

## ASRS Database Report Set

# Air Carrier (FAR 121) Flight Crew Fatigue Reports

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Report Set Description ..... A sampling of reports referencing air carrier  
(FAR 121) flight crew fatigue issues and duty  
periods.

Update Number .....29

Date of Update.....March 24, 2022

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

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



TH: 262-7

**MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data**

**SUBJECT: Data Derived from ASRS Reports**

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

ASRS reports are submitted voluntarily. Such incidents are independently submitted and are not corroborated by NASA, the FAA or NTSB. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

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

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

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

A handwritten signature in blue ink, appearing to read "B. Hooey".

Becky L. Hooey, Director  
NASA Aviation Safety Reporting System

## CAVEAT REGARDING USE OF ASRS DATA

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

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

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

# Report Synopses

ACN: 1808895 *(1 of 50)*

### Synopsis

Air Carrier Captain reported strong odors, a PACK 1 FAIL issue and vibrations during initial descent. The flight crew decided to divert to nearest suitable airport for an expedited descent and successful landing.

ACN: 1806186 *(2 of 50)*

### Synopsis

A319 Captain reported a fume event during pre-flight that resulted in reporting fatigued due to physiological symptoms.

ACN: 1805270 *(3 of 50)*

### Synopsis

Air carrier Captain reported the PF overshoot the assigned altitude during arrival and attributed it to fatigue, workload and the PF had not flown in a year.

ACN: 1802319 *(4 of 50)*

### Synopsis

Air carrier flight crew reported an altitude and track heading deviation during approach to an international airport. The crew stated this sequence of flights, since the COVID-19 pandemic started, are very long and fatiguing which may have been a factor in the event.

ACN: 1800917 *(5 of 50)*

### Synopsis

Air Carrier First Officer reported an altitude deviation during approach caused by possible fatigue, a late runway change and lack of recent flying experience during the pandemic.

ACN: 1800908 *(6 of 50)*

### Synopsis

Air carrier Captain reported final configuration was not accomplished until 700 feet which is not in accordance with the manual.

ACN: 1797710 *(7 of 50)*

### Synopsis

Air carrier Captain reported failing to properly configure for the approach due to distraction and fatigue.

ACN: 1796483 *(8 of 50)*

### Synopsis

Air Carrier First Officer reported fatigue related concerns with the scheduling of particular international flights since the COVID-19 pandemic began.

ACN: 1793523 *(9 of 50)*

### Synopsis

Air carrier First Officer reported calling in fatigued due to several maintenance related delays and company scheduling techniques that push the limits of legal rest periods.

ACN: 1793504 *(10 of 50)*

### Synopsis

An air carrier pilot reported GPS jamming.

ACN: 1791270 *(11 of 50)*

### Synopsis

Air carrier flight crew reported turning the wrong way on a taxiway at night and when turning around exited the taxiway surface due to poor taxiway lighting and markings at LGA airport.

ACN: 1787245 *(12 of 50)*

### Synopsis

Air carrier flight crew reported descending too low while conducting an approach at night.

ACN: 1786588 *(13 of 50)*

### Synopsis

Air carrier First Officer reported an altitude excursion occurred when the flight encountered an unforecasted mountain wave.

ACN: 1786484 *(14 of 50)*

### Synopsis

Air carrier Captain reported that while the First officer was hand-flying a visual approach, they descended below glide slope and observed four red lights on the PAPI. The crew leveled off and continued to landing.

ACN: 1785472 *(15 of 50)*

### Synopsis

A321 First Officer reported that right engine reverser failed to deploy. Post-flight inspection revealed that the reverser was locked out in a manner that was not visible during preflight.

ACN: 1784970 *(16 of 50)*

### Synopsis

Air carrier Captain reported taxiing on ramp without clearance and stated they had lost situational awareness as a result of a long and fatiguing day.

ACN: 1784768 *(17 of 50)*

### Synopsis

B737-800 flight crew reported executing a go-around due to improper flap setting on short final.

ACN: 1783318 *(18 of 50)*

## Synopsis

MD-11 flight crew reported fatigue and confusion resulted in a Rejected Take Off due to misdiagnosing a Bleed Air/ Pack/ Anti Ice Issue.

ACN: 1783091 *(19 of 50)*

## Synopsis

Air Carrier flight crew reported a heading deviation caused by not following SOP's and a change to the crew's normal procedures due to the pandemic.

ACN: 1782864 *(20 of 50)*

## Synopsis

Air carrier First Officer reported a flight pairing where they had no proper food available and minimal sleep leaving them fatigued and hungry during flights.

ACN: 1782106 *(21 of 50)*

## Synopsis

EMB-175 First officer reported a fumes event during initial climb resulting in a diversion.

ACN: 1781908 *(22 of 50)*

## Synopsis

B737-300 Captain reported they lost flight instruments on both sides and navigation capability during climbout resulting in a diversion. Captain stated the IRUs were not properly aligned and cited multiple distractions and fatigue as contributing factors.

ACN: 1781788 *(23 of 50)*

## Synopsis

Air carrier First Officer reported a track heading deviation during departure from SLC airport. First Officer cited feeling drowsy due to not consuming caffeine after a big breakfast may have contributed to the event.

ACN: 1780959 *(24 of 50)*



## Synopsis

Air carrier First Officer reported this crew rotation/pairing is not safe due to a fatigue factor.

ACN: 1780949 *(25 of 50)*

## Synopsis

Air carrier Captain reported Scheduling ongoing assignment changes during crew rest period resulting in his refusal of assignment due to fatigue

ACN: 1780276 *(26 of 50)*

## Synopsis

Air Carrier Captain reported several operational errors occurring after a long ground delay long due to an "ATC Zero" event.

ACN: 1780260 *(27 of 50)*

## Synopsis

Air carrier Captain reported exceeding 250 knots below 10,000 feet during descent. Captain cited fatigue and lack of flying as contributing factors.

ACN: 1780188 *(28 of 50)*

## Synopsis

Air carrier Captain reported that the flight crew count on a trip pairing had been reduced and cited multiple issues associated with the reduction.

ACN: 1779910 *(29 of 50)*

## Synopsis

Air carrier flight crew reported an unstablized approach and cited fatigue, time pressure and reduced flying as contributing factors.

ACN: 1778670 *(30 of 50)*

## Synopsis

Air Carrier First Officer reported they called in fatigued due to not being able to get sufficient rest from the previous four days flying schedule.

ACN: 1778510 *(31 of 50)*

## Synopsis

Airbus First officer reported a go-around caused by late clearance to descend and confusion caused by a similar call sign for an aircraft preceding them.

ACN: 1777575 *(32 of 50)*

## Synopsis

Air Carrier Pilots reported the First Officer became ill inflight and was unable to perform pilot duties.

ACN: 1773317 *(33 of 50)*

## Synopsis

Air carrier Captain reported receiving a flap aural warning message due to having an incorrect flap setting on final approach.

ACN: 1772336 *(34 of 50)*

## Synopsis

Air Carrier First Officer reported not following Standard Operating Procedures in a wind shear situation during departure and cited fatigue, weather, and low flight time in the last several months as contributing factors.

ACN: 1771899 *(35 of 50)*

## Synopsis

Reporter reported conflicting guidance on the BUF ILS 05 instrument approach chart referencing autopilot use.

ACN: 1770792 *(36 of 50)*

## Synopsis

B777 Captain reported "strong old sock odor" during pre-flight at the gate resulting in maintenance inspection and ultimately an aircraft swap. The new aircraft required cleaning causing further delays. The flight crew decided they were unfit to fly due to all the delays.

ACN: 1770650 *(37 of 50)*

## Synopsis

Air carrier First Officer reported approach clearance deviation resulting in ATC assigned vectors to restart the approach for an uneventful landing.

ACN: 1770055 *(38 of 50)*

## Synopsis

Air Carrier Captain reported a track deviation and cited task saturation, hunger and lack of flying as contributing factors.

ACN: 1765996 *(39 of 50)*

## Synopsis

Air carrier Captain reported making a procedural error during preflight and cited a distraction and lack of recent flying as contributing factors.

ACN: 1765758 *(40 of 50)*

## Synopsis

Air carrier pilot reported an unstabilized approach resulting in a go-around.

ACN: 1764297 *(41 of 50)*

## Synopsis

B757-200 flight crew reported Flight Director anomaly on approach.

ACN: 1761777 *(42 of 50)*

## Synopsis

Air carrier Check Airman reported not following the published checklist due to fatigue and not having flown in the last 6 months.

ACN: 1761773 *(43 of 50)*

## Synopsis

Air Carrier Captain reported a track deviation during approach and cited fatigue and low flight time during the pandemic as contributing factors.

ACN: 1761319 *(44 of 50)*

## Synopsis

Air carrier Captain reported an altitude deviation during approach.

ACN: 1760747 *(45 of 50)*

## Synopsis

Captain reported fatigue and confusion resulted in a delay due to misapplication of an MEL.

ACN: 1759362 *(46 of 50)*

## Synopsis

Air Carrier Captain reported setting and taking off with an incorrect flap position.

ACN: 1759257 *(47 of 50)*

## Synopsis

B777-200 flight crew reported an altitude deviation during cruise due to fatigue.

ACN: 1758916 *(48 of 50)*

## Synopsis

Air carrier flight crew reported numerous changes to the arrival resulted in a crossing restriction altitude overshoot.

ACN: 1758641 *(49 of 50)*

### Synopsis

Air Carrier First Officer reported missing an altitude constraint during arrival and cited workload, fatigue and lack of flight currency as contributing factors.

ACN: 1754622 *(50 of 50)*

### Synopsis

Air carrier Captain reported experiencing extreme fatigue on a two-leg international assignment.

# **Report Narratives**

ACN: 1808895 (1 of 50)

## Time / Day

Date : 202105

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 330

Altitude.MSL.Single Value : 18000

## Aircraft

Reference : X

ATC / Advisory.Center : ZZZ1

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 : Descent

Airspace.Class A : ZZZ1

## 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 : 1808895

Human Factors : Workload

Human Factors : Time Pressure

Human Factors : Fatigue

## Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Flight Crew  
When Detected : In-flight  
Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action  
Result.Flight Crew : Diverted  
Result.Flight Crew : Overcame Equipment Problem  
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

I reviewed the maintenance log when I arrived at the aircraft for the first flight of the day. It had just been released from maintenance. It had previously been written up for a strong smell coming from the lavatory. The corrective action stated that the lavatory had been leaking into the cargo bay. It had been repaired the same day and I was the first to fly the aircraft. I included this information with my crew brief. During the descent to ZZZ1, sometime prior to FL180 because the descent checklist had yet to be completed, the FO (First Officer) and I heard what sounded like an extra loud flushing noise from the FWD LAV (Forward Lavatory), but then developed into a loud sound similar to an engine spooling down, immediately followed by a strange, slightly chemical odor. We both looked at each other and confirmed what we heard and smelled. I called the A F/A (Flight Attendant) to verify if anyone had just flushed the toilet. She said someone was in the lavatory, had just flushed, and it smelled strongly like excrement. The odor quickly subsided. We discussed the possible sources. The LAV was a different style from most of our aircraft so it could have just been a sound [different] than what we were used to. The LAV had just been repaired so the odor could have been related. Since there odor was gone and there were no other indications of abnormality we continued to ZZZ1 but I had the FO start reviewing synoptic pages for any clues and I started reviewing possible diversion airports. We made a list of airports closest to our position as we got closer to ZZZ1, ZZZ2, then ZZZ3, then ZZZ4. During descent after passing through FL180, I started to hear and feel the aircraft surging. It sounded like it was coming from the engines. I de-cluttered the EICAS to check for vibration. There was a notable difference in engine vibration, but they were still in the green and there were no other indications on the EICAS. At approximately 13,000 ft. the FO and I both noticed a strong acrid odor. I called the A F/A who confirmed the LAV was not in use. I then called for the Smoke, Fire, Fumes QRC (Quick Reference Checklist). We donned our oxygen masks and the FO started through the QRC. We were almost exactly on top of ZZZ3, which we had already decided as a suitable airport, so when the FO [read the steps related to ATC] of the QRH (Quick Reference Handbook) I told him to [request priority handling] and ask to land at ZZZ3 immediately. ATC assigned an ALT of 9,000 ft. As I started to descend, the aircraft began shaking violently. ATC continued to vector and assign lower altitudes. When the FO turned off the RECIRC fans per the QRH, I asked him to put the checklist down and set up the aircraft for landing. We were very close to the airport and descending quickly. I decided the priority was for the FO to get our landing numbers and set up the approach while coordinating with ATC and the FA's. I could not help because I suspected external damage to the control surfaces so I did not want to take my attention away from maintaining positive control of the aircraft. Somewhere around the 9,000 ft. mark or lower we received an EICAS PACK 1 FAIL. This was the first time the EICAS provided any kind of indication of



an abnormality. We had experienced a loud noise, strong odors, violent shaking, and now a PACK 1 FAIL. It felt as if the aircraft had suffered major damage and safe completion of the flight was at serious risk. ATC had placed us on a downwind for the ILS but, fearing we may be losing more systems and controllability, I told the FO we were turning immediately to final. As we slowed to approach speeds the shaking reduced. The FO contacted the FA's to go over [procedures]. I did not order a brace and I did not intend to evacuate. The aircraft was stabilizing and there weren't any smoke or fire indications in the cabin or flight deck. I landed and stopped on the runway. I requested an inspection by the fire trucks to make sure the aircraft wasn't on fire and we were safe to taxi. I made an announcement for everyone to remain seated and that we had landed due to a maintenance issue, but that the aircraft was safe and we were taxiing to a gate. In our judgement, due to the order and severity of events, we thought the aircraft may be in serious jeopardy. An immediate landing was the safest option available. I have often conducted a very similar scenario with FO's on long flights out of the area and near ZZZ3, during cruise. The scenario is a fume event. The reason this is important is because the QRH for fumes is very long and involves a lot of system isolation for troubleshooting. It would take 20-30 minutes for us to review the QRH in a relaxed, stable environment. Only at the end of the QRH do you see just how much runway would be required if you're heavy and have taken a lot of performance penalties due to the QRH troubleshooting process. Because we were so close to the airport and descending quickly, I prioritized performance and navigation over completing the QRH. There simply was not enough time for the full checklist. Parked at the gate, I called Dispatch and explained what was going on. They weren't aware of the diversion. The FO had asked ATC to notify our company during descent. I was getting bounced around a lot between Dispatch and [Administration] with Maintenance talking to them in the background, but Maintenance immediately insisted that it was a simple air system failure and that the aircraft was safe. Both the FO and I conducted a walk-around. I said the aircraft was not safe to fly. I wouldn't have landed in ZZZ3 if I thought the aircraft was safe. This aircraft needs a full maintenance inspection based on the severity of conditions we had just experienced. [In the past] I've had a hydraulic line rupture at FL200, I've had a brake failure on landing, I've had a full system failure. This was like nothing I had experienced and felt far more severe at the time than just a simple air system failure. It was serious enough that I didn't know if we would make the runway. This aircraft had a recent history of fluids leaking into the cargo bay. How much unseen damage was caused by these fluids? Why wouldn't an inspection be required if the maintenance department is saying "oh yeah the smell and shaking is from the system blowing out"? As I'm trying to convince Dispatch and Maintenance that an inspection needs to be conducted, this is already approaching about 2 hours after landing, the adrenaline started to fade and the fatigue settled in. The entire crew was exhausted to the point that even the FA's were fatigued. Having drilled this scenario, I believe I acted appropriately given the circumstances. QRH calls for system isolation to identify the source but with odor being cause of the [diversion] and no EICAS indications there is no way to verify the source without taking the O2 mask off, which is extremely dangerous. We were so close and working with so little time that getting on the ground immediately became the top priority.

## Synopsis

Air Carrier Captain reported strong odors, a PACK 1 FAIL issue and vibrations during initial descent. The flight crew decided to divert to nearest suitable airport for an expedited descent and successful landing.

## Time / Day

Date : 202105

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A319

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

## Component

Aircraft Component : Air Conditioning Distribution 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 : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1806186

Human Factors : Communication Breakdown

Human Factors : Fatigue

Human Factors : Physiological - Other

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Dispatch

## 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 : Maintenance

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

Detector.Person : Flight Crew

When Detected : Routine Inspection

When Detected : Pre-flight

Result.General : Flight Cancelled / Delayed  
Result.General : Maintenance Action  
Result.General : Physical Injury / Incapacitation

## Assessments

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

## Narrative: 1

We checked in at ZZZ for flight to ZZZ1. Walking onto aircraft to preflight and get ready the FA's (flight attendants) commented that they smelled a strong fume odor in the rear of the cabin. The prior crew had left the APU running and that was providing the air to the cabin. We were not immediately sure what it was but the longer we were inside the aircraft the more it seemed to smell all over the aircraft. One flight attendant soon commented that she had been in a fume smell diversion and that she felt it now smelled exactly like what she had experienced before. As I was contacting Dispatch and Maintenance Control, the ZZZ station without our knowledge or consent had sprayed the entire aft cabin with some kind of disinfectant spray to cover up the smell and had begun to board passengers. When I was made aware of this I radioed them to stop spraying the aircraft, halt the boarding, and remove the passengers that were onboard. Maintenance Control had called a contract Maintenance Tech to investigate the odor. Meanwhile, we had shutdown the APU and connected the ground air. When the Maintenance Tech arrived, he had a bunch of paperwork for items to check, and mentioned that he was going to inspect the APU. He did not seem to know what to check or how to check it. Ultimately he handed me the pile of papers and ask us to run the engines. In an effort to help we did so. We could not specifically determine the source of the smell, but it seemed stronger with the APU providing air. We were unable to isolate the source and could not fly the aircraft or do a maintenance ferry flight. Afterward, Maintenance Control then informed us that the residual contamination in the air ducts would have to be cleaned and tested with special equipment, and that they would have to send a road crew down from ZZZ to perform those functions. So Maintenance Control knew from the start that this type of contamination issue required special procedures and equipment to deal with and withheld that critical information unnecessarily exposing us to who knows what kind of long term health hazards instead of just informing of this up front. After we officially could not use the airplane, it was around XA: 30pm. We were assigned to fly another aircraft for the flight now departing at XG: 15pm. We then spent the next few hours trying to get a day room so we could get a meal and away from the airport before the later flight. Each time we were verbally told we had a room from Crew Tracking, Hotel Desk, etc., we called the hotel and were told there were no such rooms available for us. After wasting a considerable amount of time on this effort we were finally given rooms and arrived at the hotel just after XF: 00pm. I walked down the highway from the hotel to find something to eat after having nothing for several hours. Finally sitting down to eat a sandwich, I realized that I had a dull headache from trying to determine if the fumes were no longer present in the aircraft when isolating certain ducts for Maintenance Control. It dawned on me that I was fatigued and I reported this to Crew Tracking. The cause was Maintenance, fume smells, lack of timely day room. [Captain suggested] better communications with Maintenance and Dispatch.

## Synopsis

A319 Captain reported a fume event during pre-flight that resulted in reporting fatigued due to physiological symptoms.

