

DCA22LA133

OPERATIONAL FACTORS

Attachment 8

NASA ASRS Database Query Results

November 10, 2022



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ACN: 1881276 (1 of 95)

Time / Day

Date : 202202

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 6

Altitude.MSL.Single Value : 2300

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 25000

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B757-200

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight / Delivery

Nav In Use : FMS Or FMC

Flight Phase : Final Approach

Airspace.Class C : ZZZ

Component

Aircraft Component : Trailing Edge Flap

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 8850

Experience.Flight Crew.Last 90 Days : 210

Experience.Flight Crew.Type : 2700

ASRS Report Number.Accession Number : 1881276

Human Factors : Troubleshooting

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
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 : 1883742
Human Factors : Troubleshooting

Person : 3

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 : 1883749
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
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.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While on approach into ZZZ we experienced a trailing edge flap asymmetry while configuring for landing. Routing was cleared direct to ZZZZZ, cleared for the ILS XX in day visual conditions. The aircraft was configured flaps 1, gear up crossing ZZZZZ, speed 200 kts. (rough guess). Flaps were selected to 5, and then 15 when intercepting the glide slope, maintaining speed 170 kts. until 2,300 ft. MSL (2,000 ft. AGL). At this point, gear down, flaps 20 was selected and I, the pilot flying, called for speed 20 which was roughly around 140 kts. At this point I noticed the control wheel starting to turn to the right and noticed the flap asymmetry (autopilot on). We received the EICAS message flap asymmetry and then abandoned the approach at 2,000 ft. We requested vectors for a large box pattern, [requested priority handling] and advised ATC of our situation and our intentions of returning via vectors back to the ILS XX after running a checklist. On this particular flight we had two jump seaters, both were 757 crew members who were scheduled to take the plane we were flying back to ZZZ1. The Captain on the jump seat assisted the operating Captain with the checklist, while I flew the aircraft. The checklist for trailing edge flap asymmetry was run in accordance with standard procedures. After completing the checklist, a successful landing was made with flaps 20.

Narrative: 2

During the approach we received a TE Flap Asym caution message and TRAILING EDGE light when the flaps were selected to 20. The left flap indicated 15 and the right flap indicator indicated 20. We executed a missed approach and ran the QRH Trailing Edge Flap Asymmetry checklist. I [requested priority handling] due to the flight control malfunction and increased approach speed. Returned for the ILS to Runway XX and landed. Post flight with the Mechanic revealed a split and misalignment between the inboard and outboard flap sections of the left flap.

Narrative: 3

While on approach into ZZZ we experienced a trailing edge flap asymmetry while configuring for landing. Routing was cleared direct to ZZZZZ, cleared for the ILS XX in day visual conditions. The aircraft was configured flaps 1, gear up crossing ZZZZZ, speed 200 kts. (rough guess). Flaps were selected to 5, and then 15 when intercepting the glide slope, maintaining speed 170 kts. until 2,300 ft. MSL (2,000 ft. AGL). At this point, gear down, flaps 20 was selected and I, the Pilot Flying, called for speed 20 which was roughly around 140 kts. At this point I noticed the control wheel starting to turn to the right and noticed the flap asymmetry (autopilot on). We received the EICAS message flap asymmetry and then abandoned the approach at 2,000 ft. We requested vectors for a large box pattern, [requested priority handling] and advised ATC of our situation and our

intentions of returning via vectors back to the ILS XX after running a checklist. On this particular flight we had two jump seaters, both were 757 crew members who were scheduled to take the plane we were flying back to ZZZ1. The Captain on the jump seat assisted the operating Captain with the checklist, while I flew the aircraft. The checklist for trailing edge flap asymmetry was run in accordance with standard procedures. After completing the checklist, a successful landing was made with flaps 20.

Synopsis

B757-200 flight crew reported a go-around caused by a flap asymmetry condition. The flight crew performed a precautionary landing after running the QRH procedures.

ACN: 1868747 (2 of 95)

Time / Day

Date : 202201
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : COS.Tower
State Reference : CO
Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
ATC / Advisory.Tower : COS
Aircraft Operator : Air Carrier
Make Model Name : Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Phase : Initial Approach

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 : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1868747
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Situational Awareness
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 : 1868748
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Air Traffic Control
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

On downwind on the east side of COS flying northbound, the FO/PF (First Officer/Pilot Flying) said he had the field in sight and we were cleared [for] the visual approach to [Runway] 17R. The PF mentioned planning to roll out on about a 3-4 mile final and I cleared the FMS up to AGHU on the RNAV approach as he requested. The PF began to configure early so I inquired about it and he said he still wanted to configure, so I did, as he called for flaps and gear. As he turned the base leg I told him he was way too low out here, that the terrain rises to the north, and that the white bar on the altimeter is indicating 1000 ft. above field elevation but the field was 4-5 miles southwest of our position and that our Radio Altimeter was between 600-700 feet AGL. At that point, COS tower asked about our situation and mentioned that he had received a low altitude alert from his equipment in the tower. I replied that we were ok. As the PF turned his base to final early, I told him "that's the wrong runway, the runway is that way" and I pointed to where he needed to aim the jet. The PF mentioned something to the fact that he had been looking at the incorrect runway (17L) and I believe this is the main reason he had configured and descended so early. I believe the main cause was a combination of the PF not being very familiar with the airfield and local area and accepting a visual approach at night without continuously backing up what he was seeing outside vs the instruments inside the cockpit that had the instrument approach loaded to the correct runway. I could have asked more/better questions about what he was seeing or why he was wanting to configure so early. That might have uncovered some clues to me that the PF was looking at the incorrect runway and not cross checking with his instruments.

Narrative: 2

On downwind to Runway 17R at COS we were cleared for the visual approach. Turning base, Tower told us they were receiving a low altitude alert and asked if we could maintain our own terrain clearance. We said we could and continued to an uneventful landing on Runway 17R. Should have stayed higher until the base turn. Unfamiliar landing south at COS.

Synopsis

Air carrier flight crew reported receiving a low altitude alert during approach to land.

ACN: 1851147 (3 of 95)

Time / Day

Date : 202110
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

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

Person : 1

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

Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1851147
Human Factors : Human-Machine Interface
Human Factors : Other / Unknown
Human Factors : Confusion
Human Factors : Distraction

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1851148
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Human-Machine Interface

Events

Anomaly.Airspace Violation : All Types
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Cleared for visual approach to Runway XX at ZZZ. Had RNAV XX loaded for guidance and briefed the possibility of erroneous [airport] alignment on approach. Hand flying approach where final of [erroneous airport] crosses final of ZZZ. Cause of [the incorrect runway alignment with erroneous airport] was altitude low by 200 ft. nearing FAF area as we were turning final and lack of scan of instruments with complacency after briefing the possible wrong airport alignment. PF (Pilot Flying) saw we were lined up with a runway and commenced descent and approach. Shortly after I noticed a slight course deviation and low on the published RNAV approach glidepath. We had not been cleared to land yet and seemed like we were closer than normal to not have a landing clearance. Upon further review of the visual of the airport it appeared to be a [different] airport and at that point started becoming apparent that was the incorrect airport. We arrested descent to rejoin glidepath and made a right course correction to maintain course to proper runway. We were still above 1000 ft. and able to restabilize the approach safely to the correct runway. Shortly after we initiated correction ATC queried us for proper airport identification and we confirmed rejoining Runway XX alignment to ZZZ. Suggestion - Maintain strict course and glidepath guidance to ensure not mistaking the wrong runway. Also adding in an alert to the company page of the risk of aligning and landing at [erroneous airport] as the only mention of it is in a small parenthetical note in the plainview of the approach plate for IMC operations. Having an alert to potential wrong airport landing on ACARS and/or Company Chart would help in avoiding this as well.

Narrative: 2

We were given a visual approach clearance to Runway XX at ZZZ. The Captain and I thought it'd be a good idea to practice a full flap fully hand-flown visual approach since there was no other traffic. We had the RNAV Runway XX loaded and properly sequenced. When I turned base, I saw the runway for [different airport] and immediately assumed it was Runway XX to ZZZ. Because the Final Approach Course of the RNAV Runway XX into ZZZ crosses the final approach of [different airport] it "confirmed" that I was in fact lined up for the correct runway. It wasn't until I saw a dot deviation on our lateral course that I became aware we were not lined up at ZZZ and realized it was [different airport]. I arrested my descent and made a slight turn to the right to line up with the RNAV course to Runway XX into ZZZ. ATC notified us of our error shortly after we began to maneuver back on course. [The incorrect course was caused by] Overconfidence. Since we briefed the threat, our guard went down. Expectation bias. I have never in my flying career been to this airport and never have I ever lined up for a wrong runway let alone an airport. I had set myself up for a typical right traffic visual approach and when I made my base turn and

saw [different airport], instinctively my brain told me that's where I was going to land and my instruments initially confirmed my assumption. [Reporter suggested to] add a note to company pages to alert crew of close proximity airport. Tighter tolerances on course and glide path deviation.

Synopsis

EMB-175 flight crew reported mistakenly aligned with a wrong airport during approach. Flight crew was correcting low altitude and course error when ATC notified flight crew of the error.

ACN: 1847904 (4 of 95)

Time / Day

Date : 202109
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : CMH.TRACON
State Reference : OH

Environment

Flight Conditions : IMC

Aircraft

Reference : X
ATC / Advisory.TRACON : CMH
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.STAR : CLPRR1

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
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 : 1847904
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Troubleshooting
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Other

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Procedure
Primary Problem : Chart Or Publication

Narrative: 1

Recently, new RNAV STARs were implemented in CMH to correspond to the IAF for each Runway's RNAV RNP approach. I experienced and observed a safety hazard with the CLPRR1 arrival when landing east in particular and the new RNAV STARs in CMH in general. While flying the CLPRR1 into CMH on (date), we were assigned Runway 10L for landing. Thankfully, my Captain did an excellent job briefing NOTAMs and we had caught that the 10L transition for the CLPRR1 was NOTAM'd unusable. This is a strange NOTAM for us, especially with programming the arrival into 10L properly. We could not find a way

to load the 10R transition for a landing on 10L. Therefore, at night in IMC while considering weather we had to load the wrong Runway to fly the proper transition (10R). When we reached the end of the STAR (i.e. HALUR) and began on the 281 track after HALUR, we had to reload the FMS to fly vectors for 10L. There are several safety concerns with this arrival in particular. First, the transition designed for 10R is poor relative to the airspace. It crosses directly through the departure corridor for CMH and interferes with OSU airspace as well. I believe this is why it has been NOTAM'd unusable. This transition fails to account for the common, safe, and efficient operating practice in CMH of landing traffic based on their gate assignment rather than their direction of flight. The new STARs assume traffic lands in CMH based on direction of flight. This is incorrect. There is no efficiency or safety gain in landing by direction of flight, the traffic load is acceptable for landing based on gate assignment, maximizing efficiency. This is why aircraft from the south and east are often assigned the north Runway, especially for Company operations being heavy on the gates in CMH. In general, the new RNAV stars in CMH disrupt the normal operating flow of the airspace more than is justified. Rather than lead to more efficient RNAV operations, they have in fact led to increased confusion and distrust of RNAV procedures, increased controller and pilot workload, and decreased safety margins during critical phases of flight. Having a transition for each Runway is a good idea in theory, but in practice it leads to tremendous confusion when the operating practice is to assign Runways based on gate assignment. It appears from a user perspective the RNAV STARs into CMH were designed without effective user-in-the-loop testing and feedback from users in the field, such as pilots and ATC based in CMH. As a large operator in CMH Company should play a larger role in determining how future RNAV STARs are designed. Further, we should recommend to the FAA that the existing procedures be redesigned quickly based on feedback from Columbus ATC, Company, and other players in the field at CMH. I have flown with several crews now who all express the same frustration and confusion with the new procedures. Given that we fly RNAV STARs every day, this confusion is not indicative of resistance to change; rather, it indicates poorly designed procedures that require immediate feedback and redesign. A specific recommendation is to have one transition on the STAR for landing east/landing west into CMH. Align the RNAV RNP fixes to that transition and simplify the airspace in coordination with the typical practices of Columbus controllers and the efficiency lessons they have learned. Seek more input into the design of new procedures from active players in the field and utilize more user-in-the-loop evaluation and feedback for these procedures.

Synopsis

Commercial Fixed Wing First Officer reported the new STAR, CLPRR1, which has a confusing NOTAM issued for Rwy 10L unusable. This resulted in confusion loading FMS final fix to the runway. The STAR transition also conflicts with adjacent OSU airspace and traffic flows.

ACN: 1817229 (5 of 95)

Time / Day

Date : 202106
Local Time Of Day : 0601-1200

Place

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

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B737-800
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Airspace.Class B : 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 : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1817229
Human Factors : Other / Unknown

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 : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1817244
Human Factors : Human-Machine Interface
Human Factors : Other / Unknown

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We were flying ZZZ1 to ZZZ, a XA00 report in ZZZ1. It was the First Officer's (FO) initial trip back from a 10-month furlough. We were on the ZZZZZ RNAV arrival from the northeast. I was the PF. ZZZ was landing north. ZZZ airport had an overcast layer obscuring the airport. At the appropriate time, I briefed the ILS XXR approach. We set up the FMS and tuned/identified the NAV radios for XXR, the normal approach for this arrival. When we checked in with ZZZ Approach, we were advised to expect the ILS XXL. I briefed the approach and we tuned/identified the NAV radios. We were being vectored to intercept the localizer. It looked like we overshot the localizer on the NAV display, so I turned to intercept. ATC advised us, "It looks like you are lining up for the wrong runway," and turned us off of the approach. There were no conflicts with any other aircraft. They then told us to expect the ILS XXR. We flew that approach successfully to a landing. While we were setting up for the XXR approach, we discovered we never set up the FMS for the ILS to XXL. [I believe the cause was] early sign-in. Overcast skies obscuring airport. [It was also the] FO's first trip after furlough. [I suggest] verification that both the NAV radios are tuned and identified and the FMS is set for the proper runway/approach.

Narrative: 2

Planned and briefed approach for ILS Runway XXR and was given ILS Runway XXL. The CA (Captain) set up and briefed new approach. I verified the frequencies and inbound course but neither of us set the new approach into the FMS. Was getting vectors to the ILS XXL [and] we had the correct ID for the ILS. When the CA looked at the ND and saw himself flying through the course for what was ILS XXR, the wrong approach, he corrected the heading to go back to intercept the course on the ND. The Controller said you are turning to line up for wrong approach and told us to go around. I have not flown since [last year]. I also do not have much experience in the aircraft. Was first flight since furlough. [I plan on] getting more flying in and becoming more comfortable in the aircraft, getting back into the rhythm of the flights.

Synopsis

B737-800 flight crew reported a clearance deviation due to automation mismanagement and CRM issues.

ACN: 1796483 (6 of 95)

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.

ACN: 1794646 (7 of 95)

Time / Day

Date : 202103
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 35000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Turbulence
Weather Elements / Visibility : Windshear
Light : Daylight

Aircraft : 1

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

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Airspace.Class A : 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 : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1794646

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1794647

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Speed : All Types
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 : Regained Aircraft Control
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

While in cruise at 35,000 feet and in excess of 90 knots of wind from the tail, the flight had been in constant light and occasionally moderate chop. I requested 37,000 feet after confirming performance capability, and hearing ATC advice that higher altitudes were better than lower and the closer we got to 40,000 feet the better the ride. We were told "Aircraft X, I have your request" and we were handed off to three subsequent controllers each assuring us that the next would assign our climb. Both PM (Pilot Monitoring) and PF (Pilot Flying) recognized the flight path was taking us directly into a cloud bank, and the turbulence levels were becoming more of a solid moderate chop. As a result, PM (the Captain) advised the Cabin Crew to secure themselves and instructed the passengers to take their seats and securely fasten their seat belts. This event took place less than 10 minutes from entry into extreme turbulence. On the last handover, we had a converging aircraft 1,000 feet above us and traveling in the opposite direction. When ATC called the traffic for each of us, we were just entering the cloud bank into IMC conditions. Almost immediately, we encountered an increase in turbulence to solid moderate (changes in aircraft attitude and altitude occurred, but the aircraft remained in positive control). However, within seconds, we encountered severe turbulence including large abrupt changes in altitude, attitude, airspeed, as well as wind shear and updrafts. The result was initially a traffic alert. Within a few more seconds, we were in extreme turbulence and the aircraft was being tossed about violently, control was practically impossible, and the aircraft was being pushed upwards. The PM called the increase in speed and retarded the thrust levers as the aircraft was being shaken so violently that it took both

hands of the PF to maintain positive control. Then a TCAS RA alerted us with a "LEVEL OFF" command with the converging traffic icon in the PFD illuminated yellow. Almost immediately after, the icon turned red and PF pressed the "FORCE TRIM INTERRUPT" button and shoved the yoke forward into the RA box to comply with the given guidance. The turbulence continued so violently that the autopilot was fully kicked offline, and the aircraft remained in a diving attitude per the TCAS guidance. During this period, and as a result of the wind shear and turbulence, the aircraft's speed fluctuated between a momentary illumination of the green PLI (Pitch Limit Indicator) and the triggering speed for a stick shaker activation. PM continued to apply speed brake and retard thrust levers to maintain the aircraft speed within limit (at no time did we encounter either a yellow or red PLI, or the stick shaker). At 30,500 feet we came out of the most violent turbulence and were able to reestablish a climb back to assigned altitude. Immediately after, the Captain contacted the cabin crew for an evaluation on any injuries or known damage. Beyond all the drinks and unsecured items being thrown around, none were reported, so we continued to the assigned destination. After landing, the post flight walk around revealed what appeared to be abnormal alignment or misalignment on the right outboard aileron.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

EMB-175 flight crew reported possible damage to aircraft flight controls after an encounter with extreme turbulence in cruise flight at 35,000 feet.

ACN: 1781172 (8 of 95)

Time / Day

Date : 202012

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Ceiling.Single Value : 8000

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.Other

Flight Phase : Final Approach

Route In Use : Visual Approach

Person

Location Of Person.Facility : ATC Tower

Location In Aircraft.Other

Reporter Organization : Government

Function.Air Traffic Control : Local

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 12

ASRS Report Number.Accession Number : 1781172

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Distraction

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Ground Incursion : Runway

Detector.Person : Air Traffic Control

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 notified about a report of a wrong surface landing. I was the Controller on the midnight shift. I cleared Aircraft X for Runway XXC, but the Aircraft landed Runway XXR. Approach switched the aircraft on an extended base for the visual approach [to] Runway XXC. The pilot checked on the frequency for Runway XXC. I cleared the aircraft to land for Runway XXC. After I cleared the plane to land the janitorial guy comes to the Tower cab to vacuum the Tower and empty the trash. I usually go opposite of him so we can keep our space (we had our mask on) for social distancing. When he finished cleaning the Local 3 position I recognized the aircraft was short final to Runway XXR. I knew the runway had no vehicles on it because my strip bay showed no vehicle above Runway XXR bay header. I let the aircraft land Runway XXR due to the critical phase in flight. I taxied the aircraft to the ramp after the aircraft landed safely. In the past Approach would call me on the shout line to remind me that this aircraft is set up on the wrong approach. By me not being at the position walking around the Tower cab I did not recognize the aircraft on approach for the wrong runway. The recommendations I would use to prevent this wrong surface landing is to observe an aircraft turn onto the right approach for the right runway. If that pilot makes a mistake turning on to the wrong approach I can either send the aircraft around or correct the aircraft to land on the proper runway, or I can help the pilot get visual for the runway the pilot is lined up for and clear the plane to land for that runway. The key is catching the aircraft turning on the approach early enough so I can correct the pilot.

Synopsis

ATC Tower Controller reported an aircraft landed on the wrong runway and cited social distancing distraction during a janitorial service in the Tower as a contributing factor.

ACN: 1765651 (9 of 95)

Time / Day

Date : 202010

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Altitude.AGL.Single Value : 400

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Climb

Airspace.Class B : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1765651

Human Factors : Situational Awareness

Human Factors : Training / Qualification
Human Factors : Distraction

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1765737
Human Factors : Distraction
Human Factors : Training / Qualification
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Track / Heading : All Types
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
Primary Problem : Human Factors

Narrative: 1

At gate X in ZZZ, filed to ZZZ1 on the ZZZX Departure. The flight plan after the SID started at ZZZ. We requested log-on from ZZZ2 for the departure clearance 30 minutes prior to push. Flight plan (legs) verification accomplished per SOP. First Departure clearance came about 20 minutes prior to push indicating a new clearance for the ZZZZZY, ZZZZZ [Intersection], as filed. Started to update flight plan to account for this. While editing flight plan, another Departure Clearance came in for ZZZX, ZZZ [VOR], ZZZZZ [Intersection], AF. Started editing flight plan again to account for reversion to original flight plan and SID. Completed another flight plan verification from ZZZ. Completed briefing. Standard push back and taxi for [Runway] XXR. Completed before takeoff checklist, inclusive of the "runway confirm." Both the FO and myself think we both saw the correct runway on the ND during the final check, as well as the departure brief. On takeoff, very early after liftoff, switched to Departure Control. Very early in climb, "NAV" engaged, catching me off guard as it seemed like we were below 400 feet, commanding a hard right turn. I instinctively followed the flight directors initially. In the turn, still below thrust reduction altitude (1,000 feet), I realized from my briefing that the turn should have been to the left, not the hard right turn the flight directors were commanding. I started to correct back to the left. I did not see any traffic in our immediate vicinity on TCAS. ATC then assigned us a heading of 350. As we were in the turn to Heading 350 ATC mentioned that we were supposed to turn left. I believe we were around a northerly heading when we hit 1,000 feet, our thrust reduction altitude. We apologized to ATC and inquired if there was a traffic conflict, which he replied "no." He handed us off. About 60-90 minutes into the flight we were notified over CPDLC of a possible pilot deviation and to call TRACON. I called TRACON and the Supervisor was very cordial. He explained what they had seen, and we also told him what had happened on our end. He told me they had been seeing this event a fair amount lately. Coincidentally, on the same aircraft yesterday for the outbound flight to ZZZ, we had to have maintenance reset the FMC's on the ground in ZZZ1 because both with, and without, a Flight plan in the FMC, as soon as the flight directors would be turned on the lateral "NAV" mode would engage and command a hard right turn. We tried resetting everything, inclusive of the ADIRS, swapping the nav data base, and the same thing kept happening. After maintenance reset the FMC's problem went away.

Caught/detected by myself (PF) below thrust reduction altitude of 1,000 feet. Correction applied.

First flight and operation into a busy complicated airport in over 6.5 months due to the COVID situation. Numerous cockpit distractions during cockpit setup. Several ATC digital clearances within a short period of time. External stresses caused by current state of affairs currently going on within our country and our company. Potential aircraft navigation technical issue, however, I cannot rule out pilot error. Possible pilot error scenarios would be; departure procedure in the FMC jarred/messed up by the second CPDLC clearance route uplink, and subsequently not caught during second flight plan verification. Potentially wrong runway set in FMC during cockpit setup. The FO and I don't believe it is the incorrect runway scenario because we did the Flight Plan verification, briefing, and final runway confirmation approaching the runway threshold as per SOP, and we believe we saw the digital representation of the runway on the ND. But I have to admit this is a possibility. At all times all SOPs were adhered to the best of our knowledge.

Narrative: 2

It was a busy morning out of ZZZ. Our flight plan called for the ZZZX Departure. The automatic upload for the flight plan wasn't working so my Captain was manually loading the flight plan. We received our new clearance indicating the ZZZZZY, ZZZZZ [Intersection], AF. We then fixed the computer and did a flight plan verification. Then we received another clearance, ZZZX, ZZZ [VOR], ZZZZZ [Intersection], AF. We fixed it in the box, did another verification. After takeoff, it seemed very early the airplane went into nav mode, with a right turn. Before I could say anything my Captain was correcting the turn. And before that ATC told us to turn left to 350. He then mentioned we were supposed to turn left on the ZZZX not right. We apologized and continued without incidence.

Cause - Second flight on over 7 months, due to COVID. A bunch of cockpit distractions, followed by multiple different clearances, and airplane malfunctions with automatic uploads. Bottom line SOPs were followed to best of our knowledge. Verify, verify, verify.

Synopsis

Air carrier flight crew reported turning right instead of left on departure. Both pilots referenced lack of flying as a contributing factor.

ACN: 1761012 (10 of 95)

Time / Day

Date : 202009
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 : Commercial Fixed Wing
Crew Size.Number Of Crew : 4
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Takeoff / Launch
Airspace.Class B : ZZZ

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1761012
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Dispatch

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1761089
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Dispatch
Communication Breakdown.Party2 : Flight Crew

Person : 3

Reference : 3
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 : 1761016
Human Factors : Communication Breakdown
Human Factors : Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Dispatch
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Weight And Balance
Detector.Person : Flight Crew
When Detected : Taxi
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 : Procedure
Primary Problem : Human Factors

Narrative: 1

My role for the leg was Relief Pilot. [Runway] XR was assigned during taxi. The runway was listed on the TPS for TO1 Max and after a short discussion all 4 crew members in the cockpit agreed it was acceptable. We would be using a departure to the north of ZZZ so this runway would save some time. The CA requested the FO pull new numbers since our weight came in 4,000 lbs light in the hope of improving our numbers. After they confirmed that XR was requested on a new TPS through ACARS, the number data downloaded. After departure, the crew realized [Runway] YYL numbers had been sent, accepted and downloaded. The takeoff appeared normal throughout the roll and rotation was also at what appeared to be a "normal" distance down the runway and from the end.

As Relief Pilot, during taxi I'm assigned the Jumpseat behind the FO seat. The view of all that's going on "up front" can be difficult at times and requires being very proactive in getting out of the seat for a better view.

Getting up from the seat to verify the takeoff data is necessary and appropriate.

Narrative: 2

During takeoff roll ECIAS message alerted crew of incorrect runway selection. CA elected to continue takeoff.

During taxi out ATC asked if [Runway] XR was possible and crew advised it was due to light weight and TPS data. After close out CA asked for TO 1 TPS data and FO requested through FMC. FO accepted data but none of crew caught that [Runway] YYL was now the FMC loaded runway. A delayed close out and number 1 for departure made the confirmation of the data reviewed quick and none of us caught the incorrect runway in the upload.

Due to lack of flying and a runway that was the 5th on the TPS made all of the crew slow in our ability to trap complexities of runway and power changes. Better flow and more currency will prevent this type of event.

Narrative: 3

When cleared to taxi, we were asked if we could accept [Runway] XR for takeoff at ZZZ. Our weight was acceptable and we had the TPS for TO2 dry and max power. I instructed FO to accept the runway (I have used it on occasion) and felt it was fine. I asked FO to try and get a TO1 TPS and see if it would improve our numbers a bit. He requested the TPS as instructed and I watched him enter XR and 1 for the thrust. We later determined that when he requested both the TPS and the FMC uplink, it had sent the [Runway] YYL numbers again. We believe this was because of the fact that XR was the "fifth" runway on the original TPS. We inadvertently took off with the wrong data loaded in the FMC. Our takeoff roll looked and felt normal and we rotated at what seemed to be an acceptable distance down the runway. All crew missed the fact that we had loaded the wrong runway.

The biggest reason for this error was complacency. I pride myself on TPS knowledge and, looking back, I should have caught

several red flags. This crew was all familiar with the others. We have all flown together and I let my familiarity with the others lower my guard. Secondary was the fact that relief pilots both had not flown much recently, due to COVID-19 reduction of schedules.

I am going to change a couple of techniques to trap the errors better on runway changes. While on this layover I thoroughly reviewed the FMC and found that I had a couple of misconceptions about the aircraft that I brought from other aircraft.

Synopsis

Air carrier flight crew reported they inadvertently took off with the wrong data loaded in the FMC.

