# **ASRS Database Report Set**

# Cabin Smoke, Fire, Fumes, or Odor Incidents

Report Set Description	A sampling of air carrier reports concerning cabin smoke, fire, fumes or odor related events.
Update Number	17
Date of Update	February 7, 2024
Number of Records in Report Set	50

Records within this Report Set have been screened to assure their relevance to the topic.

## Ames Research Center Moffett Field, CA 94035-1000



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

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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.



## ACN: 2037917 (1 of 50)

## Synopsis

Air carrier Flight Attendant reported a fume event of unknown source during preflight prior to boarding. Maintenance removed aircraft from service and Flight Attendant was removed from trip.

## ACN: 2033140 (2 of 50)

## Synopsis

Air carrier flight crew reported an intermittent burning odor during initial approach. The flight crew continued to a safe landing and evacuation.

## ACN: 2032399 (3 of 50)

## Synopsis

MD-11 First Officer reported receiving messages indicating possible fire in cargo hold during cruise. Flight crew diverted and performed a normal landing. Postflight temperature readings done by airport responders were normal.

# ACN: 2031952 (4 of 50)

# Synopsis

Air carrier Flight Attendant reported a rotten egg odor to the Captain during boarding. The Captain determined it to be a fume event and instructed everyone to deplane.

# ACN: 2031865 (5 of 50)

# Synopsis

B-737 pilot reported receiving a report from ATC during taxi of smoke from the aft part of the aircraft after APU had been shutdown. The flight returned to the gate with no fire indication in cockpit or from the airport fire department, ARFF.

# ACN: 2031778 (6 of 50)

# Synopsis

MD-11 Captain reported a warning annunciation for a potential fire in lower forward cargo area went off and the flight crew opted to divert.

## ACN: 2031624 (7 of 50)

## Synopsis

B737-800 First Officer reported compressor stall sounds from the #2 engine and the smell of burning rubber and smoke in the cabin when they were about to level off at cruise altitude. Crew ran compressor stall and smoke/fumes checklist prior to returning to departure airport for landing.

## ACN: 2031193 (8 of 50)

## Synopsis

B-777 Captain reported a burning odor while taxiing into the gate after starting the APU. Upon parking and shutdown maintenance discovered burned electrical components in the lower electrical compartment.

## ACN: 2029352 (9 of 50)

# Synopsis

Air carrier flight crew reported a number 2 engine fire warning message during arrival taxi. Flight crew completed the QRH procedures and requested Airport Rescue and Fire Fighting assistance who followed aircraft to parking since fire message had extinguished.

## ACN: 2028783 (10 of 50)

## Synopsis

Air carrier Flight Attendant reported an external smoke event emanating from the ground power connection during gate arrival. Crew and passengers deplaned the aircraft and airport response vehicles arrived.

# ACN: 2027741 (11 of 50)

## Synopsis

Challenger 300 flight crew reported an APU fire warning inflight. After performing the appropriate checklist procedures, the fire warning stopped. Once on the ground no fire was discovered.

# ACN: 2027154 (12 of 50)

## Synopsis

Air carrier crew reported an APU fire while loading at the parked position on the ramp. The crew observed smoke at the tail of the aircraft without cockpit warning, activated fire bottles, then evacuated safely by airstairs.

## ACN: 2025594 (13 of 50)

## Synopsis

B767 First Officer reported a strong electrical burning smell during climb in the cabin. After troubleshooting and conferring with Maintenance and Dispatch the flight crew requested priority handling to a suitable airport where a safe landing was executed.

# ACN: 2023658 (14 of 50)

## Synopsis

Air carrier Captain reported a sharp acrid odor during cruise. After conferring with Dispatch the odor was determined to be caused by a volcanic ash event which was remedied by climbing to a higher altitude.

## ACN: 2023593 (15 of 50)

### Synopsis

B767 air carrier flight crew reported fumes in the cabin. Captain decided to divert and landed uneventfully.

# ACN: 2022715 (16 of 50)

### Synopsis

Air carrier pilot reported during descent there was a spark and electrical popping sounds from panels in the flight deck accompanied by a burning electrical odor. Flight crew landed safely at destination airport where airport responders found no presence of smoke in the aircraft.

## ACN: 2021961 (17 of 50)

## Synopsis

A300 flight crew reported being notified by the cabin jumpseaters of a fume/smoke event during departure taxi. The flight crew requested airport assistance, completed the QRH procedures and took action with no injuries or damage.

### ACN: 2021299 (18 of 50)

## Synopsis

B777 Captain reported a fuel odor and EICAS fuel valve message after engine shutdown at the gate, then was notified to motor the engine by ground maintenance. After dry motoring the engine, the odor dissipated and the Fire Department personnel reported no fire or fuel spill to Captain.

# ACN: 2020522 (19 of 50)

## Synopsis

Air Carrier flight crew reported a recurring fume event during pre-flight. As Maintenance was formulating a plan to defer the APU and/or Pack 1, the flight crew timed out resulting in the flight being rescheduled.

## ACN: 2019880 (20 of 50)

## Synopsis

Air carrier A320 Captain reported being notified at destination arrival of a fume event in the cabin. Maintenance was requested and medical attention provided for the cabin crew.

# ACN: 2019080 (21 of 50)

# Synopsis

Airbus A320 air carrier pilot reported electrical problems while climbing to cruise altitude. The crew coordinated with the cabin crew to troubleshoot the problem, diverted, and landed safely.

### ACN: 2018709 (22 of 50)

### Synopsis

Air carrier Dispatcher reported a flight diverted to a nearest suitable airport due to electrical fumes in the cockpit and the aircraft was turned over to Maintenance.

## ACN: 2018441 (23 of 50)

## Synopsis

Air carrier Flight Attendant reported a strong horrible odor of unknown source during boarding. Flight Attendant notified the Captain who ordered passengers and flight crew to deplane.

## ACN: 2017316 (24 of 50)

## Synopsis

Air carrier Captain reported cabin odor and walls in the aft lavatory were extremely hot, as reported by the aft Flight Attendant. After a divert, a missed approach due to arriving too high on final and then an overweight landing, the aircraft arrived safely. The Fire Marshal and maintenance determined the aft water heater was running uncontrolled full power and overheating.

# ACN: 2015440 (25 of 50)

## Synopsis

B767-300 Captain reported a strong burning odor and proceeded to investigate the source with a ramp agent. While the cause was undetermined, the aircraft was carrying items that were dangerous when wet and the departure conditions were rainy. However, inspection prior to departure was normal.

## ACN: 2014510 (26 of 50)

# Synopsis

A321 Flight Attendant and Captain reported a fumes event during initial approach for landing.

# ACN: 2013127 (27 of 50)

## Synopsis

Air carrier flight crew reported an EICAS "Equipment Cooling" message followed by other multiple components failure including weather radar during cruise. The flight crew elected to request priority handling to the closest suitable airport where a safe landing was completed.

# ACN: 2012750 (28 of 50)

## Synopsis

Air carrier flight crew reported while in cruise they received notification from flight attendants that the forward lavatory smelled of electrical smoke and the toilet handle was hot. The pilots diverted and landed safely.

## ACN: 2012546 (29 of 50)

## Synopsis

EMB-145 Captain reported a strong fuel odor during cruise which was assigned to Maintenance upon arrival. Maintenance discovered and corrected an APU fuel leak that was misting and entering the air conditioning system.

## ACN: 2011905 (30 of 50)

## Synopsis

Air carrier flight attendants reported preparing the cabin for a possible abnormal landing because of smoke reported in the flight deck. The aircraft landed safely and the passengers were able to deplane normally.

## ACN: 2011643 (31 of 50)

### Synopsis

ERJ 145 First Officer reported smoke in the flight deck. After landing, the aircraft produced a pack overheat warning. Passengers exited the aircraft normally.

# ACN: 2011084 (32 of 50)

### Synopsis

Air carrier Captain reported a blown pneumatic duct and bleed leak during takeoff which filled the passenger cabin with excessive noise and airborne particulates. Multiple flight attendants calling cockpit during event was distracting and created difficulty communicating with cabin crew on inter-phone to assess situation in cabin and to advise of planned return to field for an overweight landing aircraft.

# ACN: 2009951 (33 of 50)

## Synopsis

Air carrier Dispatcher reported he failed to amend the flight release of the return to departure airport due to the thermal runaway of a passenger's battery pack.

## ACN: 2009237 (34 of 50)

### Synopsis

CRJ 900 First Officer reported smoke in cockpit on the ground after starting APU. The Captain shut down the aircraft, including APU, which stopped the smoke. The aircraft was towed to the gate.

### ACN: 2007800 (35 of 50)

## Synopsis

Air carrier Flight Attendant reported a persistent dirty socks odor in the passenger cabin during cruise which was reported to the Captain. After troubleshooting the flight diverted to a suitable airport where airport personnel met and provided medical support.

# ACN: 1965418 (36 of 50)

# Synopsis

Air Carrier Captain reported a burning oil odor during takeoff and initial climb which prompted the flight crew to request an immediate return to departure airport. After a safe landing the flight continued to the gate where maintenance met the aircraft.

# ACN: 1962808 (37 of 50)

# Synopsis

Air Carrier Flight Crew reported exhaust fumes throughout the aircraft during cruise. Flight crew diverted to another airport for landing.

# ACN: 1959243 (38 of 50)

# Synopsis

MD-11 Captain reported a HAZMAT box in the cargo compartment had leaked liquid during cruise. The flight diverted to a suitable airport due to fumes emanating from the cargo compartment.

## ACN: 1958283 (39 of 50)

## Synopsis

Air carrier Flight Attendant reported a fume event during preflight. Captain had entire crew deplane followed by Maintenance cancelling flight.

## ACN: 1958273 (40 of 50)

## Synopsis

Air Carrier Flight Attendant reported a fume event during flight. After conferring with flight attendants the Captain elected to return to departure airport where a safe landing was completed and maintenance support was provided.

### ACN: 1958190 (41 of 50)

## Synopsis

Air Carrier Flight Crew reported a fume event during initial climb. The flight crew returned to the departure airport where a safe landing was completed

## ACN: 1958159 (42 of 50)

## Synopsis

Air Carrier Flight Crew reported a "dirty socks" odor during final descent. Flight crew continued to a safe landing and submitted an electronic logbook entry.

## ACN: 1958082 (43 of 50)

## Synopsis

Air Carrier Flight Crew reported a Flight Attendant notification of a "strong burning" odor in the cabin during initial climb. Flight crew returned to the departure airport where a safe landing was completed.

## ACN: 1958067 (44 of 50)

## Synopsis

Air Carrier Flight crew reported a fume event upon reaching the aircraft for pre-flight. Flight crew vacated the aircraft and submitted a logbook entry.

## ACN: 1958063 (45 of 50)

## Synopsis

Air Carrier Flight Crew reported a strong electrical insulation odor during initial climb. The Flight Crew returned to the departure airport and landed.

# ACN: 1957998 (46 of 50)

## Synopsis

A321 First Officer reported a fume event during descent, which was also experienced by the flight attendants. Flight landed safely and a logbook entry was submitted.

## ACN: 1957995 (47 of 50)

## Synopsis

A320 Captain reported a very strong, foul odor filled the entire aircraft shortly after APU startup during preflight. Maintenance removed the aircraft from service.

## ACN: 1957944 (48 of 50)

# Synopsis

A319 Captain reported a fume event in the cabin during initial climb. After running the appropriate checklists, the flight crew elected to perform an air turnback.

## ACN: 1957471 (49 of 50)

# Synopsis

Air Carrier Flight Attendant reported a fume event during boarding. The rest of the flight crew also noticed the odor and fumes. After maintenance arrived, the passengers and flight crew deplaned and the aircraft was taken out of service.

# ACN: 1957210 (50 of 50)

# Synopsis

A321 Captain reported a fume event during preflight. After extensive maintenance action with no remedy, the flight was cancelled and ferried to a maintenance base the following day.



# ACN: 2037917 (1 of 50)

## Time / Day

Date: 202309

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

### Aircraft

Reference: X

Aircraft Operator: Air Carrier Make Model Name: B787-900 Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR Mission: Passenger Flight Phase: Parked

### Component

Aircraft Component: Unknown

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person. Aircraft: X

Location In Aircraft: General Seating Area 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: 2037917

Human Factors: Troubleshooting Human Factors: Workload

Human Factors: Physiological - Other

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Anomaly. Deviation / Discrepancy - Procedural: FAR

Detector.Person: Flight Attendant Were Passengers Involved In Event: N Result.General: Maintenance Action

Result.General: Release Refused / Aircraft Not Accepted

Result.General: Work Refused

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

We had a fume event after we boarded the aircraft before boarding passengers. Maintenance was called and aircraft was removed. I went to ER as I experienced watery eyes, sore throat and felt light headed and got removed from the trip

# Synopsis

Air carrier Flight Attendant reported a fume event of unknown source during preflight prior to boarding. Maintenance removed aircraft from service and Flight Attendant was removed from trip.

# ACN: 2033140 (2 of 50)

## Time / Day

Date: 202309

Local Time Of Day: 0001-0600

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

#### Aircraft

Reference: X

Aircraft Operator: Air Carrier

Make Model Name: B767-300 and 300 ER

Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR

Nav In Use: FMS Or FMC Flight Phase: Parked

Flight Phase: Initial Approach

### Component

Aircraft Component: Emergency Equipment

Aircraft Reference : X Problem : Malfunctioning

#### Person: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying Qualification.Flight Crew: Multiengine Qualification.Flight Crew: Instrument

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 2033140

Human Factors: Workload Human Factors: Time Pressure Human Factors: Troubleshooting

### Person: 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: Instrument Qualification.Flight Crew: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 2033143

Human Factors: Troubleshooting

Human Factors : Time Pressure Human Factors : Workload

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Detector.Person : Flight Crew When Detected : In-flight Result.General : Evacuated

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Landed in Emergency Condition

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

#### Narrative: 1

We were operating flt XXXX; ZZZ-ZZZ1. we were cleared the ZZZZZ arrival to land ILSXXL. Approaching the ZZZZZ intersection we smelled a faint burning odor that went away quickly, there was no visible smoke with the odor. Perhaps a minute later the odor returned, but much stronger, at which time we donned our O2 masks and [requested priority handling]. Conditions were vmc and we were on an extended base for XXL. We consulted the smoke and fumes ck list, configured, and landed uneventfully. We cleared the rwy and it was decided to evacuate the aircraft. We evacuated using the inertial reels and met up with personnel on the ground away from the airplane. The [incident] occurred very close to the airport in vmc conditions so after [advising ATC] the landing came quickly so in a lot of respects there wasnt much time to ascertain the what and where of what was burning. The only indication we recyd in flight of anything out of the ordinary in addition to the strong odor in the cockpit was a brief status message which appeared and went away in a few seconds... I was unable to read it and it occurred somewhere around 1500 ft AGL on final during configuration. The surprises!? The inertial reels do not arrest your fall as much as one would expect or anticipate. If I ever use it again I will land with knees bent and perform a military roll to avoid injury. Fortunately I had the privilege to watch the Captain landed and did exactly that the other thing I will again carry is a flashlight around my neck for immediate use, once the aircraft is secured and shutdown its rather dark in the cockpit and the [lighting] is dim.

#### Narrative: 2

We were operating flight XXXX ZZZ-ZZZ1. We were cleared to descend via the ZZZZZ RNAV XXL arrival. Approaching the ZZZZZ1 intersection we smelled a faint burning odor that dissipated quickly. A few minutes later the odor came back and then became stronger. At that point, we donned our O2 masks, [requested priority handling] and consulted the smoke and fumes checklist. We set up for an autoland ILS approach to RW XXL. We landed uneventfully and cleared the runway. We stopped on the taxiway accessed the situation and evacuated the aircraft through the main entry door with the inertial reals. There was a no indication of the source of the odor except for a momentary status message that quickly went away. Several take aways from this experience are that the inertial reals don't arrest your fall as fast as you anticipate. After the evacuation checklist is preformed it would have been nice to have a small flashlight handy. Lastly, I am thankful for all the years of training this [incident] in training. I felt that our level of training and urgency to perform our duties and land the airplane ASAP was handled very well.

# Synopsis

Air carrier flight crew reported an intermittent burning odor during initial approach. The flight crew continued to a safe landing and evacuation.

# ACN: 2032399 (3 of 50)

## Time / Day

Date: 202308

Local Time Of Day: 1801-2400

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

### Environment

Flight Conditions: VMC

Weather Elements / Visibility: Turbulence

### Aircraft

Reference: X

ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: MD-11
Crew Size.Number Of Crew: 3
Operating Under FAR Part: Part 121

Flight Plan: IFR

Mission: Cargo / Freight / Delivery

Flight Phase: Cruise

## Component

Aircraft Component: Cargo Compartment Fire/Overheat Warning

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 2032399

Human Factors: Troubleshooting

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector. Automation: Aircraft Other Automation

When Detected: In-flight

Result.General: Flight Cancelled / Delayed Result.Flight Crew: Landed As Precaution

Result.Flight Crew: Diverted

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

Operating from ZZZ1-ZZZ, past our ETP. We received a CARGO FLO FORWARD DISAG LEVEL 1, the Captain and I reviewed that alert by referencing the QRH and noted no action was required. Just a few minutes after that indication we received a LEVEL 3 CRG FIRE LWR, at this time the Captain took the controls and I read this QRH for both of us to hear and confirm the actions required. Once the checklist was completed and not knowing the severity of the fire we [requested priority handling] with ATC via CPDLC, changed destination, to the closest airport to our present position ZZZ confirming it had suitable weather, then contacted company via SatCom to inform them of the situation and to get information of cargo being hauled. Once all checklist and notifications were made I got up to get the jump seater from the bunk to come upfront to provide another pilots prospective. At this point we still had about 90 mins remaining in flight, the Captain lead discussions about ditching, evacuating, system review of cargo fire indications, location of emergency equipment. We continued to monitor the time of fire bottle activation and knew the second bottle would need to be activated while on approach. We loaded an ILS CATIII for our approach into ZZZ. Once on VHF frequency we talked to ATC about our situation and our plans of stopping to have AARF (Airport Rescue and Firefighting) evaluate the aircraft prior to taxing into the ramp. We were receiving vectors for the approach the DISCH CARGO AGENT displayed on the EAD (Engine and Alert Display), as briefed I activated the second bottle. We auto landed the aircraft and felt it safe to clear the runway before getting AARF to get a temperature reading. Once we get clearance that the temp was in dating normal and all personnel were clear we taxied to the ramp. Performed a normal shutdown and exited the aircraft via the stairs. Ending my report I would like to add that this abnormal situation went smoothly thanks to the Captain "setting the tone" at the beginning of the trip and each flight, she made sure everyone knew to speak up including jumpseaters, made us part of the decision process, took input and explained her decision process. There were no questions on what the game plan was thanks to her leadership. Fire? Smoke? Faulty smoke/fire detection? Faulty MSC (Miscellaneous System Controller)? Not sure, we didn't get a detector fault so it leads me to believe that it was an actual smoke event. These type of events can't be prevented. Unless this was a maintenance issue by not cleaning sensors or monitoring faults in the system that don't show to the crew.

# Synopsis

MD-11 First Officer reported receiving messages indicating possible fire in cargo hold during cruise. Flight crew diverted and performed a normal landing. Postflight temperature readings done by airport responders were normal.