## Time / Day

Date : 202105

## Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 15000

## Aircraft

Reference : X

ATC / Advisory.Center : 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

Flight Phase : Descent

Route In Use.STAR : ZZZZZ1

Airspace.Class E : ZZZ

## 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 : 26000

Experience.Flight Crew.Last 90 Days : 141.47

Experience.Flight Crew.Type : 9699.97

ASRS Report Number.Accession Number : 1805270

Human Factors : Communication Breakdown

Human Factors : Training / Qualification

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors : Fatigue

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Altitude : Overshoot

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Became Reoriented  
Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

We were descending on the ZZZZZ1 STAR. Just prior to level off at a higher altitude, the controller cleared us to descend via the STAR to 12,000 feet. The PF pointed to the altitude as I set it. However, he went out of VNAV to FLCH because he thought he heard descend to 12,000 feet now. I was busy with a frequency change and getting the new ATIS, and I missed the change in pitch mode. When I looked up, I noticed we were approaching 15,000 feet even though the fix just ahead of us had a at or above 16,000 foot restriction. I called it out and the PF immediately leveled off at 15,000 feet. I immediately informed the Controller and asked if he wanted us to climb back to 16,000 feet. He said we could just "descend to 12,000 feet." There was no conflict with other traffic. I believe this occurred for a number of reasons. It was a very difficult 3-day pairing made longer because of COVID. We were all exhausted, it was a high-workload environment, and the PF had not flown in over a year. He had trouble hearing ATC the entire trip which we attributed to his being off a year. Obviously, there was a breakdown in Verbalize, Verify and Monitor. Lesson learned: especially when tired and in a high-workload environment, strict adherence to SOP is essential.

## Synopsis

Air carrier Captain reported the PF overshoot the assigned altitude during arrival and attributed it to fatigue, workload and the PF had not flown in a year.

## Time / Day

Date : 202104

Local Time Of Day : 0001-0600

## Place

Locale Reference.ATC Facility : ZZZZ.Tower

State Reference : FO

Altitude.MSL.Single Value : 3000

## Environment

Flight Conditions : Marginal

## Aircraft

Reference : X

ATC / Advisory.Center : ZZZZ

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

Nav In Use : GPS

Nav In Use : FMS Or FMC

Nav In Use.Localizer/Glideslope/ILS : XXL/ILS

Flight Phase : Initial Approach

Route In Use : Direct

## 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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1802319

Human Factors : Communication Breakdown

Human Factors : Fatigue

Human Factors : Physiological - Other

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## 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 : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Instrument  
ASRS Report Number.Accession Number : 1802085  
Human Factors : Workload  
Human Factors : Troubleshooting  
Human Factors : Time Pressure  
Human Factors : Physiological - Other  
Human Factors : Other / Unknown  
Human Factors : Fatigue  
Human Factors : Communication Breakdown  
Human Factors : Situational Awareness  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude  
Anomaly.Deviation - Track / Heading : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Ground Event / Encounter : Ground Equipment Issue  
Detector.Person : Flight Crew  
Detector.Person : Air Traffic Control  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Became Reoriented  
Result.Air Traffic Control : Issued Advisory / Alert

## Assessments

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

## Narrative: 1

Intercepting the unstable Localizer on a 225 vector, approximately 16 nm final, the aircraft started to join the Localizer. The Localizer shifted to the right and the aircraft began a hard right turn to intercept passing of approximately 240 degrees. I instructed the FO to stop the turn and come back to the left toward final approach heading. He did not reply to my direction and did not act. As the aircraft passed approximately 255 degrees, I took command of the aircraft, disconnected the auto-pilot and started a turn back to the Localizer. I was concerned about the numerous aircraft on final for Runway XX. In my turn back to the Localizer I overshot the Localizer and deviated from the assigned 900 meter altitude by approximately 100 meters. I intercepted the Localizer, got back on altitude, and flew an uneventful ILS and normal landing. This all happened unexpectedly. The hard right-hand turn to intercept is unprecedented in my XX years of flying [this type aircraft]. Unstable Localizer and Autopilot aggressive turn to intercept. Fatigue affected my flying after taking the aircraft The current schedules to service this country during Covid leave no extra margin of safety when things like this go wrong. Multi-leg days, with long turns



between flights, after crossing X time zones leave little margin of safety. Also, the very long trip extensions for crew members leads to fatigue.

## Narrative: 2

I was the PF for the 2nd leg of the night which was a night recovery. At altitude I had briefed the STAR and approach, and once the descent started, we received numerous altitude, heading, and airspeed clearances as the controller was trying to work what appeared to be a fairly large recovery into ZZZZ [Airport]. ATIS reported that simultaneous ILS approaches were being flown to [Runway] XXL as well as [Runway] YY. Approaching ZZZZ, we were being vectored for the ILS Y, Runway XXL and at about 20 miles were cleared "heading 215, maintain 180 knots to 8 miles, maintain 900 meters until intercepting the Localizer, report established." We were already configured at flaps 15 with the ILS tuned and the approach checklist complete. The assigned heading provided a comfortable 15 degree cut, but with winds of about 120 at 25 knots at our altitude (overshooting crosswind), and parallel approaches being conducted, with the autopilot still engaged, I was diligently watching the automation. I pressed the APP/LAND tile and initially the aircraft maintained heading, but after a few seconds, it started making some gentle (level) turns left and right. Initially these turns were mild and we even chuckled at what a poor job the AP was doing to maintain heading to intercept. Suddenly, the magnitude of one of the turns to the right increased markedly and the aircraft was in a level turn to the right of approximately 25 degrees angle of bank with the heading coming through approximately 230 degrees. As I spent just a few seconds (no more than 4 or 5 I would say) trying to determine what the autopilot was doing, the CA called out, "turn left, turn LEFT, I have the airplane" and executed a maneuver that I would describe as similar to a PRM breakout maneuver. He disconnected the AP, added power, and reversed our turn, climbing and accelerating in the process. The maneuver was aggressive enough that I thought it possible the CA had SA to something that I was missing since I had already started to reach for the heading selector in order to get the plane to level its wings and come back to the left (note: things were happening very quickly now and I did not verbalize this FMC input since I would have just been trying to talk over the CA telling me to turn left even though the airplane did start to shallow its turn to the right once I pulled the selector). I verbalized "you have the controls" and monitored his inputs. As former fighter pilots, the CA and I both have fairly wide comfort zones and although the maneuver was fairly aggressive, I was still comfortable with the aircraft's attitude and remained quiet as I monitored the aircraft's flight path. I did not want to add to the confusion of the moment by asking questions or saying anything unnecessary since the CA was very purposeful in his maneuver. Now things became quite busy because in addition to receiving a "bank angle" audible warning due to our steep turn to the left, the approach Controller began talking to us rapidly. He made several transmissions and told us repeatedly that he had us on a heading that was not going to intercept the Localizer and that we were above our assigned altitude and asked what we were doing. I replied that we were still below the glidepath at approximately 930 meters, and maneuvering to intercept the Localizer. After a few more moments the CA stabilized the aircraft's attitude, I selected FMS speeds (since we had accelerated to approximately 210 knots and needed to slow back to 180 knots), and he began a turn back to the right to intercept the Localizer. The CA re-armed the approach (but never re-engaged the AP), slowed to the assigned speed, returned to the assigned altitude, and leveled the wings on an appropriate intercept heading. The FD provided what appeared to be valid guidance to shoot the rest of the approach. The aircraft was configured and stable before glide-slope intercept and the remainder of the approach proceeded normally with me remaining in my role as PM. We went from conducting a routine controlled approach, to one where I think we had widely differing perceptions of what was actually occurring in the space of literally about 4 or 5 seconds. This rapid breakdown of CRM resulted in actions that were perhaps more

aggressive than they needed to be, and a deviation from the ATC clearance. I would actually say there were two separate events. The first being the aircraft's unexpected and overly aggressive turn to the right to capture the Localizer for ILS Runway XXL, and the second being our response to it. The first I would potentially attribute to a software issue, a problem with the ILS tune, or some sort of RF interference. As far as the second I would suggest the following; 1) Even though I did not feel fatigued during the approach, it was at the end of a long day and it's possible I underestimated my level of fatigue. That said, I did have some coffee prior to Beginning of Daylight (BOD) for this reason and, I felt like the CA and I were both alert and engaged and don't feel like my response to the aircraft was unacceptably slow or inappropriate. 2) The CA believed that the intercept angle was excessive (he referenced 45 degrees during our debrief) and that based on his prior experiences, there was no way the airplane was going to be able to capture the Localizer. Since I had not experienced the automation act in the manner it did during our approach, I was perhaps more comfortable than I should have been with the AP's ability to capture the Localizer, even with the admittedly substantial intercept angle that we had before the CA took the controls. 3) The CA stated during the debrief that he thought we had already flown through the Localizer, and that he was therefore worried about a lack of separation from the traffic that was flying the ILS to Runway XX, to our right. I did not perceive that we had flown through the Localizer for the following reasons: a) We were in a phase of flight where we both (certainly I was) monitoring the raw Localizer data in anticipation of Localizer capture, and neither of us ever called "Localizer alive". I felt like I was hawking this for the reasons listed above (overshooting crosswind and proximity to other landing traffic). b) The AP commanded a turn to the right, which in my mind it would have only done if it were trying to intercept the Localizer from the left. c) When ATC contacted us, it was to say that we were not on an intercept heading. He did not indicate that we had flown through the Localizer or were encroaching on the protected airspace between the approach corridors for the active runways. He never issued a vector to East which is likely what he would have done had he perceived there to be a risk of loss of separation. d) When we finally got the situation under control, the aircraft intercepted the Localizer from the left. Again, this entire narrative took place in what I suspect was less than a minute. Between the uncommanded turn to the right and the CA taking the controls, maybe 5 seconds passed. That said, I could have acted sooner and certainly should have verbalized when I reached for the heading selector to stabilize the heading, since that may have precluded the CA from taking the controls and executing the "escape" maneuver. I think in the CA's mind, we were probably already past the point where that was going to mitigate our situation since he perceived that we had already crossed the Localizer, but it might have helped. I wish the CA would have verbalized why he was maneuvering as aggressively as he was. I thought that perhaps he saw an impending collision that I did not have SA of, and so I stayed quiet for longer than I should have before I started to rebuild the picture and work to develop a CRM. Ultimately, he was well within his authority to act in the manner he did and fully adhered to the company's three step intervention process. This was a tough one for me to analyze and I welcome any feedback you might have.

## Synopsis

Air carrier flight crew reported an altitude and track heading deviation during approach to an international airport. The crew stated this sequence of flights, since the COVID-19 pandemic started, are very long and fatiguing which may have been a factor in the event.

## Time / Day

Date : 202104

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

## Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Nav In Use.Localizer/Glideslope/ILS : XXR

Flight Phase : Initial Approach

Flight Phase : Descent

Route In Use : Direct

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1800917

Human Factors : Fatigue

Human Factors : Physiological - Other

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Altitude : Overshoot

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Flight Crew  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Became Reoriented

## Assessments

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

## Narrative: 1

While on descent in to ZZZ, I the CA was PF. We received a different runway assignment than anticipated. We were cleared to "cross ZZZZZ at 3,000 feet, cleared the ILS [Runway] XXR approach ZZZ." The runway change was made in the FMS from YYR to XXR. While in VNAV path and cleared for the approach we set FAF Glideslope intercept altitude of 2,000 feet in the altitude window. The last-minute change left us a bit high so we lowered the landing gear and selected LVL CHG in order to re-intercept the path. ZZZZZ the IF was in the FMS twice and while trying to correct that and heads down and distracted (because we were no longer in VNAV) the aircraft descended through 3,000 feet towards the 2,000 feet set in the ALT window. I caught the mistake at approximately 2,600 feet MSL and leveled off until intercepting the glide path. There was no correction from ATC, no known traffic conflict etc. Normal uneventful landing. Upon further consideration I determined it was best to file a report. Cause - Short night, last minute runway change, lack of recency of experience...infrequent flying over the last year with the pandemic. PF [should] have better situational awareness and avoid both pilots being heads down even if the PNF is having difficulty correcting the FMS issue.

## Synopsis

Air Carrier First Officer reported an altitude deviation during approach caused by possible fatigue, a late runway change and lack of recent flying experience during the pandemic.

## Time / Day

Date : 202104

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

## Aircraft

Reference : X

ATC / Advisory.ATC Facility : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 MAX Series Undifferentiated

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class B : 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 : 1800908

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

Human Factors : Time Pressure

Human Factors : Confusion

Human Factors : Fatigue

## Events

Anomaly.Deviation - Speed : All Types

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

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Person : Flight Crew

When Detected.Other

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Software and Automation  
Contributing Factors / Situations : Procedure  
Contributing Factors / Situations : Manuals  
Primary Problem : Aircraft

## Narrative: 1

While flying I failed to fully configure by 1,000 feet AGL. Approach was a Visual Approach. Conditions were clear, 10-mile visibility, and light winds. When landing on Runway XX, TRACON had a restriction to cross a point at 2,600 feet. Configuration at that point was Gear and Flaps 15. Began the descent but had trouble initiating the descent due to automation configuration. During this phase of the approach for some reason I thought I had until 500 feet AGL for final configuration during a Visual Approach. Final configuration was accomplished by 700 feet. Later I referred to the Operating Manual and realized my mistake. Causal factors [included] a lack of recent flying. Aircraft was a B737 Max and this was the first time I flew one in over X years. This aircraft does not slow down and go down like the B737 NG thus adding to configuration delay. Failure to remember that ALL approaches require final configuration by 1,000 feet. Pairing had a XC: 10 Sign-In requiring me to get up at XA: 30. Although this occurred at approximately XI:00 I had already been awake for 9 hours, some of it on the back side of the clock. Perhaps have the same criteria for both IMC and VMC as far as being "in the slot" this would eliminate any confusion at all. Bottom line, I confused the issue and will not allow that to happen again.

## Synopsis

Air carrier Captain reported final configuration was not accomplished until 700 feet which is not in accordance with the manual.

## Time / Day

Date : 202103

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : MCO.Airport

State Reference : FL

Relative Position.Distance.Nautical Miles : 3

Altitude.AGL.Single Value : 1100

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Airbus Industrie Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Final Approach

Route In Use : Visual Approach

## Person

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 26000

Experience.Flight Crew.Last 90 Days : 70

Experience.Flight Crew.Type : 15000

ASRS Report Number.Accession Number : 1797710

Human Factors : Fatigue

Human Factors : Distraction

## Events

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

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Issued Advisory / Alert

## Assessments

Contributing Factors / Situations : Airport

Contributing Factors / Situations : Airspace Structure

Contributing Factors / Situations : Environment - Non Weather Related

Primary Problem : Ambiguous

## Narrative: 1

When checking in with MCO final Approach Control we were given speed reduction 190 to mkr (Marker Radio Beacon), Drones reported near ORL Executive, all traffic now arriving Runway 17L and R. Cleared visual Runway 17L maintain GS on approach slow to 170. Caution traffic on right to Runway 17R, contact Tower on freq. We received our landing clearance for Runway 17L. Second birds on path siting. We were on ref and GS. About 1,100 ft. I realized we weren't fully configured. Called for gear/F3 then F Full/Landing checklist. Landing checklist completed by 800 ft. We were still at ref and on GS fully stable, we landed normally and taxied off at Taxiway F. We received no alerts during approach. I believe we were distracted more than usual as well as feeling a little tired that afternoon. I will most assuredly use this experience as a learning example of avoiding potential complacency by carefully applying our procedures to prevent any re occurrence going forward.

## Synopsis

Air carrier Captain reported failing to properly configure for the approach due to distraction and fatigue.



## Time / Day

Date : 202103

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 : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

## 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 : 1796483

Human Factors : Troubleshooting

Human Factors : Situational Awareness

Human Factors : Fatigue

## Events

Anomaly.No Specific Anomaly Occurred : Unwanted Situation

Detector.Person : Flight Crew

Were Passengers Involved In Event : N

When Detected : In-flight

Result.Flight Crew : Became Reoriented

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

Since COVID, these particular international schedules have been in a lot of flux. Most sequences, up until now, have been "rockets" where we only get to rest a relatively short amount of time during the day after an all-night flight, and then fly back all night. I have

written about this before, and this is to reiterate: these sequences are sub-optimal in terms of safety due to the limited rest. The threat on these sequences is NOT a virus, it's the cumulative fatigue after being up for two straight nights. There is no reason not to make ALL these flights have a longer sleep opportunity with a 30 plus hour layover. Three times in the last 2 months we lined up for the wrong runway in ZZZ after the double all-nighter. Fortunately, someone caught the error before it was critical, but it is reflective of the fact that the three of us are sleep-deprived. In this aircraft category, you have an older pilot group to begin with. Give us the opportunity to get enough rest. Upon arrival in ZZZ, I was extremely tired, and felt my ability to monitor was degraded. Schedule all these international trips as longer layovers. It's a safety issue, pure and simple.

## Synopsis

Air Carrier First Officer reported fatigue related concerns with the scheduling of particular international flights since the COVID-19 pandemic began.

## Time / Day

Date : 202103

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 : Commercial Fixed Wing

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Parked

## Component

Aircraft Component : Engine

Aircraft Reference : X

Problem : Malfunctioning

## Person

Location Of Person : Company

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 15295

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 5173

ASRS Report Number.Accession Number : 1793523

Human Factors : Communication Breakdown

Human Factors : Fatigue

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Maintenance

## Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Detector.Person : Flight Crew

When Detected : Pre-flight

Result.General : Flight Cancelled / Delayed

Result.General : Work Refused

## Assessments

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

## Narrative: 1

Trip began as Flight ABCD, 2-day ZZZ, daytime flying. On the XXth [Date], crew brought in plane with flap issue. Took over one hour to resolve. Just prior to engine start, ground crew said fuel was leaking from Number 1 engine. Followed QRC, ended up doing engine run. Ground crew stated no leaks after engine run. Captain looked out window to see fuel streaming from number one engine. This was never resolved. We refused to fly aircraft. Were told by scheduling a new part was being flown in and we would Maintenance ferry jet home on the XXth [Date], our scheduled day off. On XXth [Date], discovered, at jet, no part had arrived but we were told to ferry jet to ZZZ1 and it would be fixed. After consultation with numerous agencies and several hours, we again refused jet. Nothing had been fixed. Worst engine leak I've ever seen. The directives Maintenance was following were for leaks in the range of 60 to 100 drops per minute of fuel. This became a steady stream the day prior. We refused to fly jet as nothing had been done. Took some time to get hotel, had to self-help. Arrived to hotel. Scheduled to deadhead home on XYth [Date]. Due to mix-up, transportation went to wrong hotel. We missed XA00 flight home. Rescheduled for XD: 50 pm flight home. I had a ZZZ turn today, XZth [Date], with a XA50 report. This was illegal crew rest so the crew desk did a mini-pack of my schedule, combined the now 4-day trip with 4 duty periods into a 5 day trip and 5 duty periods with near absolute minimum rest. I spent some time checking on the legality of what was done, with company. It turns out, this extremely onerous now 5 day pairing with very limited rest opportunity was legal. Legal doesn't mean smart or does it mean a pilot really has adequate rest. I gave every effort in an attempt to get adequate rest, but the pressure, once finally in bed, and reflection on the maintenance issues, the mental fatigue caused by the ever-changing schedule, flying into now two days off, and then paired with a trip packing with minimal rest caused sleep to be very difficult. Two-hour time difference, though seemingly minor, comes into play as I'd become acclimatized. I finally realized, as I was about to go to parking lot, I was not safe to fly nor could I certify FFD. I called fatigued.