ACN: 1759781 (11 of 95)

Time / Day

Date : 202009

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use : Visual Approach

Airspace.Class B : ZZZ

Person

Reference : 1

Location Of Person.Facility : ZZZ.Tower

Reporter Organization : Government

Function.Air Traffic Control : Local

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10

ASRS Report Number.Accession Number : 1759781

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Track / Heading : All Types

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 New Clearance

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Airport

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Aircraft X was on an approach to Runway XX. ZZZ [Approach] changed Aircraft X to an approach to Runway XXL to help a help another aircraft turn ahead of them for a [Runway] XY approach. Aircraft X turned out the West. I saw the aircraft turning out to the West and fly through the final for Runway XXL and Runway XXR outside of my airspace. Aircraft X then turned back East toward the airport. I was launching airplanes and trying to be an extra set of eyes for LCE [Local Control East] who was very busy at the time being combined with [XYZ position]. Aircraft X then checked on to my frequency for

Runway XXL and I cleared them to land Runway XXL. They appeared to still be SE toward Runway XXL. As I noticed they may be lined up for the incorrect runway ZZZ Approach called and asked me check as well. I informed the pilot they were lined up for the wrong runway and they chose to go around on about a 3 mile final.

Some of my focus was on aiding the traffic for LCE. If we had more staffing we could have had a [XYZ] Controller aiding with that.

Synopsis

Tower Controller reported an aircraft lined up for the wrong runway during approach.

ACN: 1745712 (12 of 95)

Time / Day

Date : 202006
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : A80.TRACON
State Reference : GA

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.CTAF : PDK
ATC / Advisory.TRACON : A80
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Landing
Airspace.Class D : PDK
Airspace.Class E : A80

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
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 : 1745712
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Conflict : Ground Conflict, Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Landing PDK, VASI and PAPIs were all NOTAMed out. Wind favored 3R but we didn't have an approach and it was night with no verticals guidance so we requested ILS 22L with a 2kt tailwind. The Tower was closed and numerous small aircraft were in the pattern for 3L and 3R. On short final at 500 feet an aircraft called base for 3L. There were no Runway lights on 3L, so we confirmed he was on that runway. We weren't comfortable landing head on with an aircraft we couldn't see landing on a runway with no lights and thought he may be on the wrong runway. We went around and got vectored for another approach. Approach said we were in a Bee Hive trying to land against traffic. A plane on the ground held for us and we were able to get in on our 3rd attempt. In our 2nd attempt we never descended for the runway and boxed back to the east for a successful third attempt. PDK should be restricted after the Tower closes and the winds favors Runway 3R with the VASI INOP and numerous planes landing and doing touch and goes on an unlit runway.

We should restrict operations into PDK when the Tower is closed and we can't land with the flow of traffic. The Tower closed at XA:00 pm local on our arrival day. Since we couldn't land on Runway 3R without Vertical Guidance at night with no approach being available and the VASI NOTAMed out, we couldn't land with the flow of traffic since the winds (310 @ 8 kts) were favoring 3R/L. Since the winds were light we requested vectors for the ILS 21L and took a 2 kt tailwind. The unnerving part was there were numerous aircraft in the traffic pattern landing on an unlit Runway (3L). We inquired about this on CTAF, but had questions if the aircraft knew which runway they were on and we didn't want to fly head on into traffic we couldn't see making call outs to an unlit runway we couldn't even determine was available to use or being used. And the distraction of planes in the pattern trying to tell us what to do (how to work pilot the control lighting and the traffic pattern direction when we asked if the small Runway 3L was lit) and for us to try to explain to them why we couldn't land 3R isn't good at XY hours of duty, at night, when we were trying to talk on two different frequencies to coordinate (Approach & CTAF) and shooting an approach. A80 Approach also told us to be cautious landing the opposite direction and that we were in a "bee hive." This also put a lot of extra work on them. It's unsafe and we were going to divert if there were any additional issues on our 3rd attempt, but another jet on the ground was keeping the runway clear for us and we descended to land. We also had to taxi across this unlit runway with aircraft landing on it and using very little lighting and only having Nav/Beacon lights illuminated. With towers operating at reduced hours during COVID, this could cause an issue at other airports as well.

Synopsis

Pilot reported attempting to land at an airport with a closed Control Tower and other aircraft landing on an unlit runway at night.

ACN: 1724130 (13 of 95)

Time / Day

Date : 202002
Local Time Of Day : 0001-0600

Place

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : B737-400
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Parked
Maintenance Status.Maintenance Deferred : N
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 : Testing
Maintenance Status.Maintenance Items Involved : Inspection
Maintenance Status.Maintenance Items Involved : Installation

Component

Aircraft Component : Main Gear Wheel
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft.Other
Reporter Organization : Air Carrier
Function.Flight Crew : Check Pilot
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)
ASRS Report Number.Accession Number : 1724130

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft.Other
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 : 1724131

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : Aircraft In Service At Gate
Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action

Assessments

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

Narrative: 1

On the walk around in ZZZ, I noticed the right outboard wheel brake assembly appeared misaligned with the other wheel. Work was done on that brake in ZZZ1 before we flew the plane to ZZZ. The First Officer had done the walk around in ZZZ1 and verified the brake wear indicator pins were good, but did not notice the misalignment.

I believe the cause was improper installation of the brake assembly.

Narrative: 2

The brake assembly was installed wrong. It appears as it is shown in the picture. The right brake assembly was rotated up. During the walkaround I checked the brake which was good. Unfortunately, I did not notice that the brake was rotated up.

The brake assembly was not installed correctly by the maintenance guys.

Synopsis

B737 Captain reported that a brake assembly was improperly installed.

ACN: 1714595 (14 of 95)

Time / Day

Date : 201912
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZZ.Tower
State Reference : FO

Environment

Flight Conditions : VMC

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : Brasilia EMB-120 All Series
Operating Under FAR Part : Part 121
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 : 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 : 1714595
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Confusion

Events

Anomaly.Airspace Violation : All Types
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.Other
Result.Flight Crew : Became Reoriented
Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

The purpose of this report is to offer information about an incident that took place during the execution of a visual approach to Runway 27 at ZZZZ, that induced the inadvertent penetration of the US Contiguous ADIZ while lining up for SDM just north of the border. We had briefed and planned en-route for the VOR DME 1 27 ZZZZ. SOCAL had already cleared us direct to TIJ VOR with progressive step downs in altitude and told us that ZZZZ was landing runway XX. Once handed off to ZZZZ Approach, the controller inquired as to whether we could accept the visual to Runway XX in effort as to make us number one for landing. I verified with my FO (First Officer) to confirm we were both comfortable with that and proceeded to brief the differences for the visual. I called the runway and airport in sight. Our clearance was to descend to 4000 ft. and establish left downwind to Runway XX. Over the airport and approximately midfield I slowed to request FLAPS 15. Established on the left downwind we received further descend clearance to pattern altitude and clearance for the visual to Runway XX with a handoff to Tower. I slowed further to call for GEAR DOWN, CONDITIONS MAX, FLAPS 25, BEFORE LANDING CHECKLIST. My FO (First Officer) was preoccupied with configuring and running the checklist while I maneuvered to establish what appeared to be just south of final for Runway XX ZZZZ. As we neared the airport ZZZZ Tower immediately alerted us that we were headed for the wrong airport and to look 10 o'clock to make correction. My FO identifies that we are in fact lined up for a visual approach to Runway 26R at SDM. It took me a moment to realize my mistake as I was conflicted with my positional awareness as well as how I had missed and/or shifted my frame of reference from ZZZZ airport to SDM north of the border. I immediately corrected towards the ZZZZ Airport at which point Tower cleared us for landing Runway XX ZZZZ. At this point I re-established a stabilized final using normal descent and normal maneuvers while proceeding to landing. The remainder of the flight was carried out without further incident.

ZZZZ Tower immediately made us aware that we were headed for the wrong airport and to correct with airport at our 10 o'clock. My First Officer also realized that I was lined up for SDM. I re-situated myself identifying the border as a reference and looking at both airports then made the correction and turned to re-establish a stable final for Runway XX ZZZZ.

My penetration of the ADIZ from Mexico to US was inadvertent, however, a clear accumulation of factors lead to a chain of events such as lining up for the wrong runway to the wrong airport and on the same token, re-penetrating the ADIZ in the

commission of my error. My error was a result of a lack of situational and positional awareness on my part and my FO, as well as being task saturated flying an airplane that I do not regularly operate, closely spaced airports within close proximity to the US Contiguous ADIZ (US/Mexico Border), stronger than usual winds out of the East that may have offset my flight path to cause the airplane to fly closer than planned to ZZZZ and in effect causing me to lose my frame of reference and shifting my sights to SDM.

I took immediate evasive action to re-orient and re-establish situational and positional awareness while maneuvering the aircraft safely to a stabilized visual approach for Runway XX ZZZZ.

Staying familiar and proficient in an aircraft is a vital contributing factor that can make a sizable impact in the cockpit with regard to procedure, situational awareness, system awareness, efficiency, airmanship and safety in general. I believe that my mistake was compounded by a lack of situational awareness, high winds, and possible distraction due to lack of familiarity and practice in the aircraft type. "The first step to solving any problem is recognizing there is one." To fix this in subsequent flights faced with similar conditions, I would of course account for winds, and possibly widen out my traffic pattern to allow for more space on downwind and therefore a wider angle and wider view to identify the airport, this would buy me time and room for error. When operating so closely to the border it's best to give myself more space by remaining farther south to account for wide turns and/or unruly winds as a margin of error.

Synopsis

EMB-120ER Captain reported that on approach they became disoriented and lined up with runway at an adjacent airport.

ACN: 1712977 (15 of 95)

Time / Day

Date : 201912
Local Time Of Day : 0601-1200

Place

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

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Fog
Weather Elements / Visibility : Rain
Light : Daylight

Aircraft

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot 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 : 1712977

Events

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

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

I woke up in the morning and saw the fog, so I took my iPad and reviewed the minimums and the section of [flight manual] for low visibility take off minimums.

When we arrived at the airplane I called ATC to ask about the RVR (Runway Visual Range) and they told me the RVR was 2,400 ft. I checked again the plate with the takeoff minimums and we had enough visibility to depart.

We started taxi and by the time we get to the runway the RVR had dropped to 1,200 to 1,400 ft. At this point I looked again and I didn't pay enough attention and mixed up Runway 23R and 23L minimums. When we took the runway I checked we had the runway center line lights (Runway 23L has HIRL and CL) so I didn't get alerted and we took off with no issues. After takeoff I decided to look at the plate again and realized that I mixed up the minimums for Runway 23L with Runway 23R. Runway 23L required RVR 1,600 ft.

The flight continued normally.

I Didn't pay enough attention to the runway on the plate. The other runway is short and was closed. We talked about the minimums with the First Officer and never mentioned the "wrong runway".

Next time I'll make sure we both review the takeoff minimums plate when a new RVR is announced and make sure both pilots agree on the minimums for the current runway set on the FMS.

Synopsis

E170 First Officer reported misreading the RVR minimums for takeoff, resulting in a departure below RVR minimums.

ACN: 1705078 (16 of 95)

Time / Day

Date : 201911
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : STL.Airport
State Reference : MO

Environment

Light : Night

Aircraft

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 405
ASRS Report Number.Accession Number : 1705078
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.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We were cleared for visual approach to 12L. Approaching the marker, ATC asked if we could sidestep and land 12R. I was the PF (Pilot Flying). I looked up and mistakenly looked at Runway 11 and hesitated to respond because the PAPI showed 4 white lights. Captain responded we can sidestep and proceeded heads down to input localizer frequency for the right runway. I immediately disconnected the automation to fly the aircraft onto profile not realizing I was, in fact, looking at the wrong runway on the right. I was fixated on Runway 11 trying to get on profile when ATC advised we were turning for Runway 11 and instructed us to correct course toward Runway 12R. Upon the instruction, I noticed the third runway and realized at that point the error I had made. I corrected course immediately and we landed on 12R.

Synopsis

Air carrier First Officer reported loss of situational awareness and turned toward the wrong runway during initial approach after receiving a late runway change.

ACN: 1705027 (17 of 95)

Time / Day

Date : 201911
Local Time Of Day : 1201-1800

Place

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

Environment

Weather Elements / Visibility : Windshear
Weather Elements / Visibility.Visibility : 10
Light : Night

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Citationjet (C525/C526) - CJ I / II / III / IV
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Taxi
Route In Use : None

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Phase : Final Approach
Airspace.Class B : ZZZ

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Engineer
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Air Traffic Control.Radar : 43
Experience.Flight Crew.Total : 37335
Experience.Flight Crew.Last 90 Days : 200
Experience.Flight Crew.Type : 325
ASRS Report Number.Accession Number : 1705027
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 6200
Experience.Flight Crew.Last 90 Days : 30
Experience.Flight Crew.Type : 0
ASRS Report Number.Accession Number : 1707145
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
When Detected : Taxi
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Cleared to expect Runway XXL at B. Holding short at B cleared to cross XXL and expect further clearance on the other side. After crossing XXL told to cross XYR and hold short XXR. This was the very first flight for my FO (First Officer) [and] he was having a little difficulty changing the runway on the G3000 so we were talking and I was talking him through the change. While trying to change the runway we were given instructions to line up and wait XXR I believe. I heard right and mistakenly turned right and had just crossed the hold short line and was looking at traffic on final and because of the gusty winds couldn't tell for sure which runway he was lined up for so I stopped. I was about 15 feet past the hold short line and stopped when Tower told us to hold our position [and] then asked if we could make a 180. I did and realized the error. We were then re-cleared to hold short of XXR.

In retrospect I should have told Tower we weren't ready when they cleared us to "line up and wait." I also should have double checked the clearance because we were talking about the runway change and partially blocked the transmission from the Tower.

Narrative: 2

First flight in new aircraft after completing initial type rating. First flight with new Captain. No APU or GPU available, so more preflight tasks pushed to after engine start. Night time. Gusty winds, up to 41 kts throughout the day. Very congested area, with three major runways in direct proximity with one another. Two runway crossings in short succession. Unusual taxi route. Last-minute runway change. Rushed acceptance of takeoff clearance.

I was originally scheduled for what was to be my introductory company flight with the Chief Pilot, but shortly before, the PIC (Pilot in Command) was changed to a relatively new-hire but extraordinarily experienced Captain, due to scheduling requirements. Immediately upon arriving, I advised the Captain that in addition to it being my first flight with him, it was also my first flight with the aircraft type. As such, I told him that I was sure there would be a need for some extra time and consideration while I got up to speed, especially given the fact I'd be operating in a relatively unfamiliar cockpit, at night. The passengers arrived on time and we quickly loaded the aircraft. The aircraft had no APU and the PIC elected to do a battery start, so most of the cockpit setup happened after engine start.

While completing the After Engine Start and Before Taxi checklists, the PIC directed me to call for taxi, so I paused the checklist and got taxi clearance. Since I was interrupted in the middle of the checklist, I elected to start it over and quickly cover the items that had been completed previously. While I was still completing these tasks, the PIC started taxiing and told me to just "finish up" the remaining items.

We were cleared to taxi to Runway XXL, via taxiways Hotel and Bravo. The cockpit was set up for Runway XXL and the speeds were posted accordingly. We were anticipating an intersection departure from Taxiway Bravo, but upon approaching that point, we were cleared to cross Runway XXL, followed by a right turn on Taxiway Echo and continue taxi. At some point thereafter, we were told to expect a change to Runway XXR. The PIC took the radios and instructed me to continue the checklists through the Before Takeoff and Takeoff checklists and that he "had the rest." I advised him that I was 'heads down,' completing the checks, changing the runway in the FMS, re-posting the takeoff speeds and reviewing the departure for any differences from XXL.

The distance between Taxiway Bravo and all three runways, XXL, XXR and XYR, is extremely short and the PIC was taxiing slowly, in order to allow me time to complete all the necessary tasks. However, at this point, we were cleared to "Line up and wait, Runway XXR." I expected that I would either be able to complete all the tasks prior to the Hold Short line or we would simply cancel the takeoff clearance and advise Tower we would need another minute. Because it was night time and we had been taxiing slowly however, I was unaware that the PIC had turned right, toward Runway XXL, instead of making the left turn, toward Runway XXR, and continued across the Hold Short line. While I knew we had been cleared into position, I did not realize, and would not have imagined, that the PIC would continue past the Hold Short line and actually take the runway, with the other crew member [was] still 'heads down.'

The PIC then stopped the aircraft suddenly and said, "Look at THIS guy, lined up for the wrong runway!" At that, I looked up, saw the lights of the approaching aircraft, checked the PFD (Primary Flight Display) and SafeTaxi display and said, "HE'S not lined up for the wrong runway, WE ARE!" At that point, the landing aircraft on Runway XXL initiated a go-around and the Controller asked if we were able to make a "180." I assured her that we could and we were advised to proceed to Runway XXR. We took off and completed the flight without further incident.

Upon discussing it later, the PIC told me it was "completely on him" and that he had heard "XXR" and incorrectly turned right at the end of the runway, toward XXL. He also pointed out that the gusty wind conditions were a distraction for him. However, there were obviously a number of contributing factors to this event and many corrective actions for both of us, and our company, to implement as well.

First, this all took place within my first five minutes in this aircraft type and the experience underscores the need for new crew members to fly with an approved training Captain for an introductory period. I later found out that this actually is a standard company practice for all new-hires [to] initially fly with the Chief Pilot or Assistant Director of Operations. An exception was made in this case, due to scheduling, but would be enforced without exception, going forward.

From my second flight, throughout my first week, I only flew with the Assistant Director of Operations and each trip was an exceptional experience; no rushing, plenty of patient explanation and absolute professionalism on every level. After our last flight, he commended me for my flying and decision-making and remarked that even though our week was filled with nationwide winter storms and multiple challenges, I had not made him uncomfortable, nor had I made a questionable decision, once. For my second week, I am scheduled to fly with the Assistant Chief Pilot and Assistant D.O., exclusively, so I believe their claim of pairing new-hires with the right captains, in every other case, to be entirely accurate. In fact, after a great deal of research, it was what I heard about this company's deliberate and conscientious approach to operational safety that was one of the major points that initially encouraged me to work for them.

I will also be lobbying for a review of GPU use for engine starts. I have been on APU-equipped aircraft for a decade and felt the extra and compressed workload that results from battery-starts far outweighs any marginal benefits gained from excluding a power cart. This event also emphasizes the absolute necessity to bring the plane to a complete stop during taxi and advise ATC or ask for additional time anytime the crew feels rushed or encounters an unexpected clearance or instruction. Additionally, a takeoff clearance MUST be rejected if the crew is not 100% ready, with all cockpit tasks completed

and BOTH crew members 'heads up' before considering crossing the hold short line. In the future, I will absolutely demand that the appropriate time be taken in order to complete all tasks prior to crossing the Hold Short line. Regardless of the tasks I am working on, [I] will not turn my attention so fully from the taxiing of the aircraft and trust the other crew member not to taxi onto an active runway, even the appropriate one, until fully ready.

I also felt that the taxi and departure procedures could have been greatly simplified, especially considering the congested nature of that area, where three major runways meet. Taxiing to XXL by taking Taxiway Bravo to cross over Runway XXL, then turn on Echo, as opposed to simply continuing on Hotel to the end of Runway XXL or an intersection certainly adds significant time and attention to what could be a far more straightforward procedure. Likewise, the departure procedure, initially being cleared to takeoff from a west runway, on a busy night, for a south and east departure, could have been greatly improved, so that a last-minute runway change at night in a congested area might not have been necessary at all.

Synopsis

CE-525 flight crew reported performing a line-up and wait on the incorrect runway resulting in a runway incursion and the other arriving flight executing a go-around.

ACN: 1697152 (18 of 95)

Time / Day

Date : 201910
Local Time Of Day : 1801-2400

Place

Altitude.MSL.Single Value : 7000

Environment

Flight Conditions : VMC
Light : Night

Aircraft

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

Component

Aircraft Component : MCP
Aircraft Reference : X
Problem : Failed

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 1510
Experience.Flight Crew.Last 90 Days : 228
Experience.Flight Crew.Type : 1510
ASRS Report Number.Accession Number : 1697152
Human Factors : Human-Machine Interface

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier

Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 520
Experience.Flight Crew.Last 90 Days : 132
Experience.Flight Crew.Type : 520
ASRS Report Number.Accession Number : 1697166
Human Factors : Human-Machine Interface

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Track / Heading : All Types
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

During our arrival to ZZZ from ZZZ1 we had the wrong runway transition for ILS Runway XXL. I realized it when we started to turn south bound and Approach Control asked us if we had the wrong transition loaded. Immediately we asked for vectors and were given vectors for Runway XXL. While we were intercepting the localizer our FMA and MCP went blank and were unable to intercept the LOC for XXL. I instructed CA to hand fly the visual to XXL, since it was VMC. We rolled out on final slightly right of localizer course, which tower asked if we were established and we said correcting, since we were just little right of course. We then verified the runway and continue to land visually to Runway XXL. I made several attempts prior to glide slope intercept to reset MCP to no-avail. Raw data approach was uneventfully flown by Captain to normal landing. We continued to gate, and during my after landing flow recycled FDs and MCP RESET, we both noticed that the FMA returned to normal values after we landed, it was not blank anymore, with normal indications.

Narrative: 2

During our arrival to ZZZ from ZZZ1 we had the wrong runway transition for ILS Runway XXL. We realized it when we started to turn south bound and approach control asked us if we had the wrong transition loaded. Immediately we asked for vectors and were given vectors for Runway XXL. While we were intercepting the localizer our FMA went blank and were unable to intercept the LOC for XXL. Tower asked if we were established and we said correcting, since we were just little right of course. We then saw the runway and continue to land visually to Runway XXL. We continue to gate and notice that the FMA returned to normal values after we landed, it was not blank anymore.

Synopsis

Flight Crew reported that while intercepting the localizer, the MCP and FMA went blank. The approach was flown to a normal landing in visual conditions.

ACN: 1683812 *(19 of 95)*

Time / Day

Date : 201908
Local Time Of Day : 1801-2400

Place

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

Environment

Light : Night

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 700 ER/LR (CRJ700)
Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121
Flight Phase : Parked
Maintenance Status.Maintenance Deferred : N
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 : Work Cards
Maintenance Status.Maintenance Items Involved : Installation
Maintenance Status.Maintenance Items Involved : Testing
Maintenance Status.Maintenance Items Involved : Inspection

Component

Aircraft Component : Flap Control (Trailing & Leading Edge)
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person : Gate / Ramp / Line
Reporter Organization : Air Carrier
Function.Maintenance : Technician
Qualification.Maintenance : Powerplant
Qualification.Maintenance : Airframe
ASRS Report Number.Accession Number : 1683812
Human Factors : Time Pressure
Human Factors : Confusion

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

The flap fail caution message occurred due to the disconnection of the right torque tube from the PDU (Power Drive Unit) motor.

At ZZZ airport, we received a turnover from day shift where Aircraft X had a flap fail caution message. We were dispatched to work on it for that evening. Our work compromised of finishing the installation of the BPSU (Brake Position Sensing Unit) on the right side, due to right flap misalignment the flaps needed to be manually retracted to achieve correct configuration. The flaps were mechanically and electrically rigged per AMM (Aircraft Maintenance Manual) instructions and the torque tube was connected and my confirmed installation by my colleague which is the RII (Required Inspection Item) [certified personnel] on duty through the tug test per AMM and the measuring mentioned on the [work order]. The BPSU was installed per AMM instructions which required mechanical and electrical rigging which were performed correctly per AMM instructions. The torque tube was installed correctly per AMM instructions and was confirmed installation by my colleague which was the RII [certified personnel] on duty through the tug test and measured per the [work order]. After verification of correct installation and configuration we closed all panels complying with FOD check and moved on to the operations check. We performed an operational check of the flap and slat system per AMM instructions for at least 7 times consecutively and no message onboard or issue and the repair was good per AMM standards. Performing a separate documentation that states the removal, installation, and tug test of the torque tubes to reassure every component is installed and documented correctly.

Synopsis

CRJ700 Maintenance Technician reported improper documentation of maintenance.

ACN: 1673069 (20 of 95)

Time / Day

Date : 201908
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2300

Environment

Flight Conditions : VMC
Light : Night

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Flight Phase : Final Approach
Airspace.Class C : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1
Flight Phase : Final Approach
Airspace.Class C : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1673069
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

I feel lucky to be submitting this report. We were on final on a visual approach to XXL. We were outside of ZZZZZ. We had been handed over to Tower but before being handed off, Approach told us to expedite our descent to 3000 ft from 4000 ft. I didn't understand because I saw no other traffic around except for the a/c (Aircraft) we were following. I believe it was also approach that asked us to slow to our final approach speed. We did both. As we configured and slowed and changed frequency to Tower, we received a TA (Traffic Advisory) from the TCAS (Traffic Collision Avoidance System). Traffic Traffic. I looked at the display and saw a target. It read +02 and right on top of us. I couldn't comprehend it. I thought, where did that come from? There had been nothing on the display except the aircraft in front of us. Then it read +01 and right away to 00, inside of the triangle representing our plane on our display. I was waiting for a RA (Resolution Advisory), telling us to descend, but never another peep from the TCAS. I was looking outside to the right because the numbers on our triangle

made it look like it was possibly on that side. I couldn't see anything. The jump seater was also looking and couldn't see it either. The F/O (First Officer) finally saw it. He commented, it was close! I remember waiting to hear some scrapping. Feeling it was a helicopter or a false target. I asked Tower if we had any traffic near us. He responded an aircraft had overshoot XXR. We weren't told anything about him. I feel he must have either been cleared for the wrong runway or was preceding to the wrong runway. If this were a PRM (Precision Runway Monitor) approach there would have been a breakout well before this point. HOW DOES AN AIRCRAFT GET THIS CLOSE TO ANOTHER AIRCRAFT TODAY????? We continued for a normal landing. I really do need some answers though. Why no RA from the TCAS? Was the other plane getting a RA? If not, why not? Why not a word from ATC? Why were we both at 3000 ft? This felt very very close. I mean, in our triangle, with 00 ft!!!!

Sloppy airmanship. Poor vectoring. Wrong runway identification. NONE BY US. ATC paying better attention. Like I said, a PRM would have had a breakout. We had nothing. Better flying skills by the regional pilots. A TCAS that works.

Synopsis

Air carrier flight crew reported a near mid-air collision on approach to landing.

ACN: 1672491 (21 of 95)

Time / Day

Date : 201908

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MDW.Airport

State Reference : IL

Relative Position.Distance.Nautical Miles : 20

Altitude.MSL.Single Value : 5000

Aircraft

Reference : X

ATC / Advisory.TRACON : C90

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class C : MDW

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)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1672491

Human Factors : Time Pressure

Human Factors : Situational Awareness

Events

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

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

At 5,000 feet MSL, 20 miles from the airport at 250 knots, a Flight Attendant notified me of an ill passenger who had been in the lavatory for 40 minutes. She believed the passenger needed emergency medical attention. I returned to the frequency and advised the First Officer of the situation and that I was going to ask ATC to arrange for EMS to meet the flight. ATC

acknowledged our request and gave us a vector for RUNTS and cleared us direct to the fix. As the First Officer was programming the FMC for the new clearance, I said, "We're going to be high, I'll slow you down," as I selected the Speed bug to the MASI UP bug. The First Officer acknowledged what I had done and I verified RUNTS on the LEGS page. The First Officer executed the change and selected LNAV. As he was doing so, ATC cleared us to 3,000 feet. The First Officer immediately called for flaps 1 because we could see that we had some excess energy, but the situation remained manageable. Just below 4,000 feet ATC asked if we had the field in sight. I asked the First Officer if he had the airport and he said he did. I called the field in sight to ATC and he cleared us for a visual approach. I felt we still had extra energy but did not say anything because I felt the situation was easily recoverable with speed brakes or landing gear. The First Officer then selected direct HOBEL on the FMC, asked for verification and executed the change. We were then immediately high on the VNAV profile. The First Officer called for flaps 5. Speed was about 200 knots and I thought we needed flaps 10/speedbrakes/landing gear. Again, I didn't say anything because I didn't want to be thought of as a micromanaging Captain. A few miles before HOBEL I finally said, "Gear?" and the First Officer called for the landing gear. By then we definitely had excess energy. The autopilot overshot the final in the turn over HOBEL and the First Officer disengaged it and flew manually. I focused my attention inside the cockpit on glideslope proximity and airspeed. We were configured at 1,000' = feet but a little fast. I didn't call for a go-around because I was concerned about the ill passenger and we were correcting nicely. At 500 feet we were stable and I looked up to see that we were aligned with Runway 31R (the wrong runway). I called for a go-around. The go-around was poorly flown and I (finally) became much more directive, giving the First Officer headings and altitudes. We were cleared for closed left traffic. The First Officer configured early and got the aircraft slowed to 170 KIAS, but he was aware that he was descending quickly through 1,200 feet AGL much too early. I then took control of the aircraft, leveled off at 1,200 feet AGL and got the aircraft completely configured and on Speed. We completed the Before Landing Checklist and I stabilized the aircraft on the glideslope and localizer. Just above 1,000 feet AGL, I gave the aircraft back to the First Officer. The subsequent final approach and landing was within Company limits. I should have been much clearer much sooner that we were carrying extra energy. Later, I should have been far more directive in getting the aircraft slowed and configured. When the situation first happened, before I said anything to ATC about the ill passenger, I should have said, "Let's not rush this; take your time and do this right."