# ACN: 2031952 (4 of 50)

## Time / Day

Date: 202309

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

### Aircraft

Reference: X

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 : Parked

## Component

Aircraft Component: Coalescer Bag

Aircraft Reference : X Problem : Malfunctioning

### Person: 1

Location Of Person.Aircraft: X Location In Aircraft: Galley Cabin Activity: Boarding

Reporter Organization: Air Carrier

Function. Flight Attendant: Flight Attendant In Charge

Qualification. Flight Attendant: Current

ASRS Report Number. Accession Number: 2031952

Human Factors : Time Pressure Human Factors : Troubleshooting

Human Factors: Workload

Human Factors: Physiological - Other

### Person: 2

Cabin Activity: Boarding

Function.Flight Attendant : Flight Attendant (On Duty) ASRS Report Number.Accession Number : 2031941

Human Factors: Physiological - Other

#### Person: 3

Cabin Activity: Boarding

Function.Flight Attendant: Flight Attendant (On Duty) ASRS Report Number.Accession Number: 2031947

Human Factors: Physiological - Other

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Anomaly. Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected: Aircraft In Service At Gate Result.General: Flight Cancelled / Delayed

Result.General: Work Refused

### Assessments

Contributing Factors / Situations: Aircraft

Primary Problem : Aircraft

#### Narrative: 1

During the boarding process, a rotten egg smell was detected in the boarding area, front galley, and main cabin. Smell was reported to the captain, and he determined that we were experiencing an odor event. Captain came on the PA and instructed everyone to deplane ASAP. Crew was then met by ops who instructed us to start a report, call out sick and receive medical attention asap. We took a ride hailing service to an ER had blood drawn and received oxygen. All 4 of us flight attendants were declared good to go as our blood work came back with good readings. We were released and returned to the airport.

### Narrative: 2

During boarding, I noticed a strong smell of rotten eggs. At first, I thought a boarding passenger might have uncontrollable flatulence, but as more people came on I realized the smell was not going away. As I turned to notify the flight deck, the FO (First Officer) was coming out; I asked if he had any idea what that was. He planned to go check it out, and mentioned something about switching to or from the APU - I can't honestly remember the exact comment. In the meantime, more people came on and complained of the strong smell. When the FO came back, he went to the flight deck and said they were checking on what it could be. Shortly thereafter, he told myself and FA (Flight Attendant) 1 that we would be deplaning and the Captain came on with a PA advising everyone that we would be deplaning. FA1 was several months pregnant, so I immediately encouraged her to breathe through something (we found paper towels). I also grabbed some wet paper towels to breathe through intermittently (between saying goodbye to the passengers). Our passengers were deplaning rather slowly so FA 4 came on with a PA to encourage them to gather everything and deplane more quickly. The FO went to the top of the jet bridge to retrieve wheelchair assistance for our one wheelchair passenger. The 4 FAs deplaned as quickly as we could and regrouped at the boarding area. FA2 had already started calling a phone number, and we started moving to another boarding area (away from our passengers) to decide what to do next. FAs 2 and 4 both had some symptoms consistent with a fume event, and I was developing a headache. I am unsure of what caused the fume event.

### Narrative: 3

Shortly after boarding started the #4 & I discussed a rotten odor in the cabin. She contacted the flt deck with the concern. Flt deck called aft but I don't recall the conversation due to feeling light-headed & dizzy. Flt deck then made a cabin announcement that customers needed to deplane immediately. There should have been

more of a sense of urgency communicated so that the cabin crew could deplane quickly as well so as not to be exposed to the fumes any longer than necessary.

# Synopsis

Air carrier Flight Attendant reported a rotten egg odor to the Captain during boarding. The Captain determined it to be a fume event and instructed everyone to deplane.

# ACN: 2031865 (5 of 50)

## Time / Day

Date: 202309

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 0

### Environment

Flight Conditions: VMC

Light: Daylight

### Aircraft

Reference: X

ATC / Advisory. Tower : ZZZ Aircraft Operator : Air Carrier

Make Model Name: B737 Undifferentiated or Other Model

Crew Size. Number Of Crew: 2

Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

### Component

Aircraft Component : APU Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 10806.70
Experience.Flight Crew.Last 90 Days: 147.8
Experience.Flight Crew.Type: 10806.70

ASRS Report Number. Accession Number: 2031865

Human Factors: Communication Breakdown

Human Factors: Troubleshooting

Human Factors: Situational Awareness

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 Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly. Ground Event / Encounter: Other / Unknown

Detector. Automation: Air Traffic Control Detector. Person: Air Traffic Control

When Detected: Taxi

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed Result.Flight Crew: Returned To Gate

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure Contributing Factors / Situations : Weather

Primary Problem : Aircraft

#### Narrative: 1

Tower reported aircraft was on fire with smoke. Started both engines, turned off the APU and taxied out of ZZZ. Tower reported fire/smoke coming from aircraft very shortly later. With no cockpit indications, we asked for clarification of where the smoke was coming from. The tower replied, "aft aircraft." We called for ARFF. The ARFF scanned aircraft and only found heat from the running engines. We opted not to start APU, gate return and asked for a MX inspection. Gate returned and had both engines running because the station was not setup with a GPU or air cart and the OAT (Outside Air Temperature) was 32f. The station required 15 minutes to locate and hook up air, electrics and stairs to the aircraft all the while one or both engines were running.

## Synopsis

B-737 pilot reported receiving a report from ATC during taxi of smoke from the aft part of the aircraft after APU had been shutdown. The flight returned to the gate with no fire indication in cockpit or from the airport fire department, ARFF.

# ACN: 2031778 (6 of 50)

## Time / Day

Date: 202309

Local Time Of Day: 0001-0600

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

Altitude. MSL. Single Value: 39000

### Environment

Flight Conditions: VMC

Weather Elements / Visibility.Other

### Aircraft

Reference: X

ATC / Advisory.Center: ZZZ Aircraft Operator: Air Carrier Make Model Name: MD-11 Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR

Mission: Cargo / Freight / Delivery

Nav In Use: FMS Or FMC

Nav In Use: GPS Flight Phase: Cruise Route In Use: Oceanic Airspace.Class A: ZZZ

## Component

Aircraft Component: Fire/Overheat Warning

Aircraft Reference : X Problem : Malfunctioning

### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 2031778

Human Factors : Workload Human Factors : Time Pressure

Human Factors: Situational Awareness

### **Events**

Anomaly, Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Detector. Automation: Aircraft Other Automation

Detector.Person: Flight Crew When Detected: In-flight Result.Flight Crew: Diverted

Result.Flight Crew: Requested ATC Assistance / Clarification Result.Flight Crew: FLC complied w / Automation / Advisory

Result.Flight Crew: Landed in Emergency Condition

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations: Aircraft

Primary Problem: Aircraft

### Narrative: 1

Approximately 3 hours into our flight from ZZZ1 to ZZZ2, just past our ETP, we received a LVL 1 CRG FLO FWD DISAG. Interesting enough, prior to the ETP, I just had a discussion with my FO (First Officer) on what specifically the ETP represented in a tri-jet. We reviewed the FOM together on this subject, to include a refresher on the nearest airports page in the FMS. We discussed the rules and various scenarios in oceanic emergency decision-making. The FO was the pilot flying when the LVL 1 alert appeared, and I pulled the QRH. No action was required. While discussing the system and observing the yellow triangle in the upper FWD LWR CRG compartment on the AIR Synoptic Display, along with the DISAG light in the associated FLOW switch on the overhead panel, and approximately 3 - 5 minutes after the initial alert, we received a LVL 3 CRG FIRE LWR with tri-tone and flashing master warning. The yellow triangle also changed to RED. At this time I directed the FO to pull his QRH RED tab FIRE and SMOKE. He quickly found the CARGO FIRE LWR page and started reading out loud with his finger under each line on the procedure visible to me. We concurred with the notes and steps of the decision tree. I executed the procedure - i.e., pushed the flashing CARGO FIRE AGENT DISCH Switch, turned off the associated CARGO FLOW Switch, and turned off the associated CARGO TEMP Selector per the QRH. We estimate within 60 seconds of discharging the fire agent, the fire warning stopped. This brought some relief. We discussed diversion as I pulled up the nearest airports page on MCDU (Multi-Purpose Control Display Unit) 1. ZZZ was the closest. We discussed our options including pulling the weather and agreed ZZZ was the best course of action. I took over as pilot flying and selected direct to ZZZ on MCDU 1, and the FO selfinitiated pulling up the CPDLC page on MCDU 2 to [request priority handling] and diversion with ZZZ, whom we were logged onto. He asked me if he should select [priority], I said yes. Inflight fire constitutes this level of urgency. ATC sent us CPDLC routing direct ZZZZZ ZZZZZ1 which he confirmed with me, accepted, and loaded into the secondary. I selected heading on the FCP (Flight Control Panel), activated the secondary flight plan, and reengaged navigation. This cleaned up the FMS for accurate ETA predictions. The FMS was now showing 1:40 to ZZZ. The FO asked if he should wake the Jumpseat Pilot sleeping in the crew rest. I said absolutely. The FO jumped up, woke the Jumpseat Pilot, directed him to stow the crew rest compartment, not to worry about the cushions to just throw them in the courier area if you needed, and then returned to his seat. I quickly briefed the Jumpseat Pilot once he was on the flight deck, and my FO asked if I wanted to call the company. My FO immediately provided me with the telephone number, whereby I loaded it into the SATCOM on MCDU 3. I initially forgot to dial the 001 wondering why the call would not go through, then I fumbled through the directory and selected the [priority handling] number. No one answered. I really wished I preloaded the number in ZZZ1. Realizing now,

having seen the directory, I forgot the 001, I entered 001 and asked the FO to read me the Dispatch number again - which he still had the release teed up on his iPad open to the page. I established contacted with Dispatch to inform them of our situation and inquire as to the contents of the lower forward cargo. I asked the Dispatcher to please call ZZZ1 Ramp and let us know what we had in the belly. It was reported back empty cans. In discussion amongst the crew, we were still concerned the fire was real due to the escalating warnings and the extinguishing of the fire warning following discharge of the fire suppression bottle. Bleed 3 warms this compartment and that was a concern. Next we discussed altitude. Consensus was high altitude, cold air and less oxygen, was best to prevent reignition and I choose to remain at FL390. The cockpit was a little quiet at this point as I stared at a 1:30 ETA, when I realized I was still SPEED EDIT MACH .82 for the crossing. I announced the problem, bow tied Mach .85, then decided to change the cost index to 300 and reengage prof. This gave us an equivalent Mach.85 and better predictions for our arrival and descent. Searching for ways to trim down time to destination, this also reminded me that I needed new winds after the divert and activatte the secondary flight plan ATC sent. About that time my FO asked to re-initialize altitude as I had FL400 and FL410 for our predicted flight planned step-climbs. I said yes. Good idea. I then loaded, and briefed the arrival and approach. Initially set up for ILS XXL Flaps 50 AUTOLAND. The Jumpseat Pilot asked about our familiarity with ZZZ. I haven't been in there in a while and neither had my FO. It was a frequent route for the company pilot, and he gave us a briefing overview for landing [Runway] XXs. I was very appreciative. Now became a waiting game. I took the opportunity to discuss emergency egress, and when we expected the 90 minutes to expire to discharge the second fire suppression bottle. Predicted on approach before landing. I briefed door slides, window ropes, and potential issues to prevent injury if I called for an emergency egress. The Jumpseat Pilot asked for the location of our firefighting hood, which I advised him on the compartment above the coat closet, and I pointed out the walk around bottles in the cockpit. I told him the quick donning mask in his seat had attached smoke goggles and was his first choice. He was willing to help fight any fire, but I let him know we had no access to that lower cargo compartment. I briefed my intentions on landing, that if the fire reignited, and there was an active fire warning on approach to landing, I would stop on the runway. Otherwise, we would clear the runway and stop immediately on the taxiway to allow ARFF (Airport Rescue and Firefighting) to evaluate with their heat guns. I discussed with my FO to be very clear, concise, and specific as to the location of the potential fire, once he was on frequency with the firefighters on the ground. I then had the FO flip to the back of the QRH and read out loud for all of our review and discussion the emergency evacuation checklist. When he got to the line item about pulling the engine and APU fire handles, twist, I said we would not twist. The engines were fine and there was no need to blow the bottles unless we had an engine fire warning. We reviewed what those fire handles cut off. I felt we were thoroughly briefed on everything, except the possibility of having to ditch, which has been active in my mind through the entire emergency. I stated if the fire reignited, and we had visible signs of smoke, fire, or heat that was uncontrollable, we would perform a controlled ditch in the ocean versus burning up inflight. Aside from the slides detaching as a raft, I pointed out the location of the raft just outside the cockpit door. "That was all I had to say about that." As we approached coast in and established VHF contact with ZZZ, my FO was excellent on the radios. He used call sign Aircraft X, [priority] aircraft. I started to feel better about the situation but was not going to let down my guard. I briefed that with no active fire warning, I was going to slow to 250 below 10,000 ft. and keep the approach and landing as close to normal as possible on how we operate. We had a runway change to XXR, which I welcomed as a longer CAT 3 runway. Winds were changing as ATIS updated, and at one point the FO reported winds exceeded the 15-kt. max crossword for autoland. I said if I had to land, I was going to land the plane. If we were within limits, I would allow it to autoland. Keep me posted. The winds

died down and the fog started to roll in. We had our flaps 50, medium autobrakes, AUTOLAND distance, and I briefed the taxiway exit point. On vectors for approach, 90 minutes after discharge of the first fire suppression bottle expired, the yellow discharge light started flashing at us, and the FO pushed the button and discharged the second bottle as planned and briefed. We touched down without any further fire warning. I remembered to hit the autopilot disconnect on the voke so I could steer, cleared the runway, and came to a complete stop. The FO switched to the directed frequency to communicate with ARFF. His radio communication was perfect. He surprised me and included the location of the forward lower cargo compartment door, on the right side of the aircraft. Rescue determined no heat or ongoing fire. ARFF reported no active fire or heat. I called for the after landing checklist and asked him to advise Fire Rescue that we would be retracting the flaps to ensure personnel were clear. We switched back to Ground Control to request taxi to the Ramp. I wasn't sure if the Ramp would be ready for us so I instructed the FO to start the APU, and once it was up and stable, to shut down engine number two as we were extremely light. We pulled into parking and I shut down engines three and one. We were told ARFF would be opening the lower forward cargo compartment and inspecting. I had the First Officer disarm the doors and we conducted our normal shutdown procedures as the stairs pulled up to the jet and Fire Rescue inspected the compartment. After the flight deck was secure and we exited the aircraft, I spoke with Maintenance, Security, the Lead Fire Rescue-Man, and our Ramp Agent. Then I called the Supervisor to brief the event. Supervisor was a much appreciated warm and welcoming voice on the other end of the phone. She reminded me to write it up in the aircraft release, encouraged me to write down as many details as possible while the event was still fresh in my mind. I have [to] give credit to the exceptional performance by my First Officer. He demonstrated leadership, quick thinking, had ideas ahead of me, was constantly feeding me information so I could make good decisions, and remained engaged at the highest level performance throughout. I couldn't have asked for a stronger First Officer. We worked together in lock step like a marching band. Regardless, this trip was the first we had flown together and ever met. The engagement of our Jumpseat Pilot also deserves recognition for his upstanding professionalism and support throughout the ordeal. In debrief, some things I could've performed better on like speeding up sooner to Mach .85 and taking the time to pre-load our Dispatcher's phone number in the SATCOM before pushing, did not prove distracting and I believe were overcome by the strength of the team on the flight deck. Building the team was the best thing I did as a Captain before I ever released the parking brake. It set the tone for the synchronicity I experienced, and the empowerment of both my First Officer and Jumpseat Pilot to perform at their highest levels, thinking, communicating effectively, and freely sharing ideas. I made it clear to our Jumpseat Pilot we recognize he's a professional airline pilot even though he doesn't fly the MD-11. I let him know on preflight brief he is a part of the crew and that if he sees something, to please share it with us. He has local familiarity with ZZZ1 and our destination. Never in a million years did I think I would need that guy like I did that night. Cause - false fire warning.

# Synopsis

MD-11 Captain reported a warning annunciation for a potential fire in lower forward cargo area went off and the flight crew opted to divert.

# ACN: 2031624 (7 of 50)

## Time / Day

Date: 202309

Local Time Of Day: 0601-1200

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

Altitude. MSL. Single Value: 32000

#### 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: Climb
Airspace.Class E: ZZZ

### Component

Aircraft Component: Turbine Engine

Aircraft Reference : X Problem : Malfunctioning

#### Person

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: 2031624

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Landed in Emergency Condition Result.Flight Crew: Returned To Departure Airport Result.Air Traffic Control: Issued New Clearance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

### Narrative: 1

I was the pilot monitoring. Just prior to our level off at our cruising altitude of FL320 I noticed an abnormal noise in the #2 engine. In a matter of seconds the noise became multiple very loud bangs characteristic of a compressor stall, while also smelling something like burning rubber. The Captain immediately reduced power and lowered the aircraft's nose. While he did this, I advised center that we were leveling off at FL310 as I wasn't entirely sure if we were a [priority handling] aircraft at this point. The Captain called for the QRC for an engine compressor stall, and while I was looking for the checklist we were receiving a call from our flight attendants. At this point the engine appeared stable at a reduced thrust setting, so I answered the FA (Flight Attendant) call while the Captain advised air traffic control and got us a lower altitude. The flight attendant advised that they had smoke in the cabin, to which I responded we were working on the situation and would get back to them with more information. I informed the captain of the flight attendant's report and we decided to run the smoke and fumes QRH while diverting back to ZZZ. As there was no visible smoke in the flight deck, we both concurred that oxygen masks were not necessary. The Captain continued flying and working the radios while I ran the QRH. Once that was complete, the passengers, dispatch, and flight attendants were all advised we would be returning to ZZZ. Once we landed ARFF (Airport Rescue and Firefighting) visually inspected our aircraft for damage and reported that there was none. The captain requested that one or two of the safety vehicles follow us back to the gate, where we parked with no further incident. The casual factor was a maintenance issue with the #2 engine.

## Synopsis

B737-800 First Officer reported compressor stall sounds from the #2 engine and the smell of burning rubber and smoke in the cabin when they were about to level off at cruise altitude. Crew ran compressor stall and smoke/fumes checklist prior to returning to departure airport for landing.

# ACN: 2031193 (8 of 50)

## Time / Day

Date: 202308

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

ATC / Advisory.Ground : 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 Flight Phase : Taxi

## Component

Aircraft Component: Electrical Power

Aircraft Reference : X
Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X
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: 7759.80 Experience.Flight Crew.Last 90 Days: 194.55

Experience. Flight Crew. Type: 1158.72

ASRS Report Number. Accession Number: 2031193

Human Factors: Troubleshooting 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: Taxi

Result.General: Maintenance Action

### Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Primary Problem : Aircraft

Narrative: 1

Upon taxi into the gate, and selection of the APU switch to On and Start, a burning odor was detected by both the First Officer and myself. The electric page showed all normal indications and the APU started normally. The Status page was referenced and it showed two Status messages: Main Battery Status and Main Battery Charger Status. The First Officer contacted station maintenance on taxi in and maintenance met the aircraft at the gate. Upon parking and the gate and deplaning the passengers a maintenance write up was accomplished and, maintenance accessed the compartment. They discovered soot and charring on the battery box and connector. Smoke was observed as well. The battery was disconnected and the airplane de-powered.

## Synopsis

B-777 Captain reported a burning odor while taxiing into the gate after starting the APU. Upon parking and shutdown maintenance discovered burned electrical components in the lower electrical compartment.

