blank. After a minute or so, I heard a crackling type sound and noticed a very strong electrical odor. A mechanic was on board and noticed that the ADI breaker had popped, so logically we left it out and I transferred control to the First Officer, and I became pilot monitoring.

When we noticed the odor, we re-checked our oxygen masks and I briefed the FO (First Officer) that if we see smoke of any kind, we were to don the mask and goggles, establish communications, and proceed to the nearest suitable airport. Since we knew the likely source of the odor and it had dissipated, I elected to continue the flight without declaring an emergency. I kept the cockpit bright to detect any smoke until below 10,000 feet MSL on the way in to ZZZ.

Furthermore, I opened the QRH to the smoke, fire and fumes checklist and briefed it just in case the problem returned. Also, the FO and I agreed upon the nearest suitable airport as we progressed along the route in the event of a smoke/fire emergency so no time would be wasted getting on the ground. Again, with the breaker popped and no more odor, I deemed it safe to continue with robust contingency planning along the route.

As we descended into ZZZ, the Captain side HSI began to flicker on and off. Not knowing if this was a related issue, I immediately instructed the mechanic to find and pull the breaker. He did so, and we landed without incident in ZZZ without my primary displays.

During flight after the ADI breaker popped, the mechanic decided to closely scrutinize the aircraft maintenance log. He found that days earlier, the Captain's 'ND' (technically HSI on the 767) had been written up by the crew because it was flickering. The corrective action was to replace the ADI - the incorrect display, which was ultimately the one that failed on our flight.

Synopsis
B767 Captain reported electrical odor and multiple navigation equipment failures.
ACN: 1584582 (12 of 50)

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

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 12500

Environment
Flight Conditions: VMC

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

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

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Last 90 Days: 91
Experience.Flight Crew.Type: 548
ASRS Report Number.Accession Number: 1584582

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Multiengine
As the FO (First Officer), I was the PF (Pilot Flying) on Aircraft X from ZZZ.

Uneventful and standard pre-flight. We got off the gate several minutes early, followed by an early takeoff. After a normal takeoff, we began our climb out and accelerated towards 300 KIAS.

Passing approximately 11,500 feet, I noticed a faint electrical smell and asked the CA (Captain) if he picked up the smell. We immediately looked outside for indications, scanned instruments, and checked systems pages. All appeared normal.

Very shortly after scanning and passing approximately 13,000 feet, we experienced a loud "bang," followed by pronounced roll into the number one engine. A quick instrument scan revealed excessive EGT, followed by rapid decrease in engine performance. We vocalized what appeared to be engine failure number one. CA called ECAM, which also displayed/confirmed a failed number one engine.

I immediately started a level off. After several verbal confirmations of a failed number one engine (we wanted to be certain we were focused on the failed engine), the CA ran the ECAM. Having determined we had a damaged engine, we confirmed no desire to relight and CA discharged agent one.

I turned back towards ZZZ and CA [notified ATC]. I then took over coms, coordinating our descent and vectors to ZZZ, while CA communicated with dispatch, FAs (Flight Attendants) and let passengers know our situation/intentions.

Because we had just landed at ZZZ one-hour prior, we were familiar with the weather,
approach and 12,000 foot runway. With some clouds in the surrounding area, we briefed our plan to use vectors RNAV XX (same approach we flew one-hour prior) as our tool to get a solid visual lock on the field, then remain VMC. Once visual, we wanted to focus on flying a stable single-engine visual approach to landing (without the added effort of flying an IFR approach in VMC conditions).

With briefing complete, CA became PF, while I became PM (Pilot Monitoring). Continuing our descent and well prior to FAF, I confirmed emergency equipment on rollout, called field in sight, and we proceeded inbound visually.

CA flew a beautiful single engine landing. We landed at XX:50Z; we flew for 22 minutes.

I made callouts, announced "remain seated, remain seated" and coordinated for a stop and inspection. Once determined safe to taxi, we taxied to gate.

**Narrative: 2**

This was our 3rd flight of the day in the same aircraft. Approximately 10 minutes after takeoff, climbing through approximately 13,000 feet we experienced a loud bang, jolt, followed by aircraft roll to the left. Number 1 (left) engine experienced a compressor stall with aircraft EGT extremely high (735 deg) and then engine failure. FO (First Officer) was PF (Pilot Flying) and I accomplished ECAM procedures for Engine 1 Failure with damage. Engine 1 was shut down, Fire Button pushed, and #1 Bottle discharged IAW with ECAM procedure. [ATC was notified], vectors to return to ZZZ. I sent Dispatch an ACARS message, coordinated with FA's (Flight Attendants) (did not need cabin prep at the time), made a passenger PA announcement, and reprogrammed the FMGC for a return to ZZZ.

I then got back in the loop with the FO and took over PF duties and had FO refer to QRH procedures. We accomplished a quick brief for the RNAV RWY XX as that was the only approach available and we had previously flown it. It was VFR conditions below 2000 feet. We were cleared direct ZZZZZ and cleared for the approach. I needed some maneuvering to continue normal descent just east of ZZZZZ, then at 2000 feet airport was in sight and informed controller we were descending to 1500 feet because I wanted to be completely stable by FAF. Controller informed us we were descending below minimum vectoring altitude and we let him know we were VFR with airport in sight. Continued on approach course for RNAV and flew in visual conditions to uneventful single engine landing. Stopped straight ahead on runway and had Fire/Rescue team inspect engine and aircraft. Taxied back to gate after confirmation of no damage to aircraft. Estimate engine failure to landing was approximately 8-10 minutes. When local maintenance inspected the engine the compressor blades were okay but they found metal fragments in the engine.

NOTE: Just prior to this event the FO said he smelled something faintly that may have smelled electrical. We checked all systems screens and everything was normal, we talked about a divert plan just in case and continued to monitor but everything was normal. Shortly after the engine failure occurred. This was reported to maintenance but they did not see a correlation.

**Synopsis**

A320 flight crew reported an engine failure during climb resulted in a return to the departure airport.
Time / Day
Date: 201810
Local Time Of Day: 0601-1200

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

Environment
Light: Daylight

Aircraft
Reference: X
Aircraft Operator: Air Carrier
Make Model Name: Commercial Fixed Wing
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: Galley
Reporter Organization: Air Carrier
Qualification.Flight Attendant: Current
ASRS Report Number.Accession Number: 1584466
Human Factors: Physiological - Other
Human Factors: Situational Awareness

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: 1584467
Human Factors: Situational Awareness
Human Factors: Physiological - Other

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
Detector.Person: Flight Attendant
Were Passengers Involved In Event : Y
When Detected : Taxi
Result. Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

Some time after [push back], Flight Attendant #2 and I detected strong smell of aircraft fumes in the aft galley area. The smell was strong where we both were bothered physically by the smell. For instance, a strong burning sensation in my nostrils and throat. We both covered our nose and mouth, but of course had to remove our hand from either place in order to breath. The burning sensation where I've indicated continued for a while. Unfortunately, on the very next flight we were exposed once again to strong smell of aircraft fumes in the aft galley and cabin area. I'm sure making the exposure and symptoms worst.

I have worked [many] years as a Flight Attendant. More often now we're being exposed to aircraft fumes in the cabin that my union is collecting data as too many Flight Attendants are being exposed to aircraft fumes repeatedly, and Flight Attendants are reporting in record number.

Narrative: 2

[Report narrative contains no additional information.]

Synopsis

Two Flight Attendants reported strong fume odors in the aft galley.
ACN: 1584465 (14 of 50)

Time / Day
Date: 201810
Local Time Of Day: 0001-0600

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: B737-800
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Mission: Passenger
Flight Phase: Parked

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Galley
Reporter Organization: Air Carrier
ASRS Report Number.Accession Number: 1584465
Human Factors: Situational Awareness
Human Factors: Physiological - Other

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Galley
Reporter Organization: Air Carrier
ASRS Report Number.Accession Number: 1584468
Human Factors: Physiological - Other
Human Factors: Situational Awareness

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
Detector.Person: Flight Attendant
When Detected: Aircraft In Service At Gate
Result.General: None Reported / Taken

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

**Narrative: 1**

Some time at departure time, FA#2 (Flight Attendant) and I detected strong aircraft fumes in the galley area where we were standing/sitting. The smell was strong enough where we both were bothered physically by the smell of fumes. For instance, I experienced a strong burning sensation in my nostrils and throat and a tingling sensation on the upper part of my head. Because this was the second flight in a row that FA#2 and I were exposed to aircraft fumes, I remember once again covering my mouth and nose as fast as possible. Again, because I needed to take a breath I uncovered my mouth. This time, I noticed that my throat and nose really burned longer than the previous time.

Since then, I have felt a slight burning sensation in the back of my throat. In case the question should arise why I didn't report this to the Captain is basically because this type of situation would not have rendered any assistance from him as I assume that he has no control or procedure to prevent it. I did asked FA#1 if she had smelled aircraft fumes in the forward galley or cabin area. At this moment I truly do not remember if she said yes in regards to this flight or the previous flight. But I do remember that she did confirm that she had also smelled aircraft fumes in the forward part of the aircraft where FA#1 is upon departure from the gate. Yet, I did informed FA#1 that FA#2 and I would probably be filing some kind of report as both times we experience physical discomfort.

Although procedure says to fill out reports and e-mail to my union, I'd like my employer to know that I was unable to fill out a report as the options on the report does not permit me to file as an illness or injury for employee. May I suggest that the report be updated to include the option for a crewmember to be included as an option in the category that says "Customer Injury/Illness" to be changed to Customer/Crewmember Injury/Illness."

**Narrative: 2**

[Report narrative contrained no additional information.]

**Synopsis**

B737 Flight Attendant reported experiencing extreme fumes in rear of main cabin and galley area.
After takeoff, I (FA 2) smelled a strong odor of dirty bleach and [experienced] a headache, dizziness, tightening of throat, nausea and burning eyes. After level off the smell dissipated. Still felt very nauseated, headache, dizziness and tightness in throat throughout the flight. On descent the same smell continued with same symptoms. FA 4 started feeling nauseated and headache. After landing I could still smell the odor and ask FA 1 to come to the back of airplane and midway through the cabin she started feeling nauseated, headache and dizziness. Captain put the event in the logbook and the plane
was taken out of service. FA 1, 2, and 4 went to clinic and then hospital for blood work. After 5 hours blood was taken. Results were normal. The blood work should have been drawn a lot earlier.

**Synopsis**

A319 Flight Attendant reported feeling ill after being exposed to fumes in the cabin. Other flight attendants reported similar effects, and three of them went to the hospital.
ACN: 1583096 (16 of 50)

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

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

**Environment**
- Flight Conditions: IMC
- Weather Elements / Visibility: Turbulence
- Light: Dusk

**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
- Flight Phase: Cruise

**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: Instrument
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Multiengine
- ASRS Report Number.Accession Number: 1583096
- Human Factors: Communication Breakdown
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: ATC

**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
- Detector.Person: Flight Attendant
- When Detected: In-flight
- Result.Flight Crew: Landed in Emergency Condition

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

**Narrative: 1**

While in cruise phase of flight, we encountered moderate turbulence. The auto pilot disconnected. Pilot flying reduced airspeed. A smell similar to ozone developed on the flight deck. We coordinated with the Flight Attendant. She smelled it as well and attempted to find a source. The smell briefly dissipated but returned. No smoke, fire or other unusual indications were noted. The autopilot was reconnected and functioned normally. The smell continued, therefore as a precaution, we donned the oxygen masks and [notified ATC]. The flight landed without further incident.

The unknown source of the odor was the major threat. The ability to communicate with ATC was difficult due to an extremely busy frequency. Once the oxygen masks were on crew communications became more difficult as well. This was my first event that actually required crew coordination while using the masks.

Training communication techniques in the actual aircraft with masks on would have been a valuable tool for me.

**Synopsis**

EMB-145 First Officer reported donning oxygen masks in response to an odor, resulting in difficult communications.
ACN: **1581911** (17 of 50)

**Time / Day**
- Date: 201809
- 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: Fractional
- Make Model Name: Light Transport, Low Wing, 2 Turbojet Eng
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Flight Plan: IFR
- Mission: Passenger
- Nav In Use: FMS Or FMC
- Flight Phase: Taxi

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

**Person : 1**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Fractional
- Function: Flight Crew: Pilot Flying
- Function: Flight Crew: Captain
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Qualification: Flight Crew: Multiengine
- Qualification: Flight Crew: Instrument
- ASRS Report Number: Accession Number: 1581911
- Human Factors: Troubleshooting

**Person : 2**
- Reference: 2
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Fractional
I was Co-Captain SIC (Second in Command) in the right seat. During taxi out for departure Runway XXR at ZZZ, one of the passengers commented about it being warm in the cabin and asked if we could cool it down. I started the APU and turned the bleed air on HI. A few minutes later we were cleared to "line up and wait" Runway XXR. About that time I smelled something abnormal. Not like electrical or plastic smoke but oily, metallic. I turned around and observed smoke filling the cabin. [Advised ATC] and told Tower we had smoke in the cabin and needed to evacuate the aircraft. I shut down the APU, escorted the passengers off the aircraft and eventually back to the FBO. The PIC (Pilot in Command) completed the engine shutdown and emergency evacuation checklist and remained with the aircraft. The ARFF (Aircraft Rescue and Firefighting) crew confirmed no fire but residual smoke in the cabin and aft fuselage APU compartment. Recovery flight for the passengers was put in motion.