Synopsis

B-737 Captain reported having to execute a go-around after expediting the approach due to an ill passenger.

ACN: 1662620 (22 of 95)

Time / Day

Date : 201907

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 12

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : Mixed

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Flight Phase : Taxi

Route In Use : Vectors

Airspace.Class B : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 226
ASRS Report Number.Accession Number : 1662620
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 Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days : 199
ASRS Report Number.Accession Number : 1662631
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

The Captain briefed and we set up for the ILS PRM (Precision Runway Monitor) Approach. We both selected the Localizer in our active NAV radios. I don't know when he switched his frequency to the VOR after his brief. I verified I was "tuned and identified." Approach gave us the final turn to intercept the localizer and cleared us for the ILS PRM Approach. After the clearance, I saw that his Localizer frequency wasn't tuned correctly and I verbalized he needed to switch back to the Localizer frequency. VOR/LOC was engaged prior to him switching to the localizer frequency. While he was selecting the localizer frequency, I was verifying it was tuned and I did not notice if he had re-engaged VOR/LOC. Approach switched us to Tower. As I switched frequencies and selected the Final Monitor in VHF 2 we received a TA.

I saw Company turning onto their Localizer for the left runway, then I saw we had blown through our course and verbalized he needed to correct back to the right. At the same time, Final Monitor asked if we were on frequency. I responded with an affirmative, and he cancelled our approach clearance and instructed us to descend to 3,000 feet and then said to report re-established on the Localizer. The Captain disengaged the autopilot, but was not descending. I verbalized "descend now" and I engaged Vertical Speed at a 1,000 FPM descent to give him guidance. The Final Monitor asked, "Do you have the runway in sight?" We did. He cleared us for the approach, and I noticed the aircraft was turning left again.

The Captain didn't realize he had not re-engaged the autopilot. I told him "you are still hand flying, turn right." At that time, the Final Monitor queried us again. "It looks like you are lined up for the wrong runway." I confirmed we were correcting. He issued our landing clearance. After landing, we were cleared to taxi via the [Taxiway] loop. Upon reaching Taxiway and prior to my check-in with Ground, we heard a stuck MIC on frequency. The Captain continued to taxi while I attempted to contact Ground. I contacted Ramp to inform them of the stuck MIC on Ground frequency. The Ramp Controller cleared us in and queried "So you didn't contact Ground?" I confirmed that we hadn't because of the stuck microphone. We taxied in and parked.

Narrative: 2

ATIS was advertising the use of ILS PRM (Precision Runway Monitor) for our arrival. We briefed the complete ILS PRM Approach plate and planned accordingly with transition to a visual landing. We were given a heading to intercept the localizer. VOR/LOC was selected on the MCP. I did not verify it was actually selected on the PFD (Primary Flight Display). I noticed an aircraft on final and thought it was weird we seemed too close, simultaneously we received a TCAS Alert, and my First Officer stated "Why didn't the localizer capture?" and Tower responded with "Approach clearance cancelled and descend to 3,000

feet."

I had already taken manual control of aircraft and was descending slightly and turning back to the final approach course. The Tower Controller asked us if we had visual with the runway. We acknowledged that we did and subsequently they cleared us to land. The reason we flew through the Localizer is because I had not transferred the Localizer frequency in my radio from the standby window to the active window. I thought I had, and then when I selected VOR/LOC I did not make a definite confirmation that it was active, I assumed it was.

Synopsis

B737-700 flight crew reported their aircraft overshot approach into a TA with parallel traffic. Also, First Officer reported a stuck MIC on Ground Control and was unable to make contact.

ACN: 1645893 (23 of 95)

Time / Day

Date : 201905
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LAX.Airport
State Reference : CA
Altitude.MSL.Single Value : 3600

Environment

Flight Conditions : VMC
Light : Daylight
Ceiling.Single Value : 1800

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
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
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 25L
Flight Phase : Initial Approach
Airspace.Class B : LAX

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1645893
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Fatigue
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew
Communication Breakdown.Party2 : Ground Personnel
Communication Breakdown.Party2 : Dispatch

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

It was our last flight of a 3 leg/two day trip that had gone extremely smooth and efficient. After landing in ZZZ early, I went to get food and noticed there was a jump seater. I went to introduce myself and let him know we would get him on and he introduced himself as the FAA assigned to [the company]. This immediately instilled a rise in stress for the crew as we were told he would be sitting up front with us. Knowing there is nothing to worry about necessarily, him being there still causes some stress. When I arrived back at the airplane, I noted we were over-fueled by 10,000 lbs. The ramp topped us off at 20,430 lbs.

After managing that and being over an hour delayed the FO (First Officer) and I were also told that if we didn't leave by a specific time, half the plane would miss connections. We tried to manage the flight as quickly but as safely as possible. We were finally off with no incident. During cruise, everyone seemed to be a bit more relaxed and the flight was uneventful. The FO and I discussed the arrival and requesting 25L if it was not assigned in hopes we could get the passengers in on time. After our brief, ATC issued us 24R. As the Pilot Flying and descending through 14,000 ft slowing from 310 kts to 250 kts per ATC instructions, I was managing the aircraft and requested the FO to re-program the FMS for 24R. He said it was complete and noted the speeds were the same. I had just hit 250 kts and decided to brief the approach for 24R. After the brief, I reset the altitude for 24R and continued down the arrival. After passing through 12,000 [ft] I looked at the fixes and our heading and felt that something was wrong. Through 11,000 ft, I checked the FMS (Flight Management System) and realized we were still set up for 25L on the GPS but everything else was set up for 24R. I immediately requested the FO to ask ATC for vectors back to the 24R course as we had just passed CRCUS on the arrival which is where the arrival splits from the north and south complex. ATC asked if we were set up for 25L and after we confirmed we were, we were re-cleared for 25L. At this point, we switched everything back to 25L and then the FO noticed the FMS was not activated. He asked if I wanted it activated and in the process of talking to him, he activated the FMS, but now for 24R. After realizing we were no longer on a course, I went to green needles, tracked the localizer, and checked my altitude, at this point we were descending through about 5000 ft. I set 3600 [ft] for HUNDA and tracked the localizer.

The FO, extremely nervous at this time with our extra FAA crew member, could not seem to successfully load the approach into the FMS. I could tell he was extremely flustered, I was leveling off at 3600 [ft] which was right above the clouds, and realized that the situational awareness with everything going on was degrading and it would be a safer option to request breaking off the approach and be re-vectored. The FO requested it, we leveled off, then climbed to 4000 [ft] and took a heading. At this point the FO and I had a quick chat about just starting over, and I had him completely reset the FMS for the Runway 25L. We ran through all the checklists, flew a box pattern with ATC, was re-cleared for the approach and landed without incident. Our de-brief hit on the errors that caused the event and how we can trap them in the future. We asked the FAA what his thought was and he felt that overall, the mistake was made and was caught and corrected very quickly. When we realized the situational awareness was missing, the go-around was a good call.

In the future, instead of stating that I will be briefing and just turn to my iPad, I will ensure the FO knows to check the FMS for both the arrival and approach. This would have caught the wrong runway issue. After briefing, I may also make a habit to check the last page of the FMS to ensure runway selection. While I could have flown the approach safely in green needles, I felt the situational awareness of the FO was missing and going into the clouds with him that confused was not the safer option. Even with the lack of situational awareness, the FO did a great job taking direction and helping out. As nervous as the FO was with the FAA on board, maybe a specific brief to talk about it and ensure that there is nothing to worry about may have helped also.

Synopsis

Emb-175 Captain reported increased stress, confusion and loss of situational awareness, partially due to having an FAA inspector onboard, which ultimately led to a go-around.

Time / Day

Date : 201905
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : PVD.Airport
State Reference : RI
Altitude.MSL.Single Value : 11000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : PVD
ATC / Advisory.TRACON : PVD
Aircraft Operator : Air Carrier
Make Model Name : Medium Transport
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
Airspace.Class C : PVD

Person : 1

Reference : 1
Location Of Person.Facility : PVD.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 7
ASRS Report Number.Accession Number : 1645797
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1645875
Human Factors : Situational Awareness
Human Factors : Troubleshooting
Human Factors : Distraction

Person : 3

Reference : 3
Location Of Person.Facility : PVD.Tower
Reporter Organization : Government
Function.Air Traffic Control : Supervisor / CIC
Function.Air Traffic Control : Local
Function.Air Traffic Control : Ground
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6
ASRS Report Number.Accession Number : 1646105
Human Factors : Situational Awareness

Person : 4

Reference : 4
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 : 1645873
Human Factors : Situational Awareness

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Aircraft X on arrival route inbound to PVD. Initial altitude 11000. Check on descended to 5000. Turned aircraft direct to BEVIN intersection for the visual approach to Runway 34 at PVD. Aircraft X called PVD in sight. I cleared Aircraft X for the visual approach to Runway 34 and instructed to turn final over BEVIN for noise abatement. 10 miles south of PVD I instructed Aircraft X to contact Tower. Numerous other aircraft were on frequency and practice approaches being done.

I then started a relief briefing to release the Groton and Jumpr airspace. At this time the Local Controller called and reported they sent Aircraft X around because they noticed he on short final for OQU airport. They called OQU Tower as I was also keying up the line and were already getting the point out. I asked the OQU Tower Controller if they had them to ship them to [Departure]. I then called Local and asked them to give the aircraft back to me for re-sequence.

I re-identified Aircraft X and put them on a 230, and then a 160 heading. I then continued my relief briefing for the south two sectors.

I have no recommendations due to this just being a mistake. No procedure changes would impact what happened.

Narrative: 2

We were cleared for the visual approach into PVD Runway 34. We were told to go direct to Bevin, the FAF (Final Approach Fix), and maintain inside Bevin for noise abatement. We had the ILS 34 approach loaded and cleaned up. We knew that based on the instructions to remain inside the FAF that we needed to configure the aircraft for landing early. The Captain, who was flying, announced that he had a "no approach" indication on his side and instead of relying on a possible error in the FMS (Flight Management System), he clicked off the auto pilot and hand flew the approach. We had an airport insight and the Runway 34 in sight and he began the descent on the visual approach. I became weary that we were not on the appropriate approach and went back to the approach that was loaded and saw that the course was to our right. I told the Captain that something was wrong and called for a go around at the same time PVD Tower announced that we may be on the approach to the airport next to them. The go around was executed follow by vectors to the left for the visual into PVD. We landed at PVD.

ATC was task saturated with another aircraft and I called them twice, once asking for lower altitude and once to see if they wanted us to contact Tower a few minutes after we were cleared for the approach. After we were given the clearance or the approach, we configured the aircraft early because of the instructions to remain inside the FAF. The Captain had his range out farther than normal which led him to believe that we were close to the FAF and due to a possible FMS error he turned for the airport that was insight. The airport which is 7 miles to the south has the exact same runway setup as PVD and we saw the runway marked clearly "34". We were unaware of any possible airports in the vicinity that were similar. I was trying to configure the aircraft at the Captains request along with making the radio calls and trying to see why the approach didn't make sense to me. I missed the 1000 foot call because I was trying to see what the issue was. I had my range set at 2.5 miles and after 1000 ft I turned my range out and saw the course to our right. I told the Captain that we were not on the right approach and when ATC called us I announced the go around.

Narrative: 3

While working Local, Ground and CIC (Controller in Charge) I received an inbound call by Aircraft X for Runway 34. At the current time Aircraft X was not displayed on my STARS (Standard Terminal Automation Replacement System) display. I zoomed out to about a 15 mile range and cleared Aircraft X to land Runway 34. At this time Aircraft X was approximately 12 miles from PVD. Once clearing Aircraft X to land I clicked the aircraft's data tag making the data tag blue, then proceeded to zoom back to my normal preference setting (that meets our local minimum range setting requirement per the SOP, 10 miles). During this time I was scanning my runways and taxiways making sure all control areas were clean. After scanning the runways and taxiways I would occasionally look outside to scan for Aircraft X. (The way our Tower is situated on the airport the final for Runway 34 is behind the controller so in order to scan the Runway 34 final you must turn your back to the airport and all tower displays). The Tower itself started getting a little busier due to controllers arriving for a position relief briefing that would begin shortly for my positions. At this time I was scanning outside trying to observe Aircraft X, but could not see the aircraft. I looked back to the STARS display and observed Aircraft X tag and for a split moment thought everything was normal. Aircraft X data tag was in an area normal to land Runway 34 at PVD, but quickly identified the information I was receiving was anything but normal. Instead of the pilot flying a northeast heading he was tracking northwest and descending below a normal altitude. This is when I realized Aircraft X was lined up for Runway 34 at OQU and this was a wrong surface/ runway landing. I immediately told Aircraft X it appeared he was landing OQU. He replied back with a response similar to "We recognize that now. We're going around". I told Aircraft X to go around and gave the pilot our missed approach instructions for PVD Runway 34, making sure no one was on final for Runway 5 at PVD, which would be a direct conflict. I then tried coordinating with the Arrival controller downstairs where a position relief briefing was in progress. I stopped the briefing with a break for control and relayed the information to the Controller. During this time the TCD (Tower Clearance Delivery) Controller was coordinating a point out with OQU Tower who had no observed traffic and approved the point out.

Our normal local procedure is to have Local and Ground Control combined up. I filed a previous report regarding this issue. I do not think it is wise to have two control positions combined up in the Tower during normal traffic hours. There is more surface to scan when as a Local Controller I am scanning taxiways for vehicles and taxiing aircraft instead of concentrating on my active runways and landing/ departing aircraft.

Build a new tower across the field so controllers don't face the wrong way. We currently face Runway 16 which is used as a primary runway less than 2 days a year. Runway 34 is our third most used runway and is the active runway for a good portion of the year.

Narrative: 4

Performed Go-Around. Cleared for the visual approach 34 into PVD. We were given direct BEVIN which is the IAF (Initial Approach Fix) for ILS34. This was a visual approach backed up by the ILS. We were also told by ATC to maintain 3000 over BEVIN and stay inside the fix due to noise abatement procedures. This put us 1100ft high. The FMS (Flight Management System) had already been confirmed and executed but was showing NO APPR and it appeared we were over BEVIN with the range I had selected on the MFD (Multi-function Flight Display). We picked up an airport on the left side of the aircraft which looked like PVD but was actually OQU Quonset State. This airport has the exact layout and numbers as PVD. We started a visual approach to Quonset thinking it was PVD. Once we realized our error we performed a go around and by then the Tower had started to call us. They told us to maintain 2100 for altitude but issued no heading instructions so we flew runway heading until assigned a different one by ATC. We were vectored around and landed uneventfully in PVD.

Synopsis

Flight crew and controllers reported that an aircraft lined up for a runway in close proximity to the airport they were intending on landing.

ACN: 1615753 (25 of 95)

Time / Day

Date : 201902
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : PBI.Airport
State Reference : FL

Aircraft

Reference : X
ATC / Advisory.TRACON : PBI
Aircraft Operator : Air Taxi
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Flight Phase : Final Approach
Airspace.Class E : PBI

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Fractional
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1615753
Human Factors : Distraction

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 : Became Reoriented
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Lined up on wrong runway at VRB on visual approach. Weather was day VFR. Initial weather indicated runway 4 landing. Crew briefed and executed appropriate checklists. New weather caused change in runway. FO (First Officer) set FMS and set approach for runway 12. Due to high volumes of local training traffic and parachuting I did not catch him hitting the actual load function. I was distracted. Several birds were also observed with more distraction. We were cleared for visual to runway 12. I asked [for] vectors to final to be executed. The FO did as requested, however [runway] 04 approach popped up. In the heat of battle and distractions at hand we missed the [runway] 12 approach. ATC had already cleared us for a visual [but] we did not catch the fact that [runway] 4 was in sequence. We began VFR visual sequencing for wrong approach following FMS data. ATC queried us as would be expected. We asked for sequencing back around for [runway] 12 [and] we landed without incident.

More diligence when setting up approach sequence. Cross check and confirm each hand movement of buttons. Divide time better with oncoming approach.

Synopsis

Air taxi Captain reported initially lining up on the wrong runway following distractions related to local traffic and bird activity.

ACN: 1613487 *(26 of 95)*

Time / Day

Date : 201901
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US
Altitude.MSL.Single Value : 400

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Snow

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Super King Air 200
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135

Flight Plan : IFR
Flight Phase : Final Approach
Route In Use: Other
Airspace: Class C : ZZZ

Person

Reference : 1
Location Of Person: Facility : ZZZ: Tower
Reporter Organization : Government
Function: Air Traffic Control : Local
Qualification: Air Traffic Control : Developmental
ASRS Report Number: Accession Number : 1613487
Human Factors : Situational Awareness
Human Factors : Human-Machine Interface

Events

Anomaly: ATC Issue : All Types
Anomaly: Deviation - Track / Heading : All Types
Anomaly: Deviation / Discrepancy - Procedural : Clearance
Detector: Automation : Air Traffic Control
When Detected : In-flight
Result: General : Flight Cancelled / Delayed
Result: Flight Crew : Executed Go Around / Missed Approach
Result: Air Traffic Control : Issued Advisory / Alert
Result: Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Aircraft X was cleared for an ILS approach to Runway XXL. Runway XXR was closed for continuous snow removal and had snow removal vehicles operating on it. The weather was IMC with 1 mile visibility and snow. The approach end of both runways were not visible. I was the trainee in position in Local Control and cleared Aircraft X to land on Runway XXL which he read back. At about 1 mile final the AMASS (Airport Movement Area Safety System) issued a go-around instruction which I immediately relayed to the pilot. The aircraft was not visible yet on the ASDE (Airport Surface Detection Equipment)/AMASS display. The pilot immediately complied and executed a go around. After the pilot had begun his missed approach I informed him of the reason for the go-around, that it appeared he was aligned with the wrong runway, and I asked him to verify that he had been established on the Runway XXL localizer. He replied something to the effect of that he was "right of course", which to me would imply he had indeed established himself on the Runway XXR localizer.

During IFR weather and continuous snow removal, the approaches to XXL/XXR are frequently obscured. The radar display when zoomed out doesn't fully show whether the aircraft is aligned with the right runway, as the difference in position is only very subtle. Neither the Tower or TRACON observed the King Air lined up for the wrong runway. The AMASS essentially becomes the most useful layer of safety at that point. A recommendation that I have would be to give the Tower the ability to put an ILS system into standby/off when it is closed for snow removal. Currently we only have the ability to monitor the ILS, and can't change its functionality. If the ability to turn off the ILS to the occupied runway existed and was incorporated into the appropriate Runway close/open checklist, it would have prevented the King Air from picking up the wrong localizer. I would add that to the continuous snow removal Letter of Agreement as well. My other recommendation would be to require a closer distance setting on the radar display during IFR weather, which would help to more visibility indicate potential wrong runway alignments.

Synopsis

Local Controller reported issuing a go around to an aircraft that appeared to be on short final to a closed runway.

ACN: 1611328 (27 of 95)

Time / Day

Date : 201901
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : SCT.TRACON
State Reference : CA

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Turbulence
Light : Dawn

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
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 : Descent
Airspace.Class B : LAX

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 : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 9800
Experience.Flight Crew.Type : 6000
ASRS Report Number.Accession Number : 1611328
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

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

Narrative: 1

First Officer was flying. I was working the radios. Early morning arrival into LAX. Radios were quiet due to time of day. Slowed us down way early due to turning the airport around. They changed our arrival on the previous Approach Control frequency due to landing on 24R versus 6L. Now on HLYWD1. Cleared for ILS 24R at SEAVU. We briefed and input 24R. Next controller informed us that we were lined up for the wrong runway. We said previous controller gave us 24R. He said hang on...and assigned us 24R and gave us a new frequency. Landed on 24R without further incident.

This government shutdown has put a heightened level of stress onto the shoulders of people who already have enough stress in their lives. You can see it on the faces of the TSA in the airports. And, you can definitely hear it in the voices of the Air Traffic Controllers. These people are under duress. All of this having been said, we are confident that we were following the directions given to us by our controllers. We were rested and alert even considering the time of day.

Synopsis

Embraer 175 Captain reported confusion between LAX Controllers on runway clearance, possibly due to government shutdown and the additional stress on ATC.

Time / Day

Date : 201811
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DFW.Airport
State Reference : TX
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : D10
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 900 (CRJ900)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class B : DFW

Aircraft : 2

Reference : Y
Make Model Name : Beechcraft / Beech Aircraft Corp Undifferentiated or Other Model
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase : Cruise
Route In Use : None
Airspace.Class B : DFW

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 : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1593124
Human Factors : Situational Awareness
Human Factors : Distraction

Events

Anomaly.Airspace Violation : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On vectors for visual approach to 18R (3,000 ft. MSL), we heard ATC provide the 787 ahead of us traffic advisories near the final approach course for the runway. This advisory was "[Carrier] -- heavy, traffic two to three o'clock, 2,500, type unknown, altitude unverified" as we approached the final course moments later, we received instructions "Aircraft X fly heading 130, Intercept the localizer, cleared for the visual 18R, contact Tower now on 124.15".

Immediately after reading back the clearance, Regional Approach came back to us and said, "Aircraft X, never mind stay with me, fly heading 130, traffic 1-2 o'clock 2 miles, 3,000", I called back and said "Looking, just to be sure are we still cleared to intercept the localizer?" Regional departure said, "Negative, approach clearance cancelled, that traffic is headed right through the localizer, fly heading 130, I'm gonna take you through the localizer to avoid him, there is nobody else approaching the other side (17L, 17C or 17L) so you're clear."

We got the traffic in sight and I called it to ATC. Regional Approach controller then came back with, "Roger, maintain visual separation from that traffic, does it look like he is at three thousand?" I answered in the affirmative, "Sure does," just as we received a TA. Regional Approach then said, "Yea, I'm not talking to him, so he's violating the Bravo Airspace." We were then given a heading of 150 around the traffic and cleared for the visual to 18R and told to contact the Tower. As we positioned our aircraft for the approach, the Pilot Flying aligned with the inside runway. After confirming this misalignment with the Localizer back up, showing approximately 2 degrees left of course, I called "Hey do you know we are lined up with the left," to the PF (Pilot Flying). He responded positively, re-aligned and we landed without further incident.

ATC had mentioned that the aircraft was not on frequency and was violating Bravo Airspace. VMC conditions may have led to complacency by the GA pilot. I believe that biggest contributing factor to the incorrect runway alignment was the PF's focus being pulled outside to monitor traffic and maintain visual separation. When we were finally cleared again for the approach, there was a lot to manage in getting the aircraft configured, aligned and set up for the landing.

After thinking about it since the incident, we maybe should have asked for the other runway or made the safe decision to climb and come back around once the conflicting aircraft was clear of the airspace. We could have even asked for 17L or 17C as it was perfectly visual conditions, but even that would have required a re-brief.

Synopsis

CRJ First Officer reported vectors around a Class Bravo violator while on a visual approach led to lining up for the wrong runway.

ACN: 1585974 (29 of 95)

Time / Day

Date : 201810
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : DTW.Airport
State Reference : MI
Altitude.AGL.Single Value : 1000

Environment

Light : Night

Aircraft

Reference : X
ATC / Advisory.Tower : DTW
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : ILS Y 22R
Flight Phase : Final Approach
Flight Phase : Landing
Airspace.Class B : DTW

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 500
Experience.Flight Crew.Type : 2100
ASRS Report Number.Accession Number : 1585974
Human Factors : Confusion
Human Factors : Physiological - Other
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : FLC Override Automation
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On right downwind in night VMC cleared the visual to 22R at DTW. Turned base, configured normally. We loaded the ILS Y 22R based on the ATIS. It was briefed normally paying attention to the nonstandard note about the different ILS frequency and notes about 2.5 degree difference in inbound course (213 versus 216). Turned final, got LOC capture normally and finished configuring. We were cleared to land turning base. When I started to double check our runway alignment I got really confused. We were lined up on what I thought was 22R but the LOC was off center.

With multiple parallels and lack of familiarity with DTW at night I got concerned. The Captain started correcting to the LOC and the aircraft was pointed away from the runway. Added to this, I could not identify 22L due to the airfield lighting configuration. 22R, the runway we had lined up on initially did have all of its MALSR lighting up minus the sequence flashers. I asked Tower to turn 22R lighting intensity up as a way to confirm that we were going to land on the correct runway. They did and the Captain adjusted back to the original/correct course and runway. No unstabilized approach and a minor misalignment for 10 seconds while we confirmed that we were indeed lined up on the correct runway.

Synopsis

Air Carrier First Officer reported confusion when visually acquiring which parallel runway to land on while on approach to DTW.

ACN: 1576979 (30 of 95)

Time / Day

Date : 201808
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 : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Taxi

Aircraft : 2

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

Aircraft : 3

Reference : Z
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
Flight Phase : Landing
Flight Phase : Final Approach
Airspace.Class B : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1576979
Human Factors : Confusion
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : Ground Conflict, Less Severe
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : Taxi
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

[We were] holding short on Runway XX. [Aircraft Y was] cleared to land on short final on [Runway] XY. Other aircraft, [Aircraft Z], [was] further out on final and ATC cleared to land on [Runway] XY. Tower cleared us to line up and wait [Runway] XX. Both Captain and First Officer questioned each other as to the position of the incoming [Aircraft Z] still far out on final. [We] taxied forward to comply with Tower instructions [of] line up and wait. As we advanced forward, it became more apparent that [Aircraft Z] was lined up on the wrong runway, [Runway] XX. Our aircraft nose had crossed over the hold short line and stopped. First Officer notified Tower of our position and the incoming [Aircraft Z]. Tower directed [Aircraft Z] to go-around [because they were] lined up on wrong runway. Outcome [was] uneventful.

Synopsis

A319 Captain reported cleared on to runway by ATC, while traffic on final was mistakenly aligned to same runway.

ACN: 1573591 (31 of 95)

Time / Day

Date : 201808
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : EWR.Airport
State Reference : NJ
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

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

Component

Aircraft Component : PMC, Performance/Thrust Management Computer
Aircraft Reference : X
Problem : Improperly Operated

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Type : 468
ASRS Report Number.Accession Number : 1573591
Human Factors : Situational Awareness

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : FLC Overrode Automation

Assessments

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

Narrative: 1

We were taxiing for takeoff, expecting RWY 22R at intersection W. Taxi clearance included several delays for other traffic and flow over the first departure fix. Taxi route was slightly different than expected, but no changes of consequence. Single-engine taxi was utilized, and during hold periods the first part of the Before Takeoff Checklist was performed. At that time, both crew members failed to realize that we had RWY 22L at W entered into the FMS. [Takeoff Data] showed a Flaps 10

reduced thrust takeoff, which we were configured for.

As we continued taxi, we started the left engine and approaching the hold short we ran the remainder of the Before Takeoff Checklist. ATC cleared the flight to "Lineup and Wait" on 22R at W, and as I looked down during the "Verify Takeoff Runway" step, I then realized that 22L (and not 22R) was loaded into the FMS. The FO (First Officer) changed the takeoff runway to 22R and requested new takeoff data for that runway. As we waited for the ACARS data, we were cleared for takeoff, and we advised ATC that we needed a delay. There was no traffic waiting for departure, so ATC merely told us to "let him know when we were rolling." Once we were lined up on the runway, I transferred control of the aircraft to the FO and I took over the radios.