## Synopsis

Air carrier First Officer reported calling in fatigued due to several maintenance related delays and company scheduling techniques that push the limits of legal rest periods.

## Time / Day

Date : 202103

Local Time Of Day : 0601-1200

## Place

Locale Reference.ATC Facility : ZAB.ARTCC

State Reference : NM

Altitude.MSL.Single Value : 38000

## Environment

Flight Conditions : VMC

## Aircraft

Reference : X

ATC / Advisory.Center : ZAB

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 : Cruise

Airspace.Class A : ZAB

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1793504

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Fatigue

Human Factors : Human-Machine Interface

Human Factors : Troubleshooting

## Events

Anomaly.Deviation - Track / Heading : All Types

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Ground Event / Encounter : Ground Equipment Issue

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings

Contributing Factors / Situations : Software and Automation

Contributing Factors / Situations : Company Policy

Primary Problem : ATC Equipment / Nav Facility / Buildings

## Narrative: 1

Somewhere after Burns Flat (BFV) at 38,000 ft. and until ZUN VOR, we had encountered first an ATC Fault EICAS message. Oddly then on both transponders. First Officer was the Pilot Flying. So, we discussed and went into the QRH and complied. I had then thought to ask ABQ ARTCC if they were able to see us on their radar scope. The controller had replied yes. So when I remarked of our issue, he knew right away that jamming was taking place. Now I didn't clarify if this was any kind of military exercise and if this was normal. He acted as though it was. Shortly after this, we started slowly seeing other EICAS messages. I can't remember the exact order though. I believe the next was EGPWS TERR or so. Then L GPS appeared not too far after this. Maybe R GPS as well, maybe. Eventually we saw UNABLE RNP. So we definitely knew GPS jamming was making sense. The RNP ANP scales on the Pilot Flying Display bottom was like RNP 2.00 ANP 2.93 in amber color. It was clear our GPS was in an inertial mode. I did select radio updating eventually per the QRH's procedural instructions. Center never seem too concerned as nothing else was said. The weather was quite good and while concerned, I had a good idea as we made our way towards ZZZ1, the start of the RNAV star, the GPS navigation would probably return to a normal state and it did. There wasn't any flight safety breaches or traffic conflicts as this event happened entered at cruise. Although, I did forget to make a maintenance log entry required by mandatory reports. I may have been more fatigued than I was aware. Sleep was fragmented in chunks of multiple 2 to 3 or so hrs. on this day. Intentional GPS jamming I suppose. I've never encountered this in my entire career here. Wondering if the military does these exercises, but I would expect we'd be notified via a NOTAM and on our [flight plan] if it was known. I suppose if we knew we could of had a different routing? I don't believe compromised safety as in this case was an issue. It never degraded to a more severe off course deviation and didn't cause traffic conflicts. Don't get me wrong we were concerned and a bit miffed. I will file a security report and read more on the subject of GPS jamming interference's.

## Synopsis

An air carrier pilot reported GPS jamming.

## Time / Day

Date : 202103

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : LGA.Airport

State Reference : NY

Altitude.AGL.Single Value : 0

## Environment

Work Environment Factor : Poor Lighting

Light : Night

## Aircraft

Reference : X

ATC / Advisory.Tower : LGA

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

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 : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1791270

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Workload

## 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 : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1791271

Human Factors : Confusion  
Human Factors : Distraction

## Events

Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Ground Excursion : Taxiway  
Anomaly.Ground Incursion : Taxiway  
Anomaly.Ground Event / Encounter : FOD  
Detector.Person : Flight Crew  
When Detected : Taxi  
Result.Flight Crew : Requested ATC Assistance / Clarification  
Result.Air Traffic Control : Issued New Clearance  
Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : Airport  
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings  
Contributing Factors / Situations : Human Factors  
Primary Problem : Airport

## Narrative: 1

I, the First Officer, executed the charted Visual Approach. Landing was uneventful and rolled to taxiway Tango before passing controls to the Captain to taxi to gate. As we exited the runway Tower gave taxi instructions to the gate. and to "... stay with me". I read back the taxi instructions and the Captain repeated them as he commenced taxi from the runway and stated "flaps up". I then commenced my after landing flow; raised the flaps, checked speed brakes stowed, autobrakes off, flight directors off, wing lights off, steady and strobe to steady, trimmed to 5 units, check weather radar off, cycled ramp (though not needed) to active in VHF2, and started removing flight pertinent printer strips. By this time we were somewhere near the Bravo, Golf, Sierra taxiway junction. I briefly looked up as Captain stated, "There's Golf". I don't remember what I heard exactly that caused me to look up again, some reference to Golf taxiway perhaps. But when I looked up I did not recognize where we were. I saw lighted taxi signs for Sierra, Golf, and Bravo in the distance to the left. I could see blue taxiway edge lights all around but nothing in front of us. The blue taxi edge lights were very disorienting especially without a lit taxi center line. Our taxi and turnoff lights were so dim that they were essentially useless. The moon was providing more light than they were. On my IPAD I could see our own ship, we were on Golf but heading the wrong way. The Captain had turned right instead of left. At that point he turned left in an attempt to get back to Alpha taxiway, I assume. He did make me aware that he was concerned about accidentally crossing on to the runway. Due to the very poor lighting and the sea of blue taxi edge lights, taxiway was difficult to discern from anything else. All you could see was directional taxi signs in the darkness and blue taxi lights scattered about. The Captain turned left until there was a break in the blue lights with the Bravo sign visible just a little further away so it did appear as though we were turning on taxiway Bravo though I could see no yellow line. I told him I didn't see the taxiway, I think we're going in to no man's land, and Captain said, no, we're on Golf, there's the sign for Bravo. I was confused about the blue lights, they didn't seem to be oriented right and the our ship was sort of on Golf but pivoting so I allowed the events to progress thinking maybe I was just disoriented. When we proceeded ahead the ground before us was just dark. Really no discernible features except for blue taxi lights up ahead that seemed to mark the edge of Bravo. I said I think we're off the taxiway. Captain stopped. We exchanged thoughts on the best way to proceed from that point. We called



tower to confess. Tower took a look, said we were just near Bravo, or Golf, I can't remember exactly but he was not concerned which taxiway we ended up needing to get to the gate. I thought we might not be on prepared surface but the Captain was sure we were still on the taxiway just facing the wrong direction. So I told him clear to the right, let's turn all the way back around and take Bravo. The Captain turned tight right and proceeded back the way we came. The jet stopped and thinking it was an incline the Captain added power and we rolled back on taxiway center, turned left on Bravo, took Foxtrot then Alpha to the gate, tower then stated, "Not a problem guys, the snow plows do more damage than you". No other occurrences from then on. We did discuss the possibility that we may have left the taxiway. The Captain was confident we had not and I was inclined to believe him since I could not see the ground beneath us, we were just avoiding taxi edge lights. I told him I would check and do an external walk around once we shut down. During deplaning maintenance met me before walking out. She asked me if the landing was rough and I said, actually, no, the landing was great... WHY? She showed me a shot on her cell phone of our nose strut and this is your nose gear. It was covered with dirt. I went down to look at it and it was dirty but both tires were still intact at that point and I saw no evidence of anything else on the mains or the engines. The mains were spotless, engines were clean. I came back up, told the Captain the mains were covered in dirt on the tires and on the lowermost part of the strut. I then stepped out of the cockpit while he talked to maintenance. We turned the plane over to maintenance, they said they would check out the gear and clean it off and we left, still not sure we actually left the taxiway. The wind was blowing in excess of 30 knots and dirt was blowing all over. We chalked it up to that. It was dark, really dark on that end of the airport. The taxiways are a conglomeration that looks more like spaghetti. The whole area is labeled HS1, for good reason. They are difficult enough to navigate in daylight, much less at night with no centerline lighting, a plethora of edge lights all outlining various "islands" on the field, taxiway ID and directional signs for every taxiway that intersects in HS1 and a useless taxi light. That is a lot of scattered lights with no reliable taxi light to help gauge distance. The Captain was disoriented. Golf taxiway is constructed right on the curve at a 45 degree angle. The directional sign at night can make the left turn on Golf easy to miss especially with the opposite direction of Golf being directly in front of you. I, the First Officer was task distracted. I was performing after landing flow and cockpit cleanup. The Captain had told me during this trip that he was once based in [the area] and was very familiar with this airport, not to mention he was a check airman. My guard was down and I was not as diligent as I normally am during the taxi operation. Being tired and expectation bias. It was night, the end of the day in serious winds. The Captain and I were exhausted most of our mental energy on planning the approach and landing given the conditions that night. The approach was not exactly a standard one we do all the time, and we were not landing on the usual runway you get at this airport. A better taxi light would have alleviated much of the confusion. The lights are not adequate. Neither of us was really sure that we ever left the taxiway. Taxiway centerline lights. There are many islands outlined in blue and no green center lights to actually show the trail through the maze of them. Distance judging is difficult in the dark and it was dark for us. Those lights would have helped. I should have stayed more engaged in the taxi phase to back up my Captain. Getting lost is going to happen and there are two of us for a reason. I allowed myself to get disoriented as well.

## Narrative: 2

Landed Runway 31 LGA. Cleared at taxiway T. ATC gave us T,B,G,A to gate. Turned right on Taxiway G instead of left. Area was extremely dark, appeared to taxi over some Foreign Object and Debris (FOD) on taxiway G. After arriving at gate was informed one nose tire was flat. The area around taxiway G is confusing, especially at night. The area is not marked well and very dark making it extremely hard to find correct taxiway. Light up the area better. Better taxiway designations. Area should be redesigned.

## Synopsis

Air carrier flight crew reported turning the wrong way on a taxiway at night and when turning around exited the taxiway surface due to poor taxiway lighting and markings at LGA airport.

## Time / Day

Date : 202102

Local Time Of Day : 1801-2400

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 10000

## Environment

Flight Conditions : VMC

Light : Night

## 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

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

Route In Use : Visual Approach

## 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 : Commercial

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1787245

Human Factors : Distraction

Human Factors : Fatigue

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Deviation - Altitude : Overshoot  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Inflight Event / Encounter : Unstabilized Approach  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Regained Aircraft Control  
Result.Flight Crew : Became Reoriented

## Assessments

Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Software and Automation  
Primary Problem : Human Factors

## Narrative: 1

At 10,000 ft. cleared direct ZZZZZ and cleared visual RWY XXL ZZZ. We both agreed 8,000 ft. was a safe altitude due to terrain then 7,000 ft. after clearing the hills. Flying pilot, FO (First Officer), set 8,000 ft. then 7,000 ft. in the altitude window. It seemed we were high since we delayed the descent so we were trying to get down. I did not notice the altitude was set to 6,000 ft. Approaching ZZZZZ I realized we were low and told the FO to stop the descent. We climbed slightly and joined the Glideslope to continue the approach. We did not get any terrain warnings but it was concerning that we descended lower than anticipated at night into a high altitude airport. The FO was low time in the airplane and had just came back from a 5 year absence. I did not realize he was behind a bit on the automation. While I was trying to figure out what he was doing I lost situational awareness even though we had discussed safe altitudes. It was also the third leg we had flown that day so we were both tired. I was overly depending on the automation to help reduce the work load for both of us. The automation will only help if it is programed correctly so a person has to be very careful to cross check all available information. From now on I think it is best to request an instrument approach when it's dark going into airports you're not 100 percent familiar with. From now on I will at the very least request to join the visual further out on the instrument approach course in order to get more stabilized.

## Synopsis

Air carrier flight crew reported descending too low while conducting an approach at night.

## Time / Day

Date : 202102

Local Time Of Day : 0001-0600

## Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 40000

## Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B787 Dreamliner Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZZZ

## Person

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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 8443.00

Experience.Flight Crew.Last 90 Days : 96.43

Experience.Flight Crew.Type : 471.77

ASRS Report Number.Accession Number : 1786588

Human Factors : Human-Machine Interface

Human Factors : Fatigue

## Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Speed : All Types

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Returned To Clearance

Result.Flight Crew : Regained Aircraft Control

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Weather

## Narrative: 1

We encountered a significant unforecast mountain wave. Autothrottles were slow to react. I called out acceleration to Captain who was pilot flying. He acknowledged but did not react to the acceleration. We started to overspeed so I deployed the speed brakes and pulled back the throttles. Lost 500 feet in recovery. Reported altitude loss and wave to ATC. Debriefed event and discovered pulling throttles back was counter to FM guidance. During debrief we also discussed late departure and long taxi with complications on ramp due to weather on departure as contributing to our reaction to this event due to being fatigued. Good debrief.

## Synopsis

Air carrier First Officer reported an altitude excursion occurred when the flight encountered an unforecasted mountain wave.

## Time / Day

Date : 202101

Local Time Of Day : 1801-2400

## Place

Locale Reference.ATC Facility : JAX.Tower

State Reference : FL

## Aircraft

Reference : X

ATC / Advisory.Tower : JAX

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 : Initial Approach

Route In Use : Visual Approach

Airspace.Class C : JAX

## 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 : 1786484

Human Factors : Human-Machine Interface

Human Factors : Fatigue

## Events

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Became Reoriented

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Human Factors

Narrative: 1

On approach at night visual to Runway 26 in the Jacksonville. I was the pilot monitoring with the first officer as the flying pilot. We were given a visual approach and he [turned] off the auto pilot at approximately 1,000 feet. At the 500 feet call he was stable, I don't recall the exact altitude after 500 feet as I was heads up looking outside and I noticed three red and one white on the PAPI. I did observe he was getting low on the glideslope. We had the ILS backed up and when I looked up, I saw four red and instructed him " four reds, level off" we also received the oral warning glideslope at the same time. He did respond and leveled off approximately two to three seconds later and I saw the three red one white again. Landing was uneventful. It is also worth noting that we were into a 13 hour duty day due to weather delays and rescheduling. Also, worth noting was both Approach Control and Tower stated that they were receiving PIREPs of 40 knot headwinds until a 4 mile final. In actuality the winds were gusting up to 40 all the way to about a 1 mile final.

## Synopsis

Air carrier Captain reported that while the First officer was hand-flying a visual approach, they descended below glide slope and observed four red lights on the PAPI. The crew leveled off and continued to landing.



## Time / Day

Date : 202101

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 : Turbine Engine Thrust Reverser

Aircraft Reference : X

Problem : Failed

## 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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1785472

Human Factors : Training / Qualification

Human Factors : Fatigue

## Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

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

Detector.Person : Flight Crew

When Detected : Aircraft In Service At Gate

Result.Flight Crew : Overcame Equipment Problem

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure  
Primary Problem : Ambiguous

## Narrative: 1

On rollout deployed reversers. Noticed left pull and used heavier braking on RH side. Aircraft tracked fine down centerline. Captain advised one reverser inop. Walk-around prior to flight revealed no indication that No. 2 reverser had been inadvertently locked out. On ground post-flight walk-around verified that reverser lockout pins on No. 2 engine were NOT extended showing red. Mechanic found hydraulics lockout in place after opening cowling. This would not be visible during an external walk-around inspection. This is a procedural issue. During maintenance there is probably a checklist for this and it was simply overlooked, perhaps due to fatigue.

## Synopsis

A321 First Officer reported that right engine reverser failed to deploy. Post-flight inspection revealed that the reverser was locked out in a manner that was not visible during preflight.

## Time / Day

Date : 202101

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Icing

Light : Night

## Aircraft

Reference : X

ATC / Advisory.Ramp : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Taxi

## 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 : 1784970

Human Factors : Situational Awareness

Human Factors : Fatigue

Human Factors : Confusion

## Events

Anomaly.Conflict : Ground Conflict, Less Severe

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

Anomaly.Ground Incursion : Ramp

Anomaly.Ground Event / Encounter : Other / Unknown

Detector.Person : Flight Crew

When Detected : Taxi

Result.Flight Crew : Requested ATC Assistance / Clarification

## Assessments

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

## Narrative: 1

It wasn't supposed to be a very long leg or a long day. The plan was to fly from ZZZ to ZZZ1, grab a quick snack and go to ZZZ2 for the overnight and good food. But, that wasn't what happened. Snow flurries forced us into unplanned deicing. Bad alternates required reworking and refueling. In the middle of deicing, a sudden snow squall sent visibility plummeting and negating any holdover times. New takeoff alternates then had to be amended onto the paperwork, and re-validating required new paperwork. To describe our departure out of ZZZ as a struggle would be an understatement. But, ever so slowly and methodically, we did eventually depart to ZZZ1. It was on arrival that we were notified that our overnight had changed and to contact scheduling on the ground. So, you can imagine that when we landed in ZZZ1, we were mentally bruised, hungry, tired, and on edge. The landing was normal, as was the taxi to our planned gate. What confused us is what we saw upon turning to face south, looking at [Gate X]. There was nothing. No rampers, or wands or even lights. It was a completely empty and dark. I set the parking brake and asked my FO (First Officer) to send another in range report and commented that we should probably call ZZZ1 OPS and see if they had changed our gate. FO dutifully called OPS on the number two radio so I dialed the north ramp frequency into radio one to monitor. At that exact moment the ACARS message returned as my FO was repeating what OPS had just said; gate change to [Gate Y]! I released the parking brake and began a slow turn to the right when I realized I wasn't at an outstation in the middle of nowhere or on an uncontrolled ramp. I had lost all situational awareness and was in the middle of ZZZ1 moving without permission! I immediately stopped the aircraft and called North Ramp with the gate change. He replied yea there was a gate change and "did i just do a 180?" I don't recall saying much before he asked "and are you still moving???" I immediately replied we were not moving. At that point I was told I should never, ever do that and that he had numerous aircraft with beacons on trying to push. I should have apologized right then but instead fumbled though the gate change and having the pushing aircraft in sight. I still can't believe I would make such stupid mistake. I can't believe I didn't apologize. I was just beat up and wanting desperately to just take a five minute brake. Instead I let my guard and awareness down which led me to make a very stupid move.

## Synopsis

Air carrier Captain reported taxiing on ramp without clearance and stated they had lost situational awareness as a result of a long and fatiguing day.