On Taxiway XX in line up to Runway XXR ZZZ, we were number 5. Passengers complained it's warm back here. The crew turned on the APU via checklist. Tower cleared [us] line up and wait. We complied, suddenly smoke filled the interior of aircraft. We the crew [advised ATC] and evacuated on Runway XXR. Ran checklists. No injuries, no damage to persons or property.

Fractional flight crew reported the cabin filled with smoke from a faulty APU prior to takeoff.
**Time / Day**

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

**Place**

- Altitude.MSL.Single Value: 33000

**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: Cruise

**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: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Captain
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Multiengine
- Experience.Flight Crew.Last 90 Days: 240
- Experience.Flight Crew.Type: 613
- ASRS Report Number.Accession Number: 1581849

**Person: 2**

- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: First Officer
- Function.Flight Crew: Pilot Not Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Type: 1770
- ASRS Report Number.Accession Number: 1581856
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 : Landed in Emergency Condition
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
While cruising at FL330 in VMC conditions we began to get whining noise from under flight deck floor. This noise progressively got louder. After about 10 minutes we began to feel vibrations on floor in flight deck. Cabin crew could then hear noise in forward cabin as well. I put in a request for dispatch to call me on VHF and include maintenance (MX) on the line. While dispatch was getting maintenance on line we began to smell odor of hot wires or electrical components. This became stronger pretty quickly. I began to survey alternate options. Determined best options based on ND display and MCDU were ZZZ about 70 miles east and ZZZ1 about 160 west. I decided on ZZZ and advised dispatch of deteriorating conditions when he returned to frequency with MX. He agreed that ZZZ was good diversion and stated he would advise all necessary parties and send landing data. I transferred controls to FO (First Officer), [notified ATC], and set up FMGC for approach while FO worked on descent. Briefed cabin crew of diversion with TEST items stating cabin prep was not required.

About halfway thru descent to ZZZ the avionics cooling blower fan ceased and the CB tripped. With this, the fumes and noise stopped.

Normal landing on runway XX and taxi to gate. Fire rescue crews remained on scene until MX Could open compartment to examine cooling fan. Passengers deplaned using jetway.

Narrative: 2
An hour and twenty minutes into our flight the Captain and I both noticed a loud grinding noise from under the floor of the cockpit, associated with a noticeable vibration. There was also a noticeable electrical smell. The aircraft had a previous write up for a tripped avionics blower circuit breaker, so we determined that this was probably the issue and decided to divert to ZZZ since it was 70 miles to our east. The Captain transferred aircraft control to me, along with the radios, while he coordinated with dispatch on VHF2. I [notified ATC] and we were given direct to ZZZ with a descent. While I coordinated with ATC the Captain briefed the flight attendants and then passengers on the diversion. It was determined that an emergency egress would not be required since the avionics blower circuit breaker tripped during the descent and the electrical smell dissipated, however we still had emergency equipment standing by to meet us upon landing. I flew the uneventful approach and landing to runway XX at ZZZ. Upon landing we taxied to the gate while coordinating with the emergency personnel to ensure that they didn't see any problems with our aircraft. Upon shutting down at the gate we met with emergency personnel and inspected the aircraft. The passengers were deplaned at the gate without incident.
A replacement avionics blower was flown in from [our hub] and we continued the flight to [our destination] without further incidents.

Synopsis
A320 flight crew reported diverting due to smoke and fumes from an avionics cooling blower fan malfunction.
ACN: 1581844 (19 of 50)

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

Place
Locale Reference.ATC Facility: EGTT.ARTCC
State Reference: FO

Aircraft
Reference: X
ATC / Advisory.Center: EGTT
Aircraft Operator: Air Carrier
Make Model Name: B777 Undifferentiated or Other Model
Crew Size.Number Of Crew: 3
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Cruise
Route In Use: Direct

Component
Aircraft Component: Electrical Wiring & Connectors
Aircraft Reference: X
Problem: Malfunctioning

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Crew Rest Area
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 14419
Experience.Flight Crew.Type: 6110
ASRS Report Number.Accession Number: 1581844
Human Factors: Situational Awareness
Human Factors: Troubleshooting

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
I was performing duty as bunkie. I was notified in my bunk that flight attendants smelled electrical smoke in aft galley. I went to the aft galley to investigate and reported back to Captain. The electrical smoke dissipated by the time I arrived in aft galley. The Flight Attendant reported acrid or electrical smell immediately after galley power was cycled from the cockpit to attempt to regain power to half of aft galley equipment. The power was still out in right side aft galley equipment including 3 ovens and 7 coffee makers. In addition, the circuit breaker / power panel for that side had no lights illuminated. There was no evidence of fire or additional smoke noted. I discussed with the flight attendants any concerns they had but all were ok with continuing the flight and augmenting services for passengers. I requested they immediately inform pilots of any change in the galley power or smoke situation. I reported all to the Captain and informed the flight attendants in the mid and forward galleys including purser. Then I returned to my bunk.
**Narrative: 2**

Early in flight received a cabin call from FA. He reported no power to several ovens and coffee makers in galley. I took over pilot flying duties and ATC communications while captain worked checklists and tried to resume power to galley. After reset of galley power, FA reported a slight electrical smell. Captain woke relief pilot. He reported no electric odor. Captain Satcom called Maintenance Control and shut off all power to galley. Flight continued without further incident.

**Narrative: 3**

At top of climb, flight attendants from the rear of the airplane called the cockpit and stated the rear galley had lost half its ovens and coffee makers. This was galley 6. Galley 8 had continued to work. It was thought that a load shed had occurred. The flight attendants were told to recycle the master power switch that controlled this area of the galley. That was no help. The Cabin/Utility switch in the cockpit was also cycled. No help. The Relief Pilot was asked to go look at the situation. After the two separate resets, the flight attendants stated they smelled an electrical smell for about 10 seconds and then the smell dissipated and did not return. The smell was noted as very minor and the flight attendant was worried that his mind was playing tricks on him. Checklists were consulted and contact with Dispatch and Maintenance Control were made. Maintenance Control had no further suggestions. The smell never returned, and the power was turned off at the galley with the master switch. Flight continued to destination with the power shut off to the affected area. No further indication of the smell occurred for the rest of the flight. At no time were any circuit breakers popped or reset.

This had been a recently modified seating/galley installation. Maintenance Control had maintenance meet the flight with a smoke/fume form to be filled in by the Captain. The form was filled out and [maintenance] was directed to the area where the smell had occurred. Maintenance debriefed the Captain and the Flight Attendant in the galley at the rear of the airplane.

**Synopsis**

B777 flight crew reported a burning electrical smell from the aft galley.
Time / Day
Date: 201809
Local Time Of Day: 1801-2400

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

Environment
Light: Dusk

Aircraft
Reference: X
Aircraft Operator: Air Carrier
Make Model Name: B737-700
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Taxi

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

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Last 90 Days: 307
ASRS Report Number.Accesion Number: 1581787
Human Factors: Troubleshooting
Human Factors: Communication Breakdown
Human Factors: Confusion
Communication Breakdown.Party1: Ground Personnel
Communication Breakdown.Party2: Flight Crew

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
The Captain and I were operating Aircraft X. On taxi out, we received several reports from the flight attendants, ramp personnel via ATC and a company crew behind us that the aircraft had produced a flame and two loud bangs. We received no indication of a fire or malfunction in the cockpit. It took a moment to put the information together and into context as we initially thought it was the #2 engine, but it ended up being the #1 engine. At first there was some confusion from outside sources as I was talking to the Captain, ATC and the company crew. We ran the Engine Fire Checklist and got the engine shutdown. Ground Control dispatched a vehicle and they confirmed there was no fire. We taxied back to the gate and deplaned.

On taxi out, the FA (Flight Attendant) chimed us. She said the number 2 engine was on fire. We did the checklist for engine fire. We then heard on the radio that flames were seen coming out of the number 1 engine. Crash fire confirmed that no fire or smoke was coming from either engine. We then taxied to the gate, and took another aircraft [for the flight]. Subsequently we found out from Maintenance that the event was caused by oil leaking onto the tailpipe, and then the oil caused a brief fire condition.

B737-700 flight crew reported being notified during taxi of a flaming engine due to oil leaking into the tailpipe.
ACN: 1581674 (21 of 50)

Time / Day
Date: 201809
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 6
Altitude.MSL.Single Value: 6000

Environment
Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 100
Light: Daylight
Ceiling: CLR

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Personal
Make Model Name: Cessna 210 Centurion / Turbo Centurion 210C, 210D
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Cruise
Route In Use: Direct
Airspace.Class B: ZZZ

Component: 1
Aircraft Component: Hydraulic System
Aircraft Reference: X
Problem: Malfunctioning

Component: 2
Aircraft Component: Landing Gear
Aircraft Reference: X
Problem: Improperly Operated

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 935
Experience.Flight Crew.Last 90 Days : 45
Experience.Flight Crew.Type : 475
ASRS Report Number.Accession Number : 1581674
Human Factors : Situational Awareness

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 : Became Reoriented
Result.Flight Crew : Diverted
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Landed As Precaution

Assessments

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

Narrative: 1

Smelled smoke in cockpit, determined source was inside aircraft. As situation developed, visually observed smoke as well. Engine instruments indicated nominal. No fire observed. Performed partial electrical system shut-down (radios, moving map, intercom, etc). Diverted to uncontrolled field. Once clear of Bravo airspace 30 NM ring, powered off transponder and switched master off. Ventilated cabin by opening window. Continued diagnosis effort during expedited descent, passenger used smartphone to photograph under dash. Gear retraction handle observed to be very hot. Passenger observed hydraulic hose to be very hot. Sight glass to hydraulic reservoir found to be too hot to touch. Gear selector handle found to be in 'up' position (not as expected, should have returned to neutral after gear retraction complete). Pilot flying manually moved handle to neutral. Turned master switch back on for landing, gear extension was normal and safe landing achieved at diversion airport. Did not need to manually extend gear. Source of smoke determined to be overheated hydraulic fluid and/or jacket material of hydraulic hose. Suspect intermittent failure of handle release solenoid, which prevented hydraulic pump from going into bypass mode, thus overheating the fluid.

Synopsis

Cessna 210 pilot reported diverting to an alternate airport after experiencing smoke in the cockpit related to overheating hydraulic fluid.
**ACN: 1581223 (22 of 50)**

**Time / Day**
- Date: 201809
- Local Time Of Day: 1801-2400

**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: Regional Jet 900 (CRJ900)
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Mission: Passenger
- Flight Phase: Landing
- Flight Phase: Taxi

**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: Commercial
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1581223

**Events**
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Anomaly.Ground Event / Encounter: Other / Unknown
- Detector.Person: Flight Attendant
- When Detected: Taxi
- Result.General: Evacuated
- Result.Flight Crew: Requested ATC Assistance / Clarification

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

We made a soft landing and were [about] to exit at the very end. Just as we were about the last third of the runway, the cabin called. The First Officer was told that we had smoke in the cabin, they couldn't clearly see each other, and reported a coughing passenger. I instructed the First Officer to notify the Tower, to request they send the fire trucks to meet us and [request priority]. As we were seconds from the gate and considering the possibility of having a fire onboard, we agreed that an evacuation was necessary. I decided to bring the aircraft [to a stop] quickly at 30 feet (safe distance) from the gate and started an evacuation using the Evacuation Checklist. The ramp personnel were in position and able to assist the passengers along with the flight crew. All passengers were regrouped and instructed to walk up the jet bridge and gather inside to safety. Following the inspection from the fire department that arrived within 5 to 10 minutes, I contacted and notified the Company, Operations, and Maintenance. During this entire process, we received full assistance of all parties involved.