When the new numbers showed up, the FO loaded them in, and we saw V-speeds that were different, but we loaded them and verified the new V2 was set in the MCP window. Neither of us noticed that the new data was for Flaps 5, and we did NOT wait to print and review a hard copy of the [Takeoff Data] before loading and accepting the data into the FMS. Satisfied that the correct numbers were good and the correct runway was loaded in the FMS, we commenced the takeoff roll.

During the takeoff roll, at around 70-80 knots, the FO realized that the takeoff data was for a Flaps 5 takeoff (we were still at Flaps 10). Knowing that the actual flaps setting was higher than the [Takeoff Data], I decided at that instant that the hazard IN THIS CASE did not warrant the hazard presented by an RTO (Rejected Takeoff), so I announced to the FO to continue the takeoff. The FO rotated normally using the Flaps 5 speeds, and the takeoff was completed without further incident.

Once at altitude, I printed the 22R/W [Takeoff Data] and reviewed the differences. Compared to the other runway, V1 was 10 knots greater, VR was 9 knots greater, and V2 was 8 knots greater. Since we were already airborne, I was unable to get Flaps 10 data for 22R/W.

The event and the threats are clear: we loaded the wrong runway initially, and both of us failed to see it during the Before Takeoff Checklist (oversight/complacency). I caught the error as we approached the runway, but then we failed to properly review the revised [Takeoff Data] and ensure we were properly configured for it. As captain, I made an erroneous assumption that the FO had forced Flaps 10 in the data request (vice letting [the computer system] choose the flaps setting), and due to complacency, we didn't run the Runway Change supplemental checklist or insist on reviewing the [Takeoff Data] (digitally or hard-copy) to verify the data and configuration settings. Since we didn't anticipate a configuration change, we didn't feel the need to re-run the entire Before Takeoff Checklist again. Any one of these steps that I normally would have taken would have prevented what resulted in an Undesired Aircraft State (incorrect flap setting on takeoff).

Once we realized the error, I made an immediate decision on the safest corrective action (continuing the takeoff using the Flaps 5 speeds) to recover.

Some might argue that this was a "no harm, no foul" event, but I disagree. I allowed myself to take shortcuts that I never allowed myself to do before. I've NEVER taken off without reviewing the takeoff data message before. I'll admit that I HATE the idea of having a computer system load my data for me, because I feel it takes me out of the loop, and in this case, that's exactly what happened. Nonetheless, the errors and the oversights were mine, and as captain I have to assume responsibility for them. Had the required flaps been higher vice lower, or had there been a significant difference in runway lengths, the results could have been much different.

Synopsis

Air Carrier Captain reported taking off without proper performance data due to a late runway change.

ACN: 1568414 (32 of 95)

Time / Day

Date : 201808
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
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR

Mission : Passenger
Flight Phase : Takeoff / Launch

Component

Aircraft Component : FMS/FMC
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 : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Type : 1458
ASRS Report Number.Accession Number : 1568414
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

The airplane had two MELs that needed to be dealt with during taxi out. One for a manual engine start of the number 1 engine, and the other for the Captain's rudder disconnect button being inop for the rudder check.

We had XXR loaded into the primary flight plan, with XXL ready to go in the secondary. Because of the potential quick taxi to XXR we had elected to have that in the primary. Received pushback clearance and were told to expect XXL. I chose to keep XXR in the primary, until ATC had given it to us officially. With the procedural demand of the manual engine start, my focus was quickly redirected to managing that. Start was normal and we proceeded to taxi away from the gate area on one engine. Ran the before takeoff checklist to the line in the gate area, prior to contacting ground, and then subsequently started the second engine. Contacted ground and was told to taxi to XXL via X, Y. Once the taxi clearance was received our attention turned to the second MEL and coordinating the rudder check for the final items.

Ran the final items portion of the checklist before turning onto Y. With two engines running and a downhill taxi towards XXL on Y our attention now was focused on brake temps. We were cleared to "line up and wait on XXL," verified XXL, both of us forgetting that we had never swapped to the secondary flight plan. Cleared for takeoff, and noticed the wrong runway selected during 100 knot callout.

We had pulled numbers for both XXL and XXR, and they were the same flap setting, almost identical speeds, same departure procedure, and same T procedure. This was fortunate, as I don't think safety was ever jeopardized, but I fully acknowledge that the results could've been different.

Synopsis

A319 First Officer reported failing to update FMC for a runway change.

ACN: 1566794 (33 of 95)

Time / Day

Date : 201808
Local Time Of Day : 0001-0600

Place

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

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZZ
Aircraft Operator : Air Carrier
Make Model Name : B767-300 and 300 ER
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Climb

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Check Pilot
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1566794
Human Factors : Situational Awareness
Human Factors : Confusion

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Leg 3 of 3. During the cockpit preflight, a distraction took me away from the flight deck for a total of perhaps 5 minutes. The pilot flying continued with the preparation for the next and final leg of a 3 leg trip pairing. After I returned to my seat, I checked the entries in the CDU/FMS prior to push back and verified the route, constraints, etc. The pilot flying briefed the departure and as training was taking place, there was emphasis on the delivery of the briefing "off the glass." Threats and errors were addressed, fatigue being mentioned and the mitigation was to exercise heightened awareness, adherence to SOP, etc. Pushback and engine start was normal. Taxi out and checklist use was accomplished normally, and without delay we were cleared onto Runway XXL, as had been briefed by the pilot flying. The departure was via the ZZZZZ RNAV Departure. Taking the runway, I was heads out maneuvering the aircraft into position and verbally confirmed the runway as being Runway XXL. The pilot flying confirmed the runway from the outside and from the inside (navigation display). I gave the pilot flying the controls prior to takeoff and we started the takeoff roll. At the 80 knots call, I glanced at the navigation display and noticed the runway symbol was not perfectly lined up with our aircraft symbol but was off to the side. I called V1 and rotate. LNAV became active and I was immediately able to determine that we were in fact paralleling our course to the first waypoint and the FMS departure runway was in fact XXR. The runways being very close and the ZZZZZ being a common departure procedure for both runways did not result in excessive lateral deviations with the first fix being 7.0 DME from the departure ends. The initial climb out was normal with a hand off to Departure Control, nothing was mentioned from ATC and the departure was continued normally with the flight concluding safely and uneventfully. There was no conflict and I was well aware of the situation as soon as it became obvious what had happened.

This was the perfect example of the holes in the Swiss cheese lining up. A minor distraction early in the game resulting in an error being introduced and despite several checks and opportunities for the mistake to be discovered, it was not! I missed the error during my check of the route and the programming of the FMS done by the pilot flying. The pilot flying briefed the correct runway to include performance, despite having the wrong runway in the FMS, once again during the pre-departure

briefing prior to takeoff and finally the last and final check as we took the runway for takeoff. As hard as we tried not to make any mistakes, we still made a mistake. Thankfully, the mistake we made was not of a high threat and did not result in an undesirable aircraft state nor were there other secondary consequences. However, it uncovers the human flaw in the process when expectation bias, along with fatigue and unfamiliarity is part of the equation, this being the first time the new First Officer had been in this theater. We are safeguarded by SOP's, checklists, training and experience, and checks and balances. As humans, we will make mistakes. This was a big wake up call for the entire crew, none of who caught the error and only until the enroute climb was it mentioned.

Synopsis

B767-300 Captain reported the ND was paralleling the course after takeoff due to programming of the wrong runway.

ACN: 1546417 (34 of 95)

Time / Day

Date : 201805
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : COS.Airport
State Reference : CO

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.Tower : COS
Aircraft Operator : Air Carrier
Make Model Name : A320
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 35R
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class E : COS

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1546417
Human Factors : Distraction
Human Factors : Workload

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We were on a heading for RWY 35R from the south. We waited to call the airport in sight because a large cloud was shadowing the area making it difficult to identify the airport confidently. Once we called it in sight, COS Approach Control cleared us for the approach. As the pilot flying, I set the FAF altitude, but waited to arm the approach because I wanted to make sure we were close enough to get a good LOC signal and not have the aircraft do an "S" turn to acquire the LOC. But as soon as I armed the approach, the aircraft started aggressively turning right, to the east, toward where the LOC was depicted on my PFD. However, my sight picture said we were still east of the centerline. The turn should have been gentle and to the left. Confused, I wasn't sure if I was lining up on the correct runway or if the wrong runway was loaded in the box. I clicked off the Autopilot and the Autothrust off to turn the aircraft back toward what we thought was 35R. As I scanned, I noticed the LOC still depicted a right turn and there was no GS (don't remember if it depicted GS armed). So we turned our flight directors off. We both checked the charts and saw that 109.1 was the correct frequency, but I-LPI was the wrong identifier. During the brief, I had noticed the identifier but thought nothing of it because we often pick up LOC identifiers from other airports when we brief before our initial descent. Often when expecting a visual approach we do not confirm the identifier, and when we do, it's the one found on the RADNAV page.

As I flew, [the] pilot monitoring continued to check to make sure we were lined up on the correct runway. He noticed that the RADNAV indeed indicated the correct identifier, I-AHI. So I asked him to find out what I-LPI was from. I did not know of an airport to the east of us with a LOC that our aircraft might erroneously pick up. But I did know Meadow Lake airport was just east of COS and I did not want to mistake it for COS. Because of the cloud shadows, it was difficult to clearly see 35L and 31. He found the identifier and I heard him say it was for 35L. That didn't make sense either. Not sure if he misspoke or if I heard wrong, but it was actually for 17L. The right frequency but the wrong identifier did not make sense for 35L, so that confused me even more. In the confusion and distraction of trying to verify the runway, my approach became unstable. I felt I was almost stable so I continued. I believe I was stable at just after 1000 feet. But when the "Glide Slope" aural warning began repeating, I got high on the PAPI, so I initiated a go around. Tower cleared us to 9000 [feet] and on downwind, again cleared us for the approach. We had time to verify the GS was for 17L so we briefed that we would silence the "Glide Slope" warning when it occurred. We landed without further event.

Most of the airports we fly into make sure the ILS is turned on even when performing visual approaches. If not, they include a NOTAM in the ATIS stating the ILS is OTS. ATIS [we received] did not have such a NOTAM. In a day of automation, when we find a NAVAID not working at the last minute, it causes adjustments which increase the workload at a critical point in the flight. Furthermore, having misleading navigational information is simply unsafe. Controllers could avoid confusion and potential safety problems by making sure the ILS is on correctly even on a VFR day, or at least NOTAMed out of service. In discussing this event with other pilots, I was reminded that COS often does not have the ILS on. Perhaps a note in our blue pages mentioning that on a VFR day, do not expect the visual backed up by the ILS if indeed that is typical practice. I think our workload would have been greatly reduced if we had known why the identifiers did not match. Was there actually an aircraft computer malfunction, or is my conclusion that ATC had the wrong ILS on correct? If I had known for sure the cause, a simple query to Tower making sure we were lined up on 35R may have reduced the workload and level of confusion. In the future, I will take note of times when the ILS identifier does not match on a visual backed up by the ILS. Also, I will ask my First Officer to query the Tower to verify the runway. Lastly, I will be prepared to silence the GS portion of the GPWS if I know the indications will be erroneous.

Synopsis

A320 Captain reported receiving erroneous "fly to" information from ILS approach being used as backup to Visual approach being flown.

ACN: 1545827 (35 of 95)

Time / Day

Date : 201805

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Light : Dusk

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : EMB ERJ 145 ER/LR

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1545827
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure
Primary Problem : Airspace Structure

Narrative: 1

We were on the arrival into ZZZ and were descending to 6000 ft. We were assigned [Runway] XR and told to descend to 3000 feet. I read back XR and 3000 Feet. I proceeded to put in the localizer frequency for XR and reprogrammed the FMS to XR. We were given a heading to intercept the XR localizer. Then the controller said we were going to the wrong runway and to go left to runway XL. We did and contacted tower. On taxi we were given a phone number. The captain spoke to [the] Supervisor who explained the controller gave us XR, then changed up back to XL on the radar screen but never told us. [He] explained it was not our fault and took responsibility for what happened. I shortly after called the Supervisor as well and he explained it to me as well and said we did nothing wrong. Approach didn't tell us to back to 8L and that caused a deviation.

Synopsis

EMB-145 First Officer reported that they were assigned to land on the Right Hand runway when ATC suddenly reassigned them to land on the Left Hand runway.

ACN: 1536552 *(36 of 95)*

Time / Day

Date : 201804
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DEN.Airport
State Reference : CO

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : D01
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet CL65, Undifferentiated or Other Model
Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Approach
Route In Use : Direct
Route In Use.STAR : WAHUU2
Airspace.Class B : D01

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1536552
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Human Factors : Time Pressure
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1536554
Human Factors : Time Pressure
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We were coming off the WAHUU2 STAR into DEN. ATC gave us a head off 200 to intercept the course for RWY 16L. This heading was going to put us in front of the FAF when we intercepted. Once we saw that the intercept angle wasn't going to work then ATC directed us Direct to the FAF. The FMS was not set up correctly and the mode the aircraft was in did not allow it to intercept the course. The glare of the sun made it hard to visual see the mode the aircraft was in and hard to program the FMS. By the time we realized the aircraft was not capturing the course we turned the autopilot off and hand flew. We turned back towards the course for 16L but already went passed it and headed towards 16R. We remained in visual separation from all aircraft the entire of the incident. Once back on course we proceeded with a go-around maneuver. ATC then gave us vectors for 35L and complied with all instructions and landed onto 35L safely with no other issues.

Poor coordination with ATC and the poor use of Automation with the FMS. The Environment of the sun glare making it difficult to see the instruments. Monitoring the modes of the Aircraft and better use of the FMS to where it is set up properly and having better use of CRM.

Narrative: 2

Our STAR into DEN was the WAHUU2. We were broken off of it and given headings assigned for a visual approach. We were assigned 16L. Crew decided to back up the visual with the 16L ILS. 16L was in the FMS and ready to go, with the approach fully in starting at JEEPR, allowing plenty of fixes/distance on an extended leg of the approach. Then ATC gave us a heading of 200 to intercept the approach. With strong quartering tailwinds, we as a crew thought it was a rather strange intercept angle. There was about 35-50 knots of wind pushing us as we descended. Then ATC said that their intercept angle wasn't working, and we said the same thing, hoping we'd get a different vector. At that point we were given direct to LEETS, the final approach fix. At this time, we had the FMS in NAV mode. We were informed of traffic for the parallel runway at 16R. We saw the traffic, and were told to maintain visual separation. We mentioned we saw the traffic and continued flying. As we started to turn to the southwest, the sun started shining straight on the cockpit screens and glareshield, making it difficult to see. The Pilot Monitoring (PM) sequenced the FMS to show direct LEETS. Then we were given instructions to contact tower, where the PM continued the PM tasks. ATC then noticed us off course and not going to LEETS, getting blown off. The PM looked up and noticed that the PF had the autopilot in approach mode and green needles, but did not notify PM of this change. PM said to take the aircraft out of automation, to hand fly since we were so close to runway and could visually land the aircraft while successfully maintaining visual separation and staying stable. The Pilot Flying (PF) hesitated, and the PM had to mention to hand fly one more time. The PF then took it off autopilot, but overshot. The PF was overwhelmed. PM was assisting in the best ways possible, but by the time the PF rolled out the aircraft was overshot, and almost lining up for the wrong runway. The crew was still maintaining visual separation from the other traffic going to 16R, but it did not look good. The PM said multiple times to go around. The PF was overwhelmed, and PM had to say go around in a stronger voice. PF fumbled with FMA, so PM took off auto pilot and advanced throttles, and mentioned to ATC that a go-around was initiated. ATC gave us vectors, and we were sequenced to land on 35L. We landed on 35L no problem. However, PF was behind and significantly overwhelmed during go around and the new sequencing. PM had to take over many things, almost making it a single pilot environment.

This event was likely caused by a chain of events, similar to the swiss cheese model of safety being jeopardized. The event started with a vector that caused the aircraft to be blown off course and not even get close to intercepting the final approach course. A vector of 200 didn't seem too good. Then, when given direct the final approach fix the crew faced the challenge of having the entire cockpit being glared out with the sun. The PF did not notify the PM of what was going on with the autopilot, or what mode was pushed. The lack of communication internally was a contributing factor in addition to the PF's lack of knowledge regarding automation and the lack of vectoring by ATC.

The PM should have taken over, or initiated a go around sooner. In addition, the crew should have communicated better with regards of using automation modes.

Synopsis

CRJ-200 flight crew reported executing a go-around due to unstable approach resulting from poor ATC vector and flight crew automation mismanagement.

ACN: 1526663 (37 of 95)

Time / Day

Date : 201803

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : D01.TRACON

State Reference : CO

Altitude.MSL.Single Value : 13000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Final Approach

Route In Use.STAR : KOHOE3

Airspace.Class B : DEN

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.Last 90 Days : 79
ASRS Report Number.Accession Number : 1526663
Human Factors : Workload
Human Factors : Distraction
Human Factors : Situational Awareness

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : CFTT / CFIT
When Detected : In-flight

Assessments

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

Narrative: 1

We unintentionally landed with flaps 15 rather than the planned and briefed flaps 30. Multiple factors contributed to unrecognized task saturation on final approach. ATIS advertised runway 26 and 35C and 35R. We briefed runway 26 with a backup of 35R. ATIS winds were 290/23G39. We briefed a Vref of 144 and a target of 164. We completed the Approach Decent checklist well before the top of decent. We were cleared to descend via Kohoe 3 arrival except maintain 300kts. Later in the decent we were told to slow to 250 and comply with speed restrictions. This made it impossible to make one of the at or below altitudes. We asked for altitude relief and were given a descend and maintain 13,000 and were told to expect runway 35R. All of this increased our workload but was well managed. We did not feel behind the aircraft. We were given a normal base and downwind leg. Then we were given a heading for a dogleg to intercept 35R and cleared for the visual on that heading.

Several other factors caused us to unknowingly become task saturated. First, the FO accidentally extended the runway instead of the final approach fix and was working to correct the error as we were on dogleg. Second, due to strong crosswinds the ground track of the assigned heading put us inside the final approach fix. I called for gear down, flaps 15, landing checklist, and set target speed at approximately 1,600 AFE. Approach was armed and we were on glide path but we were right of the localizer course due to the assigned heading and strong crosswind. I didn't understand why the glide path was not capturing and verbalized this. The FO reminded me that the glideslope will not capture prior to the localizer capturing. At this point I flew through the flight directors to maintain the glideslope until localizer capture. The FO made the 1000-foot call, set missed approach altitude, and I confirmed landing clearance. Winds were steady, approximately 270/25, and airspeed was stable. The FO made the 500-foot call and all seemed stabilized. We were on glide path, on localizer, and on airspeed. At approximately 200 feet I was about dot low on the glideslope with 1 white and 3 red on the PAPI when we received the GPWS "TOO LOW TERRAIN." I didn't understand why and thought it was because I was low on the glideslope. I corrected to on glide slope but the warning continued. I confirmed the gear was down. I thought maybe we had put the wrong runway in the FMC. Everything seemed stable and normal, so I continued to a landing, which was uneventful. The aircraft floated a bit but I assumed that was due to the 20 kts of extra airspeed. It was not until the after landing flow that the FO noticed the flaps were at 15 instead of 30.

The FO and I debriefed extensively flowing the flight and agreed task saturation was the primary cause. I had not called for final flaps, and the FO had not completed the flap portion of the landing checklist.

In hindsight it is clear I should have gone around when I could not immediately determine why we were getting the GPWS "TOO LOW TERRAIN" warning. This is the number one lesson for me. The second lesson is once we were cleared for the visual approach and I felt comfortable with the approach I should have turned off the automation and continued visually. At that point the automation became a significant distraction as we worked to get it caught up with where we were on the approach. Had we not been distracted with the automation, I believe both the FO and I would have caught the flaps setting during the landing checklist.

Synopsis

B737 Captain reported that because of workload and distractions they landed with flaps 15 instead of the briefed and planned flaps 30.

ACN: 1515462 (38 of 95)

Time / Day

Date : 201801
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : JFK.Tower
State Reference : NY
Altitude.AGL.Single Value : 300

Environment

Flight Conditions : VMC

Aircraft

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

Person : 1

Reference : 1
Location Of Person.Facility : JFK.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 17
ASRS Report Number.Accession Number : 1515462
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 : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1516539
Human Factors : Situational Awareness

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
ASRS Report Number.Accession Number : 1515580
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

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 : Taxi
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

A skills check on myself was being accomplished at the time with my Front Line Manager (FLM), at which time Local Control (LC)1 and LC2 positions were combined at the LC1 position so that I was responsible for Runway13L, Runway 13R, and Runway 22L. CBA position was open in the back for helicopter and VFR traffic. Aircraft X was inbound on the VOR Runway13L approach, checked in and I cleared the aircraft to land on Runway13L. The aircraft continued inbound and another controller plugged in to relieve me. I relinquished control of Runway13R to LC2 and advised that the runway was theirs, my last departure had been switched, and nobody was holding in position. I also switched the remaining departures on my frequency to 123.9 so that LC2 could work them out.

During the relief briefing, Aircraft X called and requested verification of landing clearance, to which I responded, "Aircraft X affirm, runway 13L cleared to land." I finished the relief briefing and accomplished my 2 minutes of position debrief monitoring time, after which I unplugged and walked to the back of the cab to put down my headset and talk to my FLM about the skills check. Shortly thereafter, I heard LC2 shout out something to the effect of "Hey did you clear this guy to land on the right side?" I looked out the window and observed Aircraft X on short final, below 500 feet and probably inside a half a mile lined up for Runway13R. After recognizing the situation, LC1 sent the aircraft around. At no time during my control of the position or during my relief briefing/monitor time did I observe Aircraft X lining up for the incorrect runway.

Recommendation: The VOR approach for Runway13L/R requires that the pilot fly an extended right base for JFK and to transition from heads-down in the cockpit to heads-up visual flying in a complex and congested airspace in a cluttered ground environment within a major metropolitan area. The nature of the approach requires large passenger aircraft to perform an approach that is more suited for GA aircraft and leads to regular low altitude alert callouts. The approach also invites airspace excursions into LGA airspace should pilots become fixated on picking up the lead-in lights while the aircraft continues on the right base; if visibility is poor, pilots can easily fly past the extended centerline for Runway13L. Even on a clear day, having to visually acquire the sequenced flashing lights can prove challenging, as I have had the opportunity to experience this approach from inside the cockpit while Flight Deck Training. I am not sure if the lead-in lights were active for Runway13R, but if so, this furthers the possibility for alignment with the incorrect runway.

To this end, I would recommend termination of the VOR approach and solely using the RNAV approach, so that carriers could fly this complicated approach on autopilot. Lessening the human element would remove the possibility of lining up for the incorrect runway, with pilots hand-flying only the final portion of the approach, inside of a mile final when the aircraft is already lined up for the correct runway.

Separately, but related, the configuration of the local control positions is not appropriate for operations on the 13s. The positions face to the east, with 90% of all traffic movement on the 13s happening behind the controller, requiring constant, exaggerated body movements to scan the airspace and runway environments. Heads-down time necessary for local control operation (i.e. pulling/ordering/writing on strips, entries on the STARS keypad, etc...) is also accomplished in the opposite direction of traffic flow...transitioning from pulling arrival strips to turning around and scanning out the windows adds countless seconds to each scanning operation, which can be crucial on the most complicated approach JFK has. This specific incident happened while the relieving controller was setting up the position to his liking, ordering strips, preferred sets on the scope, etc.... At an approach speed of 140-160 Knots IAS for a B738, the time it takes for the aircraft to roll out and align with Runway13R instead of Runway13L would take 30 seconds or less, and the non-modular "modular" configuration in the tower does not allow for appropriate scanning of arrival traffic.

Narrative: 2

After passing DYMHL, I began approach into 13R instead of 13L. As soon as we realized the error, I executed a Missed Approach, climbed to 2000 feet, and was vectored to another VOR 13 L approach, [and] landed without incident. Cause: I should have briefed the visual cues of the airport layout. Suggestions: Be more thorough in briefing from FAF to Landing

Narrative: 3

Captain Pilot Flying, I was the Pilot Monitoring [while] shooting the VOR 13L/R Approach to 13L after CRI (FAF), and at approximately DMYHL, I noticed the Captain start a shallow bank to the right assuming he was starting the base to final for Runway 13L. He kept the bank in and I said, "It looks like you're lining up for the 13R" shortly thereafter I called for the "Go Around". We were vectored around for another VOR 13L approach and we landed uneventfully.

Not sure why the Pilot Flying turned towards 13R. Captain said he had shot this approach in the past. We discussed at length the fact that we were landing on 13L. I could have made a more immediate proactive statement. Instead of: "It looks like you're lining up for 13R then go around" I should have said, "You're lining up for the wrong runway... go around".

Synopsis

JFK Tower Controller and flight crew reported the flight lined up for the parallel runway prior to going around.

Time / Day

Date : 201801
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : FRG.Airport
State Reference : NY
Altitude.MSL.Single Value : 1200

Environment

Flight Conditions : VMC
Weather Elements / Visibility : Haze / Smoke
Weather Elements / Visibility.Visibility : 5
Light : Night

Aircraft

Reference : X
ATC / Advisory.Tower : FRG
Aircraft Operator : Air Taxi
Make Model Name : Light Transport, Low Wing, 2 Turboprop Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ferry / Re-Positioning
Nav In Use : FMS Or FMC
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class D : FRG

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1512574
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1512575
Human Factors : Situational Awareness
Human Factors : Confusion
Human Factors : Time Pressure

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

On arrival at FRG in VFR conditions, we were vectored for a visual. FRG is difficult to find in the lights surrounding it, plus the tower reported haze, though the ATIS said 5 miles visibility. Second In Command was pilot flying. Recognized the REIL as did pilot monitoring. Called the airport and were given, Cleared [for] the visual Contact tower, by approach.

Configured at gear down, flaps 20 approaching the runway at about a 45-degree angle and four miles out, the tower instructed 'Best forward speed' as another aircraft was following. A little awkward, but okay. Sped up 30 knots or so.

At about 1200 MSL, I realized I was seeing the wrong runway. Too close to comfortably salvage, [I] initiated a go around as I aligned with the runway. Pilot monitoring informed the tower, who instructed us to climb to 2000 feet and execute right traffic; she would call our base. We did and landed normally. In [the] future in unfamiliar airspace, I will not allow ATC to hurry me and simply head for the FAF in order to align for landing.

Narrative: 2

The flight was an unanticipated [leg] to FRG. Flight conditions were clear and at night. While we were being vectored for the approach to runway 19, we saw the airport beacon approximately 10 miles to the northeast. After confirming our position with the aircraft instruments and the moving map, we notified New York Approach we had the airport in sight. We were then cleared a visual approach to runway 19 and told to contact tower.

Tower asked us to make a straight-in approach, as the proceeding traffic was a C-172 on a one-mile final to runway 19. We were about 1-2 miles from turning a 4-5 mile straight-in approach when Tower asked us to maintain maximum forward airspeed as a Global was following us on an eight-mile final. We acknowledged the request and told tower we would increase speed and turn early to decrease the distance of our final approach.

Our angling final made recognition of the runway edge lights difficult and we cued our turn based on the Runway End Identifier Lights. As we got closer to the runway, we realized we were looking at the REILs on the far end of the runway and noticed the REILs on the approach end of the runway. At that time, Tower indicated that we seemed to be east of the runway.

We acknowledged our position and advised we were going to perform a go-around and enter the visual pattern for another approach. After I announced "go-around" to the Pilot Flying, he said he thought he could turn to make the approach. I felt we were too high and too close to the approach end of the runway to try to fix the situation and emphatically repeated the instructions to go around. We performed a go-around and entered right traffic as directed by the tower. The subsequent pattern and landing continued without incident.

Suggestions: Crews need to be reminded that "aiming for the numbers" is not the best way to make an approach to a runway, especially if you are high on [the] glidepath. This is especially true when the approach is performed at night. My experience in training required a stabilized approach, on approach speed no lower than 1000 feet AGL (outside these parameters required a go-around). Many airlines also use this guideline. That means a standard glidepath will be intercepted at approximately 3 NM from the runway.