## Time / Day

Date : 202101

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 225

Relative Position.Distance.Nautical Miles : 5

Altitude.MSL.Single Value : 1000

## Environment

Flight Conditions : IMC

Weather Elements / Visibility.Visibility : 7

Light : Daylight

Ceiling.Single Value : 1500

## Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

Flight Phase : Final Approach

Airspace.Class C : ZZZ

## Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 130

Experience.Flight Crew.Type : 3140

ASRS Report Number.Accession Number : 1784768

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Distraction

## Person : 2

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Flight Crew : Captain  
Function.Flight Crew : Pilot Not Flying  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Instrument  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Experience.Flight Crew.Last 90 Days : 200  
Experience.Flight Crew.Type : 11000  
ASRS Report Number.Accession Number : 1784765  
Human Factors : Workload  
Human Factors : Situational Awareness  
Human Factors : Fatigue  
Human Factors : Distraction  
Human Factors : Time Pressure

## Events

Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Inflight Event / Encounter : Unstabilized Approach  
Anomaly.Inflight Event / Encounter : Weather / Turbulence  
Anomaly.Inflight Event / Encounter : CFTT / CFIT  
Detector.Automation : Aircraft Terrain Warning  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Flight Crew : Executed Go Around / Missed Approach

## Assessments

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

## Narrative: 1

For the ILS Runway 04R at ZZZ, performance numbers were run for a Flaps 30 landing with a good stopping margin at Autobrakes 3. ATIS winds were calling approximately 070/13 - no gusts. Upon switching to Tower at ZZZZZ on the localizer course and tracking the glideslope, Tower cleared us to land with winds now gusting to 20. As PF (Pilot Flying), I elected to add 4 knots to the Vtarget and as an added Safety measure at ZZZ, I selected Autobrakes MAX to compensate for a slightly increased approach speed. The PM (Pilot Monitoring) attempted to quickly re-run the performance data, but the gusts were not yet accounted for in the METAR. Rather than going heads down any longer inside 1,000 feet AGL, we agreed a 4-5 knot addition to VTarget and using Autobrakes MAX would be more than sufficient to account for the gust factor. At approximately 500 feet AGL, we received a GPWS Too Low Flaps Alert. The PM immediately called for the go-around and it was initiated. A quick scan of the flap handle and I realized that I had neglected to call for Flaps 30 from a Flaps 15 setting, and the Before Landing Checklist was not run. We were quickly vectored around for another uneventful ILS. The minor distraction of adding a gust factor and changing the Autobrakes setting sent me out of a normal approach

configuration sequence and we ended up both missing the final flap setting and subsequent checklist. With the normal ZZZ procedure of not contacting (and often not switching to) Tower until reaching the fix at about a 5-mile final, it's possible for us to miss out on cues to changing weather on the ground. We were number 3 or 4 in a sequence of landings on 04R. Had we switched to Tower five or more miles sooner, we may have caught the gusting winds earlier and had more time to type in the adjusted winds and send away for the performance numbers prior to 1,000 feet AGL. This was another series of events combined with mild fatigue that led to poor task prioritization on our parts.

## Narrative: 2

The short version is that we got 'Too Low, Flaps' at 500 feet because we were at Flaps 15. We went around. Planned winds were 070/7. Tower winds were 070/12G20. I re-ran the performance landing numbers at 1,500 feet, but did not override the METAR and got back the numbers for 070/7. The PF (Pilot Flying) chose to add 5 knots to VTarget and we agreed to go from Medium to Max braking and continue. There is no guidance I am aware of as to when we would be required to re-run our landing numbers. I should not have tried to re-run the landing numbers at that point. That would have eliminated the distraction that led to not selecting our planned final flaps or running the Before Landing Checklist.

## Synopsis

B737-800 flight crew reported executing a go-around due to improper flap setting on short final.

## Time / Day

Date : 202101

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : IMC

Weather Elements / Visibility : Rain

Weather Elements / Visibility : Icing

Weather Elements / Visibility : Snow

Weather Elements / Visibility.Visibility : 5

Light : Night

Ceiling.Single Value : 700

## Aircraft

Reference : X

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 : Takeoff / Launch

Route In Use : Vectors

Route In Use : None

## Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Flight Engineer / Second Officer

Function.Flight Crew : Captain

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 17700

Experience.Flight Crew.Last 90 Days : 300

Experience.Flight Crew.Type : 3100

ASRS Report Number.Accession Number : 1783318

Human Factors : Confusion

Human Factors : Fatigue

Human Factors : Time Pressure

Human Factors : Communication Breakdown



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

## 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 : Multiengine  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Instrument  
Experience.Flight Crew.Total : 7800  
Experience.Flight Crew.Last 90 Days : 140  
Experience.Flight Crew.Type : 140  
ASRS Report Number.Accession Number : 1783344  
Human Factors : Time Pressure  
Human Factors : Confusion  
Human Factors : Troubleshooting

## Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Detector.Person : Flight Crew  
When Detected : Taxi  
Result.Flight Crew : Became Reoriented  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

The previous week of flying was the most demanding experienced in over XX years of flying. In hindsight, these challenging events diminished and taxed my mental and physical abilities on subsequent flights leading to inadvertent decisions possibly contributing to my rejected takeoff. On 3 out of last 4 flights encountered nearly identical events with the Environmental System Controller (ESC) Level 1 Alerts of Pack Flo/ Pack Disagree/ Bleed Off anomalies on two different aircraft during Max Thrust Takeoff with Anti-ice On flights. In the first flight event the anomalies presented on upwind, climb-out were corrected automatically by the ESC and Auto Anti Ice mode. Bleed Air Off, Pack Disagree, Pack Off, Level alerts all extinguished automatically. There was no input from the crew and the Level 1+2 checklists were reviewed for reference by crew. In the second flight event, relying on system knowledge, the previous flight, and anticipating the ESC would respond accordingly in same fashion it was discussed with crew that the ESC in Auto Mode would automatically resolve a pack flow disagree issue level 1 alert noticed late in taxi with a higher demand airflow presented in the system, when we were to run-up the engines for deice concerns for : 30 seconds, in position prior to takeoff. Numerous

distractions such as short taxi, checklist completion, deice fluid on windscreens making taxi turns difficult due to limited visibility on side windows, and significant deice delays made our departure later than normal allowing more body and mental fatigue to set in. The air synoptic was illuminated due to manual selection of Anti Ice because this air frame did not have an auto anti feature on it. This is important to note because it was normal looking to see AIR for our takeoff setup conditions. After engine run-up and brake release received a level 2 alert Pack not off alert, Pack Flow Disagree resulting in a decision to abort takeoff with a low speed <50 knots reject. Contacted MX resulted in a Block turn back and MX deferral for a malfunctioning Pack. Third flight event, subsequently occurred two days later with Bleed Air off/ Pack Disagree/ Pack Off level 1 alerts occurring on climb out on same aircraft first instance happened on. Close observation revealed in fact the ESC in combo with the Auto Anti Ice again fully resolved any anomalies without any input from the crew. It became more obvious to me the Auto Anti Ice feature once detecting no need for Anti Ice usage is securing Anti Ice allowing the ESC to revert to normal ops eliminating any level 1 or 2 alerts. Thus the ESC must be prioritizing the airflow, protecting the system if a potential leak is detected, turning off packs and bleeds in its process when Anti Ice was ON. On the rejected Takeoff the Anti-Ice was Manually turned ON, the ESC attempted to secure the Pack Flow /Disagree but was unsuccessful in doing so. The decision to conduct a low speed reject was correct but may have possibly been avoided by first contacting MX before takeoff. Checklist were reviewed by the crew but it was fully anticipated the ESC to resolve the Pack issue on run-up before brake release. In the future, it will be my priority with any confusing level alerts to involve MX early to form the best team based consensus and strengthen decision making.

## Narrative: 2

After deicing and during taxi out we received a level 1 alert for "Pack 3 FLOW DISAG". Level 1 checklist references: "Consequences NONE". It was our understanding that this was a cycling pack flow issue that the system controller would resolve with higher demand flow on run up once takeoff power was applied. This was our second leg for the night and we were already dealing with a lengthy delay, de-icing, icing conditions, snow, wake turbulence avoidance of a departing heavy jet and having to do an engine run up while holding in position in order to clear the engines of icing before releasing the brakes for take off. At the point of brake release to initiate the takeoff roll, neither of us noticed if the level 1 alert was still displayed. Once takeoff power was applied and we reached approximately 40kts ground speed we received a level 2 PACK 3 NOT CLOSED alert. The captain elected to reject the takeoff as is in accordance with company SOP. We cleared the runway with no further incident and returned to the blocks where maintenance deferred pack 3. We ultimately departed without further incident and completed the flight as originally planned. In hind sight we should have delayed the take off and mitigated the level 1 PACK FLOW DISAG alert before taking the runway.

## Synopsis

MD-11 flight crew reported fatigue and confusion resulted in a Rejected Take Off due to misdiagnosing a Bleed Air/ Pack/ Anti Ice Issue.

## Time / Day

Date : 202101

Local Time Of Day : 1801-2400

## Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 31000

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 5

Light : Night

Ceiling.Single Value : 5000

## Aircraft

Reference : X

ATC / Advisory.Center : 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

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class A : ZZZ

## 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

Experience.Flight Crew.Total : 1

Experience.Flight Crew.Last 90 Days : 106

Experience.Flight Crew.Type : 1

ASRS Report Number.Accession Number : 1783091

Human Factors : Situational Awareness

Human Factors : Fatigue

Human Factors : Physiological - Other

## 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)  
Experience.Flight Crew.Total : 12000  
Experience.Flight Crew.Last 90 Days : 40  
Experience.Flight Crew.Type : 6000  
ASRS Report Number.Accession Number : 1783087  
Human Factors : Situational Awareness  
Human Factors : Fatigue

## Events

Anomaly.Deviation - Track / Heading : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Detector.Automation : Air Traffic Control  
Detector.Person : Air Traffic Control  
When Detected : In-flight  
Result.Flight Crew : Became Reoriented  
Result.Air Traffic Control : Issued Advisory / Alert

## Assessments

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

## Narrative: 1

While operating our flight from ZZZ to ZZZ1 I was the Pilot Monitoring. At the time of the event, I was eating my catering and the Pilot Flying and I both found it easier for the PF to respond to ATC and manipulate the FMS. At some point at cruise altitude, ATC cleared us to fly direct from present position to "ZZZZZ." The PF responded to ATC and erroneously typed "ZZZZZ1" into the FMS scratchpad and entered the waypoint as the direct-to navigation fix after both pilots checked the resulting dashed "proposed course line" on the PF's ND screen. After several minutes, ATC inquired if we were proceeding direct to "ZZZZZ" as he showed us drifting right of the intended course. This alerted us to double-check our navigation and to discover that we were navigating to the wrong fix, the misspelled "ZZZZZ1." The PF corrected the spelling of the assigned waypoint in the FMS, proceeded direct to "ZZZZZ" and explained our error to ATC. I can identify three things that might have prevented this event: 1) The normal procedure and best course of action would have been for the Pilot Monitoring to stop eating, respond to ATC and manipulate the FMS. I do not, however, think this was much of a contributing factor. The PF is a "strong" and extremely competent pilot highly experienced on the aircraft. I don't think the PF's assumption of those duties was particularly taxing/burdensome to the PF as we were in cruise at a very quiet and low-threat portion of the flight. It is not unusual for a PF to respond to ATC and manipulate the radios and FMS while a PM is eating. I have always personally tried to not touch anything other than my food while eating in the aircraft and think this is an especially important practice during the current health pandemic. While I could have sanitized my hands once I completed the radio calls and navigation tasks, it

was more convenient to allow the PF to perform those duties for me. 2) The best course of action would have been for the PF to scroll the flight plan and chosen the assigned Direct-To waypoint "ZZZZZ" from the flight plan. However, the aircraft's FMS is slow to respond, making scrolling through a long flight plan somewhat laborious, tempting one to effect the change via the scratch pad method. The PF alternatively could have checked the paper copy of the flight plan for the correct spelling of the waypoint before typing it into the scratch pad. 3) I had the "PROG" page selected on my FMC and did notice that the course to the incorrect "ZZZZZ" was almost 25 degrees to the right of the bearing of ZZZ1 and thought it odd to be navigating that far off the bearing to destination. This matched my curiosity about the dashed "proposed course line" displayed on the PF's ND when the erroneous fix was entered into the scratch pad. However, knowing that the destination was more than 1200 miles away at the time, I assumed there was a significant "bend" in the original flight plan. Had I mentioned my observation to the PF, it might have cued the PF to check the spelling of the waypoint as the PF made the entry from an assumed spelling. When checking off frequency with the controller who made the direct-to assignment, the PF apologized for the error and asked if we should contact anyone for further discussion/explanation. The Controller indicated that he did not believe that would be necessary. My time-in-type, time-in-position and total-time are not readily available and I don't want to delay submission of this report in order to track down those numbers. I therefore entered a generic "1" in each of those blocks in the report. Each of the numbers actually totals in the thousands. Fatigue was somewhat of a factor in the event. It was the last duty day of a pairing that had us flying a mix of long and short legs, including international legs to and from an international country, and crossing the country and multiple time zones. We shifted between flying and non-flying duty periods several times and scheduled rest varied from long to short periods. Obtaining "quality" rest was a challenge and I most definitely accumulated a sleep deficit by the day/time of the event. I estimate that I slept a total of 5.5 hours during the rest period prior to the duty period of the event, one sleep period of 4 hours and another nap of 1.5 hours, waking approximately 3 hours prior to reporting for the event duty period.

## Narrative: 2

First, I can't confirm all the information requested above. I don't remember exactly which Center we were talking to or pinpoint where we were relative to a fix. I think we were with ZZZ but it might have been ZZZ1, and we were south of ZZZ1 and west of ZZZ2 at the time, going direct to ZZZZ. I was the FO and the Pilot Flying. We were cleared direct to ZZZZZ. The Captain/PM was eating his catering so I was also answering the radio. When we received the clearance to ZZZZZ it was easier for me to enter the fix in the FMC than it would have been for him, so I typed that in. About 10-15 minutes later the Controller said that he showed us about 45 degrees off course and asked whether we were going direct to ZZZZZ as cleared. We double-checked for NAV selected to the fix, looked at the course deviation, and checked the FMC, and they all confirmed direct ZZZZZ. On closer examination, though, we realized that we were actually going to a fix called ZZZZZ1, and that I had misspelled the correct fix when I typed it in. I didn't select it from the fixes listed on the flight plan, and should have done that instead of typing it in. That would have obviated the error. The aircraft made a fairly significant turn to the right when I executed the direct-to command and I thought at the time that if I'd known it was such a big difference in the track I'd have requested direct sooner. The Captain later said that he'd thought it was strange that the bearing/distance on the FMC didn't match what the airplane had turned to when we made the turn, and wished that he had said something at the time so that we could resolve the discrepancy. I should have caught the misspelling at the time, but I also should have selected the fix from the list instead of typing it in. I indicated that fatigue was a factor with this event because I think I would have caught the error or not made it in the first place. We overfly ZZZZZ often and I've noticed the variant

spelling before. It was the last night of the trip, though, and I'd not had more than 4 consecutive hours of sleep (or more than 5.5 total) on any of the previous days.

## Synopsis

Air Carrier flight crew reported a heading deviation caused by not following SOP's and a change to the crew's normal procedures due to the pandemic.

## Time / Day

Date : 202101

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

## Environment

Flight Conditions : VMC

Weather Elements / Visibility : Rain

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase.Other

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 2746.37

Experience.Flight Crew.Last 90 Days : 127.17

Experience.Flight Crew.Type : 487.87

ASRS Report Number.Accession Number : 1782864

Human Factors : Fatigue

Human Factors : Physiological - Other

Human Factors : Situational Awareness

Human Factors : Distraction

## Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

## Assessments

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

## Narrative: 1

Pairing X was modified once a week or two ahead for report times. Trip began with along ZZZZ layover and second day with a XA:50 report to fly XR:03 block to ZZZ. In cruise to ZZZ we were informed by the FA crew that no meals were boarded for us. We asked for what snacks were available given neither of us had eaten since breakfast. We were given snack type food, sugar and nothing of substance. Upon landing in ZZZ we had to clear customs and had no option for food before leaving the airport as after customs we were right at the hotel pick up area. We called the hotel and asked them to send the van and they informed it would be 10-15 mins. 45 mins later (now 11 hrs remaining in our layover) we got the hotel. We asked what food options were available and they said nothing. We both changed and walked around the hotel and found a takeout restaurant still open but with 5 plus people in line to order. By the time we got our food we had less than 10 hrs remaining in our layover and a full meal to eat. I am not use to eating this way and tried my best to get what rest I could prior to our van at XS:05 AM for a XS:40 AM report. My Captain started the crew briefing that morning with "I did not sleep as well and I'm feeling effects of fatigue so keep an eye on me." I slept OK and we both felt OK to fly to ZZZ1 and would evaluate the day as each flight came. Upon reaching ZZZ1, we were both making our standard SOP callouts - but the wrong callouts at the wrong time. For example, "Set missed approach altitude at GS intercept vs at 1,000 feet AFE". We landed and both agreed we were feeling more effects but were still fit to fly our leg to ZZZ2. Roughly half way to ZZZ2 I felt like I "hit a wall" and told the CA that I would be calling fatigue for the ZZZ3 leg. Immediately she said "please do the same for me." We completed our flight to ZZZ3 per SOP and no errors were made on arrival nor en-route aside from a few misplaced callouts. This pairing X had multiple fail points. First, no food was boarded in ZZZZ - not even the COVID adjusted non approved meal. Nothing. Second, upon arrival and clearing customs, the hotel van took over 45 mins to get to us and over an hour to get to the hotel further shortening our layover time. Third, upon arrival at the short layover, the hotel had zero food options available - not even a to go option. I can assure had we not found the restaurant across the street this would have resulted in a call to scheduling that evening. We cannot not be fed on a 6 hour flight we are planned to get both a meal and a snack and have nothing boarded. And then get to our short layover and have no food available and have to spend more time finding food and then eating a full meal to then have to sleep immediately afterwards. The sleep quality was poor at best. This completely set up day 3 - the longest day of our trip for failure. This pairing needs to be looked over and corrected, and/or the company has to provide some failsafe option if food is not boarded. In this instance we not only had food not boarded and available, but at the time we needed a quick option with no other option - the hotel had absolutely nothing. In this case we were set up on day 2 to have a minimal rest night and then move into a 3 leg day spanning 11+ hours with minimal poor sleep the night before.

## Synopsis

Air carrier First Officer reported a flight pairing where they had no proper food available and minimal sleep leaving them fatigued and hungry during flights.