## ACN: 2029352 (9 of 50)

## Time / Day

Date: 202308

Local Time Of Day: 0001-0600

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 0

### Aircraft

Reference: X

ATC / Advisory.Ground : ZZZ Aircraft Operator : Air Carrier

Make Model Name: B747-800 Advanced

Crew Size. Number Of Crew: 3 Operating Under FAR Part: Part 121

Flight Plan: IFR

Mission: Cargo / Freight / Delivery

Flight Phase: Taxi

## Component

Aircraft Component : Engine Aircraft Reference : X Problem : Malfunctioning

### Person: 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: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument

ASRS Report Number. Accession Number: 2029352

Human Factors: Workload

Human Factors : Troubleshooting Human Factors : Time Pressure

### Person: 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: Instrument Qualification.Flight Crew: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 2029356

Human Factors: Troubleshooting Human Factors: Time Pressure Human Factors: Workload

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector. Automation : Aircraft Other Automation

Detector.Person: Flight Crew

When Detected: Taxi

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Overcame Equipment Problem

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

#### Narrative: 1

After landing in ZZZ while on the taxi to parking we got a fire warning for engine 2 with the accompanying fire bell/lights. I was PM and advised the ATC of the fire warning and requested the fire department respond. The first officer PF (Pilot Flying) brought the aircraft to a stop in the intersection of taxiway 1 and 2. We completed the immediate action items/emergency checklist for the engine fire warning. The fire warning stopped sometime after firing the first bottle as the time was approaching for firing the second bottle. During this process I asked ATC if they could observe anything, and they asked the aircraft behind us who reported no fire observed. Fire Department responded and I was in communication with them on VHF. I advised the fire department of which engine had the fire warning and that engines 1 and 4 were still running before they made an inspection. The fire department reported no fire observed but reported vapor/smoke was coming from the #2 engine tail pipe. I assumed this to be from the fire bottle or the normal vapor that can be seen after shutdown. I could detect a slight odor in the air. The fire department advised ATC they would follow us to parking. ATC cleared us to taxi to parking after we restarted engine #3 which had been shutdown for the long taxi in. The first officer asked if I wanted to taxi in given the issues. At that point we switched PF/PM duties and I taxied the airplane to parking. I asked our 3rd seat first officer to advise dispatch and then while taxing to advise company. Once parked I advised the fire department when the engines were shut down so they could inspect further. I spoke with the fire department in person and maintenance before leaving the flight deck. Maintenance stated it was a false warning. After finishing paperwork and exiting the aircraft I went to observe as maintenance opened the cowl. The fire department stated they saw more heat on the thermal camera at the top near an area that was blackened with some type of dirt. At this point I double checked with maintenance and the fire department to see if they needed any additional information from us before we left.

### Narrative: 2

After landing on RWY XX at ZZZ we vacated the runway and the PF (Pilot Flying) and PM completed their after-landing duties normally. Once the engines had reached their recommended cool-down time, engine #3 was shut down. This was to manage our brake temperatures in addition to our speed as ZZZ has a taxi speed limit. After taxiing for approximately 20 minutes we received a FIRE ENG 2 warning message. The PF brought the aircraft to a stop, the PM notified ground of an engine fire, and began running the

associated FIRE ENG 2 electronic checklist. As soon as the PM notified ground of the engine fire they immediately let us know that fire services would be on their way. The checklist was run normally and the PM discharged bottle A into the #2 engine, however, the fire warning was not immediately extinguished. At this point in the checklist, we were directed to determine if an evacuation was needed or not. The PM asked ground if they saw any signs of fire from the #2 engine; both ground and a nearby aircraft reported seeing no signs of fire and it was decided at that point that evacuation was not needed. Shortly after this decision, the FIRE ENG 2 warning was extinguished and airport fire services arrived at the aircraft. In our communications with the fire services, they reported seeing no signs of fire other than smoke or possibly halon coming from the #2 engine tailpipe. After discussion with ground and the airport fire services we elected to restart the #3 engine and that the CA (Captain) would taxi us to parking. Dispatch, in addition to company ramp control, were notified as soon as practical of our situation to ensure a safe arrival at our parking stand. There were no further abnormalities.

# Synopsis

Air carrier flight crew reported a number 2 engine fire warning message during arrival taxi. Flight crew completed the QRH procedures and requested Airport Rescue and Fire Fighting assistance who followed aircraft to parking since fire message had extinguished.

# ACN: 2028783 (10 of 50)

# Time / Day

Date: 202305

### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 0

### Environment

Light: Night

#### 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: Parked Cabin Lighting: High

# Component

Aircraft Component: External Power

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person. Aircraft: X

Location In Aircraft : General Seating Area Cabin Activity : Safety Related Duties

Cabin Activity: Deplaning

Reporter Organization: Air Carrier

Function.Flight Attendant : Flight Attendant (On Duty) Function.Flight Attendant : Flight Attendant In Charge

Qualification.Flight Attendant: Current

ASRS Report Number. Accession Number: 2028783

Human Factors: Time Pressure

Human Factors: Communication Breakdown

Human Factors: Troubleshooting

Human Factors: Workload

Communication Breakdown.Party1: Flight Crew Communication Breakdown.Party2: Flight Attendant

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person: Flight Crew
Detector.Person: Flight Attendant
Were Passengers Involved In Event: Y
When Detected: Aircraft In Service At Gate

Result.General: Evacuated

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Took Evasive Action

### Assessments

Contributing Factors / Situations : Aircraft Contributing Factors / Situations : Airport

Contributing Factors / Situations : Human Factors

Primary Problem: Airport

#### Narrative: 1

We had landed, disarmed the doors, and started to deplane. I handed paperwork to the Captain and at this point Rows 1 and 2 had deplaned. All of a sudden, I saw the Captain run out of the flightdeck, panicked, and go down jetway stairs to the outside. I looked out into the jetbridge and could smell a very heavy smoky odor. I looked into the flightdeck and noticed the windshield was covered in smoke. I couldn't see through it. It was very thick. The smell was overwhelming. I said to the F/O (First Officer) "what is that, is that fire? Should we evacuate, should we blow the slide in the back?" No answer. I asked again a few times. He then said "no don't. There's a fire but we can't locate it." I called the "B" to inform her that there was a fire but we are not to blow the slide because we can't locate it per the F/O. The Ops Agent stuck her head into the galley and said "get everyone off NOW." I got on the PA and said Evacuate evacuate evacuate. Everyone off now, leave your things. The "C" then grabbed the megaphone from the front galley and started to tell everyone to get off. People were still moving very slowly. I then got on the PA and said "we need to get everyone off, fire fire fire." The Captain returned to the flight deck. Once everyone deplaned. I got the remaining bags left behind by the passengers and put them in the jetbridge. The OPS Agent came on and told me that when they connected ground power to the plane, it started to spark and they couldn't get it disconnected. I then noticed two fire trucks had arrived when I looked out the forward galley service door window. At this point neither of our pilots addressed us nor debriefed us. We gathered our things and waited in the terminal for them but they never came. The Captain should have communicated with me as the "A" FA. If he was not able to, the F/O should have assumed command. Afterwards, I would have expected a debrief after an event such as this one.

# Synopsis

Air carrier Flight Attendant reported an external smoke event emanating from the ground power connection during gate arrival. Crew and passengers deplaned the aircraft and airport response vehicles arrived.

# ACN: 2027741 (11 of 50)

# Time / Day

Date: 202308

Local Time Of Day: 1201-1800

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

### Environment

Flight Conditions: VMC

Weather Elements / Visibility: Turbulence

Light: Daylight

### Aircraft

Reference: X

ATC / Advisory.TRACON: ZZZ Aircraft Operator: Air Taxi

Make Model Name: Challenger 300 Crew Size. Number Of Crew: 2

Operating Under FAR Part: Part 135

Flight Plan: IFR

Mission : Ferry / Re-Positioning

Flight Phase : Climb Airspace.Class D : ZZZ

### Component

Aircraft Component: APU Fire/Overheat Warning

Aircraft Reference : X Problem : Malfunctioning

#### Person: 1

Location Of Person.Aircraft: X Reporter Organization: Air Taxi Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

ASRS Report Number. Accession Number: 2027741

Human Factors: Workload Human Factors: Time Pressure

### Person: 2

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Taxi Function.Flight Crew: First Officer Function.Flight Crew: Pilot Not Flying

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 2027740

Human Factors: Time Pressure Human Factors: Workload

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector. Automation: Aircraft Other Automation

When Detected: In-flight

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Requested ATC Assistance / Clarification Result.Flight Crew: FLC complied w / Automation / Advisory

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

#### Narrative: 1

On climb out in turbulence Master Warning System activated and APU Fire CAS message as well as aural "APU Fire" annunciated. Memory items were completed. When the APU Fire switch was pressed Fire indication extinguished immediately. I asked for and received the APU Fire checklist. We completed the APU Fire checklist and elected to continue to ZZZ1 as we were already prepared for a landing there. Also the distance and more importantly the time was equal to either continue or return to ZZZ. Also important to our decision to continue was our familiarity with ZZZ1. We have both had countless operations in and out of ZZZ1.

#### Narrative: 2

On a ferry leg ZZZ to ZZZ1 during climb out in light to moderate turbulence at roughly 15000 feet we received a APU FIRE CAS message. We performed the Memory Action items ( APU FIRE button press then FIRE ARM BOTTLE #2 press). Once this was accomplished the APU FIRE message had extinguished. The Captain then directed me to find and perform the appropriate checklist. Once completed we discussed continuing to ZZZ1 or turning back to ZZZ. Since we were about the same time away from landing at both we continued to ZZZ1 like originally planned without any further incident. Once on the ground we preformed a visual check both inside and in the aft compartment and not visual signs of a fire could be seen. We then informed Dispatch and Maintenance.

# Synopsis

Challenger 300 flight crew reported an APU fire warning inflight. After performing the appropriate checklist procedures, the fire warning stopped. Once on the ground no fire was discovered.

# ACN: 2027154 (12 of 50)

# Time / Day

Date: 202308

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

ATC / Advisory.Ground : 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: Cargo / Freight / Delivery

Flight Phase: Parked

# Component

Aircraft Component : APU Aircraft Reference : X Problem : Failed

### Person: 1

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine Experience.Flight Crew.Total: 12000 Experience.Flight Crew.Last 90 Days: 90

ASRS Report Number. Accession Number: 2027154

Human Factors: Confusion

Human Factors: Situational Awareness

Human Factors: Troubleshooting

Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2: Ground Personnel

Person: 2

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: Instrument Qualification.Flight Crew: Multiengine Experience.Flight Crew.Total: 11000

ASRS Report Number. Accession Number: 2027156 Human Factors: Communication Breakdown Communication Breakdown. Party1: Flight Crew Communication Breakdown. Party2: Ground Personnel

### **Events**

Anomaly. Aircraft Equipment Problem : Critical

Anomaly, Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Ground Event / Encounter: Other / Unknown

Detector.Person: Flight Crew When Detected: Pre-flight Result.General: Evacuated

#### Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem : Aircraft

#### Narrative: 1

During the end of preflight after weight balance verification and face to face with mechanic, we were waiting for the last few containers to be loaded, our NOTOC and doing our last briefings. The aircraft was on APU power and APU air with the ground external power disconnected. At approximately XA: 33Z the aircraft went down to battery power abruptly as well as emergency power. It was the same looking scenario as if a GPU had dropped of line or an APU had auto shutdown. We had no indications in the cockpit of an APU fire. As were trouble shooting the situation with the loss of APU generator power we started to hear yelling of a possible fire. My First Officer (FO) said that he thought he heard someone say fire from outside the airplane (possibly loaders from the K-loader or cargo compartment area). I asked our jump seater to see if she saw anything outside the airplane or could confirm any type of fire. She said yes. I went back and looked out the L1 door and the tail was smoking. I ran back into the cockpit and said APU Fire checklist as I pulled the APU for handle. We performed the APU Fire checklist and discharged all 3 bottles. We had no indication of whether any of the bottles were extinguishing the fire (because we had no indication of fire to begin with) so we discharged all the bottle in the interest of safety. I called ZZZ ground at the same time and told them we had an APU fire on spot and send Airport Rescue and Firefighting (ARFF) immediately. I then directed everyone off of the airplane, myself, the FO and our jump seater. I turned off the emergency power and battery switch and egress the airplane via the crew stairs with the rest of the crew on board and met down in front of the nose.

#### Narrative: 2

While sitting at parking spot in ZZZ on the ramp, our APU did an auto shutdown. Shortly after this happened we heard people yelling fire and then we heard someone say APU fire.

We asked our jump seater to step outside and check what was happening. She came back and informed us that the APU was on fire. We ran received no indication but ran the APU fire QRH procedure. We discharged the APU fire bottle, called the fire department on ground, shut down the aircraft, and evacuated using the stairs. When we exited the aircraft we could see the smoke coming from the tail. Once fire and rescue arrived they sprayed fire extinguishing agent on the tail and the temp lowered.

# Synopsis

Air carrier crew reported an APU fire while loading at the parked position on the ramp. The crew observed smoke at the tail of the aircraft without cockpit warning, activated fire bottles, then evacuated safely by airstairs.

# ACN: 2025594 (13 of 50)

# Time / Day

Date: 202308

### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

#### Aircraft

Reference: X

Aircraft Operator : Air Carrier

Make Model Name: B767 Undifferentiated or Other Model

Crew Size. Number Of Crew: 3 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Flight Phase : Climb

### Person

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
Function.Flight Crew: Relief Pilot
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument

Qualification. Flight Crew: Air Transport Pilot (ATP)

Experience.Flight Crew.Total: 1147 Experience.Flight Crew.Last 90 Days: 218 Experience.Flight Crew.Type: 1147

ASRS Report Number. Accession Number: 2025594

Human Factors: Troubleshooting Human Factors: Workload Human Factors: Time Pressure

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Deviation / Discrepancy - Procedural : Weight And Balance

Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly.Deviation / Discrepancy - Procedural : FAR Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : Other / Unknown

Detector.Person: Flight Crew When Detected: In-flight

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Requested ATC Assistance / Clarification

Result.Flight Crew: Diverted

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

Plane had electrical issues from the beginning. Cargo doors couldn't open. Maintenance advised us to reset the utility busses. Didn't finished downloading ZZZ-ZZZ1 until we were almost fully loaded with Passengers. No one told us this at this moment. Eventually all sorted out. We get going. IFE (In-Flight Entertainment) kept tripping out and restarting on the Flight Attendant (FA). Didn't think much of it. Because there was a previous write up about it that screens went out toward the back of the plane. We start climbing out. I head back for my break. As soon as I stepped out of the cockpit I got hit with a strong electrical burning smell. First thought it was the galley and something was burnt. Go to the lav. Set up the curtain. Sit down for a second. Smell only getting worse. The purser comes up to me asking me if I smell it too. I was like yeah. I was trying to process the info if it was really something to be concerned about. I call up to the front, let them know we got a strong electrical smell. In the mean time looking everywhere for where it's coming from, no actual smoke. But the smell is very very present. Get back up in the cockpit. Help with the checklist. Still cannot isolate the location. Get Maintenance Control and Dispatch in the loop and decide to divert to ZZZ2 since we were just north of ZZZ2 at the time. 15 minutes to ZZZ2. Runway XX to ZZZ1. If we knew where the odor was coming from exactly. Maybe would have went back to ZZZ1. But since we had no idea and it was still present and unknown we went for nearest suitable airport. Requested Priority. Fire trucks followed us to the gate. Landed overweight by about 6K. We get to the gate, lights start flickering on the PSU's and in the cockpit. Fire department said there is no presence of a fire from thermal imaging.

# Synopsis

B767 First Officer reported a strong electrical burning smell during climb in the cabin. After troubleshooting and conferring with Maintenance and Dispatch the flight crew requested priority handling to a suitable airport where a safe landing was executed.

# ACN: 2023658 (14 of 50)

# Time / Day

Date: 202308

### Place

Altitude. MSL. Single Value: 39000

#### Aircraft

Reference: X

Aircraft Operator: Air Carrier

Make Model Name: B747 Undifferentiated or Other Model

Crew Size. Number Of Crew: 3 Operating Under FAR Part: Part 121

Flight Plan: IFR

Mission: Cargo / Freight / Delivery

Flight Phase: Cruise

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification. Flight Crew: Instrument Qualification. Flight Crew: Multiengine

ASRS Report Number. Accession Number: 2023658

Human Factors: Workload Human Factors: Troubleshooting Human Factors: Time Pressure

### **Events**

Anomaly. Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Anomaly. Deviation - Altitude: Excursion From Assigned Altitude

Anomaly. Deviation - Track / Heading: All Types

Anomaly. Deviation / Discrepancy - Procedural : Clearance Anomaly. Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew When Detected : In-flight

Result.Flight Crew: Overcame Equipment Problem

#### Assessments

Contributing Factors / Situations: Environment - Non Weather Related

Primary Problem: Environment - Non Weather Related

### Narrative: 1

At FL390 near waypoint ZZZ we encountered what looked like high cirrus clouds. Shortly after entering the IMC conditions we had a sharp acrid smell and suspected Volcanic ash as dispatch gave us a VA warning for FL 240 and below. We immediately made a left turn

15 miles off course and a climb to FL410. Once we reached FL 410 we were in the clear and the smell. went away. Notified ATC and dispatch of the encounter and wrote up airplane for VA encounter... Not much we could have done differently in my opinion there was a large Thunderstorm tomorrow right that was probably picking up the VA cloud and bringing it to altitude. We couldn't see the cloud/ ash to avoid it until we were in it. Again Dispatch did amazing job keeping us informed of the ash cloud that was well to our south and below us. We planned our descent to remain higher to avoid ash cloud on the arrival. Just can't predict mother nature.

# Synopsis

Air carrier Captain reported a sharp acrid odor during cruise. After conferring with Dispatch the odor was determined to be caused by a volcanic ash event which was remedied by climbing to a higher altitude.

# ACN: 2023593 (15 of 50)

# Time / Day

Date: 202308

Local Time Of Day: 1801-2400

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

Altitude.MSL.Single Value: 20000

### Environment

Flight Conditions: VMC

### Aircraft

Reference: X

ATC / Advisory.Center : ZZZ Aircraft Operator : Air Carrier

Make Model Name: B767 Undifferentiated or Other Model

Crew Size. Number Of Crew: 3 Operating Under FAR Part: Part 121

Flight Plan: IFR Mission: Passenger Flight Phase: Climb Airspace.Class A: ZZZ

### Component

Aircraft Component: Unknown

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine Experience.Flight Crew.Total: 3270 Experience.Flight Crew.Last 90 Days: 108

Experience. Flight Crew. Type: 435

ASRS Report Number. Accession Number: 2023593

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Deviation / Discrepancy - Procedural : Clearance

Detector.Person: Flight Crew When Detected: In-flight

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Diverted

Result.Flight Crew: Landed in Emergency Condition

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

Approximately 15 minutes into the flight, during climb through approximately 20,000 feet, the Relief Pilot reported a burning electrical smell in the area between the flight deck and the rest seat. I transferred flying duties to the FO (First Officer) and began running the smoke, fire, or fumes checklist. The Relief Pilot returned to the flight deck and we continued the smoke, fire, or fumes checklist. The fumes were not increasing but were still noticeable and we could not identify the source, there was no smoke at any time. I contacted Dispatch and discussed the situation with the dispatcher and Maintenance Control. In consultation I decided to [request priority handling] and divert to ZZZ. The FAs (flight attendants) and passengers were informed of the situation and diversion. The FO performed an uneventful overweight landing. Firefighting services followed us to the gate and came on board. Their equipment sensed no hot spots. The passengers were deplaned.

# Synopsis

B767 air carrier flight crew reported fumes in the cabin. Captain decided to divert and landed uneventfully.