**Synopsis**

CRJ-900 Captain reported evacuating the aircraft on a taxiway after smoke was reported in the cabin.
Time / Day
Date: 201809
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: Fractional
Make Model Name: Challenger 350
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Mission: Passenger
Flight Phase: Taxi

Component
Aircraft Component: Electrical Power
Aircraft Reference: X
Problem: Malfunctioning

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Fractional
Function: Flight Crew: Captain
Function: Flight Crew: Pilot Flying
Qualification: Flight Crew: Air Transport Pilot (ATP)
Qualification: Flight Crew: Instrument
Qualification: Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1580918
Human Factors: Time Pressure
Human Factors: Distraction
Human Factors: Troubleshooting
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector: Person: Flight Crew
Were Passengers Involved In Event: Y
When Detected: Taxi
Result (General): Evacuated
Result (General): Maintenance Action
Result (Flight Crew): Requested ATC Assistance / Clarification
Result (Air Traffic Control): Provided Assistance

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1

Approximately 45 min prior to passengers arrival, we were scheduled to ground move. My SIC and I had offered to fly a trip on Aircraft X to ZZZ. We had more duty time than the current crew. Originally, Scheduling declined. Then, we received the trip. The aircraft was handed off to us. The previous crew had made all preparations for flight. Although, we were time compressed, all items in the Normal Procedures Checklist Power On and Cockpit Preparations sections were again completed. The PDC clearance was reviewed and accepted. Dual verification accomplished. Our passengers arrived before other flight deck briefings were started. Standard SOPs were followed to board passengers, load bags, etc. Each crew member accomplished a Final Walk-Around. With the main cabin and baggage compartment doors secured and both crew members on the flight deck, my SIC reviewed the ATIS and general flight deck set up. Next, I performed the required Crew, Departure and Takeoff Briefings per the Normal Procedures Checklist.

We were taxiing from the Ramp to the Runway with two passengers aboard. Both engines and the APU were operating. The ECS was on the APU. On taxiway "N" we crossed [an adjacent runway] and were instructed to switch to the Tower. My SIC made the frequency change and I called for the Before Takeoff Checklist. As that action was completed, an unusual odor became apparent. My SIC asked me if I smelled that. I replied yes. I directed my SIC to inform ATC that we needed to investigate an issue. The controller instructed us to turn onto taxiway "N1".

I looked at the CB panel behind the copilot's seat and my SIC looked at the CB panel behind the Captain's seat. Nothing was amiss. Concurring, my SIC left the flight deck to check other circuit breaker panels, the galley, cabin, lavatory and baggage compartment. With his departure the fumes subsided. Unknown to me at the time, he was met by the lead passenger who also smelled the odor. Walking forward from the rear of the cabin my SIC saw a gray haze in the entire galley. With my head set on, I never heard my SIC reporting smoke in the cabin.

The odor, much stronger than before, returned to the flight deck. In my right peripheral vision I saw a gray cloud. Simultaneously, I advised ATC to roll the equipment and informed them that we would be evacuating onto the taxiway, [with] four souls on board and 7 hours of fuel. Almost automatically, my First Officer (FO) secured AC and DC electrical power as he returned to the SIC seat. I called for the Evacuation QRC. We completed the checklist. I sent my SIC to open the main cabin door. I reviewed my QRF one last time. My FO led the passengers outside and I followed them.

Fire Rescue arrived on scene. The unusual odor was still present inside and outside the aircraft (fire rescue, crew and passengers could smell it). At the direction of Fire Rescue,
my SIC escorted their personnel through the cabin. Fire Rescue members and myself confirmed that our passengers were not in distress. Both indicated that they did not require medical attention. External access panels were opened for Fire Rescue but nothing unusual was discovered.

The airport authority provided a vehicle and driver for our passengers. Accompanied by my SIC, our passengers and their bags were returned to the FBO. My SIC and the [company] managed their needs.

With Fire Rescue in custody of Aircraft, I made a preliminary phone call to the [company]. My SIC returned from the FBO. Gear pins were inserted and the aircraft chocked.

Eventually, Fire Rescue released Aircraft. All parties agreed that no power would be put on the aircraft. Aircraft was put under tow with appropriate escort and tugged to the ramp. There the emergency lights expired due to depleted batteries. The aircraft was secured and turned over to maintenance with a technician already on scene. Appropriate entries were made in the aircraft log book.

The evacuation went well. My SIC's performance was truly outstanding!!! I hardly had to direct him. The passengers, crew and aircraft are safe. We can always do better. As professionals these matters are reviewed to enhance safety and improve performance. When requesting the rescue equipment, I forgot that we were already on tower frequency and called them ground. I did not vocalize the Evacuation QRC with clarity. We missed shutting down the APU from the fire control panel... I used the rotating APU on/off/start switch instead. I observed my SIC place the QRH in the slot by his seat as he maneuvered toward the main cabin door. Only then did I realize that we had used the evacuation checklist from the QRH. Consequently, I reviewed the QRC items. These items were my responsibility and they are my errors alone. Even with the time compression, I felt that we were ready to fly.

**Synopsis**

Challenger 350 Captain reported electrical fumes in the aircraft during taxi for takeoff resulted in the passengers being deplaned on the taxiway.
Time / Day
Date: 201809
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 39000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B787 Dreamliner Undifferentiated or Other Model
Crew Size.Number Of Crew: 4
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Cruise

Component
Aircraft Component: Air Conditioning Compressor
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: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 11326
Experience.Flight Crew.Type: 449
ASRS Report Number.Accession Number: 1579651
Human Factors: Troubleshooting

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

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

I was the Captain and I was on rest break. My co-pilot woke me and told me the relief pilots had called him and told him that there was an electrical burning smell in the cockpit and cabin. When I arrived back in the cockpit, the relief pilots told me we had lost our #1 L Cabin Air Compressor (CAC). We assumed that the fumes we were smelling was from the failed CAC. We contacted Dispatch and had them patch us in to [Maintenance Control]. We wanted to run the fumes removal checklist. Together we ran the fumes removal checklist, but there were still strong electrical fumes in the cockpit. We talked to the [Chief Pilot] and together we felt the best and safest course of action was to divert.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

B787 flight crew reported a cabin air compressor failure resulted in cabin fumes and a diversion.
**Time / Day**
- **Date**: 201809
- **Local Time Of Day**: 1201-1800

**Place**
- **Locale Reference.Airport**: ZZZ.Airport
- **State Reference**: US
- **Altitude.MSL.Single Value**: 39000

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

**Aircraft**
- **Reference**: X
- **ATC / Advisory.Center**: ZZZ
- **Aircraft Operator**: Air Carrier
- **Make Model Name**: B777 Undifferentiated or Other Model
- **Crew Size.Number Of Crew**: 4
- **Operating Under FAR Part**: Part 121
- **Flight Plan**: IFR
- **Mission**: Passenger
- **Nav In Use**: FMS Or FMC
- **Flight Phase**: Cruise
- **Airspace.Class A**: ZZZ

**Person : 1**
- **Reference**: 1
- **Location Of Person.Aircraft**: X
- **Location In Aircraft**: General Seating Area
- **Reporter Organization**: Air Carrier
- **Function.Flight Crew**: Captain
- **Function.Flight Crew**: Pilot Not Flying
- **Qualification.Flight Crew**: Instrument
- **Qualification.Flight Crew**: Air Transport Pilot (ATP)
- **Qualification.Flight Crew**: Multiengine
- **Experience.Flight Crew.Total**: 20094
- **Experience.Flight Crew.Last 90 Days**: 188
- **Experience.Flight Crew.Type**: 9778
- **ASRS Report Number.Accession Number**: 1578689
- **Human Factors**: Troubleshooting
- **Human Factors**: Situational Awareness
- **Human Factors**: Distraction

**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: Instrument  
Qualification: Flight Crew: Air Transport Pilot (ATP)  
Qualification: Flight Crew: Multiengine  
Experience: Flight Crew: Total: 12073  
Experience: Flight Crew: Last 90 Days: 214  
Experience: Flight Crew: Type: 1927  
ASRS Report Number: Accession Number: 1578698  
Human Factors: Situational Awareness  
Human Factors: Distraction  
Human Factors: Troubleshooting  

**Events**

Anomaly: Flight Deck / Cabin / Aircraft Event: Passenger Electronic Device  
Anomaly: Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor  
Detector: Person: Flight Crew  
Detector: Person: Passenger  
Detector: Person: Flight Attendant  
Were Passengers Involved In Event: Y  
When Detected: In-flight  
Result: General: Maintenance Action  
Result: Flight Crew: Overcame Equipment Problem  

**Assessments**

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

**Narrative: 1**

XX and I were on break on flight. I had just come out of the bunk with about 20 minutes or so before we were called back to the flight deck for landing. XX was still in the bunk. I just sat down in seat 1A when shortly I started to smell an electrical burning smell. As I got up, the passenger from seat 3A in the aisle was coming by my seat mentioned he smelled the odor too from the vicinity of his seat. As I went back two rows a couple of FAs (flight attendants) just came to seat 3A and were looking at the vicinity of his seat. When I got closer to the seat I smelled a somewhat stronger smell. The FAs also stated they initially saw some thin wispy smoke when they first showed up (which I did not see). At that point, I called up front and had the FOs (first officers) turn off the IFE (Inflight Entertainment) switch to kill the power to the entertainment system and power to the seats to potentially help stabilize the situation. The FOs up front turned the switch off and also said they had a brief smell of an electrical burning odor up on the flight deck. They said before I called, they unplugged a charger from the electrical outlet (charger was not hot) and also turned off the broadband switch as a precaution. As luck would have it, the smell started to dissipate shortly after getting the IFE switch off.

About then the Passenger from seat 3A mentioned he was not sure where his iPhone7 was. We all started to look around the seat for the phone and also looked for any indication of fire, hot spots, burning, or electrical arcing. None of us saw any evidence of any problems and the smell at that point was definitely dissipating. At that point I told the FAs to monitor the situation and advise if anything got worse and we were going to continue to [destination] with the IFE switch off. I also told the FOs up front to keep abreast of potential alternate airports on the last part of our route into [destination]. When
I finally got back up front, I made a call to Dispatch with a patch to [maintenance control] to discuss the situation. I ask Dispatch about our gate and he came back and confirmed.

A short time later Dispatch advised that [our gate] is going to have a 30 minute hold. I informed Dispatch that a wait of 30 minutes was not going to work as other passengers on the aircraft are already concerned with what was going on in the cabin and we need to park at the gate without any delay. He responded and got us [another gate] with no wait. We continued on with no delay, no other problems, and the smell almost gone. When we got to the gate, maintenance folks came on board and after a period of time, found the Passenger's iPhone 7 with a crushed screen under his seat.

One interesting note was that the pilots up front had a brief electrical burning smell. This is interesting as the flight deck gets only fresh air (no recycled cabin air) from the left pack. Also, the flight deck is slightly pressurized higher than the cabin to keep the air flow going aft so no cabin air drifts up front.

Pilots and the entire cabin crew did an outstanding job dealing with this potentially life threatening situation. We were extremely lucky that this incident did not turn into something more serious. Obviously the root cause of the problem was the Passenger's iPhone's crushed screen and not the seat power or entertainment system. It was a coincidence that the smell started to dissipate shortly after we turned the IFE switch off.

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

Boeing 777 flight crew reported detecting faint electrical fumes in the business class section, later attributed to an iPhone which had been crushed under a seat.
ACN: 1578167 (26 of 50)

Time / Day

Date: 201809
Local Time Of Day: 0601-1200

Place

Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 22000

Environment

Flight Conditions: VMC

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: Climb
Airspace.Class A: 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 Carrier
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 19000
ASRS Report Number.Accession Number: 1578167
Human Factors: Troubleshooting
Human Factors: Time Pressure

Person: 2

Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
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 : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Diverted
Result.Air Traffic Control : Provided Assistance

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Departed ZZZ and climbing through approximately FL220 First Officer saw smoke in the cockpit. I noticed smoke at that time coming from behind the First Officer. Oxygen Masks were donned and communications established. First Officer was already flying so I assigned him flying and ATC Communication duties. I start Quick Action Items and QRH procedures.

FO (First Officer) notified ZZZ Center under my direction and navigated back towards ZZZ airport.

QRH procedures were performed methodically and we found the source of smoke to be Air Conditioning problems associated with Pack 1.

Smoke went away immediately after accomplishing QRH procedures. Then established communications with flight attendants through interphone system. They stated NO Smoke in the cabin. Informed them we had smoke in the cockpit that was contained and were returning to ZZZ.

I asked them to prepare for a precautionary landing and gave an ETA. Then made a PA to passengers that we had a maintenance situation that required a return to ZZZ.

We reviewed the non-routine landing checklist in QRH. Rest of the flight was normal SOP. No Limitations were exceeded nor any flight parameters. ie. Heading, altitude, directions in general

We can't avoid these types of situations but I will say, the resources and procedures available to us contained the situation quickly. I can't think of anything different that
would have helped in this situation.

Communication was outstanding within the crew, ATC, emergency services in ZZZ and the company.