Additionally, we had the GPS approach to the runway loaded as a backup approach. However, we did not crosscheck our distance from the approach end with the visual distance we were observing at the departure-end REILs. Had we done so, we would have realized we were closer to the approach end of the runway and could possibly have adjusted our approach patch earlier.

Synopsis

Light transport flight crew reported an unstable approach, which led to a go-around.

ACN: 1509028 (40 of 95)

Time / Day

Date : 201801
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : IAH.Airport
State Reference : TX

Environment

Light : Night

Aircraft

Reference : X
ATC / Advisory.Center : ZHU
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 900 (CRJ900)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : GPS
Flight Phase : Descent
Route In Use.STAR : ZEEKK TWO

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1509028
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Workload
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
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 New Clearance
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

On the descent into IAH, we were originally assigned ZEEKK2 arrival and runway 26R, on frequency change we were assigned the DOOB12 arrival runway 27. On the next frequency change, we were then assigned back to direct AEX. ZEEKK2 arrival. When checking in with Approach they stated that we were on the wrong Runway transition for 26L. The controller issued a heading for the new runway 26L. Landed, No further incident.

We discussed the incident upon shutdown, neither of us recall a runway change on the last Change to the Arrival. It did not help, with multiple changes in a high workload environment.

Synopsis

CRJ-900 Captain reported confusion on approach after multiple arrival and runway changes.

ACN: 1502431 *(41 of 95)*

Time / Day

Date : 201712
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : S46.TRACON
State Reference : WA
Altitude.MSL.Single Value : 12000

Environment

Flight Conditions : VMC
Weather Elements / Visibility. Visibility : 5
Light : Dusk
Ceiling. Single Value : 5000

Aircraft

Reference : X
ATC / Advisory. TRACON : S46
Aircraft Operator : Air Carrier
Make Model Name : Widebody, Low Wing, 2 Turbojet Eng
Crew Size. Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Route In Use. Other
Airspace. Class B : S46

Person : 1

Reference : 1
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function. Flight Crew : Captain
Function. Flight Crew : Pilot Flying
Qualification. Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number. Accession Number : 1502431
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function. Flight Crew : First Officer
Function. Flight Crew : Pilot Not Flying
Qualification. Flight Crew : Air Transport Pilot (ATP)
Experience. Flight Crew. Total : 10000
Experience. Flight Crew. Last 90 Days : 100
Experience. Flight Crew. Type : 250
ASRS Report Number. Accession Number : 1502442

Events

Anomaly. ATC Issue : All Types
Anomaly. Deviation - Altitude : Overshoot
Anomaly. Deviation - Altitude : Crossing Restriction Not Met
Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy
Detector. Person : Flight Crew
Detector. Person : Air Traffic Control
When Detected : In-flight
Result. Flight Crew : Became Reoriented
Result. Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Primary Problem : Chart Or Publication

Narrative: 1

Descending on CHINS 2 arrival, set up and briefed arrival and approach for 32L. Controller changed runway to 14R. Descend via CHINS 2. Misread note "turbojets landing Boeing Field runway 31. Set up for RADDY 250/11000. Controller said we should have leveled off at 16000 feet. Maintain 12000. We read and briefed our notes. Still thought 250/11000 was clearance for Boeing Field. STAR is confusing. Still even has wrong runway numbers. BFI should have its own arrival. Don't jam it all together with SEA. At least make the notes separating the 2 airports.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

A Captain of a widebody turbojet in part 121 operations reported ambiguity in charting while approaching BFI.

ACN: 1502406 (42 of 95)

Time / Day

Date : 201712

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 12000

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B757 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

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

Flight Phase : Final Approach

Route In Use : Visual Approach

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 Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 1174

ASRS Report Number.Accession Number : 1502406

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Air Traffic Control

Were Passengers Involved In Event : N

When Detected : In-flight

Result.Flight Crew : Returned To Clearance

Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

On descent we had initially briefed and set up for an approach like we seem to do 99% of the time we land in ZZZ.

Unfortunately we were cleared for and read back ILS RWY XX, and neither of us caught our error. The cockpit was busy at the time and we were in the process of trying to slow the aircraft per ATC instruction to 180 kts from 250, while staying on the vertical path (also an all-too-common occurrence in ZZZ). We were switched to a new frequency and continued for runway XY when the controller told us we had lined up on the wrong runway while we were near ZZZZZ intersection and to stop our

descent at 7,000 ft and asked if we had runway XX in sight. We did and were subsequently cleared for a visual approach to XX.

Synopsis

B757 First Officer reported lining up for the wrong runway on final approach.

ACN: 1497370 (43 of 95)

Time / Day

Date : 201711
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : PHX.Tower
State Reference : AZ
Altitude.AGL.Single Value : 0

Environment

Light : Night

Aircraft

Reference : X
ATC / Advisory.Tower : PHX
Aircraft Operator : Air Taxi
Make Model Name : Commander 900
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : VFR
Mission : Ambulance
Flight Phase : Takeoff / Launch
Route In Use : None

Person

Reference : 1
Location Of Person.Facility : PHX.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Function.Air Traffic Control : Ground
Function.Air Traffic Control : Flight Data / Clearance Delivery
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 5
ASRS Report Number.Accession Number : 1497370
Human Factors : Situational Awareness
Human Factors : Confusion

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Runway
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

I was working the Local South, Ground South, and Clearance Delivery positions during the midnight shift when Aircraft X called for taxi to Runway 7L. I issued taxi instructions to the runway and ensured the instructions were followed. When Aircraft X was approaching the runway I coordinated the release with the Local North controller and I proceeded to clear Aircraft X for takeoff on Runway 7L. I had another unfamiliar aircraft on the frequency as well that was given taxi instructions to runway 7L which diverted my attention from the departing aircraft. When I turned to ensure the second aircraft was not

going to encroach on the active runway Aircraft X turned onto the closed runway, Runway 7R, and slowly started takeoff roll. The Local North controller and I noticed the aircraft had turned onto the wrong runway and was beginning to depart. I attempted to get the aircraft to stop and cancelled the takeoff but the aircraft had switched to the departure frequency and did not comply. Aircraft X departed safely.

I am not sure why the aircraft departed an unlit runway or if the X that depicts Runway 7R side of the closed runway was even in place because the runway had just recently closed. In this case the X on the Runway 25L side of the runway was definitely in place because we were still west flow when the runway closed. Runway 7R/25L is almost always closed for the midnight shifts and I believe having a standard crossing point at an intersection would be a great help and will increase safety as well. When runway 7R/25L is closed the taxi instructions to and from the runways can be challenging even for veteran pilots especially at night. When the dayshift comes in for the morning one of the first things many of us do is get taxiway intersections for Runway 7L, as crossing points if possible to be more efficient and safer. I understand that there will be times when this is not possible depending on what is being worked on during the midnight shift but I know most of the time it can be done. I believe this will exponentially help safety and minimize complexity for all pilots especially at night.

Synopsis

PHX Tower Controller reported an aircraft departed on a closed runway.

ACN: 1481878 (44 of 95)

Time / Day

Date : 201708
Local Time Of Day : 1201-1800

Place

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

Environment

Light : Daylight

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Parked
Maintenance Status.Maintenance Deferred : N
Maintenance Status.Released For Service : Y
Maintenance Status.Maintenance Type : Unscheduled Maintenance
Maintenance Status.Maintenance Items Involved : Repair
Maintenance Status.Maintenance Items Involved : Installation

Component

Aircraft Component : Pneumatic Valve/Bleed Valve
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person : Gate / Ramp / Line
Reporter Organization : Air Carrier
Function.Maintenance : Technician
Qualification.Maintenance : Powerplant
Qualification.Maintenance : Airframe
Experience.Maintenance.Technician : 14
ASRS Report Number.Accession Number : 1481878
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Detector.Person : Maintenance

When Detected : In-flight
Result.General : Maintenance Action

Assessments

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

Narrative: 1

Crew reported at XA:45 that they had a slow to accelerate spool up on #2 engine. Also on descent they noticed an unusual vibration. Within minutes thereafter I inspected the #2 Engine for damaged blades N1 and Exhaust. I noticed looking through the slim gap between the thrust reverser halves and the core of the engine bottom 6 o'clock position, there was a plug with a long shaft laying at the rear. I alerted the crew to hold boarding at about XA:52 because I would need to open the thrust reverser halves to inspect further. Originally I began looking at the borescope plugs but all plugs were installed and safetied. I noticed looking at the 5th stage check valve, that it was missing a plug as pictured. I inserted the plug and it was a match for the missing through bolt. I had another mechanic assisting me at the time, he took pictures and sent to Maintenance Control to alert of the finding and request support for operational checks once bolt was reinstalled. Maintenance Control notified me that a FADEC Motoring check done through the MCDU would be satisfactory. There was no difficulty reinstalling the through bolt and from the picture I have seen, it appears the bolt did not align with the flapper due to its failure and misalignment. I did not remove the valve for reinstallation of this through bolt, and in hindsight I should have done this as a precaution to inspect the valve for damage. I also would have been able to confirm that the butterfly indeed was aligned with the through bolt. Lesson learned! Bolt was installed; engines closed and secured and motoring check was satisfactory. Notified Maintenance Control approximately XC:00 work was complete and aircraft returned to service at XC:15 approximately.

Synopsis

A319 Maintenance Technician reported finding a check valve was missing a through bolt on an engine that was slow to spool.

ACN: 1479385 (45 of 95)

Time / Day

Date : 201708
Local Time Of Day : 0001-0600

Place

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

Environment

Light : Dawn

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Corporate
Make Model Name : Light Transport, High Wing, 2 Turboprop Eng
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Taxi
Route In Use : None

Person

Reference : 1
Location Of Person.Facility : ZZZ.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 1
ASRS Report Number.Accession Number : 1479385
Human Factors : Situational Awareness
Human Factors : Fatigue

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Other / Unknown

Detector.Person : Air Traffic Control
When Detected.Other
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Staffing
Primary Problem : Staffing

Narrative: 1

Aircraft X attempted to contact the Tower to receive an IFR Clearance. No response was received from me and he contacted FSS to get the clearance. Still no response from me and then Center attempted numerous times to contact me on the shout lines and as well on the phone. I did not respond for 35 minutes as I may have been asleep in the tower due to fatigue brought on by an impending cold. After I responded the aircraft received clearance and departed. The next aircraft that departed took a wrong turn on a taxiway and held short of the wrong runway. I feel as this was unrelated to the fatigue incident. [Recommendation:] identify when I am fatigued and not feeling well and take more breaks during the midshift to alleviate the issue.

Synopsis

A Tower Controller reported an aircraft and adjacent facilities could not make contact, possibly due to fatigue driven sleeping during a mid-shift.

ACN: 1471184 (46 of 95)

Time / Day

Date : 201708
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : SBD.Airport
State Reference : CA
Relative Position.Distance.Nautical Miles : 2
Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 25000

Aircraft

Reference : X
ATC / Advisory.Tower : SBD
Aircraft Operator : Air Taxi
Make Model Name : Light Transport
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class D : SBD

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Flight Engineer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 28400
Experience.Flight Crew.Last 90 Days : 52

Experience.Flight Crew.Type : 400
ASRS Report Number.Accession Number : 1471184
Human Factors : Fatigue

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

Approaching SBD from the north, we were cleared for the visual approach to runway 24 at an altitude of greater than 10000 feet. Our position was on a high upwind for runway 24, but since we arrived on runway 6 that morning, I heard "cleared for visual approach" and did not pay attention to the "runway 24" part of the transmission.

Upon seeing the runway far below and to my left, I set up a left pattern with a steep approach to runway 6. When we were on final, approximately 2 miles out, the co-pilot questioned the runway, and I realized I had set up for the wrong runway. I executed a go-around, entered downwind for runway 24, and completed a normal landing.

I believe among the causes for this error were: Fatigue, complacency due to familiarity with the area and our earlier experience at the airport, and our relative position and altitude when cleared for the visual approach. Our prime concern on the descent was to make a smooth and rapid descent while ensuring the comfort of our passengers.

The fatigue factor can be attributed to our [early] duty time start, the co-pilot's busier schedule (he had flown several times in the past few days, and though he had legal rest, was very tired from the start), and my poor sleep in the hours before the flight.

This could have been avoided by a more thorough briefing as we approached the airport. This would have given my co-pilot a heads-up that I was about to set up on the wrong runway. We discussed the event after our passengers had been picked up, and plan to be even more vigilant when we know ourselves to be fatigued.

Synopsis

Corporate Jet Captain reported setting up for the wrong runway at SBD, executed a missed approach and completed a normal landing on the runway in use.

ACN: 1470577 (47 of 95)

Time / Day

Date : 201708
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 700

Environment

Flight Conditions : VMC
Weather Elements / Visibility : Thunderstorm
Weather Elements / Visibility : Windshear
Weather Elements / Visibility : Rain

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B747 Undifferentiated or Other Model
Crew Size.Number Of Crew : 3
Operating Under FAR Part : Part 121
Flight Plan : IFR

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

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 8226
Experience.Flight Crew.Type : 1110
ASRS Report Number.Accession Number : 1470577
Human Factors : Time Pressure
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

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)
Experience.Flight Crew.Total : 9206
Experience.Flight Crew.Type : 6686
ASRS Report Number.Accession Number : 1470564

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 15504
Experience.Flight Crew.Type : 13801
ASRS Report Number.Accession Number : 1470561

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition

Assessments

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

Narrative: 1

We were on the approach to ZZZ, about 18 mile final and were watching a large storm cell over the airport. As we got closer ATC issued a micro burst alert for 50 knot wind gains and losses on final. We elected to abandon the approach and since the cell appeared to be moving quickly across the field, we elected to have delay vectors to evaluate the rapidly changing weather. We had about 1+20 minutes of fuel remaining. We were sent on a heading to ZZZZ intersection and switched to ZZZ1 approach. The controller there had clearly lost the picture of his traffic situation and did not answer our initial transmissions. We continued to have difficulty establishing communication with approach. The IRO (International Relief Officer) was communicating with dispatch to change our alternate to something closer to our current position than ZZZ2, but were told that none of the local area airports were suitable. We evaluated our fuel state and determined that we needed to divert to ZZZ2 without delay to arrive with sufficient fuel. Again, the controller seemed to not hear our transmissions and at

one point made a blind broadcast to us by our transponder code. We finally got a heading to ZZZ2 after declaring minimum fuel. In addition, we had to deviate around scattered cells as we headed to ZZZ2. We were switched to ZZZ approach as we had to go by ZZZ on our way to ZZZ. The controller informed us that Runway XYR was available for landing if we wanted it. We evaluated the situation and saw a large gap between cells that would allow a visual approach. We were vectored till we saw the airport and were cleared for a visual approach to XYR. I noticed the First Officer appeared to have the wrong runway in sight and was slightly high on the approach. He reported XYR in sight and I was providing verbal corrections to position us for the visual approach. We had to maneuver around a rain shower between us and the runway and I noticed we were trending too low when we got a below glide slope alert. We immediately corrected back to course and because of our position on an angling left base, we needed to make a turn to line up with the runway at 700 feet. My normal reaction is not to try to salvage a bad approach, but to go around and do it again. I felt that considering our fuel state, about 40 min remaining, and the rapidly changing weather we needed to land rather than go around, and that we could do it safely. The approach resembled the IGS [Instrument Guidance System] into the old Hong Kong airport. We were lined up and on speed at 400 feet and the wind at the airport remained less than 5 knots. We landed exactly in the touchdown zone and taxied to the gate without further incident.

Narrative: 2

[Report narrative contained no additional information.]

Narrative: 3

[Report narrative contained no additional information.]

Synopsis

B747 flight crew reported beginning to divert due to weather and minimum fuel but ended up going to the original destination.

ACN: 1468417 *(48 of 95)*

Time / Day

Date : 201707

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Haze / Smoke

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Regional Jet 200 ER/LR (CRJ200)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class B : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1468417

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1468415
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

As we were turned for a long final for Runway XYL, outside of ZZZZZ Intersection, we were asked repeatedly to report the field in sight. At the same time, the FMS was loaded and sequenced, but the CDI had not auto tuned, so the Autopilot was not catching the localizer. My First Officer was looking outside trying to find the field and I was splitting my attention between looking for the field, trying to not overfly the localizer and trying to figure out where the automation had failed. By the time I knew we were going to overfly the localizer I had turned off the autopilot and manually turn the aircraft towards the airport, while still trying to find the runway. Between the haze, the multiple straight lengths of pavement and XYR being closer and more prominent than XYL I was having a hard time picking out XYL and accidentally lined up on XYR.

We were also told to keep our airspeed up to 180 knots. Because we were still trying to configure for landing, we were late making the switch over to tower. By the time that I realized that we were lined up for the wrong runway, we were below 1000 feet. I then called for and executed a go around procedure.

Narrative: 2

Captain was flying. I was the pilot monitoring. Started when we were getting vectored for a visual approach for RWY XYR. Captain was confused on heading/altitude assignments I do not know why. As getting established we were not receiving the Localizer properly for the runway (it was tuned and identified though) but not helping us line up with the runway. Soon I noticed the Captain getting nervous, we were not configured completely to land and very off centerline with the runway. Being the First officer I should have prompted corrective action sooner, but the captain called a go-around. Afterwards I noticed he was confused with another runway and flying toward that one the whole time. We conducted a pilot induced go-around.

The second I felt uncomfortable I should have said something. Even though he is a new Captain I almost felt shocked by what was happening and almost froze.

It is a situation you don't expect to come across. But being fairly new in the company and on approach to landing I did not just want to point out the Captain's mistakes. It was a very big mistake so I instantly second-guessed myself on what was going on. After doing the go-around there was great CRM in bringing the aircraft in and felt way more comfortable. It was the first go-around I have ever done. In the future if there is any doubt on the operation of the flight or if I feel uncomfortable I will let the Captain know immediately. It is not worth keeping quiet and rather be wrong and corrected then right.

Synopsis

CRJ200 flight crew reported that during descent the autopilot was unable to capture the localizer.

Time / Day

Date : 201706
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ORD.Airport
State Reference : IL
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1460860
Human Factors : Confusion
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Taxiway
Detector.Person : Air Traffic Control
When Detected : Taxi
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were in the Foxtrot alleyway on the east line when we contacted metering we were number two. In the time it took us to check in, the aircraft in front of us had vacated the Foxtrot alleyway east line and we became number one on the east line. When we received our taxi clearance we were given to taxi to runway 28R/N5 by following the company aircraft in front of us. The problem was that there was not an aircraft in front of us; however, there was an aircraft number one in the Foxtrot alleyway on the west line that was our company airplane with no one behind him. We assumed that is what he meant and followed him out of the alleyway onto the active taxiway where he entered A then proceeded to A13. We immediately became confused when the aircraft in front of us made a left turn and started moving east bound on taxiway B. Both the captain and I being familiar with ORD know that a normal taxi to 22L is via B and D and had a split second decision to make. In fear of following the wrong airplane to the wrong runway and entering taxiways without a clearance the captain and I made the split

second decision not to follow the airplane we originally thought was to be correct. Instead of making the left turn and heading east on B we made a right turn on B to head west followed by a left turn on N2 and a left turn on N to enter the line. We were then told to switch to tower. After switching to tower the tower called us and said that we needed to talk to ground. We switched back to ground and knew that we made a mistake once we switched and saw the airplane we were originally thought was correct to follow turn right on A15 and make a left turn onto N to skip a part of the line we had mistakenly put ourselves in.

This event was caused by a couple of factors. To kick things off we received a poor ATC clearance to follow the aircraft in front of us when there was not anyone in front of us and didn't receive a specific clearance to taxi to the runway like taxi to runway 28R/N5 via A13,B, A15, N which in hindsight what we were supposed to do. The second contributing factor is that the captain and I made some assumptions as to what was meant by the clearance and we attempted to fill in the gaps on our own instead of asking for clarification. In addition to this error, we proceeded onto an active taxiway deeming what we thought was correct which obviously went wrong. The issue we faced was a high amount of confusion when we watched the aircraft in front of us which originally was off our left side turn left on taxiway B. We again had the opportunity to stop the aircraft and seek clarification; however we kept moving along a route we thought was more correct. An additional factor that should be noted was that ground control was very busy and it was difficult to attempt to contact ground.

In an attempt to try to avoid this from happening again, the crew should seek clarification from ATC before moving the aircraft when a vague clearance is received.

Synopsis

An air carrier First Officer reported being cleared to Runway 28R following company traffic on the Foxtrot Alleyway. The crew followed the incorrect Company aircraft and entered an active taxiway.

ACN: 1459500 (50 of 95)

Time / Day

Date : 201706

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : EGLL.Airport

State Reference : FO

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Turbulence

Light : Dusk

Aircraft

Reference : X

ATC / Advisory.TRACON : EGLL

Aircraft Operator : Air Carrier

Make Model Name : B777 Undifferentiated or Other Model

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Nav In Use.Localizer/Glideslope/ILS : Runway 27R

Flight Phase : Initial Approach

Component

Aircraft Component : Navigational Equipment and Processing

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

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 21500

ASRS Report Number.Accession Number : 1459500
Human Factors : Fatigue
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Confusion

Events

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

Assessments

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

Narrative: 1

London Final Approach has our aircraft on a vector, base leg for Runway 27R. Approach for 27R had been selected and briefed and instead of the usual holding pattern at Ockham, the controller put us on a heading and descent for the approach without delay. On base leg controller gave us a 300 degree heading to intercept the localizer and once on the LOC descend on the glideslope. Aircraft displayed LOC Capture and began turning to intercept the final course 27L. ILS ERROR came up on the FMC. We noted aloud the Aircraft was aligning on the wrong runway. Approach reminded us we were cleared for 27R. We acknowledged we had a NAV anomaly, we resumed 300 degrees using raw data while I manually typed in the proper ILS frequency for 27R. Localizer and glideslope were intercepted, approach continued and landing was successfully achieved without incident. At no time was a break out required nor was any evasive maneuver required during the anomaly. FMC NAV Error was recorded in Maintenance Logbook for follow-up investigation upon flight termination.

The FMC locked into the frequency for the ILS to 27L when it was selected on the ground during the FMC preflight programming of the entire route. The ILS Identifier is in the upper left quadrant of the PFD. Our normal cadence for preparation was thrown off slightly when we transitioned from expecting a hold at OCK to being cleared right into Heathrow. This expeditious handling got us saturated into configuration (speed slow down, descent profile for the CDA profile) and the ILS Frequencies was omitted out of our cross check. It wasn't until the aircraft actually turned to the parallel runway did we notice the discrepancy along with the ILS ERROR message on the FMC.

I suggest ALWAYS cross check that the ILS Frequency for your Selected Approach is in the upper left of your PFD. Don't assume the aircraft will ALWAYS automatically select the proper frequency despite that being on this aircraft [for a while] this anomaly has never happened to me. Just because the Map display is correct, doesn't mean the Nav aids have followed.

Synopsis

A B777 Captain reported programming the FMC incorrectly during preflight and lined up for the parallel runway.

ACN: 1458712 (51 of 95)

Time / Day

Date : 201706
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : DEN.Airport
State Reference : CO
Altitude.MSL.Single Value : 8000

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.Tower : DEN
ATC / Advisory.TRACON : D01

Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Airspace.Class B : DEN

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 965
ASRS Report Number.Accession Number : 1458712

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Prior to descent to DEN, expected Runway 35L due to construction and low arrival demand. We briefed the Descent, Approach, and Windshear Procedures, due to Windshear Advisories. On initial contact with Approach Control, told to expect 35L. On Downwind, 210 knots assigned, just prior to BARK, controller told us to expect 35R. Both pilots turn to the iPad to get 35R charts. I started an "Active Briefing" for ILS 35R backup. As I was setting ILS freq we were assigned heading 260. Rolling out on Base Leg we were asked to report "Airport in sight." We reported the Field in sight and the controller assigned us "Heading 320, Maintain 180 knots." The First Officer asked if I wanted him to extend the Course to the Final Approach Fix. I told him "yes" and he extended the FAF. As I turned to the intercept heading, I cross-checked the Nav Display and saw the intercept heading was inside the FAF, but would put us in front of other traffic on Final. The controller then told us to maintain 170 knots until 5 DME and cleared us for the Visual Runway 35R. At that point, I realized that we were going through the Final course to 35R and that the FMC was still programmed for 35L. We made the turn to 35R without conflicting with traffic for 35L. Because we had been turning and descending From a 210 knot downwind, however, we were still at very high speed, and were barely within the Stabilized Approach criteria at 500 feet.

This "Slam Dunk" was not set up to give spacing to traffic landing behind us, but rather to close spacing with traffic ahead of us. That could have led to an approach to the wrong runway, conflict with traffic on a parallel approach, or an unstabilized approach. Given that Windshear Advisories were also in effect, I consider that type of pushing to get us in fast to be an invitation for disaster. Finally, I would like to add that the Tower Controller was making a lot of comments about what airplanes were doing and the pace that they were following his instructions. I'm sure that his comments were annoying to everyone who was on frequency, and outright distracting for a crew that just got slam dunked.

Synopsis

B737 Captain reported that on approach to DEN while on downwind they were given a runway change and a short turn to final which resulted in an overshoot and an unstabilized approach.

ACN: 1454754 (52 of 95)

Time / Day

Date : 201706
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ELP.Airport
State Reference : TX
Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : ELP
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 : Initial Approach
Airspace.Class C : ELP

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1454754
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1454755
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Attendant

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : FLC complied w / Automation / Advisory
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 : Human Factors
Primary Problem : Human Factors

Narrative: 1

I was operating flight as pilot monitoring. At first I didn't notice anything out of the ordinary. In fact the entire flight was normal up until landing time this morning. Step by step is the sequence of events that took place after being cleared the visual approach. After being cleared the visual approach and being at a safe altitude of 9,000 feet (mind you field elevation is roughly 4,000 feet) Captain puts in an altitude of 6,000 feet and didn't communicate to me that he set a new altitude in the MCP.

After the short amount of time passing I told him "sir, I show 6,000 feet set confirm?" Of course, as pilot monitoring, I'm watching very carefully what the Captain is doing so that nothing serious happens to risk the safety of our approach and landing. I give the Captain 10 seconds to see if he will tell me of the new altitude set in the MCP. I hear nothing, just silence as the aircraft descends into mountainous terrain.

We are now descending through the highest terrain which is 7,176 feet and the Captain puts in 4,500 feet in the MCP we are still descending closer and closer and closer towards the highest terrain which mind you the "MSA" in that quadrant states 8,400 for a minimum safe altitude.

Now I know something seriously is wrong. Something just doesn't feel right I know we're not supposed to be this low especially over mountainous terrain. Now at this time the very loud and serious terrain pull up pull up warning flashes red and sounds in the flight deck. As I immediately begin to perform a recovery procedure for this uncomfortable undesirable situation the Captain says "I got it". Unfortunately he did not recover properly which scared me even more and showed me that he was playing chicken with mountains and with our lives.

This was no profile approach or visual. ATC kept us at 9,000 feet for a reason, so that we can be clear of obstacles and mountainous terrain and yet for whatever reason he decided to set 4,500 in the MCP and descend to this dangerous altitude in mountainous terrain. Instead of recovering properly he began a left base turn with close proximity to the mountains.

He was "cutting corners" way too close and there was no APP mode or LOC or LNAV selected. I mentioned to the Captain where the runway is and pointed it out clearly as the visibility was greater than 10 and the winds were calm. You couldn't ask for better weather during this approach. I've flown many flights to and from [this area] and am very familiar with this airport as it can be tricky if pilots don't pay attention to detail and don't brief or execute an approach as briefed correctly. Now with no CRM from my Captain into the equation and terrain warnings and flying toward the wrong runway, [let] alone wrong airport and me yelling "go around" and no response and the Captain continuing the very unstable approach.

I was put in a situation I would never want anyone to ever experience. Captain was hand flying from the time being "cleared for the visual to the runway." Now the aircraft still in a left turn towards final 1,000 feet above touchdown still no gear down and still no flaps configured for landing. This put me in a very uncomfortable situation. Not to mention we weren't even heading towards the airport, Captain was flying the aircraft blindly toward Biggs Air Force base which we even discussed about during the approach briefing that it can be easily mistaken for El Paso airport as I mentioned I flew here before and am familiar with the terrain and layout of the airport. At this point I am so uncomfortable to the point that my training kicks in and in the name of safety I say, "sir we are way off course go around."