# ACN: 2022715 (16 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 0001-0600

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

#### Aircraft

Reference: X

ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: MD-11
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121

Flight Plan: IFR

Mission: Cargo / Freight / Delivery

Nav In Use: FMS Or FMC Flight Phase: Descent

## Component

Aircraft Component: Electrical Wiring & Connectors

Aircraft Reference : X Problem : Malfunctioning

### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Pilot Not Flying Experience.Flight Crew.Total: 12000 Experience.Flight Crew.Last 90 Days: 70

ASRS Report Number. Accession Number: 2022715

Human Factors: Troubleshooting Human Factors: Time Pressure

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person: Flight Crew When Detected: In-flight

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Requested ATC Assistance / Clarification

Result.Flight Crew: Landed in Emergency Condition

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

During descent there was a spark and electrical, popping / crackling sounds from panels behind and to the right of the FO. The overhead panel back lighting also went dark. We immediately smelled a burning electrical odor. O2 masks were donned and crew communication was established. The FO continued as flying pilot. I [requested priority] handling] with ZZZ Center for fumes and smoke in the cockpit and that we were proceeding direct to ZZZ, ZZZZZ intersection. The non-alert, smoke/fire/fumes [checklist] was completed to the landing section. I positioned my Emergency Vision Assurance System (EVAS) on the top of the glare shield but didnt inflate because smoke was not a visibility issue at that time. Approach briefing was completed for XXR. We elected to autoland due to wearing O2 masks. Landing was normal and vacated XXR at taxiway 1, stopping between taxiways 2 & 3 were airport CFR was standing by. Cockpit windows were opened to vent fumes. After CFR found nothing abnormal on the outside of the aircraft we taxied to the area between [taxiway] 4 and spot XX on ramp XX. I elected to shutdown the aircraft down without APU or EXT power because the original problem was electrical. We also determined that an emergency evacuation via slides was not necessary as there was no presence of smoke. Emergency slides were disarmed and the left side door was opened with the emergency pneumatic bottle. Crew stairs were brought to the aircraft. CFR entered and said their scanners were showing no smoke.

# Synopsis

Air carrier pilot reported during descent there was a spark and electrical popping sounds from panels in the flight deck accompanied by a burning electrical odor. Flight crew landed safely at destination airport where airport responders found no presence of smoke in the aircraft.

# ACN: 2021961 (17 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US

Altitude. AGL. Single Value: 0

### Environment

Flight Conditions: VMC

### Aircraft

Reference: X

ATC / Advisory.Ground: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: A300
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

#### Person: 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: Instrument

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 2021961

Human Factors: Troubleshooting Human Factors: Workload Human Factors: Distraction Human Factors: Time Pressure

### Person: 2

Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 2021964

Human Factors: Troubleshooting

Human Factors : Time Pressure Human Factors : Workload

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Detector.Person : Flight Attendant Detector.Person : Flight Crew

When Detected : Taxi Result.General : Evacuated

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Took Evasive Action

Result.Flight Crew: Requested ATC Assistance / Clarification

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

### Narrative: 1

APU inoperative. Conducted huffer start on #2 in the chocks. Normal pushback, normal crossbleed start on #1. Taxiing for takeoff at ZZZ on Taxiway 1 approaching [Runway] XXR, received call from 3 jumpseaters indicating smoke in the courier area. No indications or warnings of smoke in the cockpit at this time. Stopped the aircraft on Taxiway 1, and notified Tower. FO (First Officer) opened cockpit door and confirmed presence of smoke, and returned to the cockpit. Smell of smoke now obvious in the cockpit. We opened both cockpit windows to ventilate. Informed Tower that we had smoke in the aircraft and request that they "roll the trucks". Conducted evacuation, shutdown the aircraft and egressed via L1 slide on Taxiway 1. Mustered five souls away from the aircraft. No injuries. Upon observation of the aircraft after egress, no evidence of fire or smoke. Met CFR (Crash Fire Rescue) upon their arrival at the aircraft. Jump seaters indicated they initially thought the "smoke" was condensation, coming from overhead vents above L1 and R1 main cabin doors. No evidence of smoke/fire discovered by CFR. Aircraft turned over to maintenance. Unknown, suspected air conditioning and/or issue with pack(s).

#### Narrative: 2

Normal "huffer" start of Engine #2 due to APU inoperative MEL. Normal crossbreed start of Engine #1. Normal taxi. Approaching hold short for Rwy XXR at Taxiway 1/Taxiway 2 intersection. Tower asked if we were "ready to go." We were still performing the before takeoff checklist so I replied "30 seconds." At approximately that same instant the Cockpit Call annunciation/audible alarm came on. CA (Captain) got on intercom and asked jumpseaters (3 aboard) "What's up?" I heard some garbled comms but clearly heard the word "smoke." I transmitted to Tower words to the effect, "We've got smoke indications, we're going to hold our position." I went back to investigate. On opening the cockpit door I immediately saw and smelled a significant amount of acrid smoke and all three jumpseaters wearing their O2 masks. The smoke was not so thick as to impair visibility so I turned on the cargo bay and courier area lights with the intention of looking through the smoke barrier windows for fire indications, but by that time I was starting to feel nasal and chest burning so I just returned to the cockpit, which was still relatively smoke-free. I told CA words to the effect, "yeah this is for real." We opened our cockpit windows and CA

called for the evacuation checklist. We ran the checklist and then CA went back and opened L1, deploying the slide. All 5 of us evacuated via the slide. ZZZ CFR (Crash Fire Rescue) arrived on scene shortly thereafter. Provided them with the DG manifest (NO DG ON BOARD). They inspected for indications of fire and found none. Cause, as yet unknown but suspect AC system. Jumpseaters debriefed us that the smoke started after the second engine (engine #1) was started and at first looked like condensation, but was staying near the ceiling and was getting thicker. They reported it was coming "out of the walls" and especially near the L and R emergency exit light fairings, which corresponds with AC vents. Would not have prevented this event, but noteworthy: ZZZ CFR crew did not have readily available means to access the aircraft. They had a "Little Giant" folding ladder but couldn't reach the R1 outside access handle and couldn't climb up through the avionics access door due to their bulky gear. They had to wait until crew stairs arrived.

# Synopsis

A300 flight crew reported being notified by the cabin jumpseaters of a fume/smoke event during departure taxi. The flight crew requested airport assistance, completed the QRH procedures and took action with no injuries or damage.

# ACN: 2021299 (18 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 1201-1800

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 0

### Environment

Flight Conditions: VMC

Light: Daylight

### Aircraft

Reference: X

ATC / Advisory.Ramp: 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 Flight Phase: Parked

### Component

Aircraft Component: Powerplant Fuel Valve

Aircraft Reference : X Problem : Malfunctioning

#### Person

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: Instrument Qualification.Flight Crew: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Experience. Flight Crew. Total: 422

Experience. Flight Crew. Last 90 Days: 138

Experience. Flight Crew. Type: 422

ASRS Report Number. Accession Number: 2021299

Human Factors: Communication Breakdown Human Factors: Situational Awareness

Human Factors : Time Pressure Human Factors : Troubleshooting

Human Factors : Confusion

Communication Breakdown.Party1: Flight Crew Communication Breakdown.Party2: Ground Personnel

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly. Ground Event / Encounter: Other / Unknown

Detector.Person: Maintenance Detector.Person: Ground Personnel

When Detected: Aircraft In Service At Gate

Result.Flight Crew: Overcame Equipment Problem Result.Aircraft: Equipment Problem Dissipated

#### Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem : Aircraft

### Narrative: 1

After engine shutdown, received status message "ENG FUEL VALVE L" and had a very distinct fuel odor in the cockpit. Ground personnel allerted me to an issue on the left side of the aircraft, but the issue wasn't decipherable via hand signals. I opened the cockpit window and a mechanic instructed us to dry motor the left engine - which we did for approximately 2 minutes. During that time, a "fireball of approx. 20 feet" exited out the rear of the left engine and the fuel smell dissapated. My FO (First Officer) requested Crash, Fire and Rescue - who were dispatched onto the scene. While the fuel situation was indeed a safety issue, the purpose of my report revolves around jetbridge movement and potential threat to passengers and ground personnel. During the unfolding events, a CS agent (who was obviously unaware of the fuel issue) moved the jetbridge into position and opened door 2L per normal procedures. Passengers began to deplane (and continued to deplane throughout). My concern is a conflicted one, and I'm not quite sure if the situation was handled appropriately (by me, the ground personnel, or the CS agent). By connecting the jetbridge and opening 2L, it provided an expeditious exit route for passengers should it have been needed - however, due to limited space in the arrivals hallway, it would have filled up quickly, trapping passengers on the jetbridge in the event of expanding fire in the left engine. Choosing to keep the jetbridge clear of the aircraft would have limited escape route to the right side of the aircraft where ground personnel were already approaching the jet. In addition, doors had already been disarmed by flight attendants, complicating any evacuation. As I play the events back, I think we were just plain lucky that the fuel didn't ignite any more than it did and nobody was injured. The ZZZ Crash Fire and Rescue squad arrived at the jet and the lead fire fighter made his way to the cockpit - reporting that no fuel existed on the tarmac and he saw no indication of fire or any other concern.

# Synopsis

B777 Captain reported a fuel odor and EICAS fuel valve message after engine shutdown at the gate, then was notified to motor the engine by ground maintenance. After dry motoring the engine, the odor dissipated and the Fire Department personnel reported no fire or fuel spill to Captain.

# ACN: 2020522 (19 of 50)

# Time / Day

Date: 202307

### 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: 1

Aircraft Component: APU Aircraft Reference: X Problem: Malfunctioning

### Component: 2

Aircraft Component: Air Conditioning and Pressurization Pack

Aircraft Reference : X Problem : Malfunctioning

### Person: 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: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification. Flight Crew: Instrument

ASRS Report Number. Accession Number: 2020522

Human Factors: Workload Human Factors: Troubleshooting Human Factors: Time Pressure

# Person: 2

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Pilot Not Flying Function.Flight Crew: First Officer Qualification. Flight Crew: Instrument Qualification. Flight Crew: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 2020824

Human Factors: Troubleshooting Human Factors: Time Pressure Human Factors: Workload

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly, Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Deviation / Discrepancy - Procedural: Maintenance

Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy

Detector.Person: Flight Crew

When Detected : Aircraft In Service At Gate Result.General : Flight Cancelled / Delayed

Result.General: Maintenance Action

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

#### Narrative: 1

On my way to the airport, I got a call from another ZZZ1 CA (Captain). He was being tail swapped out of an aircraft that had a fume event. Neither of us knew that I was about to be swapped into that very aircraft. Upon checking in, I noticed a gate change and tail swap. When I got to the aircraft, there was a lot of confusion. Incorrect FLT RLS (Release), unknown status of security search, FA's (Flight Attendant) had just been tail swapped. Because of this, I didn't thoroughly review the logbook for some time. Upon review, I noticed that the aircraft had JUST been written up for a fume event, with a perfunctory, "APU OPS check ok," as the corrective action, and I saw that the entry was made by this other ZZZ1 CA. At the same time, the Lead FA asked if I was aware that the aircraft had had a fume event and the prior crew tail swapped. I called for MX (Maintenance) and made a call to the previous CA. Maintenance indicated that they had, "run the APU full hot and full cold," and that it was, "fine." I spoke with the previous CA and he described the nature of the fume event and that it hadn't actually occurred to him, the aircraft still smelled like one. I spoke with a Chief Pilot. The Chief Pilot, MX, my FO (First Officer), and I all concluded that without any actual present indications of a problem, it was safe to make the flight with extra vigilance for a potential fume event. We flew to ZZZ uneventfully. Upon arrival in ZZZ, the FO and I went to get some food. Upon returning to the aircraft, I was hit with a wall of noxious, acrid fumes that were immediately irritating and obviously the classic presentation of a fume event. The APU was shut down and no external air was connected. I exited the aircraft and advised the FA contingent to do the same. We contacted Maintenance Control, Contract Maintenance came out and began troubleshooting. Maintenance Control asked me to perform an engine run and I declined. There was already a presence of noxious fumes of unknown origin and I was disinclined to continue to expose myself, my FO, or anyone else to them. Contract Maintenance said that he perceived the fumes on PACK 1 while running the APU, so the decision was made to defer the APU. I was generally OK with that, but was immediately confronted with even worse, persistent fumes after APU shutdown. I consulted with Maintenance Control and alerted them that the problem was not at all solved by deferring the APU. The FO, Contract Maintenance, Maintenance Control, a Chief Pilot, and I all consulted and agreed that based

on the information we had, contamination in PACK 1 was the next logical culprit. We discussed the logic of that decision, contingencies for any further problems, and evaluated it as reasonable and safe. We all eventually timed out and were rescheduled.

### Narrative: 2

I was on Aircraft X and experienced a fume event. I got on Aircraft X in ZZZ1. The Captain noticed that the aircraft had just been written up for a fume event, but that it had been cleared by Maintenance without any deferral as they were not able to duplicate it. He called Maintenance and asked why nothing had been deferred, and they told him the previous crew said that only ground air was hooked up when the fumes occurred. Maintenance disconnected ground air and had run the APU and there were no fumes they could detect. The Captain also called a Chief [Pilot] to ask how that could happen if just on ground air and to get a second opinion on accepting the aircraft. Ultimately he accepted the aircraft. We operated flight from ZZZ1 to ZZZ in that aircraft without incident. After landing, we turned on the APU and let it run its required three minutes before utilizing the bleed air. We utilized bleed air while parked at the gate while the passengers were deplaning. The ground air was not hooked up to the aircraft because the ground crew believed it to be inoperative. After the parking checklist and after all passengers had deplaned, the Captain shut down the APU. The Captain and I left the airplane to find lunch in the airport. We had a fairly tight turn around, and the Captain went back to the airplane to prepare it while I waited for the fast food. I went down the jet bridge a short time later and found the Captain at the bottom of the jet bridge along with all the Flight Attendants. He said he smelled fumes on the aircraft and told me not to board. He called Maintenance Control for a fume event. Maintenance Control asked if he would do an engine run to isolate the PACK, but the Captain did not want to do that and wanted to wait for Maintenance. Once Maintenance showed up, they ran the APU, but could not isolate a smell. The Maintenance personnel then asked if we wanted to board and check for ourselves. The Captain declined. I felt like we were at an impasse because Maintenance personnel couldn't reproduce the smell and the Captain didn't seem to want to get on the aircraft to do a "sniff test." I did stick my head in the aircraft cabin and I couldn't smell anything either, which I reported to the Captain. Maintenance then said they would keep trying for a little while longer to see if they could reproduce the smell. I think the Captain felt like he was in an awkward position because he felt like he was going to potentially have to board an aircraft with passengers and he was afraid we would then get a fume event. He had the idea to call Medical to see if it was advisable to board the aircraft with the potential for fumes. He did speak to Medical and reported that he was exposed. I told Medical that I had not been exposed at that time. While he was on the phone, Maintenance personnel came back out of the aircraft and said he did get a slight fume smell. The mechanic talked to Maintenance Control and they decided to defer the APU. The Captain agreed to that plan. While Maintenance was shutting down and deferring the APU, we all (the flight crew) walked up to the gate area. I had to talk to crew scheduling about getting an extension to my flight duty period, and talk to the gate agent about organizing an air start cart, while the Captain updated the passengers. All that took about 10 to 15 minutes. We thought it would be safe for the flight crew to get back on the aircraft and resume our duties after APU deferral, so we headed back down the jet bridge. Maintenance was already off the aircraft. I was the first one on the aircraft and I immediately noticed a very strong acrid smell right as I entered. [I was in the Army and had to do the CS gas chamber (tear gas) for training. The best way I can describe the smell is that it was almost the exact same smell as tear gas]. I did a quick assessment that it was strongest in the cockpit and cabin rows 1 through 4. I relayed that info to the Captain, who was just about to board. He also came on and confirmed that. We grabbed the Maintenance can and it showed the APU deferral had already been signed off. It must have been after APU shutdown again that the fumes returned. We again left the aircraft;

there was no way to board the aircraft in that condition. Ramp crew got the external air working and hooked it up. The flight attendants then opened all the aircraft doors, and the Captain opened the cockpit windows. We left the aircraft, getting back on every so often to see if the smell had gone away, but it was intermittently persistent. The Captain got back on the phone with Maintenance Control to discuss further options such as deferring PACK 1. My FDP (Flight Duty Period) expired before Maintenance personnel could return to our aircraft.

### Synopsis

Air Carrier flight crew reported a recurring fume event during pre-flight. As Maintenance was formulating a plan to defer the APU and/or Pack 1, the flight crew timed out resulting in the flight being rescheduled.

# ACN: 2019880 (20 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 0001-0600

#### 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: Initial Approach Flight Phase: Final Approach Flight Phase: Descent

### Component

Aircraft Component: Air Conditioning and Pressurization Pack

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 2019880

Human Factors: Troubleshooting Human Factors: Physiological - Other

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Detector.Person: Flight Attendant

Detector.Person: Passenger

Result.General: Maintenance Action

#### **Assessments**

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

Upon landing in ZZZ and taxiing clear of the runway, my lead FA (Flight Attendant) called and notified me that they were experiencing a fume event in the cabin. Multiple passengers and all of the flight attendants were feeling the effects of it. Flight Attendant B felt ill enough that she vomited. I immediately shut off PACK 2 and we initiated the Procedure for removal of odor/fumes. The Lead Flight Attendant reported that she had experienced symptoms as early as 30 minutes prior to landing. As this was during descent and arrival, there were multiple power changes throughout the time period. After blocking in at the gate, I shut down engines and kept all bleeds and PACKS turned off. We notified Maintenance Control, completed the safety form, notified the Chief Pilot, and assisted the cabin crew in obtaining medical assistance. I worked with the Maintenance crew to explain what had happened. After several cycles of the APU Bleed, I got back onboard to help Maintenance identify whether the odor was cleared out. It was not and I helped them identify the specific smell that indicates a TCP (tricresyl phosphate) generated fume event. At that point, I left the aircraft and helped coordinate for the cabin crew to receive medical attention. Neither myself nor my First Officer felt any ill effects during this event.

# Synopsis

Air carrier A320 Captain reported being notified at destination arrival of a fume event in the cabin. Maintenance was requested and medical attention provided for the cabin crew.

# ACN: 2019080 (21 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 1201-1800

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude.MSL.Single Value: 17000

### Environment

Light: Daylight

### 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: 1

Aircraft Component: Electrical Power

Aircraft Reference : X Problem : Failed

### Component: 2

Aircraft Component: Electrical Distribution Relay

Aircraft Reference : X Problem : Failed

### Person

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: Instrument

ASRS Report Number. Accession Number: 2019080

Human Factors : Time Pressure Human Factors : Troubleshooting

Human Factors : Confusion

Human Factors : Situational Awareness

### **Events**

Anomaly. Aircraft Equipment Problem : Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person: Flight Crew When Detected: In-flight

Result.General: Maintenance Action

Result.Flight Crew: Landed in Emergency Condition Result.Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Software and Automation

Contributing Factors / Situations: Procedure

Primary Problem : Aircraft

#### Narrative: 1

Climbing through about 17000ft - FL190, we heard multiple clicking/banging sounds coming from the main BUS circuit board (Relays). At the same time, we quickly saw multiple amber Xs and screens flicker, but was too quick to see which ones. Shortly after we saw it again and it was clear that multiple relays seem to be malfunctioning, but more this time. I was able to see over the next couple occurrences that the TAT (Total Air Temperature) and SAT (Static Air Temperature) indicators, CA (Captain) outlet, FMGS1, ND1 (Navigation Display 1), VHF1 on FO (First Officer) side also went out temporarily. I called back to ask the FAs (Flight Attendants) if they noticed anything, and they hadn't yet, but on the third occurrence, they reported the WIFI and the lights were flickering. About the 3rd or 4th occurrence (they happened quickly in a fairly short span of time) that my FMGS1 was now out as well as the Fuel Used numbers were reset and Fuel used for engine 2 indicators also ambered out. At this point I had asked the lead FA to do a sweep of the cabin to see if they see or smell smoke or hear anything suspicious. I had remembered that a pattern of electrical anomalies can be a possible sign of electrical fire, so I had begun to plan for that. Shortly after the lead FA said that there was a strange buzzing sound over row XX (where the Wi-Fi is) and a strange smell of possible smoke. At this point while still on the line with the FA, I gave him a briefing, and as I had seen ZZZ as the closest airport, fortunately with maintenance as well, telling him that is where we are going, [advising ATC] (while coordinating with the FO who was the flying pilot). At this point, I had decided to prepare for a possible electrical fire, and we rapidly descended from our cruise altitude of FL370. We were about 10 min away and did our duties preparing for the landing, calling the fire trucks as a precautionary method. As electrical fire is a dire situation, I was not going to hesitate, as dispatch and Maintenance Control was not fully aware of what was going on, although I did briefly send a few ACARS messages explaining it. They had suggested ZZZ1, but it was about 30 min away. I called for ZZZ while dispatch/Maintenance Control coordinated well to prepare for the landing in ZZZ. We landed safely with a full stop on the runway, completing all SOPs. Fire trucks pulled the infrared sensors and noted no heat anomalies, and we were cleared to the gate. On arrival Maintenance Control stated they received a message from our aircraft that the ENG1 IDG (Integrated Drive Generator) had failed. We had not seen that message, and while it may have popped up briefly, I did hit the recall button multiple times showing normal during the events on the flight. We had deplaned immediately on gate arrival; fire fighters did a full infrared/temperature screening twice of the interior and exterior and found no heat anomalies. It was concluded that the ENG1 IDG had or was failing, so we did an engine run to confirm and deactivate the IDG.