**Narrative: 2**

On departure out of ZZZ during initial climb out, we experienced the flight deck temperature increasing substantially. I was the Flying Pilot and the Captain was the Non-Flying Pilot. The Captain adjusted the temperature control to try and cool off the cockpit. Approximately 10 minutes into the flight climbing out of FL220 for an assigned altitude of FL280, I noticed smoke in the cockpit. I immediately donned my oxygen mask and established communication with the Captain who was in the process of donning his oxygen mask. Once we established effective communication, he gave me control of radio communications and I stated that I have positive control of the aircraft as well as radio communications. The Captain then went to the quick action checklist and found the smoke/avionics smoke/fumes procedure. The number 2 item on that particular procedure was to land ASAP if smoke was confirmed which it was. The Captain asked me to inform air traffic control. The Captain continued the checklist and I immediately [notified Center]. I told Center that we needed to also level off which I did at FL240. ATC asked what our intentions were and I stated that we needed to return to ZZZ. I was then given a left hand turn direct to ZZZ. I also requested a descent to FL100. I then provided ATC with souls on board and fuel remaining. We had 109 souls on board and 22,600 pounds of fuel. The Captain continued the checklist and made communication with the flight attendants to determine the conditions in the cabin. According to the flight attendants, there wasn't any smoke in the cabin but they did notice an unusual odor. We determined that the air ventilation and conditioning was the probable cause for smoke in the cockpit. Once the Captain selected the PACK 1 OFF, the smoke dissipated and went away. The Captain completed the checklist and then took back the radio communications while I continued to fly the aircraft. He then communicated to the passengers of our return to ZZZ. The Captain then contacted the company to let them know our situation and our intentions. He also made sure to brief the flight attendants of our return to ZZZ. During this time of checklist, I was getting weather and setting up for a visual approach backed up by [the] ILS into ZZZ. Approach control gave us priority landing, ARFF (Airport Rescue and Fire Fighting) was in position on the far end of [the] runway as we approached. We landed without any further complications and came to a complete stop once exiting the runway and re-evaluated our situation before we continued to parking. I advised Tower that we had no other problems and no smoke was present. We then taxied to the gate and deplaned the passengers.

We believe the event occurred because the PACK 1 had an overheat condition. We believe this was the reason why we had smoke in the cockpit considering we completed the appropriate checklist and was able to ventilate the cockpit and remove the smoke by selecting the PACK 1 OFF.

The only suggestion I can make is to be more attentive to the temperature within the cabin and cockpit prior to takeoff and doing a last minute assessment to determine if conditions are uncomfortable or out of a normal range.

**Synopsis**

A319 Flight Crew reported smoke entered the cockpit during climb that dissipated when Pack 1 was selected to off.
ACN: 1574897 (27 of 50)

Time / Day
Date: 201809
Local Time Of Day: 1801-2400

Place
Altitude.AGL.Single Value: 0

Environment
Light: Night

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

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: General Seating Area
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: 1574897
Human Factors: Physiological - Other

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: General Seating Area
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1574418

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Procedural: Maintenance
Anomaly.Deviation - Procedural: Published Material / Policy
Detector.Person: Flight Crew
When Detected: Aircraft In Service At Gate
Result: General: None Reported / Taken

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

Narrative: 1
Maintenance must use the utmost care before returning an aircraft to service following a fume event. Because the ability to smell the odor is usually lost after a few minutes of exposure to it, it may be difficult for them to make a valid assessment about whether the fumes are still present. We should ensure that mechanics are aware of this issue. Wider availability of the particle sniffer machine would help mechanics make objective assessments about whether an aircraft is fit to return to service.

When I first met the FO (First Officer), he told me that when he was on the aircraft earlier, he did notice some residual fume smell. I did consider this and obtained the entire crew's concurrence with the plan to briefly board the aircraft and make an assessment. However, if I have a similar situation again, I will ask more active questions to determine whether it is safe to get on the aircraft even briefly. I don't think I gave anyone the impression of pressuring them to get on the aircraft to make the assessment, but if I have a future similar event, I will actively clarify that I am not creating any such pressure.

[The company] must ensure that maintenance personnel are provided with appropriate personal protective/breathing equipment while they work on aircraft which have had a fume event. We hear a lot about medical issues affecting crew members--what about the mechanics? I didn't really think about this until I started preparing this report. If I have a future fume event, I will specifically make sure the mechanics feel comfortable working on the aircraft.

[The company] must continue to investigate the causes of fume events and take action to prevent them. The root cause of the APU oil leak should be determined. [The company] must follow up with the FO to ensure that he is fit to return to duty and provide him with any assistance that may be necessary.

Narrative: 2
Improved evaluation of residual fumes in cabin before clearing aircraft for flight.

Synopsis
Airbus flight crew reported smelling residual fumes from an APU oil leak repair upon entering the aircraft.
ACN: 1574140 (28 of 50)

**Time / Day**
- Date: 201809
- Local Time Of Day: 0001-0600

**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: B767 Undifferentiated or Other Model
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Flight Phase: Parked

**Component**
- Aircraft Component: Wheels/Tires/Brakes
- 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: Multiengine
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Instrument
- ASRS Report Number.Accession Number: 1574140
- Human Factors: Communication Breakdown
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: Maintenance

**Person : 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: First Officer
After blocking in, a wheel brake caught fire on the left hand truck. During the preflight the First Officer (FO) had mentioned that it looked like one of the brakes had been replaced on the left truck and that there was a fair amount of dirt and hydraulic type fluid on the brakes and on the ground. When Maintenance brought the logbook to the aircraft about 20 minutes later, he informed me that they had indeed changed a brake (for the life of me I cannot remember which one he said). It was written up in the logbook and signed off, and Maintenance also confirmed with me that that was why there was the dust, dirt, fluid in and around the brakes, wheels, truck of the left side. We took a 45 min loading delay, we had a reverser Deferred Maintenance Item. We took off at 369.4 GW, with a 378.0 max GW limited by landing weight. Only other problem that we had was that we could not get our ETOPS Wx via ACARS, had to do a phone patch with OPS. I contemplated using flaps 30 for landing but opted for 25 as there was only a 300 feet landing difference between the two and company SOP. I did choose brakes 4 though. I can't remember if I used 314 or 315 GW for landing but I remember that REF was 147. Landing was on speed and approximately 2500 feet down. Everything seemed normal during rollout and I disconnected the auto brakes at about 65 knots, and rolled to the next exit. I taxied into parking and did the shutdown checklist. While accomplishing it the Marshaller gave me the chocks in signal and I released the brakes knowing that they were undoubtedly warm. Then we did the Secure Checklist. The FO got up to open the door but said that there were no stairs, he informed me that he was putting the strap up. I was filling out the logbook when someone came up the stairs and said to release the brakes. I said that I already had, and the individual left without saying anything else. The FO left to do his walk around and I finished the closeout and sent it to ops. I was in the process of getting out of the seat when our Maintenance Representative and my FO came up to tell me that we had a brake fire on #2. (I didn't know anything about it to that point). Maintenance said that they had put the fire out and had already called the Fire Dept. I left the aircraft with both individuals and I and the FO moved [toward] the nose of the aircraft about 100 ft away. I did not write up anything in the logbook because I had already closed it out and I left it onboard. The Fire Dept didn't let anyone close to the aircraft for approximately 1.5 hours. In the meantime I called company with the preliminary details.
**Narrative: 2**

The landing was normal, other than an already inoperative right thrust reverser and taxied off the runway. We parked normally. After door opening a maintenance representative said, "release the parking brake" And the Captain responded, "I already did." During the post flight inspection, I made it to right-side forward fuselage and noticed, what appeared to be two Maintenance Representatives talking to each other near the left main gear. I could also see some smoke coming from the aft portion of the left truck. I thought nothing other than hot brakes and gave a wide berth to the right main gear, because I could only deduce the gear was hot and a fuse plug explosion was possible. After making my way to the tailskid, I noticed a fire extinguisher and what looked like used extinguishing chemicals on the left main tires, truck, and ground. I asked the two maintenance individuals to inquire what happened. I was told the brakes had started on fire and they had extinguished the fire. I immediately went to tell the Captain of the fire but found that he was already being informed of the fire by another Maintenance Representative. After that, the fire department showed up and would not declare the aircraft safe for approximately 1.5 hours. Suggest better communication to the flight deck crew if a fire exists, especially when involving brakes. We were not notified at all, until I inquired about the extinguishing chemicals on the brakes. We were never advised to leave the flight deck.

**Synopsis**

B-767 flight crew reported a brake fire had been extinguished after gate arrival.
ACN: 1574128 (29 of 50)

Time / Day
Date: 201808
Local Time Of Day: 1201-1800

Place
Locale Reference.ATC Facility: ZFW.ARTCC
State Reference: TX
Altitude.MSL.Single Value: 22000

Environment
Flight Conditions: VMC
Light: Daylight

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

Component
Aircraft Component: Fuel 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: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 22000
ASRS Report Number.Accession Number: 1574128
Human Factors: Situational Awareness

Person: 2
At the top of climb/level off/cruise, 22,000 ft, one of the aft cabin flight attendants called the cockpit and complained about an odor that was making her nauseous. I asked what the odor smelled like and she stated she wasn’t sure. I then asked her if it smelled like something burning, electrical, or fuel. She stated it was probably more of a fuel smell. I asked her if the smell was throughout the cabin and she wasn’t sure. I then called the forward #1 Flight Attendant and asked her if she had any strange odors in the forward cabin. She stated no, she smelled nothing. I then asked the aft cabin Flight Attendant if any passengers could smell the odor and if passengers were becoming nauseated. She did not know. I then asked her to walk forward from the rear of the cabin toward the front to determine where the smell began and where it stopped and to check and see how the passengers in the affected cabin were feeling. At this point the First Officer and I started the Aircraft Odor checklist. Several minutes later the aft cabin Flight Attendant called me back and stated that one passenger thought the odor smelled like hydraulic fluid and several others thought it smelled like fuel. She also stated the smell began around Row 17 and continued all the way back to the aft galley/rear of the aircraft, but that it seemed to be less intense. I then asked her how she was feeling and how the passengers were feeling. She reported that both of them (#2 and #4 flight attendants) and several passengers were now feeling nauseous, light headed and dizzy. I asked if she thought the odor still smelled like fuel and if the odor was getting stronger and she stated yes.

At this point, with the number #1 Flight Attendant also on the interphone, I explained to them that I was going to [advise ATC] and get us on the ground as quickly as possible, and that I would get back to them shortly. I quickly gave the aircraft and radio control
over to the First Officer and had him [advise ATC], directing him to proceed direct to the RNAV IAF. I then completed the Aircraft Odor checklist with the assumption being FUEL as the possible source. The difficulty for me in accomplishing this checklist was trying to determine if the odor was classified as strong or as mild/moderate. I chose strong and proceeded to the Smoke, Fire and Fumes checklist. Accomplishing this checklist left me somewhat confused since we had no smoke, fire or fumes, but rather a strong aircraft odor that smelled like fuel. In this case the Smoke, Fire or Fumes Checklist sent me back to the Aircraft Odor Checklist. By this point in the Aircraft Odor Checklist we had started our descent and I then referred to and accomplished the non routine landing checklist, advised dispatch via ACARS, briefed the #1 Flight Attendant on a precautionary landing and emphasizing no ground evacuation anticipated, and then made an address to the passengers regarding our situation.

Once I was able to focus my attention back in the cockpit I accomplished the descent checklist and then took back control of the aircraft. The First Officer did an outstanding job getting the aircraft direct and coordinating with ATC. The approach and landing were uneventful. Once we landed and cleared the runway I let the flight attendants know what was occurring and that we were not going to evacuate. I then stopped the aircraft on a taxiway and had the fire chief check our aircraft, in particular for potential fuel leaks and/or heat signatures. Then I made a passenger address further explaining what was occurring outside the aircraft and that everything was ok and safe. The fire chief then gave us an all clear report and we proceeded to our gate with the fire trucks following closely behind. Once at the gate and parked the aft cabin flight attendants called again and reported that the fuel odor/fumes were even stronger than before. Within a minute the fire chief came to the cockpit and report strong fuel fumes outside around the airplane. We quickly deplaned the passengers. Hind sight indicates an obvious fuel leak that penetrated the air conditioning system.

According to the QRH Aircraft Odor Checklist, an ODOR is not smoke or fumes associated with a fire source, an odor is any smell, and a fume is dangerous to inhale. So what did I have on my flight an ODOR or a FUME? With so many new, young, and inexperienced flight attendants in our airline today the descriptions, or lack of descriptions, leave Captains unsure of what really is an odor or a dangerous fume. Once on the ground and at the gate it was clear that we had a major fuel leak, fume, or vapor problem. I think we should look at further defining the word FUMES in our Smoke, Fire or Fumes Checklist to include Fuel Fumes. Furthermore, with hindsight as a guide, I think the checklist needs to address passenger electronic equipment, which should be immediately turned off and shut down if fuel fumes exist in the cabin. Numerous cases in the United States have had individuals igniting gasoline fumes at fueling pumps while parked at a gas station, blowing up the entire gas station and killing themselves, all because they answered their cell phone or turned on the light function on their cell phone. Static electricity appears to be the problem with electronic devices, and if fuel fumes are strong enough in the cabin of an airplane, then the subsequent result could be catastrophic.