Unfortunately he does not respond and does not execute a go around procedure. He is flying the aircraft closer and closer to the ground.

I keep trying to point out Runway 4 which is 12,020ft long and it is very clearly visible where El Paso is especially Runway 4. To my disbelief the Captain now is doing a series of unstable erratic maneuvers and is now setting himself to land on Runway 8R. A much shorter runway that we were not cleared to land on. Yet he was committed and aiming for Runway 8. Even the Tower makes a remark and asks if we're okay.

Meanwhile I am telling the Captain. We must go around. I now raise my voice even more and say "Sir this isn't right go around" he claims that he has controls and he "can do it" yet we were way off course and never were in course in the first place for a proper stable landing on the runway because of the descent he initially performed into the high terrain as well as aiming towards the wrong airport and wrong runway once I guided him towards the correct airport once again and correct runway.

Then it was my third and final yell for "go around". He said no we're landing, everything is under control when in fact the aircraft was 100% not in control. It was fast and sloppy and behind the curve and the aircraft was very unstable all the way until we made contact hard with the runway. The Captain barely put the aircraft on the runway with extensive abnormal high power settings in the flare to keep the aircraft from hitting extremely hard.

I hope and pray that nobody ever has to go through what I have gone through this morning on approach into El Paso, TX. We are not Cowboys of the sky we are professional aviators and are set to high standards and have standardization for a reason, either pilot can call for a go around. And if an approach does not seem right then it most likely is not right. And unstable approach deserves a go around period. Especially one with pull up terrain warnings and wrong airports and runways in front of the pilots windshield. We preach callouts for a reason to follow them and to be safe so we can live to fly safely another day with many blue skies and soft landings, so we can be role models to the generation in future of aviation safety.

Narrative: 2

This narrative starts while being vectored for a visual approach to Runway 4 at El Paso. We were cleared to 9,000 heading 270 about 7 miles north of ELP. We were cleared for visual approach to Runway 4. We continued descent toward 6,000 and

heading westbound. Once clear of the mountain ridge to the west of ELP I began further descent when we had a momentary terrain warning, I could immediately determine that terrain clearance was not a problem as we were in the clear and visually cleared all terrain prior to descending, I stopped the descent and the warning ceased.

I continued the turn to the east south of the mountains and had difficulty in reacquiring the landing runway. There was some confusion looking into the sun at Biggs AAF and ELP. I continued towards the airport and realized I was north of the position I planned. The First Officer suggested a go around, which I considered and elected to continue since I still had adequate area to maneuver for the landing. I continued toward the runway and the First Officer assisted in confirming the landing runway. The First Officer again called for a go around, I told him I had the Runway and was confident the approach can safely be completed. I made a right turn to a modified left approximately 2 mile base for Runway 4. During the turn the First Officer called for a go around. The aircraft approach speed was about 125 and during this approach nothing seemed rushed. At no time during this operation did I feel I was pushing the aircraft or my capabilities.

Having thought many hours about this flight I can see where my CRM skills were far from my beliefs. I do believe in the company's policy on go arounds. I do believe that the approach, although not pretty, was safe. But the big thing was that the First Officer was not comfortable and his judgement should not have been overlooked. I will not do this again. As for the terrain warning, although not actionable could have been avoided by planning the flight path either higher or over a different ground track.

Synopsis

The flight crew of an air carrier aircraft reported they exhibited poor Crew Resource Management (CRM) while in a stressful situation during approach and landing.

ACN: 1427690 (53 of 95)

Time / Day

Date : 201702
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 : Fog
Light : Night
Ceiling.Single Value : 100
RVR.Single Value : 800

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : B767 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Takeoff / Launch
Route In Use.Other

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 : Flight Engineer
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 12490
Experience.Flight Crew.Last 90 Days : 170

Experience.Flight Crew.Type : 2700
ASRS Report Number.Accession Number : 1427690

Events

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

Assessments

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

Narrative: 1

Mistakenly departed off of runway with 1600RVR requirements with only 800RVR.

I reported to work in the middle of the night. The day looks easy on paper, consisting of only two legs, but in reality is very tiring. It was the first night of my trip, and I hadn't been to work in over 3 weeks. I was tired to begin the trip, but I did get a good 3 hour nap in before it. On the way to the airport fog had set in, and I estimated visibility at 1/4 to 1/2 miles. When I arrived at work things were rushed as always. The First Officer hadn't flown in a month either, and was tired and moving slow. We arrived at the airplane and started performing our duties. ATIS was reporting 1200RVR and I agreed with it. I coordinated with company and received a take-off alternate. Just as I accomplished this, ground personnel completed loading our airplane and were wanting us to block out 20 minutes early. I then started moving quicker and this is where I made my mistake. When I looked at my take-off minimums page for the airport I mistakenly read the wrong runway. I read the information for the opposite runway. I fill this was due to a combination of fatigue and hurriedness. On a well-rested daytime flight, I don't believe I would have made this mistake. The First Officer did not catch this mistake either. I believe he was in the same condition as I was in. The runway I read indicated 500RVR was required. We had 1200RVR, so I thought we were good to go. I blocked out early and proceeded to taxi.

During the taxi I crossed a runway intersection and quickly counted the number of runway edge lights I saw. I counted 6. 1200' visibility, ATIS was right on. I continued to the runway and departed. Runway centerline lights and markings were clearly visible and the take-off was normal. After departure the First Officer informed me that the ATIS had changed before we started to taxi and the reported visibility was 800 RVR. Would I have caught my mistake had he told me this? Probably not, but it might have triggered an auto look up response in me. All in all this was another classic example of the accident chain forming. It started with what I feel is the biggest threat to me in my job, fatigue. Add in being rushed and a First Officer in the same condition as I was feeling, and you get mistakes. Usually these mistakes are caught by one of us, but that night it wasn't. A lesson in risk management was learned, luckily the flight ended normally.

Synopsis

B767 Captain reported a takeoff from a runway with a runway visual range that was below minimums.

ACN: 1412019 (54 of 95)

Time / Day

Date : 201612
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : CLT.Airport
State Reference : NC

Environment

Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : CLT
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 700 ER/LR (CRJ700)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Climb
Airspace.Class B : CLT

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1412019
Human Factors : Confusion
Human Factors : Fatigue
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
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 : Became Reoriented

Assessments

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

Narrative: 1

What: Took off on Runway 36C and turned right to heading 018 instead of left to heading 330

Why:

- 1) I programmed the wrong runway (36R) into the single FMS.
- 2) We didn't thoroughly brief the departure.
- 3) I didn't catch my First Officer inadequately briefing the center runway and not going over the FMS
- 4) The First Officer saw 36 in the MFD and FMS, but did not catch the R versus C
- 5) Fatigue: After two weeks of night schedule I had 10 hours to fly again at night then be up to fly an early morning schedule. I was feeling very tired all day.
- 6) Charlotte ATC: I asked the controller for the proper heading before we turned, her reply was to fly the SID, not helpful.

I've flown the LGA 9 Canarsie/Whitestone climb 100 times without messing it up, yet this is the second time that this has happened to me in CLT. I have to examine every possible cause I can think of. I should never have allowed this to happen. Charlotte is the one place where I never know what the controllers will tell us on takeoff. Sometimes it's the SID, sometimes it's the heading on the SID, if we takeoff in NAV with the SID, CLT then gives us a heading, so we change to HDG, they then turn us to the heading back to the runway, then clear us back to a fix on the SID, then a heading. It's not consistent, it's in the most dangerous part of the flight, and it's very work intensive. This could be better.

Next Time:

- 1) I will not allow the FO to brief the departure this way. We are trained to do it a certain way for a reason. If we had been standard, we would have caught the mistake.
- 2) The next time ask a controller for a heading, I will insist on a heading.
- 3) If I'm that darn tired I will call in fatigued. I must admit, our current fatigue conference call system intimidates me.

What [the company] could do better:

SCHEDULES:

- 1) Night flying or day flying, pick one, people aren't machines. Eventually someone's going to get hurt if we keep building our schedules this way.
- 2) Hot or Cold: Night 2 67 degrees, Night 3 17 degrees, good way to get sick, hard to pack, hard to rest, hard to exercise to stay sharp.

Dismiss this as whining if you like. In 23 years of Military Flying I never encountered the disregard for the human need for circadian rest, and physiological adaptation as I have [here] with our current schedules. I know the direct causal factor of this was my mistake, but I am not a careless or lazy person. I am thoroughly aware that the cost of failure in this business is the lives of my crew and passengers. Their lives are every bit as valuable to me as my own, and I really would like to avoid making such stupid mistakes again.

Synopsis

CRJ-700 Captain reported a track deviation on departure out of CLT citing fatigue, ATC inconsistencies, and company policies on fatiguing schedules as contributing.

ACN: 1390656 (55 of 95)

Time / Day

Date : 201609
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : XNA.Airport
State Reference : AR
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Tower : XNA
Aircraft Operator : Air Carrier
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Route In Use : Vectors
Airspace.Class C : XNA

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : XNA
ATC / Advisory.TRACON : FSM
Aircraft Operator : Air Carrier
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class C : XNA

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1390656
Human Factors : Confusion
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1390936
Human Factors : Confusion
Human Factors : Situational Awareness

Person : 3

Reference : 3
Location Of Person.Aircraft : Y
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1390666
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Miss Distance.Horizontal : 3000
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

On departure from XNA we were launched off Runway 34 directly into an aircraft landing Runway 16. At approximately 2500 feet tower told us to level at 3000 feet. As we did, we spotted an aircraft right in front of us. Captain banked 40 degrees left to avoid traffic. Unfortunately this aircraft was in a right turn and continued to get closer. We turned from a 336 heading to 265 heading.

While this was happening tower was in a panic to have us turn. They did not know the aircraft was out there, Approach put the aircraft on final for the wrong runway. XNA was departing Runway 34. Approach put the aircraft on final for Runway 16. The [intruder] aircraft eventually turned away from us, went missed approach and circled for Runway 34. At one point we were at the same altitude within a mile of each other. My guess is our aircraft came within a 1/2 mile of each other. While in turn to avoid the aircraft, we were still in takeoff configuration, except the gear were up.

We were told by Tower this happened because Approach put the aircraft on final for the wrong runway. Tower should've been told by Approach about the inbound. Tower could've informed them that he had departing aircraft and problem would've been solved.

Narrative: 2

While acting as the Pilot Flying I experienced a near mid-air collision just after takeoff from Runway 34 at XNA during the climbout phase. Just after my First Officer called "Acceleration altitude," I began to lower the nose from the initial 15 - 18 degree nose up climb attitude in order to accelerate to 200 knots and clean up the aircraft from the takeoff configuration. I had my multifunction display (MFD) set to a range of 5 nautical miles. During my scan I noticed a Cyan traffic diamond come into range directly at our 12 o'clock position approximately 1800 feet above us and descending as indicated by the traffic collision avoidance system (TCAS).

I quickly started scanning outside and asked my First Officer if he had a visual sighting of the traffic. As I lowered the nose I

saw an aircraft making a right turn from an easterly heading to a southerly heading towards us and Runway 16. I believe they were initiating their intercept for the centerline of runway 16 as directed by Razorback Approach. The Tower controller quickly issued a command for us to level at 3,000 feet. I was already approximately 200 feet above that altitude when the command was issued. I quickly scanned between my instruments and noted that the oncoming traffic was just outside the 2.5 mile range and approximately 800 feet above our altitude and descending into us.

The intruder aircraft still appeared to be turning into us. I initiated an aggressive left turn and as I began to roll into the turn the XNA tower controller urgently requested us to make a left turn. I initially started a left turn with 30 degrees of bank. At that bank angle I could no longer visually see the traffic and my First Officer was frantically telling me to "KEEP TURNING, KEEP TURNING, KEEP TURNING, KEEP TURNING, HE'S STILL COMING AT US! KEEP TURNING!" I increased the bank angle to approximately 40-42 degrees while watching my stick shaker margin and slightly lowering the nose to maintain my best turning performance. Sometime after I initiated the initial turn during the maneuver the TCAS computer issued a "TRAFFIC, TRAFFIC" command.

During my scan of the cockpit instruments I noted that the point of closest approach showed the amber traffic target touching the right wingtip of the aircraft symbol on the MFD and indicating approximately 100 feet below our altitude. Once clear of traffic we were cleared direct KOMMA and issued a climb. We were then handed off to Razorback departure. I contacted the cabin to check on the status of the flight attendants and the passengers, the number 1 Flight Attendant informed me that passengers were doing fine. We continued the flight without further incident.

I believe there was a miscommunication between Razorback Approach and Northwest Arkansas Tower. I also believe that opposite runway operations were to blame.

Narrative: 3

While on descent into XNA, we were set up for a Runway 34 as per the ATIS. Razorback Approach gave us direct JADIR waypoint upon checking in with no expected runway statement. We queried about the fix as we were not seeing the fix on our instrumentation. We further queried Approach again regarding the spelling of the fix but was given a vector instead. We eventually noticed the JADIR fix was on the GPS Runway 16 approach plate but thought nothing further of it. Razorback Approach then cleared us for the Visual Approach for Runway 16.

With winds being calm and forecasted to be variable, we were under the impression that a runway change had occurred and promptly proceeded to configure the aircraft for the new runway. We checked in with tower as we were about to turn for final to Runway 16. We received no response. On our second check in, we heard tower provide separation instructions for the aircraft that was climbing out from Runway 34 and at that point, we recognized the error that the Approach controller had made. The Captain retarded the descent and reconfigured the aircraft. Tower then followed up with heading instructions and assigned us back to the Approach Controller. We continued on the right downwind for Runway 34 from Approach instructions and landed without further incident.

In hindsight, we could have queried ATC a lot more thoroughly when information contradicted our ATIS and Approach Plates.

Synopsis

Air carrier flight crew reported that on initial climbout they observed another aircraft opposite direction descending towards them. Both aircraft pilots took evasive action.

ACN: 1330109 (56 of 95)

Time / Day

Date : 201602
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : SFO.Airport
State Reference : CA
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC
Light : Night

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : NCT
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR

Mission : Passenger
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class B : SFO

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : NCT
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 B : SFO

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 11548
Experience.Flight Crew.Last 90 Days : 159
Experience.Flight Crew.Type : 4766
ASRS Report Number.Accession Number : 1330109
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days : 180
Experience.Flight Crew.Type : 4142
ASRS Report Number.Accession Number : 1330140
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We were being vectored for arrival in SFO for 28L. We had leveled off at 4000 ft and were asked to call visual on RJ traffic that was at our 11 o'clock and descending to cross in front of us for RWY 28R. We had visual on the traffic and then were given a turn to intercept 28L ATC asked if we had the field in sight. We responded that we had a visual on the field and visual on the traffic. ATC then cleared us for the visual 28L and said to maintain 180 knots to the Bridge. We read back the clearance and put in 1800 ft in the altitude window. I clicked off the automation and started to descend and make a slow turn to intercept the runway centerline of 28L. Just as the descent was commenced we received a TCAS RA Descend command. I started the descent and complied with the RA. I looked out my right window and saw the RJ turning into us and descending so I kept the descent going and started a turn away. When the RA cleared we reestablished ourselves on the visual for 28L while keeping an eye on the RJ (Regional Jet), who was still crowding us on our approach. No communication was received from Tower of any potential conflict. Shortly after crossing the bridge we had another RA Descend command from the same RJ who was now over top of us and could not be seen. I complied with the RA and kept the speed up to try to get some

separation horizontally as well until the RA cleared. Still no call from Tower and we landed uneventfully.

I have to believe that the RJ never saw us and was lining up on the wrong runway. Or they were just very confused!

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

B737 flight crew reported receiving an RA from a nearby regional jet on parallel approaches to SFO Runways 28L and 28R.

ACN: 1326879 *(57 of 95)*

Time / Day

Date : 201601

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1700

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 3200

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Caravan Undifferentiated

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Cargo / Freight / Delivery

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class C : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 6300

Experience.Flight Crew.Last 90 Days : 125

Experience.Flight Crew.Type : 2200

ASRS Report Number.Accession Number : 1326879

Human Factors : Situational Awareness

Human Factors : Fatigue

Human Factors : Distraction

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 : Became Reoriented

Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Number two on a visual approach behind an [airliner]. Cleared to land runway 25L. Coming in on a visual, even in daylight conditions, I always load an approach as a backup. I saw the traffic ahead over the numbers and began to angle the base to stay closer to the shore. I watched the traffic land and turn off [the runway], and somewhere in that time I became over focused on the glide slope to maintain a dot high and remain above the wake. As I continued to look inside configuring for landing the controller advised I was lined up for 25R, now on about one and a half to two mile final. I acknowledged his correct perception and switched over to the left side. I've flown airplanes for [over] 20 years and never landed on the wrong runway. This made me realize it can happen to anyone.

Having the course dialed in certainly helps but only if you actually look at the instruments. The G600 display has the glide slope off to the right, and as I discovered you can see the glide slope without ever actually looking at the localizer. Thinking about wake turbulence, with the complacency of a day time visual approach to an airport I've worked out of for [many] years, checking the inbound course fell on the priority list, unintentionally.

Fatigue. While not overly tired, I was flying during the circadian rhythm time of two thirty to three thirty in the afternoon. Normally I'm drinking coffee during that time, but two days out of the month I'm flying instead. [This was] the end of the work week. Without meaning to I'm taking a little of a back seat to finishing up the job.

There was no other traffic in the area. I'd like to think I would have caught my error, given the familiarity with the field and the backups in place. Regardless, I'm thankful the controller felt confident in speaking up. It's possible they fall into a mindset of seeing us all of the time and thinking "they know what they're doing", most of time.

Synopsis

The pilot of a C208 reported lining up for a parallel runway during a visual approach due to fatigue and distraction.

ACN: 1326467 (58 of 95)

Time / Day

Date : 201601
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : SAT.Airport
State Reference : TX
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Light : Night

Aircraft

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

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days : 213
Experience.Flight Crew.Type : 12000
ASRS Report Number.Accession Number : 1326467

Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1326957
Human Factors : Confusion
Human Factors : Distraction
Human Factors : Situational Awareness

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Excursion : Taxiway
Anomaly.Ground Event / Encounter : Other / Unknown
Detector.Person : Flight Crew
When Detected : Taxi
Result.General : Maintenance Action
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

The Ground Crew pushed us off of a Terminal A Gate with the nose on the taxi line facing northeast. We received taxi instructions from San Antonio Ground to taxi via N, right turn on G, left turn on Runway 4, hold short Runway 30 Left. Just after starting our taxi, Ground Control told us to give way to another aircraft taxiing south on G. At this point I looked to my right and saw signage for Taxiway G and straight-ahead appeared to be a taxiway, as it aligned with W on the other side and there was a missing taxiway light which gave the illusion that this was a taxiway. This is a paved surface and not painted green as we normally see for non-stressed areas on the airport. Just after exiting the ramp and entering the area that I perceived to be an active taxiway, the FO noted that there was a taxiway light on the other side and commanded me to stop the aircraft and I immediately complied. We notified Ground that we would not be able to continue taxiing and would require ramp assistance to move the aircraft. The Ramp Crew pushed us back to the gate and told us that this same scenario had occurred two weeks earlier. We coordinated with MX Control to conduct an aircraft inspection to determine that there was no damage to the aircraft.

I think perhaps labeling the taxiway coming off the ramp to N and including that as part of the taxi instruction might be helpful1 (i.e. N1 N). I mistakenly thought that I was on N after the pushback, which I feel was a contributing factor to this incident.

Narrative: 2

We had just started to taxi after pushback and while reviewing taxi clearance on EFB. I looked back up and realized we had begun taxiing forward onto closed/repainted/replaced portion of taxiway (still on hard surface). F/O yelled "stop, stop, stop!" The nose wheel had passed the double yellow line indicating the taxiway limit. Realizing the mistake and recognizing the inability of the aircraft to turn back toward the taxiway, the APU was started and engines were shut down. Ground Ops was called and the aircraft was push back onto the taxiway. The Tug Driver noticed a broken taxiway light and it was determined that Maintenance should be called and we were towed back to the gate.

Tug Driver(s), Airport Operations, Maintenance and Pilots agreed that taxiway light had not been struck by any part of our aircraft and was deemed safe to fly. The aircraft and Crew continued to [destination] without incident. Several factors contributed to the incident: 1) the unnamed taxiway segment at east section of Company ramp, 2) instructions "give way to [aircraft] straight ahead" led us to eyes forward mode 3) the previously broken taxiway light and near perfect alignment of distant taxiway lights and green taxiway lines indicated our route was straight ahead, 4) the perfect misalignment of Taxiway G1 and Taxiway W 5) at night the nose wheel taxi light perfectly illuminated what must have been a sandblasted former yellow taxiway light.

Synopsis

An air carrier pushed from SAT Terminal A with taxi instructions N, right on G, left on Runway 4 hold short of Runway 30. Flight crew was confused, thinking his aircraft was on Taxiway N, and they taxied into the non-movement area between Taxiways G and G1 aligned with Taxiway W. Poor lighting and Taxiway N1 signage were contributing factors.

Time / Day

Date : 201601
Local Time Of Day : 0001-0600

Place

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

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Medium Transport
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
Airspace.Class C : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1324379
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Confusion
Human Factors : Distraction

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

I was the PM on a flight [to ZZZ]. After receiving vectors to the airport in ZZZ, and being placed on a Right Downwind, we were given a descent to 2500, and told to expect a short visual approach to Runway XYZ. We had the airport in sight, and began to configure. The controller have us our short base vectors and cleared us for the visual. We were configured and stable by 1000 feet. I observed the localizer begin to come in, and observed the First Officer (FO) flying a comfortable, stable approach, so I focused my attention more outside than inside as we turned a tight base to final. Once on final, I resumed my inside scan and noticed that we appeared well below the glideslope, but visual cues outside appeared normal. I looked back outside as we descended through about 300 feet and noticed "XYZ" on the pavement. My FO noticed the numbers at the same time, and we realized we were lined up for the center runway. We executed a Go Around and followed tower instructions to climb to 3000 and turn to a 290 heading. Tower never made mention (presumably hadn't noticed) our error.

The departure controller asked us the reason for the Go Around, and I felt (1) we were too busy at the moment to go into the full story and (2) it wasn't appropriate to broadcast our error over the freq, so I told him we were not stable. He apologized for the short approach, to which I assured him it wasn't his fault. A few minutes later, I did tell him we were lined up for the wrong runway, as I didn't feel it was appropriate to mislead him either.

Threats: We were given a short visual approach to the left runway from a right downwind. The approach end of Runway XYZ is about a mile closer than the approach end of Runway XYL, and from a relatively low, close in base leg, we did not see it, and mistook the Center for the Left.

Errors: Obviously lining up on the Center runway instead of the Left runway was an error. Not recognizing the error sooner than 300 feet was part of the problem. We definitely had a confirmation bias when descending down final, as even though the GS was above us, we seemed to reason it away. The error was trapped, however, as we confirmed the correct runway by use of the runway markings.

This was an eye-opening, one-off event for me. I've never lined up with the wrong runway in my 16 1/2 years here, and I've been to ZZZ countless times. In fact, we were doing this ZZZ turn after our ZZZ overnight the previous night. I consider myself VERY familiar with that airport, having gone there for a decade and a half. As the PM, I was obviously not as vigilant as was necessary to prevent such an error.

Synopsis

The Captain of a regional jet reported lining up on the wrong runway at an airport with multiple parallel runways. The error was discovered at approximately 300 feet above the ground and a missed approach was executed.

ACN: 1322298 (60 of 95)

Time / Day

Date : 201512

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MEM.Airport

State Reference : TN

Environment

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : MEM

Aircraft Operator : Air Carrier

Make Model Name : Widebody, Low Wing, 3 Turbojet Eng

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight / Delivery

Flight Phase : Initial Climb

Airspace.Class B : MEM

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : MEM

Aircraft Operator : Air Carrier

Make Model Name : Medium Large Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class B : MEM

Person : 1

Reference : 1

Location Of Person.Facility : MEM.Tower

Reporter Organization : Government

Function.Air Traffic Control : Ground

Qualification.Air Traffic Control : Developmental

ASRS Report Number.Accession Number : 1322298

Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2
Location Of Person.Facility : MEM.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1321253
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Excursion : Runway
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

At the time there was a tower tour going on and we were distracted by conversations, and explanations from the tour, we had just previously changed runway configurations, and I as a ground controller taxied the aircraft to the previous (wrong) runway and allowed the local controller to depart the aircraft into the incorrect airspace.

The individual giving the tour shall instruct the tourist not to talk to any controller on position.

Narrative: 2

Change from runway 18 to 36. Tower tour in the tower. Aircraft X was taxied by ground control to 18C instead of newly activated 36C. I cleared Aircraft X for departure. Aircraft Y checked in on a left base for RWY 36L. I recognized what happened and turned Aircraft Y west and Aircraft X eastbound to maintain separation.

Tower tour guides instruct tourists to not communicate with air traffic controllers working on position.

Synopsis

MEM Tower controllers reported a Tower tour distracted the Ground Controller allowing an aircraft to taxi to the wrong runway and Local departed traffic off that runway. Departure was in conflict with arrival traffic, so the Local Controller vectored the departure and sent the arrival around.

ACN: 1319933 (61 of 95)

Time / Day

Date : 201512
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ATL.Airport
State Reference : GA
Altitude.AGL.Single Value : 400

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Turbulence

Aircraft

Reference : X
ATC / Advisory. TRACON : A80
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 : Initial Climb
Route In Use. SID : UGAAA6
Airspace. Class B : ATL

Person : 1

Reference : 1
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function. Flight Crew : Captain
Function. Flight Crew : Pilot Not Flying
Qualification. Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number. Accession Number : 1319933
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function. Flight Crew : First Officer
Function. Flight Crew : Pilot Flying
Qualification. Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number. Accession Number : 1319934
Human Factors : Situational Awareness
Human Factors : Workload

Events

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

Assessments

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

Narrative: 1

Clearance was UGAAA6 AHN transition. Push clearance was tail north, indicating a 9L departure. The FMS was programmed for 8R and was not changed. The taxi check was completed and the brief was UGAAA6, 10,000, RONII was called as the first fix, I did not catch this. We were issued to line up and wait, followed by a takeoff clearance; RNAV to LIDAS. We took off with the wrong runway programmed in the FMS and when the navigation was selected at 400 feet we were tracking the wrong course. We received an RA, complied with it, and were then issued a heading to fly to get us back on our appropriate course. We continued without having further incidences.

When we were issued the push clearance indicating a 9L departure, I should have reverified the FMS. It was a busy taxi, yet in retrospect I should have set the brake and visually confirmed the FMS and the first fix. Upon accepting the line up and wait clearance I should have verified the runway on the flight plan page. The extra seconds to do these actions would have prevented this loss of separation.

Narrative: 2

This was a simple mistake that was missed by the distraction of busy ground operations, a fast taxi, and concerning weather in the area. The Captain was busy with taxiing, following traffic, and watching other aircraft, therefore this was clearly my duty as the FO to re-input the departure runway and double check the route.

Synopsis

ERJ-170 flight crew reported a track deviation and an airborne conflict shortly after takeoff from ATL when they failed to reprogram the FMS following a late runway change on taxi out.

ACN: 1314331 (62 of 95)

Time / Day

Date : 201511
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

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

Component

Aircraft Component : FMS/FMC
Manufacturer : Smith Industries
Aircraft Reference : X
Problem : Design

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days : 198
Experience.Flight Crew.Type : 18000
ASRS Report Number.Accession Number : 1314331

Events

Anomaly.Aircraft Equipment Problem : Less Severe
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 : Equipment / Tooling
Primary Problem : Equipment / Tooling

Narrative: 1

During preflight briefing, the Crew noted that the route in the FMC defaulted to and loaded a Runway for a particular RNAV Departure. The active runway was different. If uncorrected, this could have resulted in a huge problem on departure. I

inquired of the FO whether he often sees the runway pre-load to a default runway on our 01 routes. He stated that he thought that about 20% of our routes pre-load a runway. I was shocked to learn this.