# Synopsis

Airbus A320 air carrier pilot reported electrical problems while climbing to cruise altitude. The crew coordinated with the cabin crew to troubleshoot the problem, diverted, and landed safely.

# ACN: 2018709 (22 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 0001-0600

#### Place

Locale Reference.ATC Facility: ZZZ.TRACON

State Reference: US

#### Aircraft

Reference: X

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 : Cruise

### Component

Aircraft Component: Unknown

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person: Hangar / Base Reporter Organization: Air Carrier Function. Dispatch: Dispatcher Qualification. Dispatch: Dispatcher

ASRS Report Number. Accession Number: 2018709

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person : Flight Crew When Detected : In-flight

Result.General: Maintenance Action

Result.Flight Crew: Diverted

Result.Flight Crew: Requested ATC Assistance / Clarification

Result.Flight Crew: Landed in Emergency Condition Result.Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

Narrative: 1

Aircraft X [requested priority] due to fumes in the cockpit. Diverted nearest suitable alternate, ZZZ. Crew on the ground and in the blocks safely. No hard haz on the aircraft, only some dry ice. Crew said the fumes had an electrical smell to it. Maintenance Control looking into it at this time. Cause - maintenance problem

# Synopsis

Air carrier Dispatcher reported a flight diverted to a nearest suitable airport due to electrical fumes in the cockpit and the aircraft was turned over to Maintenance.

# ACN: 2018441 (23 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US

Altitude. AGL. Single Value: 0

#### Aircraft

Reference: X

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: Parked

#### Person

Location Of Person. Aircraft: X

Location In Aircraft: General Seating Area

Cabin Activity: Boarding

Reporter Organization: Air Carrier

Function. Flight Attendant: Flight Attendant (On Duty)

Qualification.Flight Attendant: Current

ASRS Report Number. Accession Number: 2018441

Human Factors: Troubleshooting Human Factors: Workload Human Factors: Time Pressure

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person: Flight Attendant Were Passengers Involved In Event: Y When Detected: Aircraft In Service At Gate Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Overcame Equipment Problem

### Assessments

Contributing Factors / Situations: Aircraft

Primary Problem: Aircraft

### Narrative: 1

About 10 minutes before departure I noticed a very strong and horrible smell in the cabin. I was at seat XX at the time. I went to the aft galley to try and get away from it but it was

just as strong. I called the Captain and he stopped boarding and told the passengers to get off the plane and take their belongings with them.

# Synopsis

Air carrier Flight Attendant reported a strong horrible odor of unknown source during boarding. Flight Attendant notified the Captain who ordered passengers and flight crew to deplane.

# ACN: 2017316 (24 of 50)

# Time / Day

Date: 202307

### Place

Locale Reference.ATC Facility: ZZZ.Tower

State Reference: US

### Aircraft

Reference: X

ATC / Advisory.Center: ZZZ ATC / Advisory.Tower: ZZZ Aircraft Operator: Air Carrier Make Model Name: A320 Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Nav In Use : GPS

Nav In Use: FMS Or FMC Flight Phase: Cruise Route In Use: Direct Airspace.Class C: ZZZ

# Component

Aircraft Component: Cabin Furnishing

Aircraft Reference : X Problem : Malfunctioning

#### Person

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: Flight Instructor

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 2017316

Human Factors: Time Pressure Human Factors: Workload Human Factors: Distraction

Human Factors: Situational Awareness

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Deviation / Discrepancy - Procedural : Weight And Balance

Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy

Anomaly. Deviation / Discrepancy - Procedural: FAR

Anomaly. Inflight Event / Encounter: Unstabilized Approach

Detector.Person: Flight Attendant Were Passengers Involved In Event: N

When Detected: In-flight

Result.General: Maintenance Action

Result.Flight Crew: Executed Go Around / Missed Approach

Result.Flight Crew: Diverted

Result.Flight Crew: Landed in Emergency Condition

Result.Flight Crew: Requested ATC Assistance / Clarification

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

### Narrative: 1

After departure the lead FA (Flight Attendant) called up and said they had a very strong electrical smoke smell and the walls of the center aft lav was extremely hot to the touch. I asked if there was any smoke or fire. They said there wasn't but the smell was very strong and not dissipating at all. At this point I made the decision to request priority handling and divert to ZZZ. We turned around and started down and ran all of our checklist including the overweight landing checklist. The I reached out again to the FAs and said I needed to know if any smoke started appearing at all. They said they would. They were given a priority code and we prepped for landing. Unfortunately with all that was going on I failed to notice they turned us in about 5 miles closer then I expected. Due to this we ended up being much to high for the landing. Since we didn't have an actual fire at this point I felt it was safer to go around instead of forcing a bad landing. We went around and then came back for a smooth overweight landing. After landing we stopped on the high speed and I had the fire trucks position behind us and look for any signs. I had the aft FA go back into the lay to check again. The strong electrical smell and the heat continued with no reduction in intensity. I told the Airport Rescue and Firefighting to stay close and follow us in as I felt it was safer at this point to deplane normally. I told them if we got any indication of smoke we would immediately stop and evacuate. We got to the gate and again I felt it safer to remove all passengers thru the Jetway and then have the firemen inspect the lav. Upon inspection they found the water heater to be at fault and basically running away as hot as it would go. It was so hot that the hot water coming out was 130 degrees and even the cold water was 108 degrees. For reference the other lav showed 80 hot water. The end result was a safe landing with no evacuation needed. I did make the mistake of not realizing we were as close as we were so ultimately the only thing I would have done different would have been to verify how far out we were being vectored. In the future I will attempt to look at that more closely. However a very strong mitigating factor was the possibility of this turning into a fire. Ultimately it did not luckily.

# Synopsis

Air carrier Captain reported cabin odor and walls in the aft lavatory were extremely hot, as reported by the aft Flight Attendant. After a divert, a missed approach due to arriving too high on final and then an overweight landing, the aircraft arrived safely. The Fire Marshal and maintenance determined the aft water heater was running uncontrolled full power and overheating.

# ACN: 2015440 (25 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

### Aircraft

Reference: X

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: Cargo / Freight / Delivery

Flight Phase: Parked

#### Person

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: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 2015440

Human Factors: Troubleshooting

#### **Events**

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly. Deviation / Discrepancy - Procedural: FAR

Anomaly Deviation / Discrepancy - Procedural : Hazardous Material Violation

Anomaly. Ground Event / Encounter: Other / Unknown

Detector.Person: Flight Crew

When Detected.Other

Result.Flight Crew: Overcame Equipment Problem

## Assessments

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem: Procedure

Narrative: 1

After leaving the aircraft at completion of the flight, a strong odor of something burning was evident. I was on the ramp and discussed with ramp personnel if they knew the source. The agent said no but it was stronger on the aircraft. I went back up the stairs with a Ramp Agent to investigate. The HAZMAT can was about to be removed from the aircraft. Agents removed the can and isolated it on the ramp. I reviewed with the agent the items in the can from our DG manifest. I offered to call ARFF (Airport Rescue and Firefighting) for possible assistance. We were carrying dangerous-when-wet items and it was raining in ZZZ when we departed. DG inspection prior to departure was normal and satisfactory. Possible DG situation cause undetermined.

# Synopsis

B767-300 Captain reported a strong burning odor and proceeded to investigate the source with a ramp agent. While the cause was undetermined, the aircraft was carrying items that were dangerous when wet and the departure conditions were rainy. However, inspection prior to departure was normal.

# ACN: 2014510 (26 of 50)

# Time / Day

Date: 202307

Local Time Of Day: 0601-1200

#### 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 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger

Flight Phase: Initial Approach

Airspace. Class B: ZZZ

## Component

Aircraft Component: Air Conditioning and Pressurization Pack

Aircraft Reference : X Problem : Malfunctioning

### Person: 1

Location Of Person. Aircraft: X

Location In Aircraft: General Seating Area

Reporter Organization: Air Carrier

Function. Flight Attendant: Flight Attendant In Charge Function. Flight Attendant: Flight Attendant (On Duty)

Qualification. Flight Attendant: Current

ASRS Report Number. Accession Number: 2014510

### Person: 2

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Pilot Not Flying

Function.Flight Crew: Captain

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Multiengine Qualification.Flight Crew: Instrument

ASRS Report Number. Accession Number: 2014417

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

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

Result.Flight Crew: Requested ATC Assistance / Clarification

Result.Flight Crew: Landed in Emergency Condition Result.Air Traffic Control: Provided Assistance

### Assessments

Contributing Factors / Situations: Aircraft

Primary Problem : Aircraft

### Narrative: 1

Upon leaving ZZZZ and making our approach into ZZZ, the flight crew and flight attendants detected an odor in the aircraft. The Captain made a landing where it was met with vehicles. Passengers safely deplaned as well as the flight crew. The flight crew did experience headaches and a strange taste in their throat. They were examined and advised by medics. This airplane had a fume event prior to our departure, which delayed our departure by 22 hours and 45 minutes out of a ZZZZ. Perhaps a more comprehensive inspection is in order for the aircraft.

## Narrative: 2

This event occurred on a recovery flight after this aircraft was downed for a safety of flight event and, theoretically, stabilized with the APU deferred. Takeoff and enroute portions of the flight were unremarkable, at least in regards to this issue. I say this because we did have a few avionics/electrical issues which may or may not be related to this event. One other item of note was that we discovered afterward that one of the FAs (Flight Attendant) had noted some unusual noises from the aircraft belly before departure but didn't have time to report them to the flight deck. As the Airbus can make some unusual noises in the back, it's difficult to say whether this was truly out of the ordinary. Also, the maintenance crew that had repaired the aircraft was on the flight, and I did not hear any comment from them on these noises. In any case, the flight proceeded normally until we began our descent into ZZZ where we began to notice a smell in the flight deck. I would describe it as an electrical insulation smell, though not acrid as though something were burning. The FO (First Officer), who undoubtedly has a better sense of smell than I do, seemed to feel it was more pungent than I. I called to the back and asked if they smelled anything and at least one FA noted a smell of "new shoe leather/dirty socks." Initially, as we were already on a straight shot for the field and now below FL180, I did not feel that declaring an emergency would benefit us. But, as the FO began reporting some symptoms like scratchy throat, we decided to get the aircraft on deck as quickly as we safely could. I called to the back, told them we were [requesting priority handling], but that it was just a precaution there wasn't time to be more thorough and not be an impediment to safe flying. The FO and I donned our oxygen masks, though they were so difficult to communicate with that we elected to remove them for final approach. We touched down and cleared the runway. As the safety vehicles were swarming the jet, I elected to make a PA to reassure the passengers and FAs. Originally, I had thought to shut down on the taxiway, thus removing the likely source of the fumes. Unfortunately, the FO reminded me that we had no APU, which would have meant trapping the passengers on the runway in an unventilated, uncooled, unpowered aircraft until a tug, a power cart, or a set of airstairs could be dragged out to us. Faced with that, taxiing the aircraft to the gate seemed the quickest way to get the passengers away from any possible inhalation hazard. With very brief delay, we taxied into the gate and shut down. We considered and rejected using the emergency deplaning procedure as it seemed more likely to cause panic and injury than

normally exiting the depowered aircraft. Overall, although things did not go anywhere near how I had expected them to, I think we took the best courses of action available to us at the time. The FAs were checked out by a med tech in the terminal after deplaning and as far as I am aware, no passengers required medical attention from the event. Safety of flight issues seem to be running rampant through the Airbus fleet. I've been involved in three myself in varying capacities. I can't imagine that there are no long-term effects from repeated chemical inhalation. I know that the installed oxygen masks are industry standard. However, compared to the simple military jet masks that I wore for ten years, these are horrible.

# Synopsis

A321 Flight Attendant and Captain reported a fumes event during initial approach for landing.

# ACN: 2013127 (27 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 1801-2400

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

Altitude. MSL. Single Value: 33000

### Environment

Weather Elements / Visibility : Thunderstorm

### Aircraft

Reference: X

ATC / Advisory.Center: ZZZ Aircraft Operator: Air Carrier Make Model Name: B747-400 Crew Size.Number Of Crew: 3 Operating Under FAR Part: Part 121

Flight Plan: IFR Mission: Passenger Flight Phase: Cruise Airspace.Class A: ZZZ

# Component

Aircraft Component: Cooling Fan, any cooling fan

Problem: Malfunctioning

#### Person: 1

Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Relief Pilot
Function.Flight Crew: First Officer
Qualification.Flight Crew: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification. Flight Crew: Instrument

ASRS Report Number. Accession Number: 2013127

Human Factors: Troubleshooting Human Factors: Workload Human Factors: Time Pressure

#### Person: 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: Instrument Qualification.Flight Crew: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 2013128

Human Factors: Troubleshooting Human Factors: Time Pressure Human Factors: Workload

## **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Deviation / Discrepancy - Procedural : Clearance Anomaly. Inflight Event / Encounter : Weather / Turbulence

Detector. Automation: Aircraft Other Automation

Detector.Person : Flight Crew When Detected : In-flight

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Diverted

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

During my deadhead (DH) flight Aircraft X to ZZZ2, after approximately 3hrs of flight, Captain walked up to me and mentioned that we were having an issue with the Electronic Equipment Bay and that the Equip Cooling Caution message had come up. I quickly put my stuff away and joined them in the flight deck to assist with the situation. After settling down on the third seat I was brief by First Officer (FO) about the situation, since Captain was in the restroom at this moment. I was told by FO that up to that point they had completed the appropriate QRH checklist and that the message had gone away, but that their displays began to malfunction one by one in various ways. Also, their VHF #1 radio became Inoperable. At this point the malfunction had being going on for approximately 30-40 mins before I showed up to the flight deck. A few moments went on, we crossed over to US airspace and we were now talking to ZZZ Center. We were informed by Center that there was a line of thunderstorms ahead and to advice of any deviations. At the same time Dispatch sent a message about the same weather. I then began working the weather radar, and that's when I noticed that it also had become inoperable. This is when we began the discussion of potentially diverting to ZZZ1 as it was our closest suitable airport. Since the weather radar had now become inoperable, the ability to avoid thunderstorms was going to become difficult because the day was also turning to night. We asked Center for vectors around the storms as we continued to look for other solutions and at the same time I was continually talking to Company over ACARS messages to try to keep them in the loop, since both Captain and First Officer were busy flying and communicating with ATC. At some point in our discussion, we came to the agreement that a diversion was to be conducted to ZZZ because ZZZ1 was now behind us and the weather was better at ZZZ. Also since multiple system failures had occurred, our ability to see and avoid the

thunderstorms was not possible and there was an intermittent burning smell, it reinforced our decision. Once the decision was made, Captain [requested priority handling] with Center and asked for direct vectors to ZZZ. I began running the performance data, requested the weather and NOTAMs at ZZZ while Captain and FO set up for an approach into ZZZ. As we were descending, I messaged Dispatch about our [priority handling], about our fuel on board upon landing and our ETA as well. Once we were in the terminal area, we began to try to burn off as much as we could to avoid and overweight landing, but while doing so, the Equip Cooling Message showed up again and the QRH says to land at the nearest suitable airport. And that's what we did. We turned the aircraft towards the airport and performed the ILS approach to Runway XX in ZZZ.

### Narrative: 2

Almost 3 hours into the flight, and shortly after "Fuel/tank Eng" EICAS message, we got an EICAS Caution "Equip Cooling" I called for the checklist and my First Officer (FO) ran it, the message went away but minutes later both side Navigation Displays (NDs) and Primary Flight Displays (PFDs) starting to malfunction, they would go on gray mode and come back, Captain PFD blanked for a few minutes, a message "RSTR INOP" showed up on both NDs. Also, Radio #1 stopped working, and later the weather radar stooped painting (there were multiple lines of weather in the area). While all these malfunctions are occurring, sporadic electrical burning smell came to the flight deck. None of these occurrences were mentioned in the QRH, but we related them to the equip cooling situation. We decided to get highly proactive and start looking for possible suitable diversion airports since it was an item on the QRH if the issue came back. We started to get Dispatch in the loop with all the issues arising via ACARS. I call my deadheading FO to the flight deck to support us for the rest of the flight. It was when we lost count of the malfunctions and had no weather radar going into the night when we took a firm decision to divert to ZZZ air base. We started by relaying our situation but later upgraded to a [priority handling]. We had a large number of considerations every step of the way, one of them being an overweight landing. We asked for delayed vectors near the field and tried to burn as much fuel as we could to land below max landing weight but as we were doing so, the EICAS Equip Cooling came back, and per the QRH it was time to land at the nearest suitable airport. We decided to not take any chances and bring the plane to the ground immediately. An overweight landing was performed. The touchdown was made with Flaps 30, vref 162 at less than 200 ft./min using max auto brakes and full reversers since the runway was shortened by approximately 2000 ft. We kept in constant communication with ATC who didn't let us move any further at Taxiway X until we had a marshaller and a definite parking spot. I had to contact Dispatch and Maintenance to get more assistance on what to do next to avoid further equipment overheating, since we were now on the ground and there's no guidance on the QRH about what to do after landing. We finally got personnel to park us and air base personnel to escort us out. We left the airplane dark and doors closed awaiting for Maintenance to take over.

# Synopsis

Air carrier flight crew reported an EICAS "Equipment Cooling" message followed by other multiple components failure including weather radar during cruise. The flight crew elected to request priority handling to the closest suitable airport where a safe landing was completed.