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

Synopsis
B737 flight crew reported fuel fumes/odor in the aft cabin resulted in a direct approach and landing at the planned destination.
ACN: 1573630 (30 of 50)

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

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 34000

Environment
Flight Conditions: Mixed
Weather Elements / Visibility: Thunderstorm
Light: Night

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B757-200
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Cargo / Freight
Flight Phase: Cruise
Route In Use: Vectors
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: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multieengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1573630
Human Factors: Situational Awareness

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multieengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1573635
Human Factors : Situational Awareness

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
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued New Clearance

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
We started climbing from 34000 feet to 36000 feet, working our way around thunderstorms. We got a strong acid smell and haze in cockpit. The First Officer was [the] Pilot Flying. We put on Oxygen Masks and established communication. I instructed the First Officer to fly the aircraft. I would talk to ATC and work the situation. I saw ZZZ on my screen and to the west, the weather was clear. I typed in direct ZZZ. I asked ATC what runway was in use. I pulled up the runway Final Approach Fix. We flew maximum forward speed until a few miles from the Final Approach Fix, coupled ILS auto land, flaps 25, [and] maximum auto brakes landing.

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

Synopsis
B757-200 flight crew reported diverting due to smoke in the cockpit.
ACN: 1573106 (31 of 50)

Time / Day
Date: 201808
Local Time Of Day: 0601-1200

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude.MSL.Single Value: 19000

Aircraft
Reference: X
ATC / Advisory.Center: 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 A: ZZZ

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

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1573106

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1573107
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 : Inflight Shutdown
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Issued New Clearance

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
Right engine surge/stall followed by EGT (Exhaust Gas Temperature) 1100, N2 113.1, and fire smell coming from vents. [Advised ATC] and accomplished the appropriate QRH emergency checklist. Returned to ZZZ and landed safely.

Narrative: 2
During climb at approximately FL190 a loud boom was heard. There was a pronounced yaw and shutter of the aircraft. The strong smell of smoke was present. The RH EGT (Exhaust Gas Temperature) was red as was the N2 indication. The RH engine was shutdown utilizing the severe damage checklist. [ATC was and advised and] we returned to ZZZ. The emergency equipment was requested as a precautionary measure.

Synopsis
B767 flight crew reported an engine failure and return to the departure airport.
**ACN: 1572985 (32 of 50)**

**Time / Day**

Date: 201808
Local Time Of Day: 0601-1200

**Place**

Locale Reference. ATC Facility: ZZZ.ARTCC
State Reference: CA
Altitude.MSL.Single Value: 36000

**Environment**

Flight Conditions: VMC

**Aircraft**

Reference: X
ATC/Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B777 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: 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
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 36300
Experience.Flight Crew.Last 90 Days: 130
Experience.Flight Crew.Type: 4965
ASRS Report Number. Accession Number: 1572985

**Events**

Anomaly.Flight Deck/Cabin/Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck/Cabin/Aircraft Event: Passenger Electronic Device
Detector. Person: Flight Attendant
When Detected: In-flight
Result. Flight Crew: Landed As Precaution
Result. Flight Crew: Diverted

**Assessments**
Contributing Factors / Situations : Equipment / Tooling  
Primary Problem : Equipment / Tooling  

**Narrative: 1**

[Enroute at] FL360, Purser called to inform me there was a short duration smell of burning plastic across rows 46-48. The strong smell diminished lasting a few minutes. I reported to Dispatch via ACARS after telling [the Purser] to [alert] F/As (flight attendants) throughout the cabin to look, smell, and touch for any signs of fire, smoke fumes and report back to me immediately if there were any changes. [The Purser] and I discussed the possibility of a hot charger. [About half an hour later, the Purser] reported rows 26-28 ABC, smelled not like burning plastic, but "cilantro". The sweet smell moved forward to row 23. [A few minutes later, the Purser] reported that row 26 DE turned to a faint electrical, burnt plastic smell. I asked her to check for hot chargers. She said row 26 DE had two piping hot chargers which were now disconnected. The smell went away.

[About an hour later, the Purser] called me and said the hot electrical smell was back, and very strong in the row 23-28 area. I told her to wake the passengers and make a PA to have all chargers disconnected from the outlets. I informed her I was diverting to [a nearby alternate]. I gave her time to [the alternate] and that an emergency evacuation might not be necessary, based on the current situation, but that could change. I told her to advise me if the situation got better, worse or stayed the same.

[ATC] gave us discretion to 10,000 feet and we started down. F/O (First Officer) did a masterful job setting up the FMC (Flight Management Computer). [We advised] Dispatch our situation. We landed and stopped between [the runways], [and were] informed there were no hot spots or indications of fire. We proceeded to gate. The report at the gate was no hot spots. We deplaned normally via the jet bridge and went to our hotel.

**Synopsis**

B777 Captain reported diverting to an alternate after the Purser reported electrical burning odors related to hot chargers in the cabin.
**Time / Day**

Date: 201808
Local Time Of Day: 1801-2400

**Place**

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

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Learjet 55
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Passenger
Flight Phase: Takeoff

**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 Taxi
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 3740
Experience.Flight Crew.Last 90 Days: 56
Experience.Flight Crew.Type: 360
ASRS Report Number.Accession Number: 1572478

**Events**

Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Ground Excursion: Runway
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Rejected Takeoff

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

**Narrative: 1**

During takeoff roll at approximately 90 knots, we heard a bang and felt vibration. I looked out my left side window and saw chunks of rubber flying all over the place. I immediately aborted the takeoff and told the First Officer we blew a tire. I was rolling (on one tire still I assumed) off the right side of Runway 21 when I could tell by loss of forward movement, we lost both tires. I stopped, shut down the engines and told the copilot to run the checklist and check me. I jumped out of my seat right away and when I opened the door to see if I was correct and couldn't move I saw the left landing gear was on fire. I told the passengers to evacuate due to "a small fire" and I immediately got out the rear fire extinguisher which I applied to the fire and the fire went out. Not more than a few seconds later, it started to smoke again and I was afraid it may relight so I went back into the airplane to grab the second fire extinguisher under the copilot's seat. I applied that one to the smoking landing gear and told the copilot to call Tower and get the fire trucks coming just in case it started back up again as I had nothing else left to fight it with. The fire remained out, the fire trucks showed up and once it had cooled sufficiently in their professional opinion, we retrieved our bags and things from the airplane.

**Synopsis**

Learjet 55 Captain reported leaving runway during rejected takeoff for tire failure. Flight crew discovered fire in gear area and used portable extinguishers to fight it prior to calling for assistance.
ACN: 1571858 (34 of 50)

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

Place
Locale Reference.ATC Facility: ZZZ.TRACON
State Reference: US
Altitude.MSL.Single Value: 5300

Environment
Flight Conditions: IMC
Weather Elements / Visibility: Haze / Smoke
Work Environment Factor: Temperature - Extreme
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Small Transport
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Passenger
Flight Phase: Initial Approach
Airspace.Class E: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: Captain
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1571858
Human Factors: Communication Breakdown
Human Factors: Time Pressure
Human Factors: Situational Awareness
Human Factors: Confusion
Human Factors: Workload
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC
Analyst Callback: Completed

Events
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Object
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.General : Physical Injury / Incapacitation
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Aircraft Damaged

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

Narrative: 1
Flight X was conducted as a normal revenue flight. Flight conditions for several weeks have remained the same with low inflight visibility due to smoke from all of the local forest fires. The event begins with being given a vector to intercept the Runway XX localizer. I was established at my best approximation between point ZZZZZ and ZZZZZ1. I had been given a descent from 5,900 feet to 5,300 feet. As soon as I was established a short time in the normal smoke that has been occurred daily in this area quickly turned into a bright orange red smoke and seemed like flames. Within a second I hit what I would call extreme turbulence. It picked up one wing and I am unsure exactly how far over I had turned but I was against the Captain's side wall. At the same time I was experiencing some sort debris hitting the aircraft. The time frame of all of this was within seconds. While encountering this my aircraft filled with black smoke and I was unable to see any instruments. The cabin became so hot it is hard to explain the heat. I felt like I had embers of fire on my shorts. The only thing I recall seeing at this point was an annunciation light flashing. I turned to what I believed to be the downwind side of the fire and luckily was able to remove myself from this severe situation. I had to open my cockpit window to get smoke out and reestablished myself on LOC and continued approach. Again it is extremely difficult to give exact time frame and statements I said to ATC. When I was turning away from what I was in I announced I was deviating. Then said not to allow aircraft through there and I thought I may have a fire or be on fire something to that extent. I did not formally [advise ATC] because I was so focused on trying to make sure I made it to the airport safely. I was handed off to Tower on short final I requested him to look and see if he saw anything abnormal from my aircraft. He did not and I taxied to parking. After the flight I contacted ATC and the Approach Controllers to explain what happened they in turn put a new TFR up that closed that approach down. It reinforces the fact that communication is absolutely key. I am fortunate that it was myself and not the [aircraft] that was 8 minutes behind me.
that ended up diverting because of the fire. After this contact I went through all of the [company] channels Dispatch, Ops, Maintenance Control, Local Maintenance, [and the] Chief Pilot. The aircraft was grounded and Maintenance sent to check aircraft the next morning. It was also mutually decided to go to an urgent care center which turned to an ER visit to ensure I had not taken too much smoke into my body.

Callback: 1

Reporter reiterated the severity of all flight conditions. Reporter stated that the normal inflight visibility was about 1 to 1.5 miles due to fires in the region. Reporter stated that reporter had been given no advisories or warnings from ATC about the conditions of final approach. Stated that a new wild fire had begun about XA00L that day and that reporter had this incident of probably flying through the plume about XF00L the same day. Stated that reporter did not see the fire or plume due to the low inflight visibility, also because of the other fires in the area. Stated that reporter flew into the orange-red smoke after having seen it not more than 1 second prior, and reporter thought it was flames. Stated that the heat was almost unbearable, and that reporter thought embers were actually entering the cockpit. Stated that, almost instantaneously, the cockpit filled with smoke such that reporter could not see instruments. Stated that the aircraft was, for a short time, unable to be controlled, as it was in extreme turbulence as well. Stated that the aircraft was flying through much debris from the fire. Stated that reporter maneuvered the aircraft to the left and exited the smoke, heat, and turbulence. Stated that reporter opened his window to clear the cockpit of smoke and that reporter was able to continue the approach and land. Stated that after landing the next aircraft departed and showed a plume from 14,000 to 15,000 feet tall. Stated that, upon landing, there were black embers inside the aircraft, black carbon streaks on his trousers, black streaks all over the aircraft, and white ash on the boots and any other rubber parts of the exterior aircraft. Stated that the aircraft was grounded pending inspections, and that reporter suffered smoke inhalation, for which treatment was received.

Reporter stated that reporter had no warning, whatsoever, that the aircraft was about to fly into the plume, but that the aircraft weather radar was not on at the time. Reporter suggested possible better fire reporting to the aviation community and better communications between fire discovery and or networks and aviation personnel. Reporter also suggested that perhaps Center radar might display a large fire plume and provide better early warning.

Synopsis

Small transport aircraft Captain reported extreme conditions and loss of control on approach due to wild fire.
ACN: 1571806

Time / Day
Date: 201808
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZZ.Airport
State Reference: FO

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.Center: ZZZZ
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: Cruise

Person
Reference: 1
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)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1571806

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: Maintenance Action
Result.Flight Crew: Landed As Precaution
Result.Flight Crew: Diverted
Result.Air Traffic Control: Provided Assistance

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1
During my break, I was woken up notifying me that we were diverting to ZZZZ. Found out a number of flight attendants were feeling nauseous, dizziness and sluggish. After entering the cockpit, I also got tingling feeling and headache. Cockpit crew completed Smoke, Fire or Fumes checklist, and Overweight Landing checklist. Landed and taxied to gate uneventfully. There were no signs of visible smoke or identifiable smell in the cockpit or cabin during the event.

After safely arriving on the gate, one of the flight attendants mentioned she might have smelled anti-freeze type smell coming from the chiller. Initially, I thought we might have experienced refrigerant poisoning, the symptoms were similar to symptoms of hypoxia. After Maintenance investigation that took two days found a cargo container with shoes and the glue that was used to attach soles was the cause of the symptoms. The chemicals used to manufacture the adhesive should be investigated, and if inhaled, what short and long term effects can we expect. If it's harmful to humans, it should not be carried on passenger air carriers.