I believe that this is a bad idea, especially on RNAV routings and even more especially at locations where the wrong runway loaded could result in a major course deviation. It would be fine if the departure was just limited for use from that runway. I realize that our procedures and briefings are designed to catch wrong runway loading errors (which they did in this case) but feel we are setting ourselves up for navigation errors by pre-loading runways in the 01 routes. Chief Pilot on Call was notified of my concerns.

Synopsis

Captain discovered that FMC's are designed to sometimes auto load a runway with a particular RNAV departure.

ACN: 1311518 (63 of 95)

Time / Day

Date : 201511
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : LAN.Airport
State Reference : MI

Environment

Light : Night

Aircraft

Reference : X
ATC / Advisory.Tower : LAN
Aircraft Operator : Air Carrier
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class C : LAN

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
ASRS Report Number.Accession Number : 1311518
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Fatigue

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

We were cleared for visual approach and to land 10R LAN. We intercepted LOC and GS did not look right. It did not concur with PAPI. We continued using PAPI info. About 500 feet got obstacle pull up aural alert and initiated a missed approach. Told ATC that we were going missed and he gave us heading and altitude and I told him that our intention was to land 28L now. We completed flight without further incident.

Got in late night before (midnight) and didn't get to sleep until about XA:00. Woke up XF:30. Late show next day and 3 plus hour leg. Arrived there in time to get something to eat and attempt a short nap. Short flight to LAN complicated by Weather. Took 1 hour to deice and this made our arrival over 30 late. Therefore we requested 10 though the ATIS called for 28. Controller granted request and said he switched LOC for us. This was why I wasn't that concerned with PAPI and GS discrepancy. I thought maybe it wasn't done right. It was. I had lost my situational awareness and hadn't backed up what was happening checking the FMS properly. We were approaching 9 at 4D0 [Abrams Muni] which was collocated with FAF for 10R and I was looking at that waypoint as the field. As we were climbing on the missed I saw on the FMS that 10R was still in front of us and then saw 10R. Realizing we had approached the wrong runway.

Being extra vigilant knowing I was tired and we were beyond when I thought I would be done. I should have seen the discrepancy sooner- before we started descending. The information was there I didn't see it. A note on the -7 [Chart] might help as well. That runway was lit up like a Christmas tree and is on the extended line of 10R.

Synopsis

Air Carrier Captain reports mistaking 4D0 for Runway 10R at LAN (6 NM west) until EGPWS alerts for an obstacle an a go-around is initiated.

ACN: 1310822 (64 of 95)

Time / Day

Date : 201511
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : RJBB.Airport
State Reference : FO
Relative Position.Angle.Radial : 240
Relative Position.Distance.Nautical Miles : 15
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : Mixed
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : RJBB
Aircraft Operator : Air Carrier
Make Model Name : Widebody, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use.Localizer/Glideslope/ILS : Runway 6L
Flight Phase : Final Approach

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 26500
Experience.Flight Crew.Last 90 Days : 70
Experience.Flight Crew.Type : 6000
ASRS Report Number.Accession Number : 1310822
Human Factors : Fatigue
Human Factors : Situational Awareness
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 6400
Experience.Flight Crew.Last 90 Days : 90
Experience.Flight Crew.Type : 3900
ASRS Report Number.Accession Number : 1310823
Human Factors : Situational Awareness
Human Factors : Fatigue
Human Factors : Confusion

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 : Issued New Clearance

Assessments

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

Narrative: 1

Prior to departing we checked the atis for KIX and programmed the arrival and runway we anticipated, which was the DANDE B arrival, ILS 6L. During the flight we received the atis information for KIX which still indicated the ILS rwy 6L was in use. Inflight we checked and briefed the arrival and approach, cross checking altitudes and courses and waypoints. We were talking to approach control who sounded very garbled and we had to constantly ask him to repeat communications. While on the arrival we were cleared to fly the approach. The arrival intercepted the approach course at a 90 degree angle and I decided to intercept the approach course while on LNAV because it intercepts smoother at such a high intercept angle. The airplane intercepted the approach course and turned to the approach course. Just as I was about to press the APP button the approach controller informed us we had intercepted the approach course for rwy 6R. We checked the FMC and saw that the approach entered was the ILS 6R. We started a turn to the left to intercept the approach course for 6L and then the controller told us to just continue on the approach for rwy 6R. We landed with no further issues on rwy 6R.

Somehow we had erroneously entered the wrong runway. We had the correct arrival and the correct frequency set for the rwy 6L but the wrong approach programmed into the FMC. We did not notice any discontinuity on the FMC between the correct arrival and the incorrect approach. The aircraft upon reaching the last waypoint on the arrival (BERRY) then turned correctly to the approach course. When checking the FMC during the briefing I would swear that everything looked correct. But somehow it was not. Complacency would be the natural conclusion to jump to, however the sequence of flights during this duty period were extremely taxing. We were scheduled for three legs. These were two two hour legs bracketing a four hour leg. All the legs took longer than scheduled. We were scheduled for approximately 7 hours and 30 minutes and the middle leg alone was flight planned for 20 minutes more than the schedule. Our total flight time ended up being 7 hours and 51 minutes. Additionally we did not even have the chance to just sit anywhere and close our eyes, even for ten minutes because all our time in ZZZ is used up shuttling back and forth to the terminal and back for immigration. We were both extremely tired for this last leg even though we both made sure to get appropriate sleep prior to this duty period. We did not think we were too fatigued to continue. We did not think our cognitive skills were compromised. However, apparently they were. I will definitely keep this experience in mind from now on and monitor myself for fatigue more closely in the future. This duty period and this sequence of flights is very inductive to fatigue.

Narrative: 2

Arrival into RJBB. ATIS indicated 6L ILS. Loaded DANDE B arrival (and thought) ILS Y 6L. Cleared for the ILS Y 6L. Turned from BERRY on to final. Moments later, tower informed us that we had lined up on 6R. We asked to change to 6L and they then cleared us to land on 6R. We were confused, to say the least. Choose to not go around due to not being sure which missed approach to fly. Determined that we were cleared to land on 6R. Stable at just under 1000 ft on final. I had loaded the DANDE B arrival. We briefed the arrival but I'm not sure if we THOROUGHLY briefed the approach. When tower informed us of our mistake of lining up (using LNAV) on 6R (at approx 8 miles), I noticed the following things:

- 1) 6R was the runway in the FMC (wrong one)
- 2) Prog page two indicated 33 miles from the active way point, which I thought was the runway
- 3) the miles to the next waypoint on the EADI indicated 14-13 miles
- 4) I never noticed if LOC became active, but did notice the GS alive.

Still trying to process what happened. We were aware that 6L was the active runway at RJBB but we failed to load and check the correct approach in the FMC. Bottom line: Flight deck discipline and procedures broke down. We did not brief enough if

we actually briefed at all. I remember briefing the arrival but I am not sure about the completeness of the approach brief. We were both very tired and fortunately, very lucky today.

Synopsis

Flight crew loaded and intercepted the RJBB ILS Runway 6R, but were cleared for the ILS Runway 6L. The Tower changed their landing clearance to Runway 6R.

ACN: 1308070 (65 of 95)

Time / Day

Date : 201511
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : CLT.TRACON
State Reference : NC
Altitude.MSL.Single Value : 5000

Environment

Flight Conditions : Marginal
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : CLT
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Route In Use.STAR : FILPZ1
Airspace.Class B : CLT

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1308070
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1308158
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Prior to top of descent I briefed the 1st crossing of descent and approach, landing, taxi, and all items on the back of the checklist. 30 miles southwest of CLT, ATC turned us eastbound for the base turn on the ILS 36L. The FO asked to clean up the flight plan (clear arrival fix and sequence the approach fixes in the FMGC) I agreed. My attention was on converging traffic I could see at 2 o'clock on final for 36C or 36R, we were between cloud layers. ATC then cleared us to turn left. 030, 5,000 until LONIA and cleared ILS approach Runway 36L. We were 25nm out I set the heading to 030 and selected LOC, then I asked the FO where the traffic went. ATC then called to tell us we appeared to be going thru the 36L LOC. The FO and I noticed that we had not intercepted yet and responded back what we showed. ATC responded, turn left immediately to re-intercept LOC 36L. I then saw airbus traffic directly overhead.

The FO realized we had ILS 36R in the FMGC, he quickly inserted the ILS 36L, and then reestablished on the 36L LOC. We did not receive a TCAS traffic alert or resolution. The approach controller responded that it was not a problem.

After debriefing the event following the flight, we discovered the FO had altered the secondary flight plan on the downwind leg of the approach. Before departure I had loaded the ILS 18R and I copied the primary flight plan to the secondary flight plan.

Later enroute the ILS 36L was loaded into the primary flight plan due to a wind change in CLT. The ILS 36L was briefed during our approach briefing. I suppose to save time on the downwind leg the FO made changes to the secondary flight plan removing the arrival to re-sequence the extra fixes on the long approach, but he changed the runway from 18R to 36R. Then during the base to final leg to clean up the flight plan the FO activated the secondary flight plan since I was on a heading. My attention was accessing the risk of converging traffic at 2 o'clock, though he seemed to be above us. During the time when the unnoticed error occurred we were in a high workload/task saturated period.

I had planned to add the extra fixes for the approach during the downwind since they were crossing LONIA at 5,000 for 36L, but I saw the FO busy in the secondary removing the arrival and what I thought was making the necessary changes. It seemed a bit unusual to use the secondary flight plan for the modification, but thought I might learn something. I did not pay enough attention to detail and noticed his confident fingers were a bit of a blur. I thought I would just let him do the busy work. He had been an excellent FO and very sharp, and hardworking! That's how I believed it happened.

I think sometimes we short cut our flight plan verification when we use the secondary flight plan or think it is okay to use the secondary flight plan - single pilot.

1. We should never activate the secondary flight plan during a high task loaded situation
2. When a flight plan is cleaned up the pilot flying needs to verify that it is correct!

Narrative: 2

Prior to beginning our descent into CLT, the ATIS was reporting 18R as the active runway, so that runway was entered into the FMS and briefed by the Captain. As we got closer to CLT, we were cleared to descend via the FILPZ1 arrival, landing north, as the winds had shifted and they were now using 36L as the active runway. The Captain entered the new runway into the FMS and we both verified the arrival and approach again to confirm that it was correctly entered as well as briefed any changes. As we continued the arrival, somewhere between CEDOX and DOSBE intersection, I noticed that CLT approach was giving instructions to clear other aircraft for the ILS 36L to cross LONIA intersection at or above 5,000 feet. LONIA was not loaded into the FMS at the time since the Airbus FMS doesn't automatically add all the waypoints of an ILS when there is a STAR loaded along with the approach. Since CLT was using about a 25 mile final for the runway at the time, I thought it would be a good idea to have the whole ILS loaded into the FMS to reduce our workload when turning onto final.

I decided to load the ILS into the secondary flight plan without the STAR so that once cleared to a heading to join, we could just activate the secondary and have all of the waypoints loaded when we needed them. As I was entering this into the box, ATC called us and issued several instructions including a turn to 090 heading, which I read back. In my distraction, I accidentally selected 36R instead of 36L in the secondary flight plan. ATC had turned us in fairly tight and as I was activating the secondary, we got an instruction to turn to a 030 heading to join the LOC, cross LONIA at 5,000, clear for the ILS 36L. As we were busy at this moment, we never got around to verifying the correct runway was loaded into the box until ATC called and informed us that we were crossing the localizer. At first we were confused as we were showing left of course on our

instruments. We acquired the runway in sight at this time and saw that we were indeed right of course. We were given a heading to reintercept, I immediately realized my mistake and reloaded the correct runway in the FMS, which we both verified. We rejoined the localizer and continued the approach without incident. There was never a loss of separation with other aircraft.

There are a couple causes that led to this event. The main cause was a combination of a high workload during the approach phase as well as the distraction of trying to do too much at once with entering the new runway into the box while communicating with ATC. Also, our failure to verify that the approach was correctly entered into the secondary flight plan was a major cause. Minor causes were complacency from being familiar with CLT that I didn't double check my inputs enough as well as I might have been subconsciously thinking right side runway as our brief was originally for 18 right. In the future, instead of loading a new approach into the secondary, I will manually enter the required points into the active flight plan. That will eliminate the possibility of selecting the wrong runway accidentally. Also, and more importantly, I will put more emphasis on CRM so that anything entered into the FMS will be verified to be correct before hitting activate.

Synopsis

A319 flight crew described the circumstances leading up to entering ILS 36R into the FMGC instead of the correct ILS 36L. This resulted in the crew overshooting the 36L localizer and a call from ATC to turn left to intercept.

ACN: 1303879 (66 of 95)

Time / Day

Date : 201510
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 : Takeoff / Launch

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1303879
Human Factors : Distraction
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1303881
Human Factors : Situational Awareness

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Takeoff off checklist was completed "down to the line." Below the line at Runway....checked, we realized that the wrong runway was loaded (Runway 35). As we were cleared for takeoff from Runway 17, I changed the runway, but was distracted by "company message" on the ECAM and attempted to review and clear it. I can't remember if I had the [Performance] page up or not when we got the ENG THR LEVERS NOT SET. I advised the captain to set TOGA which he did and we continued the takeoff. Above, 80 knots now, we then realized that the V speeds were not displayed on the PFD so I called them out from the paper [performance calculations] for Runway 17. The remainder of the takeoff and climbout proceeded uneventfully.

Approaching the runway I was distracted by a nuisance ECAM message (company message) instead of ensuring the V speeds and flex temp were set for the proper runway. V speeds and flex temp are deleted when a new runway is loaded into the FMS and the new numbers need to be confirmed or manually loaded. I should have caught this had I not been distracted by the ECAM message and perhaps a little too rushed to get airborne.

Narrative: 2

Was given a last minute runway change with a reduced power takeoff (FLEX). I was doing the takeoff and my First Officer forgot to change data. When FLEX power was applied, we had a red warning light that wrong data for the runway had been entered. I went to full power (TOGA) and the warning went away. The whole event lasted less than 3 seconds. Slow down and ensure proper data is loaded.

Synopsis

A321 flight crew forgets to enter a new runway and V speeds after ATC changes the departure runway. The error is not trapped by the before takeoff checklist due being distracted by a company message. Without a FLEX temperature setting, TOGA thrust is required and the First Officer calls the V speeds from the paper performance calculations.

ACN: 1297911 (67 of 95)

Time / Day

Date : 201509
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : LAX.Airport
State Reference : CA

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : SCT
Aircraft Operator : Air Carrier
Make Model Name : B737-800
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Initial Approach
Airspace.Class B : LAX

Aircraft : 2

ATC / Advisory.TRACON : SCT
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 : Initial Approach
Airspace.Class B : LAX

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
ASRS Report Number.Accession Number : 1297911
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
ASRS Report Number.Accession Number : 1297907
Human Factors : Workload
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

I was the pilot flying day VMC leg. Was told to expect 24L. From downwind over SMO was given a heading for base leg. On the issuance of the dog leg heading was told to follow traffic and I HEARD cleared visual "25L". At about that time we encountered moderate wake turbulence. The autopilot came off and I continued to hand fly the aircraft through the landing. I asked the First Officer (FO) "it's 25L now?" "Verify that" he asked ATC. I was told on the tape he read back 24L. I thought he told me "yes 25L." I saw traffic to follow on the 25 complex so flew over to align with 25L. It was clear when we got over there we were too close behind the traffic ahead. ATC asked if we saw the traffic "for the south" and we answered in the affirmative. The FO even told ATC we could do S turns. I told the FO "no" it wouldn't work and that we had to go around. Before going around ATC specified we were cleared 24L and I finally comprehended that. We flew back over to 24L and landed uneventfully. The 25L traffic was quite close but we received no TCAS warning and all traffic was in sight. FO was brand new and had never flown into LAX on the SADDE arrival. He was rushed to reprogram the box for 25L and I even told him to just get the ILS freq. I suspect that once I made the move to 25L he became task saturated. In my experience runway switches to 25L on this arrival are not uncommon. This is especially true with the 24R closure. I misheard the visual approach clearance because I thought a runway change possible. The "left" in the 24L clearance must have cued me to 25L as "right" for a 24R clearance is the usual landing runway on north complex LAX.

These comments are not meant to detract from my mistake miss hearing the approach clearance. Apparently the FO read back 24L every time. But he never did direct me back to 24L or ask for clarification on what I was doing or had heard. I simply attribute that to him being new, but a more forceful approach by the FO would have cleared up my misunderstanding.

Once I committed to the wrong runway ATC asked if I saw the traffic ahead, which is understandable, but didn't reconfirm the

runway assignment, offer a heading or simply ask us what we were doing. Regarding the traffic they said "he is for the south" which to me simply meant the south runway of the 25s, which confirmed we were too close to traffic landing on what I thought was our runway assignment. It did not convey that he was for 25L and I was cleared for 24L.

Since the aircraft came off autopilot during the wake turbulence event I suppose I was a bit more task saturated by hand flying this entire time. I was also bit distracted since the FO was new.

Narrative: 2

I was now staring at the traffic and this, along with my preceding approx. 20 seconds heads down, lost my situational awareness in relation to the airport and did not immediately realize we were now lined up on the south side of the complex. I replied to ATC that we could try an "S" turn but Captain said that wouldn't work and we should prepare to go around. It was then that I realized where we were. ATC said we were supposed to be lined up for 24L. Captain corrected back to 24L and the remainder of the approach and landing was uneventful.

Synopsis

A B737-800 flight crew reported wake turbulence on the SADDE arrival while given a, "cleared visual Runway 25L" clearance. Confusion between the Captain, First Officer ensued and they lined up for 25L after being cleared for visual to 24L.

ACN: 1296591 (68 of 95)

Time / Day

Date : 201509
Local Time Of Day : 0001-0600

Place

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

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : B777 Undifferentiated or Other Model
Crew Size.Number Of Crew : 3
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Taxi

Person

Reference : 1
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 18468
Experience.Flight Crew.Last 90 Days : 241
Experience.Flight Crew.Type : 10122
ASRS Report Number.Accession Number : 1296591
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Distraction
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew

When Detected : Taxi
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

I've read [the new procedure guide] several times, and have used it during preflight discussions and during taxi. It's well-written and useful. However, the need for a 37 page guide to introduce a new checklist runs up more than a few warning flags. I've never considered myself alarmist, and will work hard to adapt to this procedure. But since I've been on the 777 since 2002, in fact nothing in my 35 year airline career, has caused as much confusion as the introduction of this Taxi checklist, and its companion Before Takeoff checklist. Hasn't the FAA and most of the U.S. airline agency focused on reducing pilot taxi distractions in the interest of reducing ground incidents? This procedure has increased distractions and confusion several times over.

Admittedly my comments are based so far on only four separate flights. But in all cases taxiing was done during quiet airport ops with little distractions from ATC and other traffic. Yet each time it has taken 5-10 minutes to accomplish the new checklist, in all cases with 4 experienced 777 pilots participating. And yet I've seen an improperly loaded departure in the FMC after takeoff, a captain turn toward the wrong runway while taxiing, and even after a wise IRO spoke up and suggested we set the brakes to finish the checklist, we still had to vacate the runway after receiving takeoff clearance because we were 300# over gross!

Which brings us back to the confusion over gross weight terminology. The FOM glossary refers to TOG (Takeoff Gross), TOGW (Takeoff Gross Weight), TOW (Takeoff Weight), and MTOG (Maximum Takeoff Gross Weight) without really delineating differences. A bulletin discussing them would be helpful, as the new procedure guide doesn't address all concerns.

I appreciate that a lot of planning went into this procedure, but I remain extremely wary of its motivation, and its potential for distraction during real world conditions.

Synopsis

A 777 first officer reports that a new taxi procedure has increased distractions and confusion "several times over."

ACN: 1293168 (69 of 95)

Time / Day

Date : 201509
Local Time Of Day : 0601-1200

Place

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

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

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

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Flight Plan : IFR

Mission : Passenger
Flight Phase : Landing

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1293168
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1293171
Human Factors : Situational Awareness

Person : 3

Reference : 3
Location Of Person.Aircraft : Y
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1293216
Human Factors : Situational Awareness

Person : 4

Reference : 4
Location Of Person.Aircraft : Y
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 : 1295097

Events

Anomaly.ATC Issue : All Types
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness / Injury
Anomaly.Conflict : Ground Conflict, Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Were Passengers Involved In Event : Y
When Detected : Taxi
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We were number one for departure on runway 17R. Tower called and cleared us for takeoff on runway 17R. She said "RNAV NAVYE cleared for takeoff 17R". We also heard her clear another aircraft to land on runway 17C. All aircraft lights were illuminated as we took the runway for departure. The First Officer cleared the right side of the runway. I said "Clear Left" and

we noted the aircraft on final for what we thought was 17C. With the angle, it was hard to tell he wasn't lined up on 17C. We were 3/4 of the way across the hold short line for 17R when we realized he was actually on final for runway 17R. I stopped the aircraft immediately and the First Officer got on the radio and announced we were on the runway...that we were not clear. We did not have time to clear the runway before the aircraft flew by us and landed. It appeared to us that he leveled off and extended his landing. He never went around but someone on the radio stated, "Don't worry guys...I've got it".

Had we not stopped the aircraft when we did, we would have been directly in his landing path and an accident was probable. There was never any urgency on the part of the controller to acknowledge or correct the problem. We asked to taxi clear of the runway and for a phone number to call the tower. Once clear of the runway with the parking brake set, I called the tower and talked with the supervisor. He said there was no problem as our aircraft nose was barely over the hold line. We were 3/4 of the way across the hold short line just short of the threshold paint when the aircraft went by us. We were not just over the hold line! The supervisor acknowledged that the controller had made a mistake. She had been given the flight, which was on a medical [urgency] and she did not realize he was landing on runway 17R. He also acknowledged that because of our actions, an incident was probably averted.

Close runway proximity led us to believe the aircraft on final was on 17C. The controller had just cleared an aircraft to land on 17C and nobody had been cleared to land on 17R. The controller had been given the medical [urgency] flight and was unaware of their landing runway. The controller never told them to go-around, and they never initiated a go-around even after realizing we were on the runway. Better communication between the air traffic controllers. Runway 17R was being used for a medical [urgency] landing. No aircraft should have been cleared to takeoff until that aircraft was on the ground.

Narrative: 2

Better communication between the controllers and possibly the emergency aircraft. Maybe not allowing aircraft to depart during [priority] landing on runways that are close ie XXR/XXC, just in case the aircraft [in distress] lands on the wrong one.

Narrative: 3

While enroute to ZZZ, we had a medical [situation] because of a sick passenger. Requested and were cleared a landing on runway XXR. First officer was pilot flying. We were cleared to land on short dogleg to final. Between 150-200 feet, I observed an aircraft cross the runway hold line at the approach end and stop with the nose about 15-20 feet beyond it but not on the runway itself. That pilot then radioed that he had been cleared for takeoff and stopped when he saw us on short final. They thought we were lined up on the wrong runway. We never heard them get cleared for takeoff. They might have been before we checked on frequency. Tower did not direct a go around and I judged the clearance to be safe and directed the first officer to continued the landing to a normal stop. I exercised my captains authority as an aircraft [with priority] to continue the approach as we had a passenger who was having breathing difficulties and uncontrollable spasms in the cabin. We continued to taxi to the gate uneventfully. After deplaning I contacted the tower by landline and talked to one of the controllers. He said he didn't direct a go around because he also judged that the other aircraft had stopped short enough and we were an aircraft [in duress]. If the other aircraft had gotten much closer, I would have directed a go around as I'm sure the tower would have also done. I would not have landed with a cancelled landing in this case.

Narrative: 4

Midway through flight the flight attendants notified the cockpit that there was a passenger on board who was having difficulty breathing. I was the pilot flying, so I kept flying and worked the radios while the captain dealt with the flight attendants regarding the sick passenger. The passenger stated that they had sickle cell anemia. This was relayed to the physician on duty by one of the flight attendants. At around 100 miles from ZZZ, the flight attendants notified the cockpit that the passenger was shaking uncontrollably and having real difficulty breathing. At that point the captain instructed me to notify ATC that we needed priority handling. We were subsequently cleared direct to ZZZ and assigned runway XXR.

The approach was all normal. However, on short final (300-400 ft AGL) we noticed an Aircraft X that had crossed the XXR hold line and was preparing to take the runway. The Aircraft X was only about 40 feet or so across the hold line and had not entered the runway area. I initially began to level off, but we both observed that the Aircraft X had stopped and was not interfering with the runway, so the captain and I decided to continue the landing. The landing was uneventful and we taxied right to the gate where the paramedics were awaiting our arrival.

Synopsis

A flight crew reported being cleared for takeoff with an aircraft on final for the parallel runway. As the crew crossed the hold line it became apparent that the other aircraft was lined up for the runway cleared for takeoff. The Captain on the ground stopped the aircraft and the Tower was informed of the situation. The other aircraft was allowed to land. Reports from the other crew are also included.

ACN: 1291279 (70 of 95)

Time / Day

Date : 201508

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 7000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ1
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 : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway YY
Flight Phase : Initial Approach
Airspace.Class E : ZZZ1

Component

Aircraft Component : Trailing Edge Flap
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)
ASRS Report Number.Accession Number : 1291279
Human Factors : Distraction
Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

On downwind to RWY XXL at ZZZ, we began reducing speed and selected flaps 1 which operated normally. Upon reducing speed further, we selected flaps 2 and receive a FLT CTRL, FLAPS LOCKED MISALIGNMENT ECAM message. The slats appeared to operate normally however the flaps were locked between the 1 & 2 position. We ran the QRH & ECAM actions and follow ups until we ran low on fuel, and landed on RWY YY uneventfully. MX met the aircraft and we entered the discrepancy in the logbook.

We experienced several issues with this event that were related to the procedures and policies in dealing with malfunctions. Firstly, I as Captain had the FO, who was the PF, remain as PF and handle the ATC communications so that I could 'Manage' the situation, in accordance with the [Company] operational philosophy. What this resulted in was a situation where I was so completely consumed attention-wise by the in-depth research of landing performance and checklists and notifications, that I found myself entirely removed from the 'management' of the flight and later discovered that my FO had realized this and began acting as the PIC and covered us by making the decisions for the flight that I was not aware of. Now, you can claim that this was great CRM, but that would be ignoring the real problem of me being so preoccupied by doing secretarial work that I was removed from the situation and no longer 'managing'. Our checklists are WAY TOO LONG and are inefficient,

impractical and largely unusable unless you have hours of extra fuel to play with which we did not. We ran low on fuel and landed without completing all the performance calculations required by the checklist. In addition, the computed ref speeds would have had us landing in what erroneously appeared to be well below VLS, so we increased speed manually to keep us out of the Alpha Protection range which may have been inaccurate. This resulted in lowering the pitch attitude and gave us about 2 degrees of 'flare' capability to max pitch of 7.5 degrees. With this, it resulted in a very firm landing.

The current event management philosophy of the Captain doing the busy work while the FO sits over there and glances at the autopilot flying the airplane around, is flawed. The PF has MUCH MORE TIME AND MENTAL CAPACITY to 'Manage' since it requires very little effort to monitor the autopilot. Doing checklists and calculations and notifications however, is all-consuming leaving no attention or time to 'Manage' the flight. The Captain could most effectively manage the situation if he were the PF. The Captain should then delegate to the FO the tasks of checklists, calculations, research and notifications, and this is the way I intend to handle failures in the future. It's simply the most conservative, safest approach to dealing with problems. Furthermore, our checklists and calculations procedures need to be more concise. If you can't complete a checklist with the appropriate performance calculations in less than 3 minutes, it's useless. I would challenge anyone in the company to complete every checklist and calculation for our failure, without advanced warning, in less than 20 minutes. We couldn't.

Synopsis

A321 Captain reported flap problems on approach that required checklists that were, in the Captain's words, "way too long and are inefficient and largely unusable." They were unable to complete them because of their fuel situation.