## Time / Day

Date : 202012

Local Time Of Day : 1801-2400

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 5000

## Environment

Flight Conditions : Mixed

Weather Elements / Visibility : Windshear

Weather Elements / Visibility : Rain

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : EMB ERJ 170/175 ER/LR

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Climb

## Person

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 : 1782106

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Fatigue

## Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Result.General : Maintenance Action

Result.General : Flight Cancelled / Delayed

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

The Captain gave me the plane and started making calls on COM2 which I did not listen in on. Operations attempted a Dispatch patch which didn't work, Dispatch via airnav, Flight attendant calls, and PAs. Meanwhile I was flying the plane with automation, getting vectors from ATC, descending (I believe we were around 30,000' when we decided to divert), and fielding ATC questions to a limited extent. We were able to go and stay VMC at some point during this time although it was night. Maybe 6 minutes later the Captain was back with me and he took the airplane. At that point I started working the box with a bit of help from the Captain. I was still also handling most of the ATC calls at that point. We ended up getting direct to a waypoint that put us on a base to final for Runway XXL. Shortly thereafter they changed it to Runway XXR. Unfortunately I wasn't able to send for the numbers until we were turning final. I ran what I could of the descent checklist as I waited for them to come back. As they finally came up, Captain said it was too late, he would use green dot as a reference for landing. I expressed that I was OK with that and pulled myself away from the automation. Either shortly before or after this the Captain commented a different strange smell in the cockpit, I verbalized smelling it as well but am unable to describe it accurately- maybe some kind of fumes. Remember at this point we had a real concern that there was a fire with a fuel leak despite the lack of alarms or EICAS msgs. The Captain executed a very nice landing and I continued to communicate with tower on the dedicated frequency. We pulled off and came to a stop. Captain asked for a fire truck to inspect the plane which was accomplished without any abnormalities or fire indications found. We then proceeded to gate in the company ramp. At some point during this latter taxi the smell dissipated from the cockpit. I suggested not turning the APU on as it could have been the source of our issues. Captain agreed and asked me to notify Ops that we wanted to taxi in and leave engine 1 on while they hooked up the ground power. I relayed this and it took a while but was eventually accomplished. We shut down and medics came into the forward doorway asking to assess/treat folks. The flight attendants seemed to be the only ones reporting headaches/symptoms from the incident, especially FA2. Both FA2 and FA3 did a great job throughout the situation. I was especially impressed with FA2 doing her job professionally while in obvious distress after the cockpit door was opened. The medics basically had to insist on taking her for evaluation while the Captain stepped in to the forward cabin and volunteered to perform any of her FA duties necessary while the passengers deplaned. I remained in the cockpit monitoring the systems. Captain demonstrated superb leadership and decision making skills this night and I feel very lucky to have been working with him during this event. We talked to a variety of ground personnel and mechanics after a quick debrief. One mechanic firmly believed that de-ice fluid was ingested in the APU and that caused the odor. Captain and I were skeptical as we had not de iced all day and had been in heavy rain. The mechanic showed me the aft of the aircraft and there did indeed appear to be a small streak of fluid (not water) on the belly forward of the APU inlet. However to me it looked like the fluid came from the APU as the fluid was more concentrated there and disappeared as the streak moved forward on the small belly fin for maybe 8'. I took a few photos which should be attached. It's also noteworthy that we had this same aircraft for the last 2 flights (about 4.5 flight hrs) which included an identical takeoff from ZZZ. Unfortunately it took over an hour for everyone, especially the FAs, to complete all the required phone calls and documentation. We were unlucky enough to wait over 45 minutes for ground transportation during which we talked to crew scheduling and the contacted the shuttle company multiple times. We all got to the hotel after X pm truly exhausted from the experience and without an opportunity to get any dinner. Surprisingly I wasn't the only crew member to mention trouble sleeping as I unwillingly replayed the events over and

over in my mind. In hindsight now it's interesting to evaluate myself going from the adrenaline spike during the incident, to the fatigue crash afterwards, to the inability to relax when I finally got to the hotel room. The following day which was supposed to be my day off was a deadhead home. That afternoon I evaluated my condition and thought it appropriate to ask for a later start for my next 3 day trip starting the following day. I will evaluate myself again on the next day and ask for yet a later time/day to join this next trip if necessary. Despite all the great training I've had to it was a valuable experience to go through this in real time. It was interesting as this evolved from a transient cockpit odor to a de facto emergency landing. We do get mild transient odors in the cockpit from time to time without consequence and I really thought this would be a similar outcome. I fully expected the flight attendants to report the odor gone as we continued the climb out and found myself a bit surprised to be going into ZZZ2 even though we literally had just been discussing it before the decision was made. After extensive reflection I feel like we handled the situation very well. I do think in hindsight that we could have communicated even more during that extremely busy descent. We both debriefed about looking at the landing weight during the descent, thinking it was okay, and deciding it better to land even if we were slightly over weight anyway but I don't remember either of us verbalizing it in flight. We also didn't discuss our obvious decision not to hold and run checklists which we both decided was not the best option. There is an argument to be made that if we had our hands full safely getting the plane down ASAP and those discussions were OK to save until later. In hindsight we probably should have [communicated the urgency to ATC] at some point. Initially the Captain and I had some uncertainty as to how strong the fuel smell was in the aft cabin but decided it was time to go to ZZZ2 regardless. As soon as we described the situation to ATC they treated it as an emergency and we were busy enough not to discuss or bother officially declaring it.

## Synopsis

EMB-175 First officer reported a fumes event during initial climb resulting in a diversion.

## Time / Day

Date : 202101

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

## Environment

Flight Conditions : Mixed

Weather Elements / Visibility : Windshear

Weather Elements / Visibility : Haze / Smoke

Weather Elements / Visibility.Visibility : 10

Light : Night

Ceiling.Single Value : 1600

## Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-300

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Climb

Route In Use : Direct

Airspace.Class B : ZZZ

## Component : 1

Aircraft Component : Flight Dynamics Navigation and Safety

Aircraft Reference : X

Problem : Failed

## Component : 2

Aircraft Component : INS / IRS / IRU

Aircraft Reference : X

Problem : Improperly Operated

## 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 : 15000  
Experience.Flight Crew.Last 90 Days : 102  
Experience.Flight Crew.Type : 2400  
ASRS Report Number.Accession Number : 1781908  
Human Factors : Human-Machine Interface  
Human Factors : Distraction  
Human Factors : Fatigue

## Events

Anomaly.Aircraft Equipment Problem : Critical  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Diverted  
Result.Flight Crew : Landed As Precaution  
Result.Flight Crew : Landed in Emergency Condition  
Result.Flight Crew : Overcame Equipment Problem  
Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

On climbout lost flight instruments ADI HSI both sides and navigation capability. Was on standby instruments. I took the aircraft from FO and requested priority handling. With help from ATC. Landed VFR safely at ZZZ. Found the IRUs not properly aligned. With constant interruptions preparing for the flight by flight attendants, fuel slips, security forms, I failed to properly align the IRUs. I usual devote my attention to this process and can only imagine that I got interrupted. I was also tired. Everything seemed normal on taxi out. I was able to update the position at the end of the runway. I had a First Officer brand new to the airplane. Just finished IOE. Ultimately it was my fault I take full responsibility. I feel terrible about it. Pilot error on my part.

## Synopsis

B737-300 Captain reported they lost flight instruments on both sides and navigation capability during climbout resulting in a diversion. Captain stated the IRUs were not properly aligned and cited multiple distractions and fatigue as contributing factors.

## Time / Day

Date : 202101

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZLC.ARTCC

State Reference : UT

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft

Reference : X

ATC / Advisory.Center : ZLC

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Cruise

Airspace.Class A : ZLC

## 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 : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1781788

Human Factors : Confusion

Human Factors : Fatigue

Human Factors : Physiological - Other

Human Factors : Situational Awareness

## Events

Anomaly.Deviation - Track / Heading : All Types

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Flight Crew : Returned To Clearance

Result.Air Traffic Control : Issued Advisory / Alert

Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

While waiting for the airplane to be towed to the departure gate, I ate a heavy breakfast and did not consume any coffee as this was an Air Carrier X operation and I anticipated coffee being readily available on the plane. In spite of my request, the FA never made any coffee. ATC issued a 15 degree heading change for traffic. I made the heading change without incident. Subsequently, I began to feel a bit drowsy. After approximately 5 minutes, ATC issued "Direct SUNED" fix. I selected direct SUNED in the FMS and activated after PM confirmed the change. I forgot to select the NAV mode on guidance panel and we continued on the previous heading for 3 more minutes. I snapped to attention ATC reissued the Direct SUNED clearance and after a moment of confusion as to why the clearance was reissued, I realized that the guidance panel was still set to HDG mode. The proper NAV mode was engaged and we proceeded direct to SUNED without incident or any further mention of the issue by ATC. Driven by adrenaline, I remained mentally aroused and vigilant for the remainder of the flight. Cause - PF's Postprandial lassitude caused by failure to ingest a suitable amount of caffeine following heavy breakfast. PM inattention/distraction was also a factor. Ensure personal availability of postprandial drowsiness countermeasures (aka Coffee) and remember to verify changes on flight mode annunciator.

## Synopsis

Air carrier First Officer reported a track heading deviation during departure from SLC airport. First Officer cited feeling drowsy due to not consuming caffeine after a big breakfast may have contributed to the event.

## Time / Day

Date : 202101

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : IMC

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Route In Use : Direct

## 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

Experience.Flight Crew.Total : 9012

Experience.Flight Crew.Last 90 Days : 175

Experience.Flight Crew.Type : 586

ASRS Report Number.Accession Number : 1780959

Human Factors : Situational Awareness

Human Factors : Troubleshooting

Human Factors : Other / Unknown

Human Factors : Fatigue

## Events

Anomaly.No Specific Anomaly Occurred : All Types

Detector.Person : Flight Crew

When Detected.Other

Result.General : None Reported / Taken

## Assessments



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

## Narrative: 1

First leg arrives ZZZZ mid evening, and crew arrives hotel at approximately close to midnight, after a 13-hour duty all-nighter, rests until van departure the next evening ZZZZ time, for a report time 2 hours later and a 2-leg 14:20 duty day with 10+ hours of flying to ZZZZ1 and back followed by another 1.5-2 hours to get back to the ZZZZ hotel. With a 3-person crew, and the FAR117 limitations, the ZZZZ1 turn begins with no one properly rested (due to the 3-person crew, each crewmember gets at most 3 hours of rest on the red-eye to ZZZZ on the first night, and arrives at hotel just after Window of Circadian Low (WOCL), unable to get much restorative rest. The next night's report time is at the \*beginning\* of the WOCL, meaning two nights in a row of disrupted sleep (unrelated to the ZZZZ1 turn, but indicative of the poorly-built nature of this trip, the third duty period of the 5-day pairing also includes a redeye, for a total of 3 min-rest 3-pilot redeyes in 5 days). Concerning the ZZZZ-ZZZZ1-ZZZZ legs, because of the 117 restrictions, depending how the Relief Pilot (RP) and PM split the first leg or part of the 2nd, and the expected flight time of the ZZZZ-ZZZZ1 leg, no one gets decent rest. In our pairing, I as the RP slept first on the outbound leg for 2 hours, and the PM slept next for 3, and the PF slept the entire return leg (2.5 hrs). This was FAR117 compliant, but due to pairing construction is essentially too little, at the wrong time, and contributed to a degradation in safety. It is not helped by a 2-hour ground sit (during which it's impossible to rest because the countries authorities enter the airplane for a security sweep and postflight / preflight duties must be accomplished, and the constant loud noises and aircraft motion from cargo loading/unloading). So the RP and PM sleep a very small amount during the WOCL, and the PF doesn't get a rest opportunity until after the WOCL, when it may no longer be possible to sleep. This is bananas. ZZZZ1, and the country's airspace in general, is among our more challenging operations (language, altimetry, nonstandard ATC phraseology and procedures, night/weather, unfamiliarity with fix names, etc.). Setting up a minimum crew with back-to-back red eyes and little rest opportunity in that environment is dangerous. And the crew is then left to consider a fatigue call on the ground in ZZZZ1 - one of the worst places in the world to stop the operation for crew and airline alike.

## Synopsis

Air carrier First Officer reported this crew rotation/pairing is not safe due to a fatigue factor.

## Time / Day

Date : 202101

## Place

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase.Other

## Person

Location Of Person.Other

Location In Aircraft.Other

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1780949

Human Factors : Fatigue

## Events

Anomaly.Other

Detector.Person : Flight Crew

When Detected.Other

Result.General : Work Refused

## Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

I awoke at XA:00 on Date and was called just a few hours later and told I was being placed back on rest, and given a XP:00 assignment. I don't understand how I'm supposed to be able to function, with less than 12 hours to adjust. I attempted to go to sleep at XJ:00 but laid awake till almost XM:00. I was awakened just after XM:00 when my phone received a text alert that my schedule had changed. I have no way to silence text alerts without also silencing all phone calls. I attempted to go back to sleep but was stressed that I would sleep through the call and could never fall back to sleep. Scheduling finally called me at XR:00, giving me absolute minimum notice to show, when I was forced to call in fatigued. I understand that this type of assignment is currently legal on paper, it

shouldn't be, but I have to tell you that I flew transatlantic flights for 8 years and was never as fatigued as I have been on Reserve under this domestic FAR 117 rules. This is ridiculous. This is the second time in only 10 days that I was switched from day to night duty with less than 12 hours notice and after being awake for less than 5-6 hours. I want to make our system work so that the flights can be covered, but this current system is a system of "gamesmanship". No one is on the same team. Why don't we have a system where everyone wants the system to work to get the planes and passengers where they need to be? It just seems like it has become a war between the company and the union and not a great place to work anymore.

## Synopsis

Air carrier Captain reported Scheduling ongoing assignment changes during crew rest period resulting in his refusal of assignment due to fatigue

## Time / Day

Date : 202012

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Aircraft

Reference : X

ATC / Advisory.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 : GPS

Nav In Use : FMS Or FMC

Flight Phase : Descent

Flight Phase : Taxi

Flight Phase : Climb

Route In Use : Direct

## 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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1780276

Human Factors : Distraction

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Ground Personnel

## Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Track / Heading : All Types

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Ground Incursion : Taxiway  
Detector.Person : Flight Crew  
When Detected : Aircraft In Service At Gate  
When Detected : In-flight  
Result.Flight Crew : Became Reoriented

## Assessments

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

## Narrative: 1

I wanted to take a few minutes to relate to you my personal experiences during the events that transpired. We were at the tail end of a lengthy four day trip, with the usual holiday related challenges; weather, maintenance, crew-placarding, lengthy sit times, de-icing etc. On the third day of the trip, we were waiting in line for departure on [Runway] XXL at ZZZ, when the tower informed us that the operation was shut down for a "deep-cleaning" at ZZZ1 Center. Having personally experienced the same the same scenario last year when both the ZZZ2 Tower and ground were shut down for a COVID spread throughout their Tower, it didn't take long for us to figure out the reason for the closure. Like everyone one else in our situation, we opened up the FOM and began compliance with the notification processes for the passengers, the Flight Attendants, and ZZZ Ops. My First Officer (FO) and I immediately began working the 14 hour duty day issue, (FO A was my second FO during the course of the trip, and he had a less restrictive duty day constraint than I did). After nearly two hours at the hold short line, we began the process of finding a gate, with the intent to avoid the prospective government fines levied for lengthy delays. It was the usual chaos, with ZZZ Ops being overwhelmed by this unforeseen event. As we approach the two hour FOM deadline for locating a gate, we were assigned DXX via ACARS. While taxiing to the gate, we made multiple attempts to get guidance from Ops, Ramp, Dispatch, etc., to see what the intent was for the passengers, my crew, and the aircraft. We were unable to get any specific guidance. Following our arrival at the gate, an Agent opened the main door, and told us that the flight would be cancelled. As directed by the agent, the passengers disembarked with their bags. Since we had seen no changes to our crew schedule, nor had we received any kind of communication from crew tracking, we assumed that the agent was correct regarding the cancellation, and as such, we began reviewing our required duty time obligations. Absent any further guidance, we subsequently put the aircraft "to bed," and once again we attempted to contact crew tracking, (no luck there). Rather than exit into the terminal, we elected to continue to wait on the aircraft. After 20 minutes or so, a new Agent came down the bridge, and asked me if we were ready to board the aircraft. Needless to say, I was a bit astonished. I asked her what the plan was, and she said that we were going to resume the flight to ZZZ3, ASAP. I reminded her that the airspace was still closed, and that we had not received any contact from either dispatch or tracking, regarding an updated release, and that we would need additional fuel, lavatory/water service, and a resupply of the delay rations that the Flight Attendants had used for the passengers during our time spent waiting on the taxiway. I also told her that both of us, along with two of the Flight Attendants had duty-time issues that we have to calculate and resolve before departure. She promptly replied and asked me, "Captain are you refusing to board the aircraft?" I immediately realized that this was the standard pass-the buck/assign the delay language, that some Agents use in an attempt to intimidate Pilots. I took several deep breaths, before I stated to her in no uncertain terms, that we would need to at least begin to address the aforementioned issues, before we would be comfortable boarding the aircraft again. Her reply was,

"Captain, are you refusing to board the aircraft?" I answered that until we get some of these issues resolved, yes. What was clear to myself, my FO and the number one Flight Attendant, is that this was clearly an attempt at pilot-pushing. [In my opinion], this Agent had one concern, and that was to make sure that these passengers would become someone else's problem, (namely ours). Long story short, and after significant efforts by all involved, we reconstituted the flight and determined that without further lengthy ground delays that we would likely arrive in ZZZ3 within our respective 14 hour duty day window. We then performed our usual checklists, flows, refueling, new clearance etc. After push-back, start and taxi instructions were received, I made my first mistake of the flight, and turned in the direct opposite direction of ground's instructions on the taxi clearance. It was at this point that I realized I was a lot more tired than I thought. My FO and I discussed this, and we agreed that though we were both somewhat tired, it was safe to proceed, and that we should just take extra time and precautions going forward. Mistake number two on my part was that when ATC changed our departure STAR, we briefed it at the gate, had it up on our iPads, but I had failed to enter it in the MCDU. After wheels up, ATC gave us direct-to clearance to a fix that wasn't on the legs page. My FO quickly realized that I hadn't entered the new departure STAR, and he rapidly remedied it on the MCDU. I was mad at myself for making this series of unprecedented and inexplicable mistakes. Those mistakes continued as we descended on the type of complex STAR with a series of "at or above" altitude constraints, that confounds the logic on some of the older "Basic" airplanes. Needless to say, we landed safely in ZZZ3 later that evening. After block-in, I determined that I was within my duty legality, by 20 minutes or so. It had been a very long day. We had departed ZZZ4 that morning before the sun had risen, and we had left the gate at ZZZ for the second time, well after the sun had set. In summary, I had made many embarrassing operational mistakes during the course of the last leg, beginning with my pre-flight, push back, all the way through the descent into ZZZ3. The only explanation for my numerous mistakes was fatigue. In short, I will never, ever, again allow the "system" to push to me beyond my own personal safety limits. I will take my First Officers counsel more seriously when it comes to considering just how tired we are. Additional factors include that when you consider the cumulative effects of four and five day trips on us, along with a 14 hour duty period, it can be well beyond the average pilot's limitations to safely operate. And while I don't blame the agent personally, (like everyone else, she was just doing the job in the manner that she was trained), and like everyone else she's just under time pressure. As time has gone by at our company, it has become clear to me, that the safety culture at the top of this airline, is in many respects, mostly honored and kept in place, by those who of us, who are at the pointy end of the spear. In retrospect, the main causal factor was fatigue due to a lengthy delay. Two suggestions. The first is that [in my opinion], we need to take into account the cumulative effect of a lengthy four and five day trip on pilot fatigue. The other issue is Gate Agent conduct and verbiage regarding flight Ops as it regards to boarding the passengers.

## Synopsis

Air Carrier Captain reported several operational errors occurring after a long ground delay long due to an "ATC Zero" event.