# ACN: 2012750 (28 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 1201-1800

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

Altitude. MSL. Single Value: 37000

## Environment

Light: Daylight

### Aircraft

Reference: X

ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B737-800
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121

Flight Plan : IFR

Mission: Passenger Flight Phase: Cruise Airspace.Class A: ZZZ

## Component: 1

Aircraft Component: Toilet Furnishing

Aircraft Reference : X Problem : Malfunctioning

### Component: 2

Aircraft Component: Electrical Wiring & Connectors

Aircraft Reference : X Problem : Malfunctioning

### Person: 1

Location In Aircraft: Flight Deck Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying Qualification.Flight Crew: Multiengine Qualification.Flight Crew: Instrument

Qualification.Flight Crew: Air Transport Pilot (ATP)

Experience. Flight Crew. Last 90 Days: 85 Experience. Flight Crew. Type: 11895

ASRS Report Number. Accession Number: 2012750

Human Factors : Workload Human Factors : Time Pressure

Person: 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: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP)

Experience. Flight Crew. Last 90 Days: 150

Experience. Flight Crew. Type: 1895

ASRS Report Number. Accession Number: 2012751

Human Factors: Time Pressure Human Factors: Workload

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

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 in Emergency Condition

Result.Flight Crew: Requested ATC Assistance / Clarification

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

#### Narrative: 1

While in cruise flight phase at FL 370, approximately 60 NM north of ZZZ, the Flight Attendants notified the flight deck to report that the FWD Lav Flush button was extremely hot to the touch and there was a smell of burning plastic and/or an electrical burning smell. The First Officer and I ran the QRH/ QRC Procedure for Smoke, Fire, Fumes, and donned our oxygen masks. I talked to the Flight Attendants, and they indicated that the problem was not getting any better but also was not getting worse. We coordinated the diversion with ATC and got clearance instructions to ZZZ. Diversion information was communicated to Dispatch. We advised ATC and we landed XXR in ZZZ. The Fire Department met the aircraft on the ground and after assessing with them and the Flight Attendants, we decided to taxi to the gate where the Fire Department would board the aircraft and put thermal imaging on the button. When firefighter personnel entered the main cabin door the fire personnel inspected the forward lavatory and observed a slight smoke or haze and we were informed to deplane passengers off of the aircraft expeditiously. We also observed the smell of electrical burning when the cockpit door was opened. It was a mutual decision between the Fire personnel, me and first officer to power down the aircraft completely. Prior to power down of the aircraft, I informed the Flight Attendants that we would have no power to the aircraft while deplaning. Passengers were expeditiously deplaned, and the aircraft shut down, while Passengers were still onboard. As soon as power was removed from the aircraft, the heat at the lavatory flushing button began decreasing and the smell and haze dissipated. This was determined from Fire Personnel using a temperature sensing apparatus and we were quickly informed of that. I

maintained communication with Fire Personnel, Flight Crew during the entire process. Passengers were deplaned expeditiously and efficiently, there were no reported injuries or other concerning issues related to Passengers or other Flight Crew Members. Throughout the entire event we (Flight Crew) kept the Passengers informed of the situation with timely and pertinent information.

#### Narrative: 2

While cruising at FL 370 the Flight Attendants called up to report that the FWD Lav Flush button was extremely hot to the touch and there was a smell of burning plastic and/or an electrical burning smell. The Captain and I ran the QRH Procedure for Smoke, Fire, Fumes, and donned our oxygen masks. Subsequently the captain talked to the Flight Attendants, and they indicated that the problem was not getting any better but also was not getting worse. We coordinated the diversion with ATC and got the aircraft pointed towards ZZZ. Diversion information was communicated to Dispatch. We advised ATC and we landed XXR in ZZZ. The Fire Department met the aircraft on the ground and after assessing with them and the Flight Attendants, we decided to taxi to the gate where the Fire Department would board the aircraft and put thermal imaging on the button. When they opened the main cabin door the Fire Personnel observed a slight smoke or haze and said we needed to get Passengers off the aircraft expeditiously. We also observed the smell of electrical burning when the cockpit door was opened. Passengers were expeditiously deplaned, and the aircraft shut down while Passengers were still on board. As soon as power was removed from the aircraft, the heat at the toilet flushing button began decreasing and the smell and haze dissipated.

# Synopsis

Air carrier flight crew reported while in cruise they received notification from flight attendants that the forward lavatory smelled of electrical smoke and the toilet handle was hot. The pilots diverted and landed safely.

# ACN: 2012546 (29 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 1801-2400

#### Place

Locale Reference.ATC Facility: ZZZ.TRACON

State Reference: US

Altitude. MSL. Single Value: 10000

### Aircraft

Reference: X

ATC / Advisory.TRACON: ZZZ Aircraft Operator: Air Carrier

Make Model Name: EMB ERJ 145 ER/LR

Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR Mission: Passenger Flight Phase: Climb Airspace.Class E: ZZZ

## Component

Aircraft Component: APU Fuel System

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification.Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine Experience.Flight Crew.Type: 5154

ASRS Report Number. Accession Number: 2012546

Human Factors: Workload Human Factors: Troubleshooting

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected: Aircraft In Service At Gate

When Detected: In-flight

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action

Result.Flight Crew: Overcame Equipment Problem

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

### Narrative: 1

During climbout above 10,000 feet, the Flight Attendant called and reported a strong smell of jet fuel and that some passengers where also noticing the smell. We were avoiding a thunderstorm and a short time later I spoke to the Flight Attendant and she reported that the smell had gone away. After arriving at the gate the Flight Attendant brought it to my attention that the strong smell of jet-fuel had returned around the time of landing. At that point the smell was very evident throughout the cabin and flight deck. I wrote it up and reported it to maintenance. When maintenance came, they walked around the aircraft a few times and after the second walk around they discovered that there was fuel spraying out near the APU, at the underside of the rear fuselage. I went to have a look at the leak and there was a puddle of fuel on the ground, below the APU at this point We shut the aircraft down at that point. The next morning I noticed a strong smell of Jet fuel on my pilot shirt. Base Chief Pilot has been briefed on the event. Donning oxygen masks and returning to ZZZ would have been a consideration if the smell didn't go away, however the Flight Attendant (FA) quickly reported the smell had gone away so we continued to ZZZ1. Perhaps we should have taken the more cautious approach and don oxygen immediately. It was the trainee First Officers (FO's) second day, so that may have been a factor if the issue was present during his walk around in ZZZ. Maintenance did have issues spotting the leak however when they discovered it, as the fuel was being "misted". Maintenance said the fuel mist was entering the air conditioning. I spoke to maintenance later on and they changed out the fuel control unit for the APU. They said the fuel leak was close to the APU bleed valve and therefore this is how the fuel vapor entered the air conditioning system.

# Synopsis

EMB-145 Captain reported a strong fuel odor during cruise which was assigned to Maintenance upon arrival. Maintenance discovered and corrected an APU fuel leak that was misting and entering the air conditioning system.

# ACN: 2011905 (30 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 0601-1200

### Place

Locale Reference.ATC Facility: ZZZ.Tower

State Reference: US

#### Aircraft

Reference: X

ATC / Advisory. Tower: 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

Nav In Use.Localizer/Glideslope/ILS: RNAV XX

Flight Phase: Descent

Flight Phase: Initial Approach

Flight Phase : Cruise Airspace.Class D : ZZZ

# Person: 1

Location Of Person.Aircraft: X

Location In Aircraft : General Seating Area Cabin Activity : Safety Related Duties

Cabin Activity: Service

Reporter Organization: Air Carrier

Function. Flight Attendant: Flight Attendant (On Duty)

Qualification. Flight Attendant: Current

ASRS Report Number. Accession Number: 2011905

Human Factors: Time Pressure Human Factors: Workload

Human Factors: Situational Awareness

### Person: 2

Location Of Person.Aircraft: X

Location In Aircraft : General Seating Area Cabin Activity : Safety Related Duties

Cabin Activity: Service

Reporter Organization: Air Carrier

Function.Flight Attendant: Flight Attendant (On Duty)

Qualification.Flight Attendant: Current

ASRS Report Number. Accession Number: 2011906

Human Factors : Time Pressure Human Factors : Workload

Human Factors: Situational Awareness

### **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: In-flight

Result.Flight Crew: Landed in Emergency Condition

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

## Narrative: 1

I was doing my initial descent cabin preparations while waiting for the final approach notification. While waiting for the chime I noticed the flight deck was calling me (normal call). Captain advised me of an ongoing priority which I guite didn't understand completely but was asked to prepare the cabin for a possible evacuation and to be ready for bracing signals. They sounded busy and said they would call me back later. I rushed to prepare the cabin (short notice) since I wasn't specified how much time I had. I rushed to secure the galley and the passengers the best I could, briefed my exit row one second time and asked them to review the safety card once again. Captain made an announcement explaining the situation but I was busy getting everything in order, I didn't pay much attention. I made sure nothing was blocking egress and proceeded to read the Flight Attendant Manual (FAM) on the evacuations section. Already seated and in a brace position I hear the landing gear and review my commands one last time and suddenly before touch down I hear 'brace brace' and I start shouting 'heads down stay down' louder every time until all people were down. We landed safely and 1 over head bin opened during landing. We taxi out the runway and I stand up to close the overhead bin full of bags, and people were surprised saying I did a great job, however people from row 7 and behind said they heard noises during landing and that they smelled smoke. We park at the gate open draw door and I made sure all passengers exit the aircraft safely and quickly as possible, since I don't really know what's going on I said to leave bags behind. Then I go back make sure everybody is out and grab bags left behind (since we are safe) and stand outside with all the passengers and firefighters entered the aircraft.

#### Narrative: 2

I was in the middle of initial descent cabin preparation while waiting for the final approach signal, then I realized I got a normal call from the flight deck instead of the final approach notification. I answered the call on the forward flight attendant station and received what could have been a special briefing. I received a very brief description of the type of priority we were having (smoke in flight deck), instructions to prepare the cabin in case we experience a [priority situation] and to be ready for bracing signals. All this from the Captain, as they got busy they said they would call me back to finish the briefing, I don't remember receiving the time left we had till landing. As soon as I finished the call, I look through the windows to estimate how much time left we have till landing then I proceed to turn the lights on bright, I don't do any announcements because I don't want to waste time (again I don't know how bad the situation is and how much time we have) and proceed to secure the passengers and the cabin the best way possible since I was told to be ready for a possible emergency. I make sure nothing could be blocking the egress of any of the passengers and brief the exit row one second time and ask them to review the safety information card once again. I start to shout that seat belts must be fastened, tray tables up, seat backs up and all loose items out of the way, in the meantime Captain made

an announcement that I couldn't hear well because I was busy making sure everything was right and people seemed to follow instructions. I read the manual for 2 minutes on the evacuations section when I hear the landing gear down and proceed to secure myself on my jump seat with seat belt and harness low and tight, I do a quick review of my commands and when I hear 200 ft. from the flight deck I hear "brace brace brace" (I later found out the pilot shouting commands was the First Officer) through the PA, and I start shouting "heads down, stay down" over and over making sure people do the brace position. We touch down and the landing feels quite normal, one of the overhead bins opened during landing. I keep shouting my commands, I never heard the instruction to evacuate which led me to remain seated while shouting commands and waiting for further instruction. We taxi out the runway safely, I stand up to close the overhead bin full of bags and look through all windows and everything seemed safe. I go back to my jump seat and ask people to remain seated with seat belts fastened and asked them if they were ok. People from the middle section to the aft section start telling me we were off the runway during landing, that they also heard crackling sounds, they saw smoke and they were noticing a burning smell. I personally didn't notice any of those things. We park at the gate and they have the walkway ready for us, firefighters were there and we performed an expedite deplaning. I wait till all the passengers are out and go check the cabin and lavatory to make sure nobody is left behind, with Captains permission I returned to grab the bags once it was safe, firefighters entered the aircraft.

# Synopsis

Air carrier flight attendants reported preparing the cabin for a possible abnormal landing because of smoke reported in the flight deck. The aircraft landed safely and the passengers were able to deplane normally.

# ACN: 2011643 (31 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 1201-1800

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

#### 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

Nav In Use.Localizer/Glideslope/ILS: RNAV XX

Flight Phase : Descent Flight Phase : Cruise Airspace.Class D : ZZZ

## Component

Aircraft Component: Air Conditioning and Pressurization Pack

Aircraft Reference : X Problem : Malfunctioning

### Person

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: Instrument Qualification. Flight Crew: Multiengine

ASRS Report Number. Accession Number: 2011643

Human Factors: Workload Human Factors: Troubleshooting Human Factors: Time Pressure

## **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Detector. Automation: Aircraft Other Automation

Detector.Person: Flight Crew When Detected: In-flight

Result.Flight Crew: Landed in Emergency Condition

Result.Flight Crew: FLC complied w / Automation / Advisory Result.Flight Crew: Requested ATC Assistance / Clarification

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations: Aircraft

Primary Problem: Aircraft

Narrative: 1

Normal take-off and climb with no abnormalities. Approximately 15 minutes from our destination the Captain and I started to smell smoke in the cockpit, no visual signs of smoke in the cockpit at that time. We could smell the smoke for about thirty seconds and I was pulling out the QRC/QRH. The smoke seemed to dissipate and we could not find the source and all systems looked to be operating normally. At that point the Captain and I monitored the situation and they chose to continue the flight. Approximately 10 minutes out, as we were starting our descent that is when we began to smell the smoke again, but still had little to no visual smoke on board. That is when we relayed to ATC that we had smoke in the cockpit and ATC [requested priority handling]. On the descent the Captain advised me to open the QRC/QRH and start the smoke fire or fumes checklist. At that point we put on our oxygen mask and established communications, we forgot the smoke goggles. I did stop on the checklist after pushing out the recirculation fan and gasper fan as we were setting up for our final approach into ZZZ and I saw the next step was the descent. We were cleared for the RNAV XX and while on the approach didn't notice any smoke building in the cockpit. Normal landing with no abnormalities. On the taxi in as we were turning into the gate we did get a pack one overheat message. Once pulled into the gate all the passengers were de-boarded safely.

# Synopsis

ERJ 145 First Officer reported smoke in the flight deck. After landing, the aircraft produced a pack overheat warning. Passengers exited the aircraft normally.

# ACN: 2011084 (32 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US

Altitude.AGL.Single Value: 0

## Environment

Flight Conditions: VMC

### Aircraft

Reference: X

ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier

Make Model Name: Commercial Fixed Wing

Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger

Flight Phase: Takeoff / Launch

Airspace.Class B: ZZZ

## Component: 1

Aircraft Component: Air Conditioning Distribution Ducting, Clamps, Connectors

Aircraft Reference : X Problem : Failed

# Component: 2

Aircraft Component: Engine Air Pneumatic Ducting

Aircraft Reference : X
Problem : Malfunctioning

## Person

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: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Experience. Flight Crew. Total: 625

Experience. Flight Crew. Last 90 Days: 194

Experience. Flight Crew. Type: 625

ASRS Report Number. Accession Number: 2011084

Human Factors: Distraction

Human Factors: Communication Breakdown Communication Breakdown.Party1: Flight Crew Communication Breakdown.Party2: Flight Attendant

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector.Person: Flight Crew When Detected: In-flight

Result.General: Maintenance Action Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Requested ATC Assistance / Clarification

Result.Flight Crew: Landed in Emergency Condition Result.Flight Crew: Returned To Departure Airport Result.Air Traffic Control: Issued New Clearance Result.Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Primary Problem: Aircraft

### Narrative: 1

Normal taxi and operations to XXR, takeoff roll normal but at 120 kts we got an EICAS message, caution bleed leak body. I verified and continued as we were well into high speed regime at this point. Once airborne we were alerted by multiple Flight Attendants (FAs) that we had potential smoke/fumes in aft cabin. This issue of multiple FAs calling the cockpit during the high speed regime was distracting and created a subsequent problem that the intercom was effectively blocked by multiple users so we could not communicate at a time when I needed specific information on the nature of the smoke etc. I circumvented this by doing a FA check in call and was able to speak to our purser. They did an admirable job as they had to walk to the aft cabin to speak to their cohorts and calm the passengers down, many were standing up trying to get away from the source of the noise and smoke (dust). We [requested priority handling]. Asked to level off at 5000 ft. and took vectors around for a downwind whilst the (FO) ran the multiple bleed EICAS messages and did an awesome job coordinating with ATC and flying the jet as I juggled Maintenance Control and Dispatch plus the very concerned Flight Attendants. Once we were complete with these, I spoke with Dispatch and asked them to run weights for overweight landing at 509000 lbs. Dispatch did and verified our performance limit was 578000 lbs. We ran the overweight landing checklist, coordinated Brief with FAs and made a PA to passengers. By that time the smoke/dust had dissipated and the noise from the duct had stopped. We flew an ILS XXL flaps 30 approach, smooth landing. Crash rescue were there to meet, inspected the aircraft and cleared us to taxi back to the gate. At same time we coordinated with FAs to make sure there were no further issues in back. We taxied back to gate x. I made a PA to passengers to try and alleviate any stress, especially in the aft section of the aircraft. The gate agents and FAs did a nice job deplaning the aircraft. Mechanics came on and informed us that it was a blown duct and Assistant Chief Pilot Person A came up and asked us some questions flowed by the Chief Pilot. It was only after deplaning and debriefing with our FAs that the extent of the noise and particulates in the air was apparent. The passengers in rear rows XX/XY in the vicinity of the duct were very shaken, O2 was administered to some passengers as they were having trouble breathing. FO did an outstanding job, running checklists, highlighting relevant information,

coordinating with ATC, pulling up the overweight checklist and once on ground having situational awareness to pull up tire synoptics for the overweight landing. Couple of small points, having the Chief Pilots office in the cockpit too fast after an event is not helpful, adrenaline is too high and my bad for just not kicking them out. We answered a bunch of questions which in hindsight should have waited until a reasonable time after the event. The mechanics were also very fast to want to get forms filled out but again hindsight should have told them to wait. I should have been with the FAs who needed my attention. I got to them eventually but should have been quicker.

## Synopsis

Air carrier Captain reported a blown pneumatic duct and bleed leak during takeoff which filled the passenger cabin with excessive noise and airborne particulates. Multiple flight attendants calling cockpit during event was distracting and created difficulty communicating with cabin crew on inter-phone to assess situation in cabin and to advise of planned return to field for an overweight landing aircraft.

# ACN: 2009951 (33 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 1801-2400

### Aircraft

Reference: X

Aircraft Operator: Air Carrier Make Model Name: B737-800 Operating Under FAR Part: Part 121

Mission: Passenger Flight Phase: Climb

### Person

Location Of Person: Hangar / Base Reporter Organization: Air Carrier Function. Dispatch: Dispatcher Qualification. Dispatch: Dispatcher

ASRS Report Number. Accession Number: 2009951

Human Factors: Workload Human Factors: Time Pressure

#### **Events**

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Flight Deck / Cabin / Aircraft Event : Passenger Electronic Device Anomaly.Deviation / Discrepancy - Procedural : Hazardous Material Violation Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly Deviation / Discrepancy - Procedural : FAR

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected: In-flight

Result.Flight Crew: Landed in Emergency Condition Result.Flight Crew: Returned To Departure Airport

Result. Flight Crew: Requested ATC Assistance / Clarification

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem: Procedure

### Narrative: 1

Flight ZZZ - ZZZ1 returned to field after a Passenger's battery pack exploded and caught fire. Dispatch did not file the amendment to the release for a return to field properly. Flight Crew had advised ATC and was operating under their authority. I initially filed an amendment for a change of destination but didn't add an alternate. I then refiled the amendment as a return to field.

# Synopsis

Air carrier Dispatcher reported he failed to amend the flight release of the return to departure airport due to the thermal runaway of a passenger's battery pack.

# ACN: 2009237 (34 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 1201-1800

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 0

## Environment

Flight Conditions: Marginal

Light: Daylight

## Aircraft

Reference: X

ATC / Advisory.Ground : ZZZ Aircraft Operator : Air Carrier

Make Model Name: Regional Jet 900 (CRJ900)

Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

## Component

Aircraft Component : APU Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Air Traffic Control: Local
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 2009237

Human Factors: Troubleshooting

Human Factors: Situational Awareness Human Factors: Communication Breakdown Communication Breakdown.Party1: ATC Communication Breakdown.Party2: Other

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Ground Event / Encounter: Ground Equipment Issue

Detector.Person: Flight Crew

When Detected: Taxi

Result.General: Maintenance Action Result.Flight Crew: Returned To Gate

### Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure

Primary Problem: Aircraft

### Narrative: 1

We departed from the gate our second time of the day and just as we started the engines, we received a new wheels up time from ATC. The Captain started the APU, I did the After landing check, then we shut down the engines to conserve fuel. After about 2-3 minutes with the APU on, white smoke began to fill the cockpit. we closed the vents, and the Captain shut down the plane to stop the smoke. we tried to communicate with OPS, but they wouldn't answer their phone. We decided the best place for the passengers was on the plane, due to the rain and the stairs of the plane, but many were feeling sick due to the lack of airflow. Finally, after about an hour, with the help of tower and fire rescue, we got ahold of ops and got towed in. The cause of the event was Operations not monitoring their radios or phones. Simple as that. Ops should monitor radios and phones if a plane is on the ground. ESPECIALLY during bad weather days.