**Synopsis**

B767 First Officer reported enroute diversion due to several Flight Attendants experiencing symptoms similar to hypoxia caused by unknown source. Further investigation by Maintenance determined fumes of cargo shipment of glue and shoes was the probable cause.
ACN: 1570862 (36 of 50)

Time / Day
Date: 201808
Local Time Of Day: 0601-1200

Place
Locale Reference.ATC Facility: ZAB.ARTCC
State Reference: NM
Altitude.MSL.Single Value: 36000

Environment
Flight Conditions: Mixed
Weather Elements / Visibility: Turbulence
Weather Elements / Visibility: Thunderstorm

Aircraft
Reference: X
ATC / Advisory.Center: ZAB
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
Route In Use: Direct
Airspace.Class A: ZAB

Component
Aircraft Component: Air Conditioning and Pressurization Pack
Manufacturer: Airbus
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)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1570862
Human Factors: Troubleshooting

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

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
We were level at 36,000 feet and deviating for thunderstorms approaching the RNAV arrival and the First Officer noticed dirty sock smell. No change in power setting was noted and both packs were being fed by its respective engine. I called the flight attendants and wanting not to prompt them asked if everything was okay. The A Flight Attendant immediately responded that it smelled like "dank foot." I also began smelling dirty sock at this point. We donned our Oxygen masks and after confirming no smoke or sign of fire was present ran the "Elimination of odors in the cockpit/cabin" procedure in [flight manual]. The flight attendants indicated that they first smelled the dirty sock smell in the aft cabin. Per the procedure we turned off Pack 2 and waited 5 minutes. The smell dissipated both in the cockpit and in the cabin.

We decided to continue to destination. At the top of descent with a power reduction to flight idle a faint dirty sock smell returned. We again donned our oxygen masks. Since we previously confirmed that pack 2 was causing a dirty sock smell we chose not to attempt to cycle Pack 2 on and Pack 1 off. The flight attendants also stated that there was a dirty sock smell in the cabin. Due to our proximity to our destination we continued our descent and landing as planned. I took off my oxygen mask on the approach at approximately 1,000 feet to facilitate a better sight picture for landing. At that time I again smelled strong dirty sock smell. After landing we turned off Pack 1 and monitored cabin temperatures. At the gate and after engine shutdown I opened the cockpit window. Neither the First Officer nor I experienced any symptoms. One flight attendant reported "tingling" in their throat. No passengers reported symptoms or requested medical attention. A detailed logbook entry was made and the cabin smoke/fumes form was completed.

Synopsis
A320 pilot reported "dirty sock smell" detected by First Officer in the cockpit and Flight Attendants in the cabin.
ACN: 1570516 (37 of 50)

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

Place
Locale Reference
ATC Facility: ZZZ.TRACON
State Reference: US

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

Person
Reference: 1
Location Of Person
Aircraft: X
Location In Aircraft: Cabin Jumpseat
Cabin Activity: Safety Related Duties
Reporter Organization: Air Carrier
Function
Flight Attendant: Flight Attendant (On Duty)
Qualification: Flight Attendant: Current
ASRS Report Number: Accession Number: 1570516
Human Factors: Distraction
Human Factors: Physiological - Other
Human Factors: Situational Awareness
Human Factors: Confusion

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
Detector
Person: Flight Attendant
When Detected: In-flight
Result
General: Physical Injury / Incapacitation
Result
General: Flight Cancelled / Delayed
Result
Air Traffic Control: Issued New Clearance

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

About 5 to 10 minutes after takeoff sitting in the R2 jump seat I smelled something really bad, like body odor. It came on very strong and then I realized it was the stinky sock smell that I've heard others talk about with aircraft contamination. I asked another Flight Attendant who was sitting next to me in the aisle aft jump seat and he said yes he did smell it and was just bout to say something. I called the A flight attendant and asked her to come back quickly. She did and right away said she smelled it to call the Captain. I did and reported our experience. The Captain asked if we were feeling nauseous. I said no, but a little light headed. He said ok we will go back. The three of us in back went to the front galley as the fumes/smell weren't up there.

The Captain called and asked one of us to go back so he could do some checks. The A Flight Attendant went, spoke to him on the inter phone. When she came back she said the smell was now moving to the forward part of the cabin. I was starting to feel tingles in my hands and feet and a little dizzy. We waited to take our aft jump seats until right before landing as to not be breathing in contaminated air. When we went to the back the smell seemed to change to an almost sweet ammonia type cleaning smell. We landed and the Captain over the PA said "Remain Seated, Remain Seated." He then called all Flight Attendants and told us the doors are disarmed and to open all doors except R1. We opened our doors and placed the safety strap across doors L2 and R2.

The fire department was outside and firemen came to the back of the aircraft to ask what happened. We told them and at that time they didn't smell anything. The First Officer called back and asked if we wanted medical attention. We all said we did. We were still feeling funny, light headed, dizzy and tingling. It wasn't as bad as in air but it was definitely not gone. We waited for at least 40 minutes on the aircraft for the paramedics to come. While waiting a representative came and asked us questions for his paperwork. He told us we actually needed to go to a facility for our blood to be tested and only certain places could do that. He also gave us the number to get that worked out. Paramedics came and at that point we said we were told we need to go someplace specific and we didn't need them. They left.

We [got a ride] to a medical center. We waited and were there for at least 2 hours. When we finally saw the nurse practitioner he took our blood pressure, listened to our lungs, looked in our ears and eyes and said that first of all they don't test for carbon monoxide unless the believe we were exposed and he thought we weren't since we smelled something. He said carbon monoxide is odorless and we would need to be exposed for 5 or 6 hours to be poisoned. I gave him the information regarding the type of gas/oil etc. we used so that he would know what we were possibly exposed to. He dismissed it and us. So it was a complete waste of time. We were still feeling symptoms but they were dissipating and we were all exhausted. We got rooms at a really crappy hotel in a bad area of town. The room I was given smelled like bad cigarette smoke, I asked to change rooms and apparently there was not one single other room available. I slept in another Flight Attendant's room as it was too late to find another hotel for myself. We finally were in our rooms. Make sure our aircraft are safe before we fly them. There should be a protocol of exactly what should happen after an event like this. No one was prepared or knew exactly what should happen next. Send a crew to a location for testing that knows exactly what this situation is and are familiar with it.

Synopsis

A Flight Attendant reported feeling ill from odors in the cabin.
ACN: 1570471 (38 of 50)

**Time / Day**
- Date: 201808
- Local Time Of Day: 0601-1200

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

**Environment**
- Light: Daylight

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

**Component**
- Aircraft Component: Pax Seat
- 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 Not Flying
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Instrument
- ASRS Report Number.Accession Number: 1570471
- Human Factors: Communication Breakdown
- Human Factors: Situational Awareness
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: ATC

**Person: 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
While arriving [at the gate], Number 3 FA (Flight Attendant) called and conveyed that there's smoke and fire at row 18, left side and that he is taking the extinguisher to it. I informed the Captain and he expedited our parking as I tried to contact the Tower for ARFF assistance. The Tower frequency was congested and after a few tries I got through. Tower called ARFF and after shutdown the Captain went to the back and by that time the smoke had already dissipated.

Smoke had actually originated from under row 18, right side. By the time we parked passengers sitting nearby apparently had poured water onto the electronics box that was smoking. We deplaned normally and upon inspection by Maintenance and ARFF, it was concluded that no other components of the plane were affected. A seat power box was removed and had a strong electronic burning odor.
ACN: 1570426 (39 of 50)

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

**Place**
Locale Reference.ATC Facility: ZZZ.TRACON
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: EMB ERJ 145 ER/LR
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Takeoff
Airspace.Class B: ZZZ

**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: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1570426
Human Factors: Troubleshooting
Human Factors: Situational Awareness

**Events**
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Illness
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
Result. Flight Crew: Overcame Equipment Problem
Result. Flight Crew: Returned To Departure Airport
Result. Flight Crew: Requested ATC Assistance / Clarification
Result. Air Traffic Control: Provided Assistance

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1

Once airborne me and the FO (First Officer) could smell what it appeared to be oil fumes coming from one of the packs. This kind of event happened in the past but it would normally go away almost immediately. This time the odor was strong enough to get us talking about it. Around 2,000 MSL I called the FA (Flight Attendant) to see if she was smelling the same thing but she did not. During the climbout I decided to momentarily turn pack Number 1 off and the smell went away. At this point we were sending messages to Maintenance Control and they told us to monitor the oil quantity and informed us that Dispatch was following our conversation with them. We noticed that the oil quantity for ENG Number 1 was showing 9 QT, we had 12 QT before we left, and the oil smell was minimal but it was still present.

At this point I wasn’t comfortable going all the way to [the destination] breathing that kind of air in the flight deck and I started discussing with the FO the possibility of an air return. I called the FA again to verify if she or anyone in the cabin were complaining about strong smells of oil but she said that everything was OK. The FO and I talked about possible physiological side effects that we needed to be aware of and because of that we were constantly asking one another how we were feeling. I also suggested using the oxygen mask at intervals as a precaution. Right at that point Dispatch sent a message asking if we wanted to return and we said YES. We got a route amendment, we made a plan, I informed the FA about our intentions, talked to the passengers and finally to ATC.

Even though we never [advised ATC], [they] still treated [us like a priority]. Once below FL250 we turned the PACK 1 OFF to minimize the exposure to the fumes and at a lower altitude we turned the engine bleeds off and supplied air-conditioning from the APU. The FO at some point was complaining about a minor burning sensation on his nose and we both started feeling a light headache descending through 6,000 MSL.

There were rescue vehicles waiting for us and we were directed to stop the plane on the taxiway and wait for them to complete an aircraft inspection. They thought we had smoke in the flight deck and I had to correct them. After giving them more details about our situation they found a puddle of oil on the ground below ENG Number 1. We taxied to our gate, made an entry in the aircraft log, talked to Maintenance staff about the situation, talked to the on-call Chief Pilot and told him that I was not fit to fly anymore. He suggested that we should go to the airport clinic and have a check-up but since it was closed we concluded that the best action was getting some rest and go to the clinic next day early in the morning.
Even though we had no smoke in the flight deck I should have performed the FIRE/SMOKE QRH and have worn the O2 mask the whole time and not just using O2 at intervals like we were doing. I would suggest that the FIRE/SMOKE QRH should be renamed in a way to address the possibility of fumes when smoke is not present.

**Synopsis**

EMB-145 Captain reported that after takeoff there was an odor of oil fumes in the cockpit.
ACN: 1570377

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

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

Environment
Flight Conditions: VMC

Aircraft
Reference: X
Aircraft Operator: 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

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Captain
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Type: 1137
ASRS Report Number.Accession Number: 1570377

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event: Passenger Misconduct
Anomaly.Deviation - Procedural: Published Material / Policy
Detector.Person: Passenger
Detector.Person: Flight Attendant
Were Passengers Involved In Event: Y
When Detected: Aircraft In Service At Gate
Result.General: Flight Cancelled / Delayed

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

This report documents an incident of smoke observed and fumes detected in the cabin approximately five minutes prior to closing the cabin door for departure.

I, Captain, was contacted and advised by Flight Attendant, that a customer seated in 23F had reported to her that she had observed smoke rising along the side wall of the cabin interior and that she had detected an odor consistent with something burning. Additionally, customers seated in the same row of the reporting customer in 23F, as well as in 22DEF reported similar observations. FA (Flight Attendant) stated she briefly observed smoke in a formation she described as similar to cigarette smoke. I responded to the incident location to investigate. Upon arrival, I did not observe smoke. However, as I approached 23F, I detected a faint odor consistent with electrical combustion. Based on my observation and the statements of the aforementioned customers and FA, I made the decision to deplane all customers. I then contacted [Maintenance] and briefed the Maintenance Controller of our status and concerns. Upon arrival, a Maintenance Technician initiated a smoke and fume investigation of the aircraft. Upon determining the results of the initial investigation to be inconclusive, the Maintenance Controller suggested contacting and interviewing customers seated in 23F and 24F regarding the location and contents of their carry-on property.

I returned to the boarding area of the terminal and requested Supervisor page customers assigned to 23F and 24F and request that they come to the service counter with their belongings. Since the reporting customer was seated in 23F and we were concerned about property belonging to and stowed under 23F by the customer assigned to 24F, I initially contacted and interviewed the customer assigned to 24F. I introduced myself and explained I was concerned for her safety, as well as that of the entire flight. I observed she was in possession of a backpack. I asked her where her backpack had been stowed and what items she had in her backpack. She stated she had stowed beneath 23F, and, that among other items, it contained an e-cigarette, but stated she had turned it off. I asked if she would voluntarily open her backpack. She answered affirmatively and did so. As I looked inside her backpack, I detected an odor similar to the odor I had detected during initial investigation in the incident location of the cabin. I then introduced myself to the customer assigned to 23F and asked if she could smell the interior of the backpack and inform me if she smelled anything familiar. She did so and immediately, without hesitation, stated she detected the identical burning fume odor she had detected in the cabin.

From the aforementioned statements and observations, I determined the cause of the smoke and fumes was customer 24Fs e-cigarette. In an effort to resolve the matter and ensure the safety of flight, I asked the customer assigned to 24F to take her belongings back through the TSA security check point for re-screening. Additionally, I asked the Supervisor to attempt to persuade 24F to voluntarily relinquish her e-cigarette, which she did without incident.