## Time / Day

Date : 202012

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 : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Flight Phase : Descent

Route In Use : Direct

Route In Use.STAR : ZZZZZ2

Airspace.Class E : 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 : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1780260

Human Factors : Distraction

Human Factors : Fatigue

Human Factors : Human-Machine Interface

Human Factors : Training / Qualification

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation / Discrepancy - Procedural : FAR

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

While descending via the ZZZZZZ2 STAR into ZZZ, we were given a direct, followed by a heading and a descent to 6,000 feet and a request to fly our best forward speed for spacing. In complying with the instructions, I descended below 10,000 feet at 300 knots. At approximately 9,000 feet, I recognized the error, leveled off and slowed to 250 knots. We continued the flight to an uneventful landing. Although I had gotten a full night's sleep the night before, I was feeling somewhat fatigued by the time we began the flight to ZZZ. I had been flying long days from the previous 4 day trip that started with a very early commute on the morning. Compounding this is the fact that my recency of experience is lacking. I had flown very little during the previous 3 months due to a problem with my international qualifications. I believe that if I had not gotten distracted with the revised clearances from ATC this would not have happened. I had been flying in VNAV, but opened the speed window when a higher airspeed was requested by ATC. My improper monitoring of the automation led me to descend below 10,000 feet at a speed above 250 knots. Unfortunately, my First Officer did not catch the error either.

## Synopsis

Air carrier Captain reported exceeding 250 knots below 10,000 feet during descent. Captain cited fatigue and lack of flying as contributing factors.



## Time / Day

Date : 202012

## Place

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

## Aircraft

Reference : X  
Aircraft Operator : Air Carrier  
Make Model Name : Commercial Fixed Wing  
Crew Size.Number Of Crew : 3  
Operating Under FAR Part : Part 121

## Person

Location Of Person.Aircraft : X  
Location In Aircraft.Other  
Reporter Organization : Air Carrier  
Function.Flight Crew : Captain  
Qualification.Flight Crew : Instrument  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Multiengine  
Experience.Flight Crew.Total : 24000  
Experience.Flight Crew.Last 90 Days : 180  
Experience.Flight Crew.Type : 2100  
ASRS Report Number.Accession Number : 1780188  
Human Factors : Workload  
Human Factors : Fatigue

## Events

Anomaly.No Specific Anomaly Occurred : Unwanted Situation

## Assessments

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

## Narrative: 1

I am writing this because I'm concerned about the safety of the ZZZ - ZZZZ - Chengdu Airport - ZZZZ - ZZZ pairing. Starting on date, it was changed from a 4 person crew to a 3 person crew. This is NOT SAFE. I understand why [it] changed is because the duty time went from XX:25 to XX:20 and so only 3 pilots are required. I've flown this trip X times and it's challenging with 4 pilots let alone 3 pilots. The primary purpose of this report is to identify this [pairing] as a safety event. My goal is to provide a corrective measure that will mitigate a safety issue, before it becomes a Incident/Accident THREAT: Personal

Fatigue. This trip is on the back side of the body clock with a late night pick up out of ZZZZ. This trip becomes close to a XX hour duty day because of the 1:10 ride from downtown [city] to the airport and back. The flight from ZZZZ is often 2 hours longer than the flight coming back from Chengdu due to the Jet stream. Often, because of this jet stream, there is moderate turbulence along the route, making sleeping in the bunk difficult. The Captain must be in his seat for the take-off and landings for both legs. With a three pilot crew, it is difficult coming up with a plan for breaks, especially on the shorter Chengdu - ZZZZ segment. The relief Pilot will hardly get a break, besides being upset for not getting a break, they will be very tired. The relief pilot is one of the most important people in the crew, and you want them alert. They often see threats before the flying pilots do, and can bring the threat to their attention. THREAT: Environmental. Often there is low visibility in Chengdu and ZZZZ this time of year, increasing the work load. There is a X:10 break in Chengdu which is a very busy time for the pilots. We have to flight plan, pre-flight (with full suit) deal with the Chengdu police and customs. With the boarding of cargo (very noisy and moves the plane around a lot with loading of cargo containers) it is impossible to get any rest while on the ground. THREAT: Technical. Chinese airlines are almost back to normal, leaving Chengdu is a very busy time for ATC. I have flown with new pilots that haven't flown China and between operating in meters and the difficulty with the Chinese ATC language it is impossible, and irresponsible leaving the flight deck out of FL180 to go on break. Because of this, it isn't until reaching cruise altitude until the Captain can start his break. Meters can be challenging and causes a lot of missed ATC calls, or repeats. The 4th pilot is a huge benefit for listening to ATC and providing back up! I've flown this trip X times now, having 2 Captains and 2 FO's was by far the safest. It gave everyone a break and each Captain had a leg which helped mitigate stress, and fatigue. With one Captain and 3 FO's it is not nearly as safe as 2 Captains, but it is bearable because you get more of a break. With one Captain and 2 FO's it is impossible to get a break, of good rest. Another thing the company needs to think about, this is China during COVID times. The company realizes the difficulty of a layover in China for the crews. The duty time with 3 crews is reduced to XX hours. There can only be a X:10 delay in Chengdu before an extension takes place. After doing this trip X times I know for a fact that the likelihood of me extending is nil, due to fatigue. The mitigation is simple. Make it a 4 person crew.

## Synopsis

Air carrier Captain reported that the flight crew count on a trip pairing had been reduced and cited multiple issues associated with the reduction.

## Time / Day

Date : 202012

Local Time Of Day : 1801-2400

## Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Altitude.MSL.Single Value : 3000

## Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use.STAR : ZZZZZ

Airspace.Class B : ZZZ

## Person : 1

Location Of Person.Aircraft : X

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 : 1779910

Human Factors : Situational Awareness

Human Factors : Fatigue

Human Factors : Distraction

## 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 : 1780137

Human Factors : Fatigue

Human Factors : Distraction

Human Factors : Situational Awareness

## Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Inflight Event / Encounter : Unstabilized Approach  
Detector.Automation : Aircraft Terrain Warning  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Overrode Automation  
Result.Flight Crew : Became Reoriented

## Assessments

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

## Narrative: 1

Cleared for visual approach to Runway XXL on modified downwind, at 3,000 feet. Maneuvered aircraft to arrive at ZZZZZ at 3,000 to intercept LOC/ Glideslope simultaneously. Thought I was going to be above glideslope at ZZZZZ, asked FO to set 2,000 feet acquired Localizer inside of ZZZZZ, still at flaps 3. Drove into glideslope, selected flaps full. Radio altimeter briefly showed 800 feet due to terrain variation. Broke SOP of being fully configured by 1,000 feet. I accepted a night visual approach after a 12 hour, three leg duty day. Fatigue was a contributor. Hurried visual, should have intercepted final at IAF vs. FAF. My currency was spotty due to reduced flying on reserve. Never accept short visual approaches at end of long duty day.

## Narrative: 2

I was acting as PM. Approaching ZZZ at night from the SW with a high overcast layer above. ATC had us on a downwind leg for [Runway] XXL at 4,000. The autopilot and auto thrust were engaged. Approximately abeam the end of the runway, ATC asked us if we had the field in sight. The CA/PF says he does, so I reported the field in sight. ATC then cleared us for the visual XXL. The PF then set 3,000 in the FCU and I confirmed and referenced the plate showing the FAF ZZZZZ at 3000. I believe the PF went open descent to 3,000 from 4,000. The PF then began his base leg turn. The intercept angle initially looked like it was going to join the final just outside of the FAF. As we approached 3,000 the PF continued the turn in. He asked me to set 2,000 into the FCU and set 1,000 v/s down. I complied as it appeared to me that the PF was trying to intercept the course and I assumed he was going to join inside of ZZZZZ/FAF. He readjusted his intercept to join the final at ZZZZZ or just outside it. By that time I began to realize we were getting low on the profile. I still had visual contact with the runway. At approximately that time, the airplane leveled at 2000 just inside of ZZZZZ and ZZZ tower advised us of a low altitude alert and to check our altitude with the current altimeter setting. I replied with our call sign. We continued at 2,000 until intercepting the glideslope and landed safely. We were approaching the end of a long duty day and it was a non eventful and quiet flight, so fatigue was a possible factor. I am also familiar with operating into ZZZ, so I was a bit complacent, as well as being in VFR conditions and being able to see the runway. Having both pilots confirm and verify any further altitude changes in the FCU after the setting of the lowest charted altitudes for the approach used.

## Synopsis

Air carrier flight crew reported an unstablized approach and cited fatigue, time pressure and reduced flying as contributing factors.

## Time / Day

Date : 202012

Local Time Of Day : 1801-2400

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Climb

Flight Phase : Descent

Flight Phase : Cruise

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 43

ASRS Report Number.Accession Number : 1778670

Human Factors : Fatigue

## Events

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

Anomaly.No Specific Anomaly Occurred : Unwanted Situation

Detector.Person : Flight Crew

When Detected : Pre-flight

When Detected : In-flight

## Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Staffing

Primary Problem : Company Policy

## Narrative: 1

On Day 5, the crew desk called me to assign me to a trip on Day 6 with a XA:40 report time. I called in fatigued on Day 6 at approximately [3 hours prior]. I had just finished a 4 day trip from Day 2 to Day 5, with each day requiring subsequently later report times and the last 2 days requiring late or all night flying. Additionally, even though this trip spanned 4 calendar days, it only included 2 sleep cycles. The previous 4 day trip created a significant cumulative sleep debt, as tracked by my Apple Watch. Day 1-Day 2, 6:38 of sleep at home prior to reporting for my 4 day trip. Day 2-Day 3, 8:44 of sleep in the ZZZ hotel. Day 3-Day 4, 5:26 of sleep after landing in ZZZ1, but I woke up at XA:00 am local time and had a XR:59 departure that night. I attempted to take a nap prior to reporting

for duty but I couldn't fall asleep and was awake for about 18 hours prior to flying a redeye. Day 3-Day 4, No sleep due to redeye. I flew a redeye. Extremely tired during the flight and took a 25 minute nap during cruise. When I returned home, I slept from approximately XA: 45 until the crew desk woke me from deep sleep shortly after XG: 00. After the crew desk woke me, I packed my bags and prepared for the new trip. I attempted to go back to bed at XK: 00 but could not fall asleep. I realized that it was not safe for me to attempt to fly my 3rd transcontinental trip in 2 days so I called in fatigued. Day 5-Day 6, No sleep due to crew desk interrupting my recovery sleep from the previous redeye. Of note, my previous trip involved a significant cumulative clockwise circadian rhythm disruption in which every day required a later report time and each day flew later into the night. Clockwise disruptions such as this are generally easier to tolerate compared to counter-clockwise disruptions. However, this 4 day trip also was engineered to accumulate sleep debt. Day 1 was 11 hours of duty and 20.5 hours of rest, which equates to a 31.5 hour long duty/sleep cycle. Day 2 of my 4 day was 7: 15 of duty and nearly 25 hours of rest, which was a 32 hour duty/sleep cycle. Combined with each day's later duty periods, it was generally easy to fall asleep at the beginning of the rest periods. However, it was not realistic nor possible to achieve 2 circadian rests or resets during the layovers, which meant that each day I would be awake for a longer period of time prior to reporting for late night flights. This culminated when I reported for my redeye after being awake for 18 hours. Upon landing I was absolutely exhausted and needed to catch up on the previous 4 days of missed sleep. Unfortunately the crew desk interrupted this much-needed sleep and assigned me the new trip on Day 6. In other words, the crew desk expected me to shift from my previous XM: 00 pm and XS: 00 pm local report times to a XA: 40 am report time after disrupting my rest and being awake for over 12 hours. Furthermore, the crew desk did not consider the larger picture of the 4 day trip and subsequent 2 day trip as a single 6 day long physiological marathon. Considering the operational design of my previous 4 day trip, combined with a back-to-back 2 day trip, I do not think it's physiological possible or safe for anyone to endure such a disruptive 6 day period especially after the crew desk wakes you up in the middle of a much needed restorative sleep period.

## Synopsis

Air Carrier First Officer reported they called in fatigued due to not being able to get sufficient rest from the previous four days flying schedule.

## Time / Day

Date : 202012

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : SNA.Airport

State Reference : CA

Altitude.MSL.Single Value : 3000

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : SNA

ATC / Advisory.TRACON : SCT

Aircraft Operator : Air Carrier

Make Model Name : Airbus 318/319/320/321 Undifferentiated

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 : Final Approach

Flight Phase : Initial Approach

Route In Use.STAR : DSNEE FOUR

Airspace.Class C : SNA

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class E : ZLA

## 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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1778510

Human Factors : Communication Breakdown

Human Factors : Fatigue

Human Factors : Human-Machine Interface

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

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Deviation - Speed : All Types  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Inflight Event / Encounter : Unstabilized Approach  
Detector.Person : Flight Crew  
Result.Flight Crew : Executed Go Around / Missed Approach

## Assessments

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

## Narrative: 1

Descending on the DSNEE 4 arrival from EMLLD, we became aware of congested airport environment with two different TCAS traffic alerts very close by. Approach had us at 190 knots departing DSNEE, and we were expecting the visual to runway 20R. We had gone to flaps 2 configuration. We were handed off late to the final controller, and when we switched over we heard a company call sign with nearly identical numeric as ours, cleared for the RNAV (RNP) Z runway 20R. We heard the other aircraft read back the clearance, we knew a VERY similar call sign was on frequency. We thought we might be cleared for the same approach. We checked in and asked if we were going to get the RNAV approach, and the controller said no, we were going to get a visual unless we asked for the approach. Shortly after, the controller cleared an aircraft to descend to 3000', but neither of us were sure that it was our call sign. The First Officer (FO) attempted to clarify, but the controller was very busy and talking nonstop. We flew a few more miles, and before we could clarify he repeated the clearance to descend to 3000' and asked if we had the airport in sight. We called the airport, and said we were high. He cleared us to fly through final approach course and intercept from the right. FO read back the clearance, and we both agreed it was going to be tight. I immediately called for gear down and got the flaps to full; I also used the speed brakes as long as safely practical. We switched over to tower control, and I made the glideslope at approx. 1400' AGL, but we were still 40kts fast. I told the FO we were going to do a 'Soft Go'. At 1000' AGL I called for 'Go Around, Takeoff/around (TOGA)' and advanced the thrust levers to TOGA. I then called 'climb' as I brought the thrust levers back to what I thought was the climb position, but was actually the Maximum Continuous Thrust (MCT) detent. The tower initially held us to 2000', so I reduced our climb rate - we were accelerating rapidly. As we cleaned up and were cleared to 3000', the FO recognized that we were in MCT detent and brought it to my attention. By then we were clean and rapidly approaching 250 KIAS. I brought the thrust levers back to idle as we passed 260, and we saw a maximum speed of about 280 before we began to slow down again. I selected speed mode and set 220 KIAS, positioned the thrust levers in the climb detent and re-engaged auto thrust. We slowed and turned back into a right downwind for an uneventful visual approach and landing at SNA. Causes (1) Late clearance to descend. SNA is challenging even when on a normal profile, and a few miles made all the difference. (2) Task saturation. The L.A basin is one of the busiest airspaces in the world. Two Traffic Alerts and nonstop chatter from the approach controller indicated that he was task saturated, as well. (3) Call sign confusion. The scheduling shop should never have had two call signs separated by one digit arriving at the same airport at the



same time. (4) Approach expectations. We were going to do a visual, and changed our setup and expectations when we heard preceding traffic approach clearance. (5) Fatigue. Our FAR 117 duty day limit was 10 hours. We had been awake since 3.5 hours earlier to make sign-in, and were at 9:00 of our 10:00 limit when we arrived at SNA. When we knew we were too high to likely make a successful approach, we could have asked for a vector and more time/distance to descend. Flight scheduling needs to de-conflict call signs so very similar ones are not scheduled to arrive at the same airport at the same time. The ATC controllers seemed very busy; perhaps a few more controllers on-shift would help divide the workload better. Crew scheduling could alleviate fatigue factors by avoiding sequence builds that have crews flying into airports at the back end of their duty periods that are known to present unusual challenges (even if they aren't officially 'special qualification' airports).

## Synopsis

Airbus First officer reported a go-around caused by late clearance to descend and confusion caused by a similar call sign for an aircraft preceding them.

## Time / Day

Date : 202012

Local Time Of Day : 1801-2400

## Place

Altitude.MSL.Single Value : 39000

## Environment

Flight Conditions : VMC

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Cruise

Route In Use : Direct

## Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1293

Experience.Flight Crew.Last 90 Days : 76

Experience.Flight Crew.Type : 1293

ASRS Report Number.Accession Number : 1777575

Human Factors : Physiological - Other

Human Factors : Fatigue

## 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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 31000

Experience.Flight Crew.Last 90 Days : 173  
Experience.Flight Crew.Type : 14660  
ASRS Report Number.Accession Number : 1777578  
Human Factors : Situational Awareness

## Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness / Injury  
Anomaly.No Specific Anomaly Occurred : Unwanted Situation  
Detector.Person : Flight Crew  
Detector.Person : Flight Attendant  
When Detected : In-flight  
Result.General : None Reported / Taken

## Assessments

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

## Narrative: 1

While enroute and at cruise altitude of 39,000 feet, with between 1:00-1:15 hrs of flight time remaining of a 3:40 hour flight: my stomach began to feel queasy, I started sweating, and in a short time felt the urgent need for a bowel movement. I advised the Captain of my need to use the lavatory and contacted the flight attendants. I quickly got out of my seat due to the urgency in my stomach and went to the door. When I stood up rapidly, I felt a rush of nausea as well as feeling light-headed. When the flight attendants knocked, I opened the door. The next thing I know I am sitting on the galley floor with a nurse sitting next taking care of me, with a doctor assisting. The doctor and nurse monitored my vital signs, which initially both blood pressure and oxygen levels were low. I began to feel normal shortly after they had me drink some water and ½ cup of orange juice, utilize the onboard oxygen and began to administer 2 bags of IV fluid. Blood pressure and oxygen levels returned to normal. I told them that I had been fasting and had not eaten for nearly 2 days. I also said I could tell I was dehydrated due to the limited amount of urine output on our first lavatory break 1-1/2 hours into the flight. Both agreed that this was probably a cause for what happened and called it a vagal response, which can cause a person to faint. Upon landing, we were met by paramedics at the gate. They took my vital signs to include a blood glucose test. After completing their assessment, they said I was fine and there was no need to take me to the hospital. After being released from the paramedics, the entire crew of went to the crew van and the overnight hotel. Medical Assistance provided a Hospital for me to be seen, to ensure I was medically able to fly (as a passenger) back to ZZZ. I went to the Hospital and received: initial screening, EKG, and blood tests to include Electrolytes, Hemoglobin, Triage Cardiac screen "CUANTITATIVO, (INCLUYE TROPONINA I, BNP, MIOGLOBINA, CKMB Y DIMEROS D)" The doctor stated that I was in excellent shape and saw no problems or issues with any of my test results. I was released with no further action nor medications required.

## Narrative: 2

On Aircraft X ZZZ to ZZZ1 my FO (First Officer) said he needed a lav break, and I said go ahead, I have the aircraft. He got out of his seat and waited for the (FA) Flight Attendant to call so we could open the door. As the door opened and the FA came into the cockpit, he said boy your FO is very sweaty. Not more than 30 seconds later, the back end called and said the FO had passed out in the forward galley or first class. At that point, the FA stayed with me on the flight deck for the duration of the flight as he was talking on the phone and giving me vitals so I could send too Dispatch. We had an ER nurse taking care

of FO and she set up an IV and he began to get better and told us he wants to continue to ZZZ1. FO was checked at the gate as well as going to ZZZ1 hospital and everything was good with no further action.