# Synopsis

CRJ 900 First Officer reported smoke in cockpit on the ground after starting APU. The Captain shut down the aircraft, including APU, which stopped the smoke. The aircraft was towed to the gate.

## ACN: 2007800 (35 of 50)

# Time / Day

Date: 202306

Local Time Of Day: 0601-1200

#### 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: Cruise

## Component

Aircraft Component: Coalescer Bag

Aircraft Reference : X Problem : Malfunctioning

### Person

Location Of Person. Aircraft: X

Location In Aircraft: General Seating Area

Cabin Activity: Service

Cabin Activity: Safety Related Duties Reporter Organization: Air Carrier

Function. Flight Attendant: Flight Attendant In Charge Function. Flight Attendant: Flight Attendant (On Duty)

Qualification.Flight Attendant: Current

ASRS Report Number. Accession Number: 2007800

Human Factors: Troubleshooting Human Factors: Other / Unknown Human Factors: Physiological - Other

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy

Anomaly. Deviation / Discrepancy - Procedural : Clearance

Detector.Person: Flight Attendant

When Detected: In-flight

Result.Flight Crew: Requested ATC Assistance / Clarification

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Diverted

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

Before take off FA#2 called me about a odor in the back cabin and galley, so I went back to confirm what he smelled and I smelled the odor too as I approached row 21 and FA#4 did as well. After take off FA#2 told me that the odor was still there so I went back there again to confirm what they could smell. I told him to go ahead and call the captain and let him know. I went back up to the front galley. FA#2 came to front galley and told me that he let the captain know and that he was feeling light headed and a little dizzy so I told him he may need to go on oxygen and call the captain back and let him know what he was experiencing. The captain then asked if he needed to call the POC (Physician on Call). The POC was contacted and he was told to get on oxygen. Captain called and asked about smell, so I did a cabin check and called him back and let him know the sweet odor was still present. Captain told me that he was going to try to flush the cabin air and see if that helps. Afterwards he called and I did a cabin check and sweet odor was still back there. After the cabin service that FA#4 and I did her symptoms heightened and she went on oxygen as well. I updated the captain on the odor and both fa's and told him passengers were asking concerning questions. He let us know that we would be diverting and that the oxygen mask would be deployed at 14,000 ft when we started descending and he made a PA to the passengers. FA# 2 and FA #4 said they had a combination of symptoms of feeling foggy, lightheaded, dizzy, sick to stomach, eyes burning, metallic taste, dry mouth, and a little slow articulating. Captain made an announcement that oxygen mask were being deployed when we reached 14,000 ft and FA# 2 made an announcement instructing on how to use them and I went through the cabin to check on the passengers and to make sure they were ok and knew how to properly use them if they needed oxygen. After landing we were met by two managers and the police, emt, fire dept. A announcement was made to the passengers that if they needed any medical attention and want to be checked out it was available for them. The emt's checked our vitals. I was told mine checked out fine. I only had a metallic taste in my mouth which I have had [previously]. We were then bused to terminal. Once we deplaned 2 supervisors met the flight and was given an brochure and a letter to attend a mandatory meeting tomorrow that I have been withheld from service for a investigation into a potential performance matter. This event was handled really well by the crew. We all communicated well and worked as a team. We all took care of each other and our passengers. We all put safety first. I was also contacted by several inflight managers to see how we were doing and received instruction and support about what we needed to do.

## Synopsis

Air carrier Flight Attendant reported a persistent dirty socks odor in the passenger cabin during cruise which was reported to the Captain. After troubleshooting the flight diverted to a suitable airport where airport personnel met and provided medical support.

# ACN: 1965418 (36 of 50)

# Time / Day

Date: 202301

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

## Aircraft

Reference: X

Aircraft Operator: Air Carrier Make Model Name: B737-800 Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR Mission: Passenger

Flight Phase: Takeoff / Launch

## Component: 1

Aircraft Component : Engine Oil Seals

Aircraft Reference : X Problem : Malfunctioning

## Component: 2

Aircraft Component: Engine Air Pneumatic Ducting

Aircraft Reference : X Problem : Malfunctioning

## Component: 3

Aircraft Component: Pneumatic Ducting

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 1965418

Human Factors : Workload

Human Factors: Troubleshooting Human Factors: Time Pressure

#### **Events**

Anomaly. Aircraft Equipment Problem : Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person: Flight Crew When Detected: In-flight

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action Result.Flight Crew: Landed As Precaution

Result.Flight Crew: 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

Overweight Landing. Normal taxi, We departed Runway XX ZZZ. As TO power applied we began to notice burning oil smell on flight deck. I thought about rejecting but it was not my leg and this is not an uncommon thing and dissipates once engines are at pores for a moment. Continued TO and after rotation fumes continued and seemed to increase. Out of 1500 I told ZZZ Tower Controller we were having a fume event and needed an immediate return. I did not declare emergency since there was no visible smoke. We were handed to ZZZ TRACON Departure, turned at 3000 ft. Downwind for Runway XY. I dinged Cabin and asked if they smelled anything, the response was no. I told them we would be returning to ZZZ and they had 10 minutes, let me know if they see anything. During this time odor continued. Didn't get any better. We accomplished after After TO ck, cruz, descent ck and a quick set up and brief of ILS Runway XY. weather was CAVOK. We were over landing weight and deployed Gear and flaps in downwind to burn fuel. I did a rough and dirty calc and figured we would be at landing weight at touchdown. I sent acars to Dispatch and called gate freq in ZZZ to tell them we would need a gate right away. FO (First Officer) landed perfectly smooth touch. I noted we had touched at 450# over MAX landing weight. We taxied to fast to gate. I started APU for electric and shut down the Left engine and the result was increase in fumes. We pulled into gate and shut down RH engine and went on APU air. The fumes subsided and I suspect it was the RH engine dumping oil into the bleed air to the pack. Maintenance arrived and Mechanic said he smelled the oil as he entered the plane. Post flight I spoke with ALL the flight attendants and the rear positions said they had strong fumes. The #1 on call said there were no fumes. Some people simply have bad smell? IDK. A cursery review of the aircraft past history indicated high oil consumption of the RH engine. I had noted this and it was included in my preflight threat assessment briefing to the FO. I did not declare an emergency as the traffic at the airport was not heavy and my priority was getting on the ground ASAP. It was extremely high workload and I commend the FO for the teamwork. I think we covered the bases and actually had to extend the downwind an extra minute to get finished. The Tower was aware of the situation and I assume an alert 1 was issued. I felt further distraction of declaration was not helpful. I fully blame Company maintenance procedures for not identifying and repairing the high oil consumption on the RH engine. They dispatched an aircraft with an ongoing defect. Jets are not Piston engines and high oil consumption should not be deferred and dispatched. Tricresyl phosphate when burned and introduced into cabin can kill. The Airline has a fume event reporting policy and has taken adequate steps to report the downline event reporting. I feel Maintenance diminishes the serious

nature of fumes in the cabin. This aircraft should have not been dispatched with high oil burn.

# Synopsis

Air Carrier Captain reported a burning oil odor during takeoff and initial climb which prompted the flight crew to request an immediate return to departure airport. After a safe landing the flight continued to the gate where maintenance met the aircraft.

# ACN: 1962808 (37 of 50)

# Time / Day

Date: 202301

Local Time Of Day: 1201-1800

### Aircraft

Reference: X

Aircraft Operator: Air Carrier

Make Model Name: EMB ERJ 145 ER/LR

Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Flight Phase : Cruise

### Person: 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: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument

ASRS Report Number. Accession Number: 1962808

Human Factors: Workload

Human Factors: Troubleshooting Human Factors: Time Pressure

### Person: 2

Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: First Officer
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 1962810

Human Factors: Training / Qualification

Human Factors: Time Pressure Human Factors: Workload

#### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy

Anomaly Deviation / Discrepancy - Procedural : Clearance

Anomaly. Deviation / Discrepancy - Procedural: FAR

Detector.Person: Flight Crew

When Detected: In-flight

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Diverted

Result.Flight Crew: Overcame Equipment Problem

Result Flight Crew: Requested ATC Assistance / Clarification

Result.Flight Crew: Landed in Emergency Condition Result.Air Traffic Control: Provided Assistance

### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

### Narrative: 1

In cruise at 17,000, sudden thick exhaust fumes became present in flight deck and cabin. [Requested priority handling] and a diversion to ZZZ was executed.

## Narrative: 2

[Report narrative contained no additional information.]

# Synopsis

Air Carrier Flight Crew reported exhaust fumes throughout the aircraft during cruise. Flight crew diverted to another airport for landing.

# ACN: 1959243 (38 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 0001-0600

#### Place

Locale Reference.ATC Facility: ZZZ.ARTCC

State Reference: US

### Environment

Flight Conditions: VMC

#### Aircraft

Reference: X

ATC / Advisory.Center: ZZZ Aircraft Operator: Air Carrier Make Model Name: MD-11 Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR

Mission: Cargo / Freight / Delivery

Flight Phase : Cruise Airspace.Class A : ZZZ

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function. Flight Crew: Pilot Not Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 1959243

Human Factors: Workload Human Factors: Troubleshooting Human Factors: Physiological - Other

### **Events**

Anomaly, Flight Deck / Cabin / Aircraft Event : Illness / Injury

Anomaly. Deviation / Discrepancy - Procedural: FAR

Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly. Deviation / Discrepancy - Procedural : Hazardous Material Violation

Detector.Person: Flight Crew When Detected: In-flight

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Diverted

Result.Flight Crew: Landed As Precaution

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Requested ATC Assistance / Clarification

Result. Air Traffic Control: Provided Assistance

#### Assessments

Contributing Factors / Situations : Human Factors

Primary Problem: Human Factors

### Narrative: 1

Enroute from ZZZ1 to ZZZ2, approximately 2 hours into flight, FO (First Officer) observed faint odor. Approaching abeam ZZZ, got slightly stronger. FO continued to fly. I went aft to courier compartment to investigate. Odor was stronger there. I reinforced seal of smoke curtain Velcro and returned to cockpit. FO smartly donned O2 while I was out of the seat. Odor was not overwhelming but out of an abundance of caution, diverted to ZZZ. Notified Dispatch and ZZZ Ramp. Got NOTAMs, ATIS, and built and briefed the approach while FO continued to fly. We decided not to declare an emergency and got vectors from ZZZ Approach for an uneventful approach and landing on Runway XXL. We taxied to parking on the ramp. Fire trucks met us at the gate and cleared the area after the source of the odor was determined and removed, and the associated attributes of the substance were reviewed. The box was labeled as Class 3 and had a shipping label for aromatic liquids/essential oils. The shipper was from ZZZZ. It was clearly wet at the bottom of the box. Dispatch had planned on us quick turning to ZZZ2, but FO had developed a headache and wanted to make sure it wasn't a result of the inhaled odors. Contacted Operations and eventually had trip revised for short layover in ZZZ. [The cause was] leaky HAZMAT. [I suggest] better packaging by shippers.

# Synopsis

MD-11 Captain reported a HAZMAT box in the cargo compartment had leaked liquid during cruise. The flight diverted to a suitable airport due to fumes emanating from the cargo compartment.

# ACN: 1958283 (39 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 0601-1200

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

## Aircraft

Reference: X

Aircraft Operator: Air Carrier Make Model Name: B777-200 Crew Size.Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger Flight Phase : Parked

## Component

Aircraft Component: Pneumatic System Control

Aircraft Reference : X Problem : Design

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Door Area 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: 1958283

Human Factors: Workload Human Factors: Troubleshooting

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Detector.Person: Flight Crew Detector.Person: Flight Attendant When Detected: Routine Inspection

When Detected : Aircraft In Service At Gate Result.General : Flight Cancelled / Delayed

Result.General: Maintenance Action

#### Assessments

Contributing Factors / Situations: Aircraft

Primary Problem: Aircraft

#### Narrative: 1

The First Officer (FO) exited the cockpit as Flight Attendants (FA) 01,02,04 entered the aircraft. He asked if we noticed any unusual odor in the cabin. We stopped to assess the environment and agreed that there was a definite odor in the cabin. He suggested we exit the plane as he suspected there was a fume event occurring. He opened the jetway door to allow fresh air to enter and dissipate the smell. At this time the Captain entered the jetway from the terminal. He immediately said he smelled an odor and told us all to go back up into the terminal. Maintenance was called to investigate. The flight canceled. Anything short of re-configuring the bleed air systems on all aircraft will not stop these occurrences from happening.

# Synopsis

Air carrier Flight Attendant reported a fume event during preflight. Captain had entire crew deplane followed by Maintenance cancelling flight.

# ACN: 1958273 (40 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 0601-1200

#### Place

Locale Reference.ATC Facility: ZZZ.TRACON

State Reference: US

#### Aircraft

Reference: X

ATC / Advisory.TRACON: 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 E: ZZZ

### Component: 1

Aircraft Component: Coalescer Bag

Aircraft Reference : X Problem : Malfunctioning

#### Component: 2

Aircraft Component: Pneumatic Ducting

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Cabin Jumpseat Cabin Activity: Safety Related Duties

Function. Flight Attendant : Flight Attendant (On Duty) Function. Flight Attendant : Flight Attendant In Charge

Qualification.Flight Attendant: Current

ASRS Report Number. Accession Number: 1958273

Human Factors: Time Pressure Human Factors: Troubleshooting

Human Factors: Workload

Human Factors: Physiological - Other

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Detector.Person: Flight Crew

Detector.Person: Flight Attendant

When Detected: In-flight

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action Result.Flight Crew: Landed As Precaution

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

I was sitting in my jumpseat on climb when I (Flight Attendant #4 (FA)) noticed a very strong rancid, sweat, locker room smell. I asked the #2 Flight Attendant if she smelt anything which she said she did. I immediately referred to my manual: odor and fumes section and began reviewing procedure and fume categories. Once determined to fall into a category (oil source), I called the #1 who also reported smelling the fume. The number one reported she would call the Captain. The Captain called back to myself and the #2 to gather more information, at which point I began to feel ill. The Captain reported he would go through his checklist, and I began to assess the cabin for potential smoke and sources. No smoke or sources were found. Flight Attendants continued to communicate I began to feel more ill, with weakness, headache, cough, throat pain, shaking, and slow cognitive processing. The Captain made a PA stating that we would be returning to ZZZ due to odor in the cabin. At that time the number 1 asked me to see if any passengers smelt the odor as someone in first class reported that smelt something, I asked the final rows in which XXD reported he smelt "burning grease". I wore a mask and breathed through my shirt but the fume/odor continued to be overwhelming. I got in my jump seat and preformed my 30 second review, following procedure, as we prepared for landing. Once landing we waited on the taxiway for several minutes before being brought to the gate. Upon the seatbelt sign going off I monitored and challenged to disarm the door and continued to smell the odor, the #1 and 2 completed all call and the passengers were informed of an aircraft change. I continued to feel ill. Once off the aircraft the pilots reported smelling burning, and maintenance also reported smelling an odor. I met with [a supervisor] who quided me in getting to a hospital to be checked due to presenting symptoms. I contacted [Company] and proceeded to the hospital and was assessed/treated.

# Synopsis

Air Carrier Flight Attendant reported a fume event during flight. After conferring with flight attendants the Captain elected to return to departure airport where a safe landing was completed and maintenance support was provided.

# ACN: 1958190 (41 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 0001-0600

#### Place

Locale Reference.ATC Facility: ZZZ.TRACON

State Reference: US

### Environment

Flight Conditions: VMC

#### Aircraft

Reference: X

ATC / Advisory.TRACON: 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 Flight Phase: Climb Airspace.Class E: ZZZ

### Component

Aircraft Component: Pneumatic Ducting

Aircraft Reference : X Problem : Malfunctioning

#### Person: 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: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Experience.Flight Crew.Total: 5225 Experience.Flight Crew.Last 90 Days: 156

Experience. Flight Crew. Type: 652

ASRS Report Number. Accession Number: 1958190

Human Factors: Workload Human Factors: Time Pressure Human Factors: Troubleshooting

#### Person: 2

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function. Flight Crew: Captain Function. Flight Crew: Pilot Flying Qualification. Flight Crew: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Experience.Flight Crew.Total: 801

Experience. Flight Crew. Last 90 Days: 238

Experience.Flight Crew.Type: 801

ASRS Report Number. Accession Number: 1958199

Human Factors: Troubleshooting Human Factors: Time Pressure Human Factors: Workload

#### **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 When Detected: In-flight

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action

Result.Flight Crew: Overcame Equipment Problem

Result.Flight Crew: Requested ATC Assistance / Clarification

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

So in the pre-flight, I came back from doing an extensive walk around and came back up to the cockpit and was taking off lots of layers of clothing when I noticed a light haze and it did haze up in the cabin and have a smell. The mechanic that was on the aircraft came up to the flight deck. He checked for faults but nothing. The aircraft to our right was getting de-iced and we figured with the wind it probably injected a little of the de-ice fluid and it was going away. The mechanic released the flight saying it was probably deciding fluid. After we took off on the climb we noticed it came back and the Flight Attendants (FA) said they smelt it too very strongly towards door XX there was a faint smoke as well. Flight crew [requested priority handling] to turn back to ZZZ for safety. We accomplished the Fume Event checklist and the Overweight Landing checklist as well. Dispatch send landing data. We came back to the departure runway for a landing. We pulled off the runway. Fire crew then conducted there safety checks on heat and smoke and felt it was safe to return to the gate. We returned to the gate.

#### Narrative: 2

[This flight] was planned and released in compliance with FAR 121, the [company] Flight Operations Manual (FOM), and Boeing 777 Flight Manual. During pre-flight, an odor of unknown origin was noted in the cockpit and Maintenance Control was consulted. The conclusion provided by Maintenance Control regarding the odor was a suspected deicing

fluid that had migrated into the pneumatic ducting. Considering the snow event at ZZZ the day prior, and that the aircraft had been on the ground in ZZZ overnight, the explanation seemed plausible. Maintenance Control provided a maintenance release document and the flight proceeded. After departure and upon climb out a strong odor and faint smoke was noted in the cockpit at the same time that a Flight Attendant in the AFT galley reported that there was smoke in the cabin. The Captain [requested priority handling to] return to ZZZ. The Fume Event checklist; and the Overweight Landing checklists were completed in addition to normal procedures. Runaway condition data was obtained and stopping distance was verified for ZZZ Runway XXC. The approach and landing was conducted and upon exiting the runway the aircraft was stopped to allow Airport Rescue and Firefighting to evaluate the aircraft with FLIR sensors. No fire or hotspots on the aircraft were reported by Crash Fire Rescue or observed by the crew. The aircraft was taxied to the gate. Customer service met the aircraft to accommodate the passengers and Maintenance Control was debriefed on the event. The flight deck crew was subsequently debriefed by the Chief Pilot and deemed capable of continuing the duty period. Threat and Error Management CRM skills were used effectively in all phases resulting in a successful outcome.

## Synopsis

Air Carrier Flight Crew reported a fume event during initial climb. The flight crew returned to the departure airport where a safe landing was completed

# ACN: 1958159 (42 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 1801-2400

#### Place

Locale Reference.ATC Facility: ZZZ.Tower

State Reference: US

Altitude.MSL.Single Value: 2000

### 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: Final Approach

### Component

Aircraft Component: Coalescer Bag

Aircraft Reference : X Problem : Malfunctioning

### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function.Flight Crew: Pilot Not Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine Experience.Flight Crew.Total: 81 Experience.Flight Crew.Last 90 Days: 81

Experience. Flight Crew. Type: 81

ASRS Report Number. Accession Number: 1958159

Human Factors: Workload Human Factors: Time Pressure Human Factors: Troubleshooting

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected: In-flight

Result.General: Maintenance Action Result.Flight Crew: Landed As Precaution

Result.Flight Crew: Overcame Equipment Problem

### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

### Narrative: 1

With approximately 5 minutes of flight [remaining], while on approach, both pilots and forward cabin crew observed a smell similar to dirty socks. No system malfunctions were observed. Uneventful landing and taxi to the gate ensued. ELB entry made.