[Flight] was subsequently re-boarded. After an approximately two [hour] delay [flight] departed ZZZ and arrived in [destination] without further incident.

Synopsis

A320 Captain reported a passenger's e-cigarette in their carry-on caused concern which resulted in deplaning and a smoke and fume investigation.
Time / Day
Date: 201808
Local Time Of Day: 1201-1800

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US

Environment
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Center: 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: 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: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Commercial
ASRS Report Number.Accession Number: 1569561

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1569637

Events
Anomaly: Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector: Person: Passenger
Detector: Person: Flight Attendant
Were Passengers Involved in Event: Y
When Detected: In-flight
Result: General: Evacuated
Result: Flight Crew: Diverted
Result: Flight Crew: Landed As Precaution

Assessments
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft

Narrative: 1

Cause of smoke is unknown to me at this time. I was the pilot monitoring [when] the flight attendant called up to the front and noted that she saw a smoke/haze in the back of the cabin. She later indicated to us that several of the passengers had noticed the smoke and had also notified her. I asked her to come to the front of the aircraft and call me when she had done so. My FO utilized his phone to take a picture through the peephole so we could see what was occurring. We noted the smoke in the rear of the cabin. I began to smell the acrid odor in the flight deck. At that point I commanded masks on and began QRH procedures. I told them that [we intended to divert to a nearby airport]. I spoke with the FA again and told her to find the source possibly in the walls or ceiling. I did have several calls between myself and the FA in the descent.

The FO got established on a visual approach. I elected to have him continue the pilot flying role so I could continue to monitor the emergency. Once we landed I brought the aircraft to a complete stop on the runway. I immediately called the FA and inquired if there was still smoke. The FA noted that she could still smell the smoke and I was concerned that we still had an active fire onboard. At that point I told the FA we were going to be evacuating on the runway. I made an announcement to the passengers to evacuate out the left and right side of the aircraft and to go to the nose of the aircraft. I completed the emergency evacuation QRH and noted that the FO was unable to egress out of the flight deck door. I decided that we needed someone on the ground to assist the evacuation at this point. I egressed through the Captain DV window and helped several of the passengers egress through the main cabin door as that was where the majority of the passengers were. Once we were completely egressed I began coordinating.

Since cause of smoke is unknown at this time I cannot state, however I have a few lessons I would like to pass on.

1. After the cabin O2 masks were deployed the mask door above the entrance caused difficulty in opening the flight deck door. This was unexpected and slowed egress.
2. Locating the lead or incident commander is vital.

Narrative: 2

I was the First Officer and PF. While en route the Flight Attendant contacted the cockpit to notify us of a smoke/haze that was in the back of the aircraft in which she was made aware of from a passenger ringing their call button. Since the FA informed us that she was in the rear of the aircraft, the Captain asked her to continue to the forward cabin and contact us again to see if there was any noticeable difference throughout the cabin. While the FA was still on the phone with the flight crew, I decided to use my iPhone camera to
peer through the cockpit peephole to see if I could see any of the smoke. As the Captain and I zoomed in on the photo that I took, we quickly noticed that we could not even see the FA in the rear of the aircraft through the smoke developing in the cabin.

It was then that we started to notice the haze that was developing in the cockpit and the acrid smell coinciding with it and we quickly donned our oxygen masks. Center gave us [a nearby alternate] as an option and we took it and began an expedited descent. There were 2-3 additional calls between the cabin crew and cockpit as we continued our descent and once again after landing, where a decision was made to do an evacuation on the runway to eliminate any potential of being onboard in case a fire was developing. The Captain and Flight Attendant made it clear that the passengers were to deplane in the forward [part] of the cabin through the entrance door, but some of the people in the rear took it upon themselves to remove the emergency exit doors and evacuate over the wings.

**Synopsis**

EMB-145 flight crew reported diverting to an alternate airport and evacuating on the runway after experiencing smoke in the cabin enroute.
Event: 1

The A321 has a problem. 80% of all my flights land and fumes enter the cabin on taxi in or at the gate with passengers and crew on board.

[Day 1, Flight A, Aircraft X]
As we taxied to the gate, the cabin filled with fumes. After the Captain opened the flight deck door, I reported the fumes.

[Day 2, Flight B, Aircraft Y]
Fumes flooded the cabin right before the agent opened the aircraft door. I had to place a wet towel over my nose and mouth. When Captain opened the aircraft door, I reported the problem. He said, "ok" and left.

[Day 3, Flight C, Aircraft Y]
We were delayed on the tarmac due to bad weather. The first time the flight stopped and then started again, fumes flooded the business class cabin. I was standing in the aisle speaking to a passenger. I called the cockpit and told him I was going to report this. He said, "ok."

[Day 4, Flight D, Aircraft X]
I didn't smell the fumes until after we disarmed our doors at the gate.

This has been a problem for a long time and many of us have been reporting it. It has to do with the new bleed air engine procedure.

**Synopsis**

A321 Flight Attendant reported noticing a frequent problem with fumes in the cabin on taxi in.
Exposed to carbon monoxide poisoning on aircraft. Aft galley and back of the aircraft.
Injury report filled out and treated at hospital ER. On board aircraft to preflight equipment and get galley ready for flight. Within minutes started feeling a pounding headache, and burning in my eyes, numbness and tingling in my fingers. I was on board the aircraft about 35 minutes. Exposed in the back galley about 20 to 25 minutes. The other 3 flight attendants also were feeling the symptoms but to lesser degrees and were not exposed as
much as I was. Captain came on board, told the gate agent to hold up boarding until he determined what was going on. He could not smell anything in the back. I told him my symptoms and he asked me if I was feeling ready and safe to go? I told him I was not and wanted off the aircraft. My supervisors came down and we all got off the aircraft. I was starting to feel heavy and a little disoriented. I was assessed by medical on the jetway and transported to hospital where my blood test confirmed later that afternoon that I had levels of carbon monoxide in my system.

**Synopsis**

Flight Attendant reported illness due to carbon monoxide inhalation while preparing the galley for flight.
ACN: 1568150

Time / Day
Date: 201808
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.Ramp: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: A321
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.Aircraft: X
Location In Aircraft: Cabin Jumpseat
Reporter Organization: Air Carrier
Qualification.Flight Attendant: Current
ASRS Report Number.Accession Number: 1568150
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Attendant
Communication Breakdown.Party2: Flight Attendant
Communication Breakdown.Party2: Flight Crew

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
Detector.Person: Flight Attendant
When Detected: Taxi
Result.General: None Reported / Taken

Assessments
Contributing Factors / Situations: Aircraft
Contributing Factors / Situations: Company Policy
Contributing Factors / Situations: Environment - Non Weather Related
Contributing Factors / Situations: Procedure
Primary Problem: Aircraft
**Narrative: 1**

Sat on taxiway with no movement. [9 minutes after doors closed] fumes entered Aft Galley where myself (#6) and #2 were seated. Passengers in last row commented on fumes. Flight Attendant #1 made public address "fumes are due to engine restart and will dissipate once we're moving."

Fortunately, I carry a mask for these occasions, however, #2 did not have a mask and was suffering. And even though I do have a mask, I was still exposed as this mask doesn't necessarily filter jet engine exhaust, nor does it cover the eyes. #6 left jump seat because he could no longer bear the fumes. Meanwhile, #1 called me to ask if I wanted to return to gate. Yes, I wanted to, however, I wanted it to be a joint decision with the #6 but he was standing in the aisle. I yelled for him to return to Galley. He indicated he didn't want to return to gate. In my opinion, he was toughing it out and didn't want to appear weak, etc. He later admitted this was the incorrect decision. I had no time to talk sense into him because at that point takeoff was imminent. He required oxygen in flight.

Knowing that this is a known potential issue on Airbus, pilots should have informed us of the situation so we would have had time to protect ourselves, or some other action should have been taken by pilots to protect us. Instead, we sat with the fumes for 30 minutes. Pilots never said a word to us or asked how we were. This is an extremely serious issue with potential long-term health impact and was preventable, in my opinion.

**Synopsis**

A321 Flight Attendant reported after engine start, fumes entered the cabin aft galley area.
ACN: 1568089 (45 of 50)

Time / Day
Date: 201808
Local Time Of Day: 0601-1200

Place
Locale Reference.ATC Facility: ZZZ.ARTC
State Reference: US
Altitude.MSL.Single Value: 20000

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: A330
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Descent
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: 1568089
Human Factors: Situational Awareness
Human Factors: Time Pressure
Human Factors: Workload
Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Crew

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Relief Pilot
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1568091
Human Factors: Situational Awareness
Communication Breakdown
Communication Breakdown. Party1 : Flight Crew
Communication Breakdown. Party2 : Flight Crew

Events
Anomaly. Aircraft Equipment Problem : Less Severe
Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly. Deviation - Procedural : Published Material / Policy
Anomaly. Inflight Event / Encounter : Weather / Turbulence
Anomaly. Inflight Event / Encounter : Unstabilized Approach
Detector. Person : Flight Attendant
When Detected : In-flight
Result. Flight Crew : Executed Go Around / Missed Approach
Result. Flight Crew : FLC Overrode Automation
Result. Aircraft : Equipment Problem Dissipated

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

Narrative: 1
On descent through FL200, Flight Attendant (FA) reported odor in cabin from FWD galley through row five. First Officer (FO), FB and I smelled it too. The FO and I thought it smelled like ozone, and we were flying through an area of thunderstorms. However, the FB thought it smelled electrical. We donned oxygen masks and I got out the Quick Action Card (QAC), but the FA reported the odor dissipated, so we suspended the procedure and removed our masks. Due to a late clearance for approach from ATC we had to go missed approach and at the same time the FA reported the odor again and stronger than before. We donned oxygen masks and I performed the QAC procedure and talked to ATC while the FO flew the aircraft. We were vectored back around cells for another approach. There was never any smoke visible, just electrical smell which again dissipated after three to four minutes, which is partly why I didn't declare an emergency, but in hindsight I should have anyway. We suspended further procedures after doing the Quick action card, but kept our masks on for the approach and landing, which was uneventful. I put the events in the logbook and debriefed maintenance at the gate. FO and FB performance was exemplary and contributed greatly to a coordinated crew response to a very busy situation.

Narrative: 2
All pilots had returned from break and we were on descent at FL200. Out of FL240 all of us smelled smoke. The Captain told us to don oxygen, which we did. Almost immediately the purser called to report smoke. I asked the Captain if I could check out the cabin and he agreed. I donned the mask and exited the cockpit. I walked the length of the aircraft talking to every Flight Attendant (FA). All had smelled it and all thought it was electrical. I couldn't see any smoke and the smell was dissipating as I returned to the cockpit. Upon my return the smell was virtually gone so we removed masks and continued. It was my sense that it was electrical in nature and definitely neither oil nor Skydrol in the Air Cycle Machine. There were thunderstorms all along the arrival route so we diverted a little south and then turned to the outer marker for XYR. It seems that we were the first airplane to have made an approach since a cell had passed over the field recently; it was very quiet and the only other traffic in the area was behind us. We were vectored for a right base to XYR intercepting outside the FAF at 2000 MSL and then given a heading with a clearance
to intercept the localizer. The First Officer (FO), who was flying, was configured with gear
down and flaps 3 as we approached the glideslope. As we crossed the GS intercept the FO
realized hadn't received an approach clearance yet so we couldn't start down. The Captain
called the Tower for clearance but we got stepped on once and ignored or stepped on
another time and it took three calls to get an approach clearance. By now we were close to
being two dots high but we started a descent to recapture. The FO called for full flaps and
deployed the spoilers to get back on glide path. As we descended through 1000 feet we
were close to being stable but the spoilers were still deployed. I said, rather loudly, "The
boards are still out. Go Around." There was a startle effect as the two realized that we
were, in fact, at 950 feet and the spoilers were still out. I said again, "Go Around." The
Captain said, "Go around" and the FO executed a go around. Within a few seconds we all
smelled smoke again. The Captain again ordered us to don our masks which we did.

The FO executed a soft go-around (and did a great job), the Captain began executing the
QRC and I set up the intercoms so we could talk and then called back to the purser. He
said it was worse than before. The Tower gave us directions to climb to 4000 feet and
turned us over to the TRACON. Turning downwind I said we should probably declare an
emergency. I got no response from the Captain. The Captain executed the QRH procedure,
effectively cutting off the packs. After another minute or two I reiterated that would should
declare an emergency, stating that landing an airplane with everyone in the front wearing
oxygen masks was an emergency in and of itself and that we'd look pretty stupid if
something went wrong and we hadn't done so. I don't remember exactly what the Captain
said but he demurred. I deferred. Vectoring for final we were now in instrument
conditions. We were cleared for the approach but had missed putting the FMS into
Approach Mode ("activate/confirm"). The FO selected managed speed and the autopilot
pitched to capture the glideslope. The aircraft begin to accelerate and came within 1 knot
of an overspeed at 180 knots. He quickly realized what was wrong and put the speed in
manual mode, and dialed back the bug to just above VLS. The captain was able to quickly
put the aircraft back into approach mode and returned us to managed airspeed, we were
stable by 1000 feet, and we landed. The FO is an excellent stick and a bright and cheerful
pilot. He did a great job. The Captain was slow and methodical, followed company
procedures and kept us all on track. They both did a really nice job and deserve
commendation. I would happily fly with both of them again.