## Synopsis

Air Carrier Pilots reported the First Officer became ill inflight and was unable to perform pilot duties.

## Time / Day

Date : 202011

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

## Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

## 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 : 1773317

Human Factors : Physiological - Other

Human Factors : Fatigue

Human Factors : Communication Breakdown

Human Factors : Distraction

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

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

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Result.Flight Crew : Overrode Automation

Result.Flight Crew : Became Reoriented

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

On short final to land Runway XXR we heard a "too low, flaps" audible warning. As the PM, I saw we were at flaps 25 with a planned flaps 30. I called this out to the First Officer who was the flying pilot as I selected flaps 25 and performed the landing check which we had apparently missed on approach. We made a normal landing. This was our second day in a row of very early flights with wake up calls and 3 time zone changes. While I didn't feel fatigued, I suspect I was more tired than I realized. We had just flown a nearly 5 hour cross country flight with a breakfast of a couple spoonfuls of granola, a couple spoonfuls of yogurt, and a few grapes. This was our company provided meal for the flight. While I normally take responsibility for providing my own food, this is not always possible in the current COVID environment. I believe this was a significant contributing factor. In hindsight, the proper response would have been to perform a go around and set up for another approach. While I don't feel my handling of the situation was unsafe, it was not consistent with company procedures. With reasonable sleep and nutrition I'd like to think I would have made a different decision.

## Synopsis

Air carrier Captain reported receiving a flap aural warning message due to having an incorrect flap setting on final approach.

## Time / Day

Date : 202011

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 500

## Environment

Weather Elements / Visibility : Windshear

Weather Elements / Visibility : Turbulence

## 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

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1772336

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Distraction

Human Factors : Fatigue

## Events

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

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Automation : Aircraft Other Automation

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Human Factors

## Narrative: 1

I was PF and the Captain was PM. We had winds gusting to 190/22G40 knots and low-level wind shear advisories in effect. Around 500 feet or so, I was task saturated just trying to fly the plane and I did not see the altitude. We got a wind shear caution. I said "continuing" and the Captain agreed. He later mentioned he was watching the altitude and we were continuously trending up. We should have used the wind shear escape maneuver according to the SOP. We had wind shear advisories on the first two approaches, had reviewed the SOPs and briefed that with a caution we may choose to continue or perform the wind shear escape maneuver. A warning and we would be getting out of there. We briefed the entire maneuver to ensure it was fresh for both of us and we were clear on our individual roles. Since we briefed on the approach that we would decide with a Caution, it was fresh in our minds. The Captain mentioned in cruise that we should have performed the wind shear escape maneuver because we were departing. Contributing causes, last leg of 4 flying around weather, moderate turbulence all day, almost diverted and had to hold due to weather on last leg, wind shear on approach and flying at night. I am relatively low time ~120 hours in 7 months, an average of 17 hours a month, which has led to poor consolidation of knowledge.

## Synopsis

Air Carrier First Officer reported not following Standard Operating Procedures in a wind shear situation during departure and cited fatigue, weather, and low flight time in the last several months as contributing factors.



## Time / Day

Date : 202010

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : BUF.Airport

State Reference : NY

Relative Position.Distance.Nautical Miles : 10

Altitude.MSL.Single Value : 3000

## Environment

Flight Conditions : IMC

Weather Elements / Visibility.Visibility : 0.5

Light : Night

## Aircraft

Reference : X

ATC / Advisory.TRACON : BUF

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 : RWY 5

Flight Phase : Initial Approach

Airspace.Class C : BUF

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1771899

Human Factors : Fatigue

## Events

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

Detector.Person : Flight Crew

When Detected : In-flight

## Assessments

Contributing Factors / Situations : Chart Or Publication

Contributing Factors / Situations : Manuals

Primary Problem : Chart Or Publication

## Narrative: 1

BUF ILS 05. Note 1 at the bottom of the page states "RVR (Runway Visual Range) 18 with Flight Directors and Autopilot.....". Note 3 in the briefing strip note section states "Autopilot coupled approach not authorized." Remove the "Flight Directors and Autopilot" from Note 1. While a fresh crew might be expected to catch this, at the end of a long day, a tired crew might not, so why not make it easier for them.

## Synopsis

Reporter reported conflicting guidance on the BUF ILS 05 instrument approach chart referencing autopilot use.

## Time / Day

Date : 202011

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Flight Conditions : VMC

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B777 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Parked

## Component

Aircraft Component : APU

Aircraft Reference : X

Problem : Malfunctioning

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 30000

Experience.Flight Crew.Last 90 Days : 198

Experience.Flight Crew.Type : 1356

ASRS Report Number.Accession Number : 1770792

Human Factors : Fatigue

Human Factors : Troubleshooting

## Events

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

## Assessments

Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft

## Narrative: 1

We started the APU and turned the packs on. The entire plane filled with a smoky haze with a strong old sock smell. The smoke cleared in a few minutes but the smell continued. We called for a mechanic. Unknown to us the fire department was called out due to smoke from cargo hold. We had no indications in the cockpit. They checked it out and found no fire. Maintenance believed smoke was from APU oil leaking into air system. This resulted in having to get a new plane from the hangar and a long rolling delay. We found out the plane needed to be cleaned also so the last XA: 15 am departure time posted was not going to happen. My First Officer and I agreed we were not safe to operate the flight.

## Synopsis

B777 Captain reported "strong old sock odor" during pre-flight at the gate resulting in maintenance inspection and ultimately an aircraft swap. The new aircraft required cleaning causing further delays. The flight crew decided they were unfit to fly due to all the delays.

## Time / Day

Date : 202011

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ORD.Airport

State Reference : IL

## Aircraft

Reference : X

ATC / Advisory.TRACON : C90

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 : FMS Or FMC

Flight Phase : Initial Approach

Airspace.Class B : ORD

## Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1770650

Human Factors : Fatigue

Human Factors : Distraction

## Person : 2

Reference : 2

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1770942

Human Factors : Confusion

## Events

Anomaly.Conflict : Airborne Conflict  
Anomaly.Deviation - Track / Heading : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Inflight Event / Encounter : Other / Unknown  
Detector.Person : Flight Crew  
Detector.Person : Air Traffic Control  
When Detected : In-flight  
Result.Flight Crew : Returned To Clearance  
Result.Flight Crew : Overcame Equipment Problem  
Result.Flight Crew : Became Reoriented  
Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

Approach gave us a heading to intercept the 28C localizer. Captain turned to that heading but didn't not select a different NAV mode. I assumed he was waiting for wings level to select NAV. At wings level, he did nothing so I asked if we were cleared for the approach. He thanked me and selected NAV. At that point I believe we were too far to intercept the course. Approach asked if we were going through course. They gave us a heading to the south to reintercept. Captain left autopilot on and the aircraft was slow turning and I didn't take the plane and turn the autopilot off. Approach called traffic 1,000 ft above on the 27L approach. We had the traffic and were given an additional turn south, and decent to 4,000 ft and recleared for the Visual for 28C. [Reporter stated a contributing] cause was end of a 4 day trip and we were tired. Also, we had more discussion in sterile [cockpit] than normal as an aircraft ahead of us had reported a drone approximately 400 ft below them on final. I was uncertain which aircraft this was relative to our position on the approach, so we were discussing that. [Reporter resolves to] pay closer attention. Disengage autopilot to correct more quickly.

## Narrative: 2

I was pilot flying. We were vectored to the ILS for runway 28C in ORD. We were instructed to join localizer for 28C. I was planning to use LNAV and VNAV until outside the final approach fix. As we turned to vector to join, I paused before hitting LNAV because usually the aircraft would turn towards course immediately and if you wait it will fly the heading and then join. Approach had us a little too close for that and with 15 knots of wind from south we flew through the course. The FO pointed that out and I turned at same time as approach gave us another heading to join. We were also given a lower altitude. Auto pilot was on. We then joined the localizer and continued the approach.

We were vectored close in and with the 15 knot cross wind, pushed through localizer.

I needed to do better monitoring of where the course was.

## Synopsis

Air carrier First Officer reported approach clearance deviation resulting in ATC assigned vectors to restart the approach for an uneventful landing.

## Time / Day

Date : 202011

Local Time Of Day : 1801-2400

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

## Aircraft

Reference : X

ATC / Advisory.ATC Facility : 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 : FMS Or FMC

Flight Phase : Climb

Route In Use : Direct

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1770055

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Fatigue

Human Factors : Physiological - Other

Human Factors : Training / Qualification

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Communication Breakdown.Party2 : ATC

## Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Executed Go Around / Missed Approach

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

Soon after departure from ZZZ, we were given a lower cruise altitude. All of these changes spanned the climb, cruise and descent segments, so PF accomplished numerous FMS program changes. Prior to ZZZZZ, we were given a vector for spacing - heading 290, I think - and subsequent descents and speed changes. At some point during the changes, PF lost track of things and turned toward ZZZZZ waypoint without clearance. ATC issued a turn back to heading 300. PM noticed the turn, but was in third leg since returning from five months leave, so did not intervene or call out the discrepancy as he, also, was not certain the turn was incorrect. Crew was subsequently cleared to ZZZZZ and to descend VIA ZZZZZ arrival and landed XXR without incident. I think even the Controller lost track of all of the instructions.

I attribute the error to task saturation, hunger and some dehydration. I was also a little distracted by some personal issues going on which I started to think about while we were waiting during flow control from ZZZ-ZZZ1. I think we will have lots of issues going forward as pilots come off of extended leaves of absence.

I should not have let myself get distracted and dehydrated.

## Synopsis

Air Carrier Captain reported a track deviation and cited task saturation, hunger and lack of flying as contributing factors.



## Time / Day

Date : 202010

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 : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

## Component

Aircraft Component : INS / IRS / IRU

Aircraft Reference : X

Problem : Improperly Operated

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1765996

Human Factors : Fatigue

Human Factors : Distraction

Human Factors : Training / Qualification

## Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Passenger Misconduct

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

Detector.Person : Flight Crew

When Detected : Aircraft In Service At Gate

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

I made an error in not verifying that all 3 ADIRS were aligned before departure after having the preflight flow interrupted by the passenger disturbance at the gate. I tried to be deliberate and methodical in reviewing the manual after discovering the error before performing the alignment and thought I had found the only pertinent caution, the flaps/slats. The format of the manual made it appear to me that the section was complete on page X. Only suggestion would be to keep all cautions and warnings for a given section grouped together in the text, instead of having one at the start of the section and another at the end of the section (in this case on the next page).

The First Officer (FO) and I discussed the threats and errors that occurred on this morning and the opportunities that I missed to capture those errors. We additionally thoroughly reviewed the system. I take away a number of lessons learned from this morning and will be more vigilant when I recognize when my habit patterns are interrupted.

Other potential considerations:

My FO and I had briefed the entire trip that he was low time (just over 100 hours) and I had not flown in 5 weeks. While I felt rested and alert, this was day 4 of a 23 hour trip with all early morning shows which may have also contributed to a decreased capacity.

My cockpit preparation flow was interrupted when a passenger, who had refused to pay for his carry-on bag, breached the gate in ZZZ and caused a disturbance at the forward door. I got out of my seat to see what was going on and prepare to close the door should things escalate. When I returned, I thought I had finished my flow completely but after pushback and engine start realized I had not turned on IRS3 when we got an ADR3 fault caution message.

Knowing that there were warnings and conditions about aligning IRS's outside of the normal preflight I opened page X which has the ADIRS preflight information. The caution on that page said to make sure the flaps and slats were retracted before aligning, which was confirmed before I turned on IRS3. Since there was a GPS outage in our area, and we had moved in the pushback after aligning IRS1 and IRS2 I also decided to do another full alignment of those. When I selected all of the ADIRS off we got a master warning for the ADIRS 1+2+3 fail and other cautions which all resolved after I turned them on to align again.

Knowing we had gotten out of our normal flow, and recognizing that I had gotten distracted with gate issue, during the alignment the FO and I went through the preflight items and reviewed our previous work to confirm we had not missed anything else. After the alignment was complete and all systems normal we departed for an otherwise uneventful flight.

Once in cruise, I went back to review the manual and found on the next page Y a continuation of the ADIRS section with an additional second bullet point, one that said not to align the ADIRS with the engines running.

## Synopsis

Air carrier Captain reported making a procedural error during preflight and cited a distraction and lack of recent flying as contributing factors.



## Time / Day

Date : 202010

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1000

## Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1765758

Human Factors : Fatigue

Human Factors : Training / Qualification

Human Factors : Other / Unknown

Human Factors : Distraction

## Events

Anomaly.Deviation - Speed : All Types

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

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1

ATC asked us to maintain 190 [knots] to ZZZZZ, I realized that might be a little tight, but I thought it would work if configured a little early. I was referencing the radar altimeter throughout and as the speed was not coming off as I would have liked I believed it to be manageable. I thought I had an additional 300-400 feet to configure to flaps 30 for landing, when I heard the 1,000 foot call. I [immediately] executed a go-around for being unstable.

Cause - 1) Length of time between flights. 2) Long day. 3) High rate of speed to FAF.

Knowing how little I have been working, I should have been a little more aggressive in my SA (Situational Awareness) and planning.

## Synopsis

Air carrier pilot reported an unstabilized approach resulting in a go-around.

## Time / Day

Date : 202010

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1000

## Environment

Flight Conditions : VMC

## Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B757-200

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Cargo / Freight / Delivery

Flight Phase : Initial Approach

Airspace.Class B : ZZZ

## Component

Aircraft Component : Flight Director

Aircraft Reference : X

Problem : Malfunctioning

## Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1764297

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Distraction

## Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : 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 : 1764499  
Human Factors : Distraction

## Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Inflight Event / Encounter : CFTT / CFIT  
Detector.Automation : Air Traffic Control  
When Detected : In-flight  
Result.Flight Crew : Overcame Equipment Problem  
Result.Air Traffic Control : Issued Advisory / Alert

## Assessments

Contributing Factors / Situations : Aircraft  
Primary Problem : Aircraft

## Narrative: 1

Cleared for visual approach and cleared to land on RWYXXL. [Commercial flight] canceled their take off clearance so [ZZZ] Tower told us to continue the visual approach with a canceled landing clearance. We were 7.5 miles out direct to the Final Approach Fix in LNAV (Lateral Navigation) and the armed glideslope had captured at about 3,000 MSL providing a constant descent. We were Flaps 5 at 180 kts. To create spacing I called for gear down and flaps 20 and rolled the speed back above 20 maneuvering speed. The plane began to slow and pitch down with flap extension. I called for flaps 25 when the gear showed 3 green and the EICAS (Engine Indication And Crew Alerting System) showed "Autopilot" indicating it was still working but in a degraded mode. I then saw GS FMA (Glideslope Flight Mode Annunciator) now had a line thru it. At this point I disconnected the autopilot and leveled off visually. The altitude was about 1400 MSL, 1000 AGL. I told the Pilot Monitoring I was going to maintain 1000 AGL until established. Right after I leveled off the [ZZZ] Tower announced low altitude alert. During the debrief the Pilot Monitoring said he saw the glideslope go full scale below us and then shoot up to full scale above us near the autopilot disconnect. I continued to maneuver visually to the runway centerline at 1,000 ft. Once established we cycled the Flight Directors and the glideslope centered back to where we were on the approach. Continued visually and landed. Wrote up the discrepancy in the logbook. Fatigue didn't cause it, but it may have slowed my processing of everything that was happening kind of at the same time. Don't allow the glideslope to capture early. Choose another vertical mode until on or very close to the LOC (Localizer).

## Narrative: 2

We were cleared for the visual to [Runway] XXL and subsequently cleared to land approximately 10SW of the airport. We were level at 3000 when approach was armed and glideslope captured. Aircraft began descending on glideslope. ATC canceled our landing clearance and cleared a [Commercial flight] for takeoff on [Runway] XXL. In order to slow and create space the Pilot Flying called for gear and flaps 20. After we received an AUTOPILOT EICAS and the GS FMA (Glide Slope Flight Mode Annunciator) had an amber line through it. The Captain disconnected the autopilot and autothrottles and leveled the aircraft. We were approximately 1400 MSL (1000AFE). About this time [ZZZ] Tower called

a low altitude alert. The glideslope indicated full scale deflection below us and shortly after indicated full scale deflection above us. The Captain continued visually onto centerline; the Flight directors were turned off and turned back on and approach rearmed. LOC and GS FMAs activated and appeared to act normal. Autopilot/Glideslope malfunction. ATC canceling our landing clearance and clearing an aircraft for takeoff on our planned runway caused a distraction about the same time as the malfunction.

## Synopsis

B757-200 flight crew reported Flight Director anomaly on approach.



## Time / Day

Date : 202009

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Work Environment Factor : Poor Lighting

Light : Dawn

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Taxi

Route In Use : Direct

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Check Pilot

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 2071

Experience.Flight Crew.Last 90 Days : 12

Experience.Flight Crew.Type : 2071

ASRS Report Number.Accession Number : 1761777

Human Factors : Training / Qualification

Human Factors : Other / Unknown

Human Factors : Fatigue

## Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown

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

Anomaly.Deviation / Discrepancy - Procedural : Security

Detector.Person : Flight Attendant

When Detected : In-flight

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

I was conducting an initial Operating Experience with a First Officer (FO) who is new to the aircraft. As we started our takeoff roll the Flight Deck door swung open. A Flight Attendant immediately closed the door and it was indicating locked. I was positive I checked the Flight Deck door "OPEN" light during the After Start Checklist and it was out. I believe the door became unlocked during an electrical power transfer issue caused by me.

When I called for the After Start Checklist, I was momentarily distracted while watching the FO perform his flows. I neglected to turn on the engine generators at the beginning of the flow. When the FO turned off the APU, we momentarily lost power (I immediately caught the mistake right when he was turning off the APU). I believe this may have electrically unlocked the door.

Contributing factors:

Not much sleep the night before.

This was our first flight together.

I flew 2 days last week after not flying for 6 months.

It was right at dawn and I had the lights on dim just as the sun was starting to shine into the cockpit. I may have seen the blue Generator OFF BUS lights if the switch was on bright.

## Synopsis

Air carrier Check Airman reported not following the published checklist due to fatigue and not having flown in the last 6 months.

## Time / Day

Date : 202009

Local Time Of Day : 0601-1200

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 6000

## Environment

Flight Conditions : IMC

## Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Final Approach

Route In Use : Direct

Airspace.Class B : ZZZ

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 25000

Experience.Flight Crew.Last 90 Days : 25

Experience.Flight Crew.Type : 2880

ASRS Report Number.Accession Number : 1761773

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Fatigue

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Air Traffic Control  
When Detected : In-flight  
Result.Flight Crew : Became Reoriented  
Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

I made a delayed turn from base to final approach while conducting the ILS XXR into ZZZ. The reason for the delayed turn was a momentary lapse in CRM skills. I was the flying pilot, my copilot was the monitoring pilot. We were on a base leg when the Controller gave us a turn towards the final approach. I remember dialing in the correct heading, but forgot to press heading select. About ten seconds or so elapsed before the Controller asked if we were turning. I realized my error and immediately pressed heading select. The Controller gave us a new heading and an approach clearance. We turned onto final with a slight overshoot and above the glide slope. We configured for landing and used vertical speed mode to intercept the glide slope from above. We were on speed and altitude well before the 1,500 foot gate. Other than the late turn and the high glide slope intercept, there was no other incident or error.