## Synopsis

Air Carrier Flight Crew reported a "dirty socks" odor during final descent. Flight crew continued to a safe landing and submitted an electronic logbook entry.

# ACN: 1958082 (43 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 0601-1200

#### Place

Locale Reference.ATC Facility: ZZZ.TRACON

State Reference: US

Altitude. MSL. Single Value: 7000

#### Aircraft

Reference: X

ATC / Advisory.TRACON: 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 : Climb

Flight Phase : Initial Climb Airspace.Class E : ZZZ

### Component

Aircraft Component: Pneumatic Ducting

Aircraft Reference : X Problem : Malfunctioning

#### Person: 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: Instrument

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number.Accession Number: 1958082

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors: Physiological - Other

Human Factors: Time Pressure

### Person: 2

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: First Officer Function.Flight Crew: Pilot Flying Qualification.Flight Crew: Multiengine Qualification. Flight Crew: Instrument

Qualification.Flight Crew: Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 1958229

Human Factors: Troubleshooting Human Factors: Time Pressure Human Factors: Physiological - Other

Human Factors: Workload

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected: In-flight

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action

Result.Flight Crew: Overcame Equipment Problem

Result. Flight Crew: Requested ATC Assistance / Clarification

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

During the climb out of ZZZ we were passing through about 7,000 ft. The bleed configuration was still the same from takeoff: engine bleeds on, APU bleed off, packs auto, isolation valve auto, recirc fans on, trim air on. Around this time we entered icing conditions and turned the engine anti-ice on. Moments later we received a call from the cabin. They reported a "strong burning" smell, no visible smoke, and it was not obvious where it was coming from. While the First Officer (FO) and I began to diagnose the situation we received another call from the cabin indicating that odor was getting worse. The FO and I put our oxygen masks on, [requested priority handling] to return to ZZZ. Throughout the event the Flight Attendants (FA) reported difficulty breathing, dizziness, and one of them developed a nose bleed. We ran the non-normal checklist. The Flight Attendants reported that odor/fumes had improved in the back of the aircraft and the forward Flight Attendant stated it was no longer getting worse. The approach and landing was normal. Airport Rescue and Firefighting (ARFF) did a thermal scan of the aircraft after we cleared the runway. Everything on the exterior of the aircraft appeared normal. We taxied to the terminal and deplaned normally. The Flight Attendants reported that none of the passengers had requested medical assistance. The number 4 Flight Attendant with the nose bleed reported they were in stable condition to complete the deplaning process and was treated for the condition afterwards. Communicating with the oxygen masks on is very loud and adds a distraction and barrier to communication. Task saturation was a challenge as well. Reinforcing the importance of following SOPs and using good threat and error management will help crews navigate events like these with a successful outcome.

Narrative: 2

During initial climb, Flight Attendants called to report an odor in the cabin. Captain and I donned our oxygen masks, [requested priority handling to departure airport], completed the appropriate checklists and returned to ZZZ without further incident. The only suggestion that I have is to train pilots exactly how to communicate with the oxygen mask on.

# Synopsis

Air Carrier Flight Crew reported a Flight Attendant notification of a "strong burning" odor in the cabin during initial climb. Flight crew returned to the departure airport where a safe landing was completed.

# ACN: 1958067 (44 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 1801-2400

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference : US Altitude.AGL.Single Value : 0

# Aircraft

Reference: X

Aircraft Operator: Air Carrier Make Model Name: A319 Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan: IFR Mission: Passenger Flight Phase: Parked

### Component: 1

Aircraft Component : APU Aircraft Reference : X Problem : Malfunctioning

### Component: 2

Aircraft Component: APU Pneumatic System & Ducting

Aircraft Reference : X Problem : Malfunctioning

### Component: 3

Aircraft Component: Coalescer Bag

Aircraft Reference: X

Problem: Improperly Operated

#### Person: 1

Location Of Person.Aircraft: X Location In Aircraft: Door Area Reporter Organization: Air Carrier Function.Flight Crew: Pilot Not Flying

Function.Flight Crew: Captain

Qualification. Flight Crew: Multiengine

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument

ASRS Report Number. Accession Number: 1958067

Human Factors: Workload

Human Factors: Physiological - Other

Person: 2

Location Of Person.Aircraft: X
Location In Aircraft: Door Area
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
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: 1958069

Human Factors: Physiological - Other Human Factors: Troubleshooting

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Anomaly, Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected : Aircraft In Service At Gate Result.General : Flight Cancelled / Delayed

Result.General: Maintenance Action

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

#### Narrative: 1

Upon walking down the jet bridge to board the plane, the First Officer (FO) and Flight Attendants (FA) starting vacating the aircraft, explaining they just experienced a fume event when they boarded. As the gate agent and I got closer to the aircraft door we also both confirmed this. We left the area immediately. None of the crew requested medical help, but the FO reported feeling mentally hazy. The aircraft had just been brought over from the maintenance hanger, and the APU and packs were on.

### Narrative: 2

Walked down the jet bridge. I could smell something. Once I got on the plane I noticed the dirty socks smell. I walked to the back of the plane and made sure no one was on that I could smell it back there too. Flight Attendant's (FA) were just coming on I told them to get off the plane immediately. I called maintenance on the radio and grabbed the Aircraft Maintenance Logbook (AML) and left the plane. These re-happening way to often. I just went to the hospital two weeks ago for a fume event. Suggestions - I believe the FAA needs to seriously start investigating these. How many people are being exposed to these neurotoxins everyday? It is unacceptable!

# Synopsis

Air Carrier Flight crew reported a fume event upon reaching the aircraft for pre-flight. Flight crew vacated the aircraft and submitted a logbook entry.

# ACN: 1958063 (45 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 1201-1800

#### Place

Locale Reference.ATC Facility: ZZZ.TRACON

State Reference: US

#### Aircraft

Reference: X

Aircraft Operator: Air Carrier Make Model Name: A319 Crew Size. Number Of Crew: 2 Operating Under FAR Part: Part 121

Flight Plan : IFR Mission : Passenger

Flight Phase: Initial Climb

Flight Phase: Climb

### Component

Aircraft Component: Cooling Fan, any cooling fan

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain

Function. Flight Crew: Pilot Not Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 1958063

Human Factors: Workload Human Factors: Troubleshooting Human Factors: Time Pressure

### **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: 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

On departure a strong smell of electrical insulation could be detected coming out of the vents in the cockpit. It got stronger as we climbed. I called the Flight Attendant (FA) and asked to check the entire cabin to see if they could detect any smell. They reported no smell. After discussing the situation with the First Officer (FO), I transferred control over to him. The FO [requested priority handling] and I ran the QRH procedure for the Smoke and Fumes and also for the overweight landing. The smell went away once I had turned off the avionics cooling system. Fire trucks were awaiting for our arrival. FO performed the landing and I noted the VSI at touchdown was -200 fpm. Once we exited the runway, I made a PA to passengers to remain seated and that we would return to the gate. I spoke to ZZZ Chief Pilot and Dispatcher. Submitted via the iPad the report to maintenance. Aircraft Maintenance Logbook entry made. Cause - Electrical odor smell in cockpit.

# Synopsis

Air Carrier Flight Crew reported a strong electrical insulation odor during initial climb. The Flight Crew returned to the departure airport and landed.

# ACN: 1957998 (46 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 1201-1800

#### Place

Locale Reference.ATC Facility: ZZZZ.ARTCC

State Reference: FO

Altitude.MSL.Single Value: 8000

#### Aircraft

Reference: X

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: Descent

#### Person

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: 1957998

Human Factors: Troubleshooting

Human Factors: Workload

Human Factors : Physiological - Other

Human Factors: Time Pressure

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected: In-flight

Result.General: Maintenance Action

Result.Flight Crew: Overcame Equipment Problem

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

Narrative: 1

Upon arrival into ZZZZ, around 8,000 ft. I detected a subtle chemical odor which I could not immediately determine the cause. It was faint, and was not an odor I had experienced before, not like the old dirty sock smell. I didn't mention what I had noticed to the Captain since it was so subtle and I was still trying to personally classify the odor. Shortly later a call from the flight attendants came up and I knew immediately they were calling about that odor. They had mentioned a strong smell in the aft cabin, rows 27 forward to 12, which resembled a magic marker, vinegar, chemical smell. They said it was strong and that passengers could smell it as well. We were around 6,000 ft. when we were notified. We referenced the FCOM (Flight Crew Operations Manual) Odor Recognition and Isolation quide, but due to the short duration of the remainder of the flight we did not have the appropriate time to isolate systems and wait to see if the odor would dissipate or not. The Captain called back a short while later to see if there had been any improvements to the odor. The response was that it was still present but had dissipated and now had a sweet smell. The flight landed and arrived at the gate without incident. Upon landing we contacted the flight attendants to get a summary of what they experienced to make an accurate logbook entry. The FA (Flight Attendant) 3 had noticed the odor the most and was the first to make the call, so we queried him. His summary was as stated before, that he had noticed the strong magic marker, vinegar, chemical smell around the 10,000 ft. chime, and it continued upon descent. He called us shortly after experiencing the smell and had asked other customers and flight attendants if they smelled anything, which they agreed. It dissipated slightly, but remained for the rest of the flight. He stated that the strong chemical smell dissipated into a sweet smell, but he complained of a slight throat irritation. A logbook entry was made, an odor report filled out, and Maintenance was contacted.

## Synopsis

A321 First Officer reported a fume event during descent, which was also experienced by the flight attendants. Flight landed safely and a logbook entry was submitted.

# ACN: 1957995 (47 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 1801-2400

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 0

#### Environment

Weather Elements / Visibility: Rain

### Aircraft

Reference: X

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

Flight Plan: IFR Mission: Passenger Flight Phase: Parked

### Component: 1

Aircraft Component : APU Aircraft Reference : X Problem : Malfunctioning

### Component: 2

Aircraft Component: APU Pneumatic System & Ducting

Aircraft Reference : X Problem : Malfunctioning

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 1957995

Human Factors: Workload

Human Factors: Troubleshooting

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly, Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor

Detector.Person : Flight Crew Detector.Person : Flight Attendant

When Detected: Aircraft In Service At Gate

Result.General: Maintenance Action

Result.General: Flight Cancelled / Delayed

Result.Flight Crew: Overcame Equipment Problem

### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

### Narrative: 1

We were at the gate waiting on a Maintenance Technician to sign off the logbook of a discrepancy. I started up the APU and when I turned on the APU Bleed, a very strong foul odor filled the flight deck and cabin. The Maintenance Technician concurred with the odor so we proceeded to the cabin to verify the odor. The odor was extremely strong throughout the cabin. The flight attendants were very nervous and concerned with the smell. I went back to the flight deck and turned off the APU Bleed and the odor started to slowly dissipate. The Maintenance Technician called Maintenance Control after I wrote up the odor. Maintenance Control decided to take the aircraft out of service based on what the Maintenance Technician told them and they quickly were able to get us a new aircraft. None of the crew were feeling any ill affects from the odor and were comfortable continuing in the new aircraft. No customers were onboard.

### Synopsis

A320 Captain reported a very strong, foul odor filled the entire aircraft shortly after APU startup during preflight. Maintenance removed the aircraft from service.

# ACN: 1957944 (48 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 1801-2400

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

#### Aircraft

Reference: X

ATC / Advisory.TRACON: 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 Flight Phase: Initial Climb

Flight Phase : Initial Clim Airspace.Class B : ZZZ

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification. Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 1957944

Human Factors: Workload Human Factors: Troubleshooting Human Factors: Time Pressure

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Detector.Person : Flight Crew When Detected : In-flight

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action

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

Encountered an odor event in the cabin after departure. We ran the appropriate checklist and returned to ZZZ. At least one crewmember required medical help after the flight. Maintenance issue.

# Synopsis

A319 Captain reported a fume event in the cabin during initial climb. After running the appropriate checklists, the flight crew elected to perform an air turnback.

## ACN: 1957471 (49 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 0001-0600

#### Place

Locale Reference. Airport: ZZZ. Airport

State Reference: US

Altitude. AGL. Single Value: 0

#### Aircraft

Reference: X

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: Parked

#### Person

Location Of Person. Aircraft: X

Location In Aircraft: General Seating Area

Cabin Activity: Boarding

Cabin Activity: Safety Related Duties Reporter Organization: Air Carrier

Function.Flight Attendant : Flight Attendant In Charge Function.Flight Attendant : Flight Attendant (On Duty)

Qualification.Flight Attendant: Current

ASRS Report Number. Accession Number: 1957471

Human Factors: Troubleshooting

Human Factors: Workload

Human Factors: Physiological - Other

#### **Events**

Anomaly. Aircraft Equipment Problem: Less Severe

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Flight Deck / Cabin / Aircraft Event : Illness / Injury

Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy

Anomaly. Deviation / Discrepancy - Procedural : FAR

Detector.Person : Flight Attendant Detector.Person : Flight Crew

When Detected : Aircraft In Service At Gate Result.General : Flight Cancelled / Delayed

Result.General: Maintenance Action

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem: Aircraft

#### Narrative: 1

I was FA (Flight Attendant) #4. Flight and cabin crew boarded the aircraft at approximately XA: 45. The #2 and I went to the rear of the aircraft. Just prior to boarding the #2 commented that the cabin looked hazy and I concurred. It was the entire cabin but appeared more profound mid cabin. A slight smell of burning plastic and a musty odor combination followed. At that point, boarding had begun and the smell worsened but the haze seemed to clear. After boarding was in progress for about 10 minutes, the smell began to give me a headache as well as the #2. At that point we notified the #1 who then notified the cockpit. From what I was told, the FO (First Officer) also began to notice the smell. The Captain then walked through the cabin and noticed the smell as well. At that point the Captain stopped the boarding. Mechanics were called and showed in about 5 - 10 minutes. After the mechanics walked through the cabin the decision was made to have the boarded passengers and crew exit the aircraft. That was at approximately XB: 45 - XC:00, from my recollection. At that time I was experiencing a full blown headache. The aircraft was taken out of service and the crew waited for another replacement aircraft. My headache lasted a good part of the day until early evening. [I suggest to] determine and address the cause and not the symptom. After years of reporting on symptoms, i.e. what it smells like, what it looks like, and when it happens, a cause needs to be determined. And whatever the cause is, what is contained in these fumes needs to be determined. Short term effects are headache etc., but what are the long term effects. A carbon dioxide test is useless if the culprit is not carbon dioxide.

## Synopsis

Air Carrier Flight Attendant reported a fume event during boarding. The rest of the flight crew also noticed the odor and fumes. After maintenance arrived, the passengers and flight crew deplaned and the aircraft was taken out of service.

# ACN: 1957210 (50 of 50)

# Time / Day

Date: 202212

Local Time Of Day: 1801-2400

#### Place

Locale Reference. Airport: ZZZZ. Airport

State Reference : FO Altitude.AGL.Single Value : 0

#### Aircraft

Reference: X

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 Flight Phase: Parked

### Component

Aircraft Component : APU Aircraft Reference : X Problem : Failed

#### Person

Location Of Person.Aircraft: X Location In Aircraft: Flight Deck Reporter Organization: Air Carrier Function.Flight Crew: Captain Function.Flight Crew: Pilot Flying

Qualification.Flight Crew: Air Transport Pilot (ATP)

Qualification.Flight Crew: Instrument Qualification.Flight Crew: Multiengine

ASRS Report Number. Accession Number: 1957210

Human Factors: Workload Human Factors: Troubleshooting Human Factors: Time Pressure

### **Events**

Anomaly. Aircraft Equipment Problem: Critical

Anomaly. Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly. Deviation / Discrepancy - Procedural: Maintenance

Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy

Anomaly. Deviation / Discrepancy - Procedural : MEL / CDL

Detector.Person: Flight Attendant Detector.Person: Passenger Detector.Person: Flight Crew

When Detected: Aircraft In Service At Gate

When Detected: Routine Inspection

Result.General: Flight Cancelled / Delayed

Result.General: Maintenance Action

#### Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

Aircraft X experienced a reported fumes event after start of engine #2 at the gate in ZZZZ. Aircraft Y arrived from ZZZ - ZZZZ, having just experienced a fumes event in flight. The inbound Captain placed the write-up in the logbook, completed the Fumes Event worksheet, and debriefed Maintenance. In coordination with Maintenance Control, ZZZZ Maintenance personnel performed the required procedure to troubleshoot the source of the fumes. I coordinated with Company, and Maintenance personnel, and went up to the gate area to inform the customers of the situation. Over the next hour and a half the First Officer and myself assisted the ZZZZ Maintenance personnel to complete the lengthy procedures. The customers and personnel were given periodic updates by myself, while the flight attendants remained in the discussion throughout the process. Coordination and operational updates between myself and the Chief Pilot continued via cellphone throughout the night. It was determined that the likely source of the original fumes event was the APU. Subsequently the Bleed Air portion of the APU was MEL'ed and the aircraft was placed back in service. Customers and crew were briefed and boarding was initiated. At this point, due to CBP (Customs and Border Patrol) limitations, we needed to depart within an hour, which included a 20-minute coordinated extension. Engine #2 was started at the gate due to the APU Bleed Air not being available. After the engine was started, before pushback was commenced, I received an interphone call from the F2 stating the odor/fumes were once again prevalent in the area of Row 23 and that customers were also complaining about the fumes. The FO (First Officer) and myself did not smell any fumes out of the ordinary. The engine was shut down, the jetway was brought back to the aircraft, and the boarding door was opened. Since we were now going to be past our "latest departure time" due to CBP restrictions, it was decided to deplane the customers as we started working with Maintenance on the fumes event. No customer health related issues were noted due to the fumes, to my knowledge. The flight was subsequently cancelled by Operations. The flight attendants were released to a hotel as a new flight segment for the customers was built for the next day... a new plane would be flown in. The customers were briefed about the situation and remained in the boarding area for a time as accommodations were coordinated. The FO and myself remained with the aircraft to continue work with Maintenance. The plan, as coordinated through the Chief Pilot with Operations, was to eventually ferry the aircraft out of ZZZ to a maintenance base, if the aircraft could be placed back in service. After subsequent review, Maintenance Control, Operations, and both the FO and myself all agreed that MEL'ing Air Conditioning Pack #2, along with the already MEL'ed APU Bleed Air, would be sufficient... the aircraft would then be a ferry flight to ZZZ1, as it was the only maintenance base available due to CBP restrictions in the other bases. The length of the maintenance procedure for securing Air Conditioning #2 Pack per the MEL meant we would be close to the airport closing time, at which point we would not be allowed to depart. Coordination was initiated to request the airport closing time be extended for our situation. In the end, just as the maintenance procedure was completed along with the subsequent logbook paperwork, airport Tower reported the airport was closed. It turns out our request to extend the airport closing time was denied but never passed on to us. After further coordination with Operations, the ferry flight was cancelled and rescheduled for the next morning. The FO and I were released to

rest. The Company coordinated to have ZZZZ Immigration come back to the airport and clear the FO and myself back into the country. He also coordinated with our normal driver for airport pickup, as we awaited a hotel assignment. The next day morning, the FO and myself returned to the airport and completed a ferry flight of aircraft to ZZZ2. The flight was uneventful with no fumes/odors noted.

# Synopsis

A321 Captain reported a fume event during preflight. After extensive maintenance action with no remedy, the flight was cancelled and ferried to a maintenance base the following day.