Two things went wrong with this flight. The first is that Captain made a questionable call
not to declare an emergency. He conceded this graciously on the ground and said that he
was so busy that he was concerned that declaring an emergency would just make it worse.
The second is our failure to get the aircraft in Approach mode on the second approach. The
FO had gone to TOGA which restrung the approach and then cleaned up the aircraft, and
had done a very nice job of it. I take some responsibility for missing this. It's the job of
the FB to see everything and cover for the two guys up front flying. Having said that my
two mitigating circumstances are that the Captain's and FO's MCDUs are hard to see from
the observer seat, and everything is harder to see when you're wearing an oxygen mask.
This is a design flaw of the Airbus. Generally the only way an Airbus will go into Approach
mode by itself is if it's on a STAR and crosses a programmed energy reduction point. We
seldom do this in the United States which is why SOP is to "activate and confirm" at
10,000 feet. We train that we will always land the Airbus in managed airspeed mode. The
going theory for this is to take advantage of GS mini. My experience over the last ten
years is that this works nicely most of the time, especially in the 330 with its wing, but this
causes trouble at times, and this was one of them. We are developing an over reliance on
automation and the design of the Airbus is contributing to a decline in my flying skills. I
work pretty hard to maintain them (in accordance with company policy as outlined in FM
Part 1) but I know I make some pilots nervous because they're not used to flying with any
of the automation turned off, ever. With the FAA’s our Training Department's move to emphasize manual flight I'm hoping this will change. Secondly, the Captain's belief that declaring an emergency would potentially increase his workload is wrong. It's designed to do the opposite. Once we declare an emergency we become the local controller's priority, plus his supervisor, plus everyone else in the tower for that matter. Pilots never (rarely?) like to become melodramatic and declaring an emergency for what we suspect may be trivial will make us feel foolish. But if we had to go around because of the failure of the aircraft in front of us to clear the runway, and our little smoke incident turned into an uncontained fire, we would have certainly been fools. We should have a training module explaining what happens with ATC when we declare an emergency and what its advantages are.

**Synopsis**

A330 Captain and Relief First Officer reported odor in cabin causing a return to departure airport.
ACN: 1567987 (46 of 50)

**Time / Day**
- Date: 201808

**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: 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

**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: Instrument
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Multiengine
- Experience.Flight Crew.Total: 9651
- Experience.Flight Crew.Last 90 Days: 200
- Experience.Flight Crew.Type: 6609
- ASRS Report Number.Accession Number: 1567987

**Events**
- Anomaly.Aircraft Equipment Problem: Less Severe
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Anomaly.Inflight Event / Encounter: Unstabilized Approach
- When Detected: In-flight
- Result.Flight Crew: Landed As Precaution
- Result.Flight Crew: Landed in Emergency Condition
- Result.Flight Crew: Returned To Departure Airport
- Result.Air Traffic Control: Provided Assistance

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

**Narrative: 1**

At rotation (the First Officer and I) smelled a strong acrid oily smell, masks immediately on and gear selected up. Communications established. We agreed we needed to land ASAP. The First Officer notified the tower that we needed to return. The tower cleared us to land and gave us vectors to visual XYL, the vectors were too tight and a stabilized approach was not possible. A go around was initiated and was vectored to runway WZ visual backed up by an ILS, equipment was standing by, normal landed and cleared runway WZ, stopped on taxiway. Fire rescue did quick inspection of aircraft exterior. Fire chief radioed all clear and followed us to gate.

At the gate, with engines off and APU on, the aircraft would not depressurize. APU bleed was selected off and outflow valve was manually opened.

Passengers deplaned uneventfully.

Smoke/Odor was limited to flight deck and masks were worn until downwind WZ, there was a problem seeing with the masks on as it was fogging up. I felt it was a safer option for me to see properly during landing.

Notes:
- Smoke/Odor seemed to be less at lower power settings
- Flight Attendants were given [proper] instructions on downwind for runway XYL
- We were unable to contact dispatch or receive any landing data (First Officer was able to contact ops on their frequency and told them the situation and got a gate assignment)
- Landing was under max landing weight at approximately 130,000 pounds.
- Take off to landing was approximately 20 minutes.

**Synopsis**

B737 Captain reported "acid oily smell" on rotation and returned to departure airport.
ACN: 1566632 (47 of 50)

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

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

Environment
Light: Daylight
Ceiling: CLR

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737-800
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Flight Phase: Cruise
Airspace.Class A: ZZZ
Cabin Lighting: Off
Number Of Seats.Number: 160
Passengers On Board.Number: 150
Crew Size Flight Attendant.Number Of Crew: 4

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Cabin Jumpseat
Cabin Activity: Boarding
Cabin Activity: Deplaning
Cabin Activity: Service
Reporter Organization: Air Carrier
Qualification.Flight Attendant: Current
Experience.Flight Attendant.Total: 28
Experience.Flight Attendant.Airline Total: 28
Experience.Flight Attendant.Type: 98
ASRS Report Number.Accession Number: 1566632
Human Factors: Physiological - Other

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Cabin Jumpseat
Reporter Organization: Air Carrier
We had just finished the meal service when the #3 Flight Attendant asked me (#4) and the #2 Flight Attendant if we smelled anything in the cabin. She told us where she was smelling the odor, and #2 went to investigate. He came back and indicated that he did smell the odor of something like fuel. I went up to see if I could smell it, and did, in fact, smell it as well. I, however, have sinus issues, so the smell wasn’t as strong to me as it was to the other flight attendants at that point. We contacted the #1 to get her opinion. She walked back and indicated that she, too, smelled the odor. We all agreed it was the smell of fuel. We contacted the cockpit crew. The Captain asked if the passengers were saying anything to us about the odor. I told him no. I said that maybe the odor was concentrated around the top of the cabin, which might explain why only we were noticing it. He asked me to go to the area of highest concentration, rows 20-21, and see if the odor was present at floor level. I did this, and reported back to him that it was present at floor level, but was much fainter than the area where our heads were when standing in the aisle. He then asked the First Officer to go back to smell for himself and also indicated that he was going to turn off the air recirculation to see if that helped dissipate the fumes.

Once the Captain turned off the recirculation of the air, the smell, in my opinion, got much stronger. This is the opposite of what we expected to happen. The Captain then asked the First Officer to come through the cabin and investigate. The First Officer came down through the cabin and joined #2 and me in the back galley. He said that he did, in fact, smell the fumes, and that they smelled like jet fuel to him. We all talked about how odd it was that the passengers weren’t saying anything to us about the fumes. The First Officer told us to take oxygen if we needed to because we, the cabin crew, were all beginning to become light-headed and were suffering from headaches. #2 and #3 flight attendants were also becoming nauseous. The cockpit crew asked us to keep them advised and also asked us if we felt like we needed to divert. The four of us were uncomfortable making that decision since the passengers weren’t complaining. Cockpit decided to continue.

By the time we landed I had also begun to feel nauseous. Once we deplaned, a mechanic came on and said the odor would make sense, since the area of highest concentration of fumes was right over the center fuel tank. The aircraft was removed from service.

Oddly, once we got out into fresh air, the symptoms did not go away. #2, #3, and I asked to be removed from the trip. #1, who had been furthest away from the issue, was only
experiencing a small degree of light-headedness, and so she elected to continue flying. By the next day, the symptoms had all disappeared.

**Narrative: 2**

During boarding, the #3 Flight Attendant noticed a smell and after takeoff still noticed it and asked if I would check to see if I smelled it too, so I checked and did. It smelled like fuel from around row 20-21 to aft of cabin to aft galley. The other flight attendants checked and smelled same, so we called the cockpit to tell them what was happening in the cabin. The First Officer came back to smell as well and concurred that in fact it smelled like jet fuel. He said that if we needed O2 to take it and they would write it up and that he would tell the Captain (who said he would not come back because he had sinus surgery and couldn't smell). The First Officer asked if we wanted to divert, at which time we told him how we felt and that shouldn't be our call but felt that should probably happen, but [also] asked if that isn't their call to divert. At that point, we still had 1.5 hours to go and the crew chose to continue versus divert. At which point myself, Flight Attendant #2, and Flight Attendant #3 were feeling most ill effects and then Flight Attendant #4 came to feel the same with Flight Attendant #1 in front cabin feeling a bit of what the rest of us were because she was up front and not in the midst of the area where it originated from.

**Synopsis**

B737-800 flight attendants reported feeling ill from fumes in the cabin that smelled like jet fuel.
**ACN: 1565148** (48 of 50)

**Time / Day**
- Date: 201807
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference.Airport: MCO.Airport
- State Reference: FL
- Altitude.AGL.Single Value: 0

**Environment**
- Weather Elements / Visibility: Thunderstorm
- Light: Night

**Aircraft**
- Reference: X
- 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
- Cabin Lighting: High
- Number Of Seats.Number: 187
- Passengers On Board.Number: 187
- Crew Size Flight Attendant.Number Of Crew: 4

**Person**
- Reference: 1
- Location In Aircraft: General Seating Area
- Cabin Activity: Boarding
- Reporter Organization: Air Carrier
- Experience.Flight Attendant.Total: 16
- Experience.Flight Attendant.Airline Total: 16
- Experience.Flight Attendant.Number Of Acft Qualified On: 3
- Experience.Flight Attendant.Type: 85
- ASRS Report Number.Accession Number: 1565148

**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 Attendant
- Were Passengers Involved In Event: Y
- When Detected: Aircraft In Service At Gate

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

**Narrative: 1**

Smelled fumes in the cabin that continued to get worse and developed a haze. Passengers began coughing and complaining of eyes burning. I felt lightheaded and nausea. Captain thought it was exhaust. After 45 minutes we deplaned.

**Synopsis**

Flight Attendant reported fumes in cabin prior to pushback.
Time / Day
   Date : 201807

Place
   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

Person
   Reference : 1
   Location Of Person : Gate / Ramp / Line
   Reporter Organization : Air Carrier
   Function.Ground Personnel : Gate Agent / CSR
   ASRS Report Number.Accession Number : 1564692
   Human Factors : Troubleshooting

Events
   Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
   Anomaly.Ground Event / Encounter : Other / Unknown
   Detector.Person : Maintenance
   Detector.Person : Gate Agent / CSR
   Were Passengers Involved In Event : N
   When Detected : Aircraft In Service At Gate
   Result.General : Maintenance Action

Assessments
   Contributing Factors / Situations : Airport
   Primary Problem : Airport

Narrative: 1
   I went to check the cabin temperature for the flight. When I arrived at the gate I noticed pc unit was switched off, and mechanic was walking down the jet bridge. I asked him if [he] switched it off. He said it was cold on board so he switched it off and will call back if it needs to be [turned] back on. While I was inside aircraft checking aircraft cabin temps mechanic told me he smells fuel, I came down the jet bridge and I noticed wet around the pc air unit. So I checked if it's a fuel spill. Fuel was still dripping out of the unit nonstop, fuel was spilled from the Jet bridge where pc unit was staged to all the way down to taxi lane. I notified my supervisor, he respond quickly and showed up to the gate, he asked me to bring fuel spill cart and we start cleaning the fuel and secured the spilled area.

Synopsis
Ground personnel reported a fuel leak/spill from pc unit on jet bridge.
ACN: 1563332

Time / Day
Date: 201807

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

Aircraft
Reference: X
Aircraft Operator: Air Carrier
Make Model Name: A321
Crew Size. Number Of Crew: 2
Flight Plan: IFR
Mission: Passenger
Flight Phase: Landing

Person
Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Cabin Jumpseat
Reporter Organization: Air Carrier
Qualification. Flight Attendant: Current
ASRS Report Number. Accession Number: 1563332

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

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

Narrative: 1
We were notified before boarding that [the] aircraft had a fume incident the day prior. We notified the Captain about the previous fume event. During inflight right before descent we noticed a very strong smell and notified the First Flight Attendant and Captain. The fumes got in my throat and had I felt a burning sensation. I tried to cover my nose and mouth upon landing.

During landing while strapped in my jump seat I noticed a deadheading crewmember looked very pale. When I asked him if he needed medical assistance upon arrival he agreed. I notified the First Flight Attendant to let the Captain know we needed an ambulance. Since I had the burning sensation in my throat and a pounding headache a
family member drove me to an emergency room to get looked at as suggested by Inflight Supervisors.

The plane had a fume event the day prior. Why would they put our health and safety at risk and use the plane right away?

**Synopsis**

A321 Flight Attendant reported feeling ill from exposure to fumes in the cabin during descent.