The fact is the I/we made an error by not following through with Verbalize Verify and Monitor. I know that we both verbalized the heading change, I recall we both Verified setting the heading, we both, however, forgot to monitor the FMAs for the change. I think that we realized the something wasn't right a split second before the controller queried us.

There were many threats preceding this error. This is an all-night flight with an early morning low visibility arrival. The airspace is quite congested and there were many aircraft with similar sounding call signs. We had a runway change while on the arrival and the Controller kept us little higher and gave us a turn a little earlier than we had expected. I had a scheduling change in the middle of this pairing which reduced my rest time a day before this leg. Do to the current global pandemic and the reduced airline schedules, neither of us had flown very much in the past six months. I know I felt a bit rusty and tired.

To mitigate this I gave what I thought was a good approach brief before top of descent, and we briefed the changed approach during the arrival. We still failed to monitor the FMA change at a crucial moment. It was an error I hope I/we don't repeat.

## Synopsis

Air Carrier Captain reported a track deviation during approach and cited fatigue and low flight time during the pandemic as contributing factors.

## Time / Day

Date : 202009

## Place

Locale Reference.Airport : ZZZ.Airport  
State Reference : US  
Relative Position.Distance.Nautical Miles : 12  
Altitude.MSL.Single Value : 5600

## Environment

Flight Conditions : IMC  
Weather Elements / Visibility.Visibility : 0.5  
Light : Daylight  
Ceiling.Single Value : 300

## Aircraft

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

## Person

Reference : 1  
Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Flight Crew : Pilot Flying  
Function.Flight Crew : Captain  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Instrument  
ASRS Report Number.Accession Number : 1761319  
Human Factors : Other / Unknown  
Human Factors : Fatigue

## Events

Anomaly.Deviation - Altitude : Crossing Restriction Not Met  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

High over ZZZZZ [fix]. It was the last leg of a three-day. No HGS (Head-up Guidance System) and had to fly like I did as an FO without HUD (Heads-up Display). Just felt a little behind; probably from being tired, not eating much since airport selections are minimal, and not having flown an approach without a HUD in over a year.

[Suggestion] Take meals with me because of the COVID impact on airport food. Fly without the HUD periodically. I did great on that approach and was stabilized at 1,000 feet in the end.

## Synopsis

Air carrier Captain reported an altitude deviation during approach.

## Time / Day

Date : 202008

## Environment

Flight Conditions : VMC

Light : Dusk

## Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B787 Dreamliner Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Route In Use : Vectors

Airspace.Class B : ZZZ

Maintenance Status.Maintenance Deferred : Y

Maintenance Status.Records Complete : Y

Maintenance Status.Released For Service : Y

Maintenance Status.Required / Correct Doc On Board : Y

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Inspection

Maintenance Status.Maintenance Items Involved : Testing

## Component

Aircraft Component : Engine Air Starter

Aircraft Reference : X

Problem : Malfunctioning

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1760747

Human Factors : Communication Breakdown

Human Factors : Fatigue

Human Factors : Troubleshooting

Communication Breakdown.Party1 : Maintenance

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Deviation / Discrepancy - Procedural : Maintenance  
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
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  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : MEL  
Contributing Factors / Situations : Procedure  
Primary Problem : MEL

## Narrative: 1

Upon pushing back we encountered what we believed to be a start valve would not open problem on the #1 engine. We proceeded to run the appropriate checklist which required the mechanic to manually open the start valve. The procedure proved unsuccessful and we executed a BTB. Upon trouble shooting, maintenance was able to get the engine started pretty quickly and applied MEL. After talking with the mechanic and reviewing the MEL we decided we were going to start the #1 engine before we pushed back. The mechanic talked about pressing and holding the start valve switch while the engine was starting. I told him I was uncomfortable with that because that is not what was in our QRH. We had a discussion as to whether it meant press and hold or just press the switch. I came to the conclusion that it meant press only not hold and if that did not work something else is the problem. I did not want to do a procedure that is not in our QRH. The mechanics conclusion was the engine was not going to start correctly unless I pressed and held the start switch. After more discussion we saw the Arm Light or Start switch failure checklist which was exactly what we had. Our start switch was not latching when selected. I was very happy at the time because it was a QRH procedure to start the engine in the state that it was in. What did not dawn on me in that particular second was that it was a different MEL. Same overall outcome, just a different procedure to start the engine. The MEL should have been a different one. I realized that maintenance was going to have difficulty trouble shooting the problem and I did not want another crew to go out to the aircraft and apply the wrong procedure. Upon landing I put a comment in the logbook about using the Start switch failure procedure in order to help maintenance quickly trouble shoot the problem. After reviewing that checklist I realize that was not correct because it would need to be deferred prior to departure. It was our third leg of a night that started late the previous day. Fatigue was definitely becoming an issue. The initial problem was myself misdiagnosing the problem and sending everyone down the wrong rabbit hole with the start valve fails to open checklist. If I would have diagnosed that correctly we would have ran the checklist and received our deferral and been on our way. This also helped lead the mechanic to that deferral. I had the First Officer run the secure checklist so we could go inside and get out of maintenances way. We were not expecting maintenance to correct the issue that quickly and were caught a little off guard. You can imagine my surprise when they turned the engine and got it started so quickly. We reviewed the MEL just like we were supposed to and had to setup the cockpit to get ready to fly again. We had to review all our performance, get an ARTR and make sure our flight planning was still good. Sometime between the long discussion of how we were going to start the engine



and what procedure I was going use, I lost track of the fact of this may be an incorrect MEL deferral we are using. I was correct in being alarmed by not starting the engine with the correct checklist procedure, but failed to go back and make sure everything was correct when I found the right answer. I was more focused on the fact of I saw the procedure in the QRH and it was exactly what the mechanic was telling me what needed to do get the engine started. I do not believe anything was procedurally done incorrectly other than the paperwork issue. The only reason why I entered a comment in the logbook was to help lead maintenance down the correct path. I talked to the mechanics upon landing and made sure they new the situation. I realized after the fact that the comment wasn't appropriate because it would have required a deferral and never should be entered as a comment. The aircraft never was returned to a normal status by running the QRH checklist. The First Officer did an outstanding job of helping me and looking up checklists and MEL's. Maintenance did an outstanding job of trouble shooting quickly. I think the lesson learned is to just realize when something does not seem quite right it probably isn't. And when that happens you probably should start all over again to assure that it is done correctly.

## Synopsis

Captain reported fatigue and confusion resulted in a delay due to misapplication of an MEL.

## Time / Day

Date : 202009

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

## Environment

Work Environment Factor : Glare

## 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 : FMS Or FMC

Nav In Use : GPS

Flight Phase : Takeoff / Launch

Route In Use : Direct

## Component : 1

Aircraft Component : Flap/Slat Control System

Aircraft Reference : X

Problem : Improperly Operated

## Component : 2

Aircraft Component : Electronic Flt Bag (EFB)

Aircraft Reference : X

Problem : Malfunctioning

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 14000

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 300

ASRS Report Number.Accession Number : 1759362

Human Factors : Communication Breakdown  
Human Factors : Fatigue  
Human Factors : Distraction  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
When Detected : In-flight

## Assessments

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

## Narrative: 1

I have never set flaps incorrectly, or departed, with an incorrect flap setting. This was the First Officer's takeoff. Both he and I departed with the incorrect flap setting today. After flying 4 tough, weather legs between ZZZ and ZZZ1 the day prior, I believe we were both still tired from dealing with the thunderstorms the day before. I didn't sleep well. Earlier, we discussed some serious stressors regarding challenges of a forced commute from a mandatory displacement and we could no longer rely on securing a passenger seat to work. My First Officer is being furloughed and was very concerned about the future and our Company. I had not been into ZZZ1 for a very long time. They had numerous taxiways closed and under construction. Initially, I thought I understood the taxi clearance, then realized I had it wrong. While doing the taxi checklist on the way out, I was preoccupied with my EFB trying to verify taxiway names. My EFB was (and remains) very slow to respond to screen manipulations. So, I was a bit frustrated looking back and forth between my device and the called checklist items. Given the glare of the sun against the flap gauge, and my difficulty reading it (I had not yet switched to sunglasses), I simply was distracted and misread the gauge. On the before takeoff checklist, I guess I simply "saw what I expected to see." I have a hard time believing I missed it. Once airborne on takeoff, I directed further acceleration in the climb to account for the flap discrepancy. The flight proceeded normally without further event.

What I could have done differently: I should have stopped the taxi when I could not get the EFB to respond. I should have put on my prescription sunglasses earlier. Having noted this error, I asked myself what else could I do in the future so this never happens again. Here's my personal fix (apart from being darn sure I read the gauge correctly). Since the throttle position blocks the view of the flap lever for the Captain, there is a metal ridge line just aft of the throttle quadrant. Follow that line and it takes you right to the flaps 15 position. Going forward, I know if that line doesn't carry into the flap handle, I am not at flaps 15.

Other thoughts: Why not add physically touching the flap handle and looking at it to confirm its position in addition to current practice. I will do this myself. I think it's easier to see than the MCDU or gauge. Since FOQUA monitoring captures errors, is it possible to program this system to alert the pilots when the flap setting disagrees with the programmed takeoff data?

## Synopsis

Air Carrier Captain reported setting and taking off with an incorrect flap position.



## Time / Day

Date : 202009

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZFW.ARTCC

State Reference : TX

Altitude.MSL.Single Value : 39000

## Environment

Light : Daylight

## Aircraft

Reference : X

ATC / Advisory.Center : ZFW

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

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Cruise

Airspace.Class A : ZFW

## Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1759257

Human Factors : Human-Machine Interface

Human Factors : Workload

Human Factors : Fatigue

## Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Relief Pilot

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument  
Qualification.Flight Crew : Multiengine  
ASRS Report Number.Accession Number : 1759444  
Human Factors : Fatigue  
Human Factors : Workload  
Human Factors : Human-Machine Interface

## Person : 3

Reference : 3  
Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Flight Crew : Other / Unknown  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Instrument  
ASRS Report Number.Accession Number : 1759447  
Human Factors : Fatigue  
Human Factors : Workload

## Events

Anomaly.Deviation - Altitude : Overshoot  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Air Traffic Control  
When Detected : In-flight  
Result.Flight Crew : Returned To Clearance  
Result.Flight Crew : Overcame Equipment Problem  
Result.Flight Crew : Became Reoriented  
Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

We were in a very busy communication with Dispatch about the ZZZ weather and possible divert plan. We were receiving dozens of ACARS pages of info from Dispatch. ATC Center, I think, gave us a decent from FL400 to FL390. I put it in the MCP Altitude window and the FO (First Officer) confirmed. I gave him the aircraft and proceeded to call dispatch. Somehow, FL380 was put in the window. The ATC controller called to confirm we were supposed to level at FL380. We bottomed out at about FL382 and promptly returned to FL390.

The cause was we were extremely busy dealing with dispatch, weather and route changes and then transferring the aircraft to the FO, who had just minutes earlier returned from his rest break. All of us are rusty with the reduced flying. Wake up call is [early] in ZZZZ. Fatigue at the end of a [long] flight has everyone a bit off their game. Add in not flying much.

Returning at the end of a long flight we failed to catch an otherwise normally caught error. [We should] refocus on Pilot Flying and confirming the altitude.

## Narrative: 2

I had just come off break. When I sat down there were over 10 messages waiting on the com page and I was told Dispatch wanted us to divert. We were in VERY busy communication with Dispatch about the ZZZ weather and possible divert plan. We were receiving dozens of ACARS pages of info from Dispatch. ATC Center gave us a descent from FL400 to FL390. The Captain put it in the MCP Altitude window and I confirmed it. He gave me the aircraft and proceeded to talk to Dispatch. Somehow, FL380 was put in the window. The ATC controller called to confirm we were supposed to level at FL380. I immediately noticed the error, put FL390 in the window and use vertical speed to arrest the descent and start a climb back up to FL390. We bottomed out at about FL382 and promptly returned to FL390.

The cause was we were extremely busy dealing with Dispatch, weather and route changes and then transferring the aircraft to me was probably not as clear as I remember, I had just minutes earlier returned from my rest break. The altitude change occurred immediately after I sat down to this hectic environment. All of us are rusty with the reduced flying. Fatigue at the end of a long flight has everyone a bit off their game. Add in not flying much.

When returning at the end of a long flight we failed to catch an otherwise normally caught error. [We should] refocus on Pilot Flying and confirming the altitude. Have the FB more in on the process on the initial seat swap.

## Narrative: 3

I was returning from a restroom break. The cockpit was very busy communication with Dispatch about the ZZZ weather and possible divert plan. We were receiving dozens of ACARS pages of info from Dispatch. ATC Center gave us a descent from FL400 to FL390. MCP Altitude window and the FO confirmed. The Captain proceeded to brief the purser and call Dispatch. Somehow, FL380 was put in the window. The ATC controller called to confirm we were supposed to level at FL380. We bottomed out at about FL382 and promptly returned to FL390.

The cause was overload of information coming to us at one time, between the briefing of the possible divert, ACARS scrolling loads of paper, I had to change my roll [to checking], NOTAMs, 36 of them, plus weather, change of aircraft control, plus my return to cockpit added to the mix. Late into the day with reroutes, changes of STARs, updating the various diversion airports situation in addition to making decisions on the fuel for the divert if needed. Task saturation was present for everyone.

Flight crew situation was everyone was busy, I'm not sure how the change happened. I think everyone was a little rusty from the lack of flying over the last few months contributed to the error.

## Synopsis

B777-200 flight crew reported an altitude deviation during cruise due to fatigue.

## Time / Day

Date : 202008

Local Time Of Day : 1801-2400

## Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 17000

## Environment

Light : Dusk

## Aircraft

Reference : X

ATC / Advisory.Center : 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 : Descent

Route In Use.STAR : ZZZZZ

Airspace.Class E : ZZZ

## Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : 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.Last 90 Days : 59

Experience.Flight Crew.Type : 59

ASRS Report Number.Accession Number : 1758916

Human Factors : Fatigue

Human Factors : Other / Unknown

Human Factors : Workload

## Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying



Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Instrument  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Experience.Flight Crew.Last 90 Days : 55  
Experience.Flight Crew.Type : 6000  
ASRS Report Number.Accession Number : 1758930  
Human Factors : Other / Unknown

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Deviation - Altitude : Overshoot  
Anomaly.Deviation - Altitude : Crossing Restriction Not Met  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Returned To Clearance  
Result.Air Traffic Control : Issued New Clearance

## Assessments

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

## Narrative: 1

ATC changed the arrival and issued a speed up followed by a slow down speed restriction and also a descent clearance somewhere in there. The PF inadvertently deleted the crossing altitude restriction at ZZZZZ. He selected VERT SPEED to continue the descent and I failed to ensure we changed the MCP altitude to prevent going below 17,000 feet. Subsequently, I verbally intervened just prior to descending below 17,000 feet, but didn't do so effectively. We descended to 16,750 feet before recovering to 17,000 feet.

Contributing factors included: Day one of UOE [Upgrade Operating Experience]. PF has been on an AM schedule. PM didn't sleep well the night prior. PM lack of recent experience in FO seat.

I made the assumption that the PF was aware of the restriction and would meet it. When I noticed that the MCP altitude window was incorrect, I verbally intervened but did so ineffectively. I should have done a better job of bringing it to his attention and physically intervened as necessary.

## Narrative: 2

We were descending on the ZZZZZ1 STAR into ZZZ. I was the PF on my first day of UOE [Upgrade Operating Experience]. During the descent, ATC changed the arrival to the ZZZZZ STAR and to descend via the STAR. Then we were assigned to cross ZZZZZ at 17,000 feet, and instructed to start the descent prior to our VNAV profile descent point. I selected Vertical Speed mode on the MCP and verbalized and verified that mode. I did not reset the MCP altitude from the lowest published altitude to 17,000 feet for the change in mode. As we approached 17,000 feet at ZZZZZ, the PM said, "There's 17,000 feet." As I realized that we weren't leveling off, I spun the Vert Speed back into a climb and reset the altitude window to 17,000 feet. The lowest altimeter reading I saw was 16,720 feet, and we corrected back to 17,000 feet. The PM told ATC that we were at ZZZZZ at 16,700 feet,

and ATC directed us to descend via the ZZZZZ. There were no other issues with this flight or event.

## Synopsis

Air carrier flight crew reported numerous changes to the arrival resulted in a crossing restriction altitude overshoot.

## Time / Day

Date : 202008

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 2100

## Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Descent

Route In Use : Direct

Airspace.Class B : ZZZ

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1758641

Human Factors : Fatigue

Human Factors : Training / Qualification

## Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

Before departure we were re-routed because of convective activity over ZZZ1. After airborne we were re-routed 2 more times and assigned the ZZZZZ2 arrival and 17,000 feet as a final altitude. Later we climbed to FL210 for a better ride. We had checked the arrival constraints while at our cruise altitude of 17,000 feet and after climbing to FL210 we didn't notice that we were now missing a published constraint at ZZZZZ Intersection. Just prior to ZZZZZ Intersection, we were cleared to descend via the arrival so we set the bottom altitude, confirmed it and started the descent. The First Officer noticed the constraint on the chart and brought it to my attention, so I leveled off and added the constraint to the FMS and shortly resumed the descent. ATC did not mention the early descent and we were unsure of how far off the published path we got.

Cause - High workload, weather, lack of currency, failure to recheck descent profile after climbing. End of a long 3 leg day.

Suggestions - Automation awareness during low altitude cruise operations.

## Synopsis

Air Carrier First Officer reported missing an altitude constraint during arrival and cited workload, fatigue and lack of flight currency as contributing factors.

## Time / Day

Date : 202008

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

## Environment

Flight Conditions : IMC

## Aircraft

Reference : X

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 : Final Approach

## Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 5255

Experience.Flight Crew.Last 90 Days : 43

Experience.Flight Crew.Type : 1304

ASRS Report Number.Accession Number : 1754622

Human Factors : Fatigue

## Events

Anomaly.No Specific Anomaly Occurred : All Types

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Human Factors

Primary Problem : Company Policy

## Narrative: 1

The issue is what happens [in the late afternoon between flights at an international terminal]. Required to stay on the plane while passengers disembark. About an hour with constant PA announcements. Then we are placed on an inter-terminal bus. Neither clean nor comfortable. This lasted just over 2 hours. We had to change buses once because the AC didn't work on the first bus. (NO CHANCE FOR ANY REST AT ALL!) Allowed back on the plane to perform pre-flight duties. Already on the back side of the clock and put in deplorable conditions without even a facility to use for personal hygiene/bodily functions. (NO REST ROOMS!) Fighting bad weather on the return [flight] made this a very frustrating and possibly dangerous situation. We both felt very fatigued during the return flight. There has to be a better way. Both of us passed out on the ride back to the hotel. (I almost never sleep on a bus.)

## Synopsis

Air carrier Captain reported experiencing extreme fatigue on a two-leg international assignment.