ACN: 1289254 (71 of 95)

Time / Day

Date : 201508
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : NCT.TRACON
State Reference : CA
Altitude.MSL.Single Value : 11000

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
ATC / Advisory.TRACON : NCT
Aircraft Operator : Air Taxi
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Route In Use.STAR : BODGA1
Airspace.Class E : NCT

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Facility : NCT.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Other / Unknown
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 9
ASRS Report Number.Accession Number : 1289254
Human Factors : Situational Awareness
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1289556
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - 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 : Provided Assistance

Assessments

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

Narrative: 1

Aircraft X on BODGA1 Arrival which is a descend via with confusing procedures. Assigned "Landing 28 Left" but flew the routing for "Landing 28 Right", by flying wrong route aircraft entered depart sector without coordination. Departures are climbing to 15,000 and this aircraft was in the airspace at 11,000 without coordination. This happens approximately 25 to 20 times a week and no one is doing anything about it. I have reported to management that this is dangerous and nothing is done.

The Descend VIA routes for SFO are poorly designed. They conflict with other airspace, have restrictions that are in violation for CFR's (below B airspace assigned speeds greater than 200K), have altitude restrictions that don't contain the aircraft in B airspace once entering, have confusing transition names (landing West means fly the east route and Landing East means fly the West route). No Lost comm procedures for a route that splits 8 miles from center boundary yet center has no way of knowing which routing the aircraft should be on.

Management is not attempting to fix the problems because they refuse admit there is a problem. Instead they keep putting band aids on a poorly designed procedure. Safety taking a back seat making these routes look like 3 years of planning was time well spent.

Narrative: 2

On the BDEGA One RNAV arrival into SFO, FMS was setup for the runway 28R transition after CORKK waypoint. ATIS stated runway 28L or 28R were the runways in use. Since the FBO is off of runway 28R, that was the preloaded transition after CORKK waypoint. Just prior to CORKK, ATC announced to expect runway 28L. As I was rebriefing the copilot about landing and the planned runway exit, we passed CORKK waypoint on the way to FINSH waypoint for runway 28R.

I reviewed the STAR and queried the copilot about the wrong runway transition and to report to ATC. ATC replied we were supposed to fly the runway 28L transition to BRIXX waypoint not CORKK and to continue on our present course for the 28R transition. A frequency change was given to the next controller with no other comments. Flight continued in VMC for the Quiet Bridge Visual to runway 28R without further incident.

It is imperative to verify the correct data is loaded into the FMS prior to commencing a crew brief to avoid thinking about what you may normally be issued as opposed what you actually are assigned.

Synopsis

NCT Controller described how procedures into SFO are allegedly not correct. Aircraft are going to the wrong runway, leaving the Bravo airspace, and are violating speed restrictions below the Bravo. Pilot of aircraft described how they set up for one runway and then were assigned another, which led to confusion in the cockpit.

Time / Day

Date : 201507
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : SEA.Airport
State Reference : WA
Altitude.MSL.Single Value : 5000

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : S46
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use : GPS
Nav In Use.Localizer/Glideslope/ILS : Runway 34L
Flight Phase : Initial Approach
Airspace.Class B : SEA

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : S46
Aircraft Operator : Air Carrier
Make Model Name : Widebody, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 3
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use : GPS
Nav In Use.Localizer/Glideslope/ILS : Runway 34R
Flight Phase : Final Approach
Airspace.Class B : SEA

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1280936
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew
Communication Breakdown.Party2 : ATC

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
ASRS Report Number.Accession Number : 1280937
Human Factors : Workload
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown

Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 400
Miss Distance.Vertical : 50
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Returned To Clearance

Assessments

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

Narrative: 1

I was the Captain/Pilot Monitoring on flight into SEA on the HAWKZ4 arrival to 34L. SEA Center told us to slow and gave us S vectors for metering into SEA. Told to Slow to 210 knots and given direct SONDR. Then SEA approach told us to "slow to 190, then down to 6,000 feet, don't worry about 6,000 foot restriction at SONDR." New SEA Appr frequency 133.65 very busy and checked in at 6,000 feet inside of SONDR and in the weather, IMC. Approach immediately gave us 2 traffic calls for a Corporate jet 5 miles in front of us and a heavy jet. I responded with "we are IMC at 6,000 feet, No Joy on traffic, request lower" (as best as I can remember the calls). They said "descend to 5,000 feet cleared ILS 34L". We were gear and Flaps 15 trying to go down and slow down further. We broke out at about 5,300 feet. I saw the Corporate aircraft and did not know where the heavy jet was. First Officer (FO) called the runway in sight, I asked if he saw the heavy jet (I thought I heard the heavy jet call us in sight?), he said no, only the runway. I called SEA appr and said "Aircraft X has the field in sight" at about 12-11 DME. I zoomed in on the MAP, saw a TCAS target was off our right wing, less than a mile. Started looking out the FO's side windows and saw the heavy jet same altitude, less than a mile in a right hand turn to final, but it had some heading crossing angle, and I was concerned he may be overshooting. By this time 10 DMEish, we were on LOC CAP/ GS CAP and FO was hand flying the aircraft. I said, "You have to watch that guy (heavy jet) close, he may be over shooting and I don't think he sees us!" I called approach and said something like "Does that heavy jet have us in sight? is he going to 34L or 34R" (at the same time I see him bank up, belly up to us at least 30 to 40 deg of bank, at the same time we are getting an RA). Approach says "he's going to 34R, contact tower" at about 10 DME we get and RA "Climb" and RA symbology, my FO asks me if he should go around? I said "No, stay visual with him, level off, and stay ABOVE him! pull up if he gets any closer". We both watch him snap turn away from us to the right and it appeared like they were heading to 34L, our runway. We may have gotten a second RA or a continuation of the first to climb RA, we stayed level as we watched him descend and turn away from us, back to 34R's final. I changed to tower frequency and called in "Visual the field, the corporate and the heavy jet at 6.9 DME for the visual 34L" "Aircraft X you are cleared to land 34L" I think we got within 300-500 slant range of him and initially we were Co-Altitude or he was 50-100 lower than us. I know he overshot 34R and maybe was trying to line up on 34L until I made that call on Appr frequency, as we were both getting RA's at 9-10 DME. My FO was pretty rattled, landed on speed, 1,500 feet down and got on brakes pretty aggressively, I took Taxi Echo, Tango, Juliet, cross 34C and held for 5 -10 min short of 34R. We had hot brakes when we pulled into the Gate. Maintenance checked brakes and made a write up.

I believe the cause of this event was ATC vectoring large amounts of aircraft into minimum spacing and a heavy jet lost Situational Awareness and either overshot or was flying to the wrong runway and almost hit us.

Synopsis

A B737 flight crew on approach to SEA Runway 34L took evasive action from a heavy jet assigned Runway 34R as that aircraft's crew appeared confused about their assigned runway and drifted toward 34L several times while below 6,000 feet.

ACN: 1279145 *(73 of 95)*

Time / Day

Date : 201507
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Final Approach

Airspace.Class B : ZZZ

Component : 1

Aircraft Component : Indicating and Warning - Landing Gear

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Squat Switch

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 163

Experience.Flight Crew.Type : 610

ASRS Report Number.Accession Number : 1279145

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 145

Experience.Flight Crew.Type : 1534

ASRS Report Number.Accession Number : 1279160

Human Factors : Workload

Human Factors : Situational Awareness

Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Track / Heading : All Types

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Automation : Aircraft Other Automation

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Maintenance Action

Result.Flight Crew : Overcame Equipment Problem

Result.Flight Crew : Executed Go Around / Missed Approach

Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

After gear extension while on approach we did not get a green nose gear light on either the front or overhead panels. We executed a go around, climbed to 4000 FT and accelerated to 220 knots. I sent dispatch a note to call with Maintenance Control. We tested all lights with switch and press to test but both nose gear lights did not illuminate. We also looked for a checklist but did not find one that was applicable to our situation. During that time my FO spoke with the FAs and shortly after I made a PA to the passengers.

It was my leg so I continued to fly and talk to ATC while my FO spoke with Dispatch and Maintenance Control. During that time I selected a new runway in the FMC and dialed in the new ILS frequencies. After relaying all to Maintenance Control he asked us to cycle the gear down and check again. After second gear extension we had a green nose gear light on overhead panel but not on forward panel. With concurrence from Maintenance Control we elected to leave the gear down and return for landing. After turning back I swapped controls with my FO. I briefed that I had set us up for Runway XX prior to knowing whether we'd have a nose gear. He told me we had one more call coming through. I spoke with the FA's and made a 2nd PA letting the passenger know our gear indication was back to normal and we were coming back for a normal landing. I was not aware but someone had requested the Chief Pilot be brought in. By then I was on the conference call so I tried to quickly update him on the situation and terminate the call. While being vectored back my FO was able to change one of two forward nose gear bulbs which then became halfway illuminated. Although the overhead panel green nose gear light was sufficient we were now back to two green nose gear lights. Approach told my FO we'd be on Runway XXR so with normal indications he continued to our original planned runway. He had just been cleared on a heading to intercept for the visual when I got back with him. He had reselected Runway XXR in the box but did not remember to reselect the Runway XXR frequency so he initially intercepted the Runway XXL localizer. Approach queried him and gave us a new heading just as we caught the discrepancy. We then transferred controls, got switched to tower, cleared to land and I continued in for a normal landing to Runway XXR.

Narrative: 2

Swapped duties and I got vectors while ATC got an actual runway assignment for us. Captain reviewed checklist for nonstd, nonnormal, talked to the Chief Pilot and monitored vectors to final. ATC assigned Runway XXR, turned 23 mile final, given 060 heading to intercept. Reset runway to Runway XXR in FMC for visual, with ILS backup, but I forgot to reset freq. Cleared for visual approach, armed APP mode, and started turn to final, ATC immediately recognized we were lining up on the wrong runway and vectored us left over to Runway XXR, we reset ILS frequency and landed uneventfully with 3600 lbs.

Synopsis

A B737 nose gear forward green and overhead down and locked lights did not illuminate with the gear down. After recycling the gear the overhead light illuminated. The forward green light illuminated following a bulb change.

ACN: 1276408 (74 of 95)

Time / Day

Date : 201507
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LAX.Airport
State Reference : CA

Environment

Flight Conditions : VMC
Weather Elements / Visibility : Turbulence

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
Aircraft Operator : Air Carrier
Make Model Name : MD-11
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 25L
Flight Phase : Initial Approach

Route In Use.STAR : SEAVU2 Arrival
Airspace.Class E : SCT

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1276408
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1276409
Human Factors : Confusion

Events

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

Assessments

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

Narrative: 1

Captain flying. Captain built the ILS 25L approach in the FMS and briefed it. First Officer (Pilot Monitoring) reviewed active flight plan point by point with constraints for SEAVU arrival to ILS 25L into LAX. Crew was cleared to descend via SEAVU arrival and Cleared for ILS 25L approach.

Crossing SEAVU it suddenly became apparent that the active waypoint was not appropriate for the ILS 25L approach appearing to be the ILS 24L instead. Crew worked together to reinsert the correct approach and made correction back to appropriate course. At that point the data tag indicated the aircraft was 1.1 nm right of course. At the same time the crew made turn back to course, LA Approach controller inquired, "are you correcting back to course for ILS 25L approach?" We responded in the affirmative, continued the approach and landing without incident.

The Captain admitted that at some point after the brief, he made FMS Changes to the secondary flight plan and believed he accidentally switched with the active flight plan with neither crew member recognizing the mistake.

Pilot Flying accidentally swapping secondary with active flight plan in FMS

More awareness and coordination on behalf of both pilots when FMS changes are made.

Narrative: 2

During preparation for arrival into LAX I built and briefed the SEAVU arrival and RWY 25L ILS approach. After briefing with my FO, I decided to build the arrival and RWY 24R approach in the secondary just in case they gave that to us. My F/O pointed out that the other runway offered was the ILS 24L and that is because RWY 24R was reported as closed. I noticed that also when I told him what I was doing. I then went back in and rebuilt the ILS RWY 24L. That is where I must have made a mistake and actually loaded RWY 24L in the active flight plan in the FMS. We had already briefed the whole arrival going into LAX with 25L and so we did not notice the change since the arrival is the same until the plane gets to SEAVU waypoint. After

SEAVU waypoint the heading is the same for all runways and the only thing different is the waypoint that begins the approach for each runway. As we were descending on the arrival I was verbalizing each waypoint and what was next as far as altitude and airspeed restrictions. When we got to SEAVU I noticed immediately that the next waypoint was not the waypoint that begins the RWY 25L approach. Since I was pilot flying I directed the FO to quickly enter the correct runway. By the time we got the ILS RWY 25L into the FMS we were very close to the point LUVYN which is the point that begins the approach for RWY 25L. This caused a slight overshoot and we turned to get back on course. There were never any altitude discrepancies and we then flew the approach and landing without incident.

As I indicated earlier, I built the FMS and briefed the arrival and approach and then decided to go back and enter a different arrival and runway in the Secondary flight plan in the FMS. Normally I would do that during my initial build and brief and then the error would have been caught. Nevertheless, I made a mistake and built the arrival and approach for RWY 24R. We saw that ATIS showed the other approach was RWY 24L and not RWY 24R so I went back to the FMS and reentered the arrival and approach for RWY24L in the Secondary. This is where I must have mistakenly entered the arrival and approach for RWY24L in the Active flight plan. Since we had already briefed the whole arrival and approach for RWY25L we did not debrief the Active. As we progressed in the arrival I maintain a good watch on all altitudes and airspeed requirements and did not notice the wrong runway was in the Active until we got to SEAVU and I saw that the next waypoint was not the one I was expecting. We then fixed the problem.

Lesson learned for me is to build and brief after all FMS inputs are complete. If you make a change after briefing make sure it is correct and that all information in the FMS is exactly what you want.

Synopsis

MD11 flight crew reports being cleared for the SEAVU2 Arrival to the ILS 25L at LAX and the FMC is programed accordingly. Crossing SEAVU it suddenly became apparent that the active waypoint was not appropriate for the ILS 25L approach appearing to be the ILS 24L instead. The crew quickly corrects the FMC just as SCT takes notice of the track deviation. The Captain may have accidentally switched the secondary flight plan in the FMC.

ACN: 1256128 (75 of 95)

Time / Day

Date : 201504
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DCA.Airport
State Reference : DC
Altitude.MSL.Single Value : 17000

Environment

Flight Conditions : VMC
Weather Elements / Visibility : Thunderstorm
Weather Elements / Visibility : Turbulence
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZDC
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 145 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Descent
Route In Use.STAR : FRDMM3
Airspace.Class E : ZDC

Component

Aircraft Component : Altimeter
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
ASRS Report Number.Accession Number : 1256128
Human Factors : Confusion
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1256129
Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
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.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Weather
Primary Problem : Ambiguous

Narrative: 1

Prior to the start of the arrival we had been deviating around thunderstorms and I had put the ATIS on auto update since there were thunderstorms in DCA. Around FL240 we had been told to expect the south transition. However, ATC changed us to the north transition and then back again to the south transition based on changing winds at the airport. At FL210, they cleared us for the FRDMM arrival. During this time they then cleared us via the TRUPS. I inquired and that was given in error and we were recleared to descend via the FRDMM arrival. I also inquired on landing runway since the ATIS was giving a different runway than he assigned. He said that the ATIS was giving out the wrong runway ONLY.

I started to notice that the ATIS updates were changing at a rapid pace, consistent with a thunderstorm passing over the field. The first ATIS included a squall line passing. We initially received an ATIS and by the time the events ended we were back [near beginning of the alphabet.] I do not remember being given an altimeter setting from ATC and when we performed the inrange [checklist] I gave the most up-to-date altimeter setting which was 29.54 to the Captain (CA).

As we were approaching PLDGE, the controller told us to immediately stop our descent and to hold at PLDGE. We were less than 5 miles from PLDGE and quickly rushed to put the hold in the FMS. He said expect 1 turn in the hold and to level at 17,000. Also, we were instructed to slow as well. He said all of this was due to flow into DCA. We had started to hold when the controller asked us what altitude we were at. I said 17,000 and he confirmed that this was not what he was showing. I said we were level at 17,000 and current altimeter 29.54. He quickly stated that this was wrong and current altimeter was 30.04. He said he informed us earlier that the ATIS was wrong. The CA and I both agreed that earlier he had told all aircraft on frequency that the runways were wrong and that was it. There was no mention about altimeter. The controller told us we were not listening. Numerous other aircraft were inquiring about runway and altimeter settings.

After one turn we were recleared direct to PLDGE and given a descent to 16,000. As we started to descend he told us again to descend to 16,000 and once there recleared the FRDMM arrival. We had unfortunately took that as a "descend via" and not a "cleared via" The controller inquired about our altitude being off and informed us of our error of descend vs cleared. From there the rest of the arrival was uneventful and we asked for correct altimeter settings with each frequency change.

Initial threats were the arrival itself and thunderstorms in the area. During the arrival we were given unexpected close

holding, speed reduction, and descents that were not on the arrival. ATC also gave us the wrong arrival and switched landing runways 3 times. ATC only informed us that the ATIS included the wrong runway and DID NOT mention that the altimeter settings being produced were wrong.

The errors were the two altitude deviations. The second coming from a high stress and workload environment created from the first one. I believe the quick hold, descent, and speed reduction, followed by the constant weather updates and deviating with storms caused us to confuse the descend via and the cleared via clearance at the end of the event.

I believe we should have told ATC we were unable for the hold. We were too close to the fix and combined with our altitude and speed reduction our workload was already too high. Especially after dealing with the wrong altimeter setting and confusion. I also think there needs to be clarification if the ATIS is wrong. When we landed in DCA and asked ground if the departure ATIS was correct he informed us that it was a national outage and that they were producing wrong information. I think this was an urgent issue and should have been communicated better with working crews, possibly via a message from dispatch or ATC. When I first inquired about the runway change on arrival, the controller had no idea that it had been changing to begin with. He informed us only that the runway on the ATIS was wrong and nothing else.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

An EMB145 flight crew experienced the digital ATIS altimeter setting anomaly experienced by so many other flight crews on this day. Two altitude deviations occurred. The first due to the altimeter setting and the second when the crew started to descend via when only cleared via the FRDMM3 arrival. Thunderstorms and holding patterns compounded the situation.

ACN: 1245852 (76 of 95)

Time / Day

Date : 201503
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ORD.Airport
State Reference : IL
Altitude.AGL.Single Value : 4000

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.TRACON : C90
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 145 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 27R
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 : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 18000
ASRS Report Number.Accession Number : 1245852
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party1 : Flight Crew

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

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 15000
ASRS Report Number.Accession Number : 1245853
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Person : 3

Reference : 3
Location Of Person.Facility : C90.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1247355
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were cleared for visual approach for 27R and instructed to contact tower at the marker. Then before switching to the tower, we heard approach control (what we thought was for our flight) offer to switch over to land on 27L. I replied with "we would appreciate that" but without our call sign. Then, the flying pilot began the side step maneuver to 27L. I (the pilot monitoring) asked approach control for tower frequency (thinking that we need the tower frequency for 27L (not 27R) the approach controller stated that we should have intercepted 27R... Then gave us a heading 360, then 040 and climb to 4000. The approach controller then gave vectors for 27R. Landing was made without incident.

Both I and my first officer thought we heard the offer from approach control for 27L which (I learned from the approach control supervisor - via telephone conversation) was intended for another aircraft. Plus I did not use my call sign on the read back. And the controller did not ask for our call sign on read back. For me to be more careful listening to call signs. Always use call signs on read backs - even on those quick response-type ATC communications.

Narrative: 2

On approach to ORD 27R both Captain and I believed ATC offered 27L. Began sidestep, ATC said "keep doing what you are doing" Approach informed us we were lining up with wrong runway, turned us to 360 heading to bring us back around to 27R. Misunderstanding the offer was for another aircraft. ATC not clarifying call signs. In future, triple check sidestep offers and clearances.

Narrative: 3

I was working arrivals into ORD landing RWY 27L. I was running ILS approaches on the center runway while visual approaches were being conducted to the parallel outboard runways. The north side controller had cleared an EMB145 for a visual approach to RWY 27R. He then made a transmission to another aircraft that there was a spot on RWY27L and asked if he wanted that. He said he would take it with no call sign given. Supposedly what happened was that the EMB145 thought that was for him and took over for my runway. He just happened to slide smack in the middle of 2 of my arrivals. Being so close to the final approach fix and everything going so smoothly, I never noticed his airplane moving over. Even on the replay it looked like the tower might have moved him over (gutsy as that might have been). Anyway, when the supervisor asked me if I remembered this, I said no, while he said other people saw it. Even so, nobody brought it to my attention. Like I said, it

probably looked like both aircraft were at or inside the final approach fixes where ORD takes over.

Get call signs with every read back. This would be an excellent opportunity to say that the pilots are getting too lax with their transmissions. Omitting the ATIS when they check in and rarely giving correct altitudes i.e. "leveling one one thousand" while actually leaving 12,000.

Synopsis

An EMB-145 flight crew and one of the C90 Controllers involved describe a misunderstanding between the crew and C90 resulting in vectors for a second approach. After initially being cleared for the visual to Runway 27R the EMB145 crew accepts a clearance meant for another aircraft to land Runway 27L and moves over.

ACN: 1244216 (77 of 95)

Time / Day

Date : 201503
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : CAE.Airport
State Reference : SC
Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : IMC
Light : Night

Aircraft : 1

Reference : X
ATC / Advisory.Ground : CAE
ATC / Advisory.Tower : CAE
Aircraft Operator : Air Carrier
Make Model Name : Small Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use.Localizer/Glideslope/ILS : Runway 11
Flight Phase : Final Approach
Route In Use : None
Airspace.Class C : CAE

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : CAE
Aircraft Operator : Corporate
Make Model Name : Light Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Route In Use : None
Airspace.Class C : CAE

Person : 1

Reference : 1
Location Of Person.Facility : CAE.Tower
Reporter Organization : Government
Function.Air Traffic Control : Ground
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2.7
ASRS Report Number.Accession Number : 1244216
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Confusion
Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : ATC
Analyst Callback : Attempted

Person : 2

Reference : 2
Location Of Person.Facility : CAE.Tower
Reporter Organization : Government
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1244221
Human Factors : Situational Awareness
Human Factors : Confusion
Human Factors : Communication Breakdown
Human Factors : Distraction
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1244630
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 4

Reference : 4
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
ASRS Report Number.Accession Number : 1244635
Human Factors : Situational Awareness
Human Factors : Confusion
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
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.Air Traffic Control : Separated Traffic

Assessments

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

Narrative: 1

I was working ground control and a runway change was initiated to runway 11 and 5. Previously we were on Runway 29 and 23 for the shift I was working. Maybe ten minutes after the runway change was initiated and I made the ATIS broadcasting the appropriate ATIS, I taxied Aircraft Y to runway 29 (the previous runway in use) marked the strip for runway 29 and switched the pilot to the tower. I then was made aware of the situation when the local controller began giving traffic alerts to Aircraft Y and Aircraft X on final for runway 11. Aircraft Y departed opposite direction into Aircraft X and became a direct conflict.

I believe a visual reminder of what runways are in use immediately after a runway change on the console would serve as a

memory jogger. Muscle memory of repeating the same actions all day over and over again, only to change to the complete opposite can cause confusion and I believe a runway in use sign would help.

Narrative: 2

Ground Control (GC) taxied Aircraft Y to runway 29. The active runway was 11. The runways had been switched and this was the first aircraft to depart the airport. Aircraft X was vectored for the ILS 11. I had stood up to look at the lighting panel and Aircraft Y calls ready for takeoff runway 29. I was using a hand set because I had left my headset in the tracon. I missed Aircraft Y saying he was at runway 29. Aircraft X calls after Aircraft Y and is on final runway 11. I clear Aircraft X to land Runway 11. I go straight to Aircraft Y and clear them for takeoff Runway 11 Heading 050. Aircraft Y questions the Heading and I said "Affirmative heading 050 for Aircraft Y." I told Aircraft Y of the traffic on 7 mile final runway 11. I scanned the runway and saw flashing lights at the approach end of runway 11 and did the scan of the rest of the runway. I did not see the aircraft at the approach end of runway 29. The flashing lights I saw where the barrier lights that separate A1 and A2. After clearing Aircraft Y for takeoff I looked up at the Dbrite to see where Aircraft X was and then I looked down to my notepad to write Aircraft X on the arrival column. I then went to the Aircraft Y strip to write the heading down and then looked back up to see where Aircraft Y was. Out of the corner of my eye I see flashing lights and it is Aircraft Y going the wrong way. I looked back at the strip and it had runway 29 on it. I looked back up at the Dbrite and see Aircraft X and I told Aircraft X to go around climb maintain 4000. I then go back to Aircraft Y and tell them to turn right heading 050 immediately. I go back to Aircraft X and issue a traffic alert and tell him to turn right heading 180 then to Aircraft Y I issued a traffic alert and the aircraft passed to the north and south.

I had earlier in the day thought about going home sick because I was tired. I didn't for several reasons. We are at minimal staff, I was the late person, and I have been counseled on taking sick leave.

The event happened because Aircraft Y was taxied to the wrong runway. The second problem happened when I missed the call saying Aircraft Y was at runway 29, possibly due to having the hand set and not the head set, the pilot did not question the clearance for takeoff on a different runway.

Better communication, seeing the red flag when a pilot questions anything. Not using a Hand set. Don't send aircraft to the wrong runway.

A visual aid of some sort to indicate the runway in use would help when switching runways. It happens frequently, sending an aircraft to the wrong runway after a runway change.

Narrative: 3

During the ILS approach and configuring the aircraft for the ILS into CAE, I overheard taxi and immediate take off instructions for Aircraft Y from CAE tower. While conducting the ILS into CAE in IMC conditions inside the FAF and fully configured we were instructed to go around and climb to 4000 ft. by CAE tower. I, the Pilot Monitoring (PM) and acting PIC, responded to the tower verbally and the Pilot Flying (PF) called for the appropriate actions. As I was configuring the aircraft autopilot FCP for the appropriate speed mode, flap settings and altitude while climbing we immediately received the first TCAS alerting us to a traffic warning and subsequent Resolution Advisory (RA) of "monitor vertical speed" which produced a red upper band on the VSI. I immediately shifted my attention to the oncoming threat which presented itself as a red Traffic Advisory (TA) at +100 ft. and closing rapidly on top of us. I believe the TCAS RA then commanded descent instructions and the VSI was solid red. I instructed the PF First Officer to descend as I pushed on the yoke with my left hand and focused my attention outside to make an evasive maneuver if the opposing aircraft came into view while still in IMC. We were at 2000 ft. MSL when this happened and quickly descended to 1700 ft. MSL while simultaneously receiving an immediate right turn to 180 degrees by the tower which I confirmed and the Pilot Flying (PF) complied with. Seconds later the TCAS gave us a Clear of Conflict call and we managed to climb to the new assigned 2500 ft. only after climbing through 3000 ft. and back down to 2500 ft. We configure the aircraft to flaps 8 and 200 kts level. I contacted the Flight Attendant at this point and informed her what occurred and we would continue with another approach. We continued as instructed to rejoin the ILS approach to runway 11 and landed uneventfully. After landing and completing the appropriate checklists, I then contacted the tower supervisor. He notified me that he believed Aircraft Y was cleared for a runway 29 departure but the tower supervisor seemed unsure of how or why this was done. I left my information with the supervisor for follow up. He commented that he would file an MOR and that the FAA will investigate this. After landing in ATL I contacted the Safety Representative and discussed the event and subsequent actions needed on my part and the crew.

The first and foremost threat and error was an aircraft that I believe was cleared to depart in the opposite direction while we were inside the FAF in actual IMC. Secondly, given go around instructions with a climb that subsequently put us in a position in opposition to the immediate and subsequent RA of monitor vertical speed and descent. These events happened very quickly, within seconds, and my situational awareness and aircraft control monitoring became saturated with information. The aircraft was never out of control but rapid changes in pitch and headings within 1400 ft. of the ground required to comply with the RA and tower instructions created some concern with speed control and configuration as we escaped. On a lesser side note we are still learning the new checklists and flows but this was a very minor distraction prior to the event.

Time permitting double check with tower which runway departing aircraft is using.

Synopsis

CAE Ground Controller taxis aircraft to Runway 29. Previously the airport was departing Runway 29, and ten minutes ago changed to using Runways 11 and 5. Ground Control later hears Local Control issuing traffic alerts to the aircraft he taxied to Runway 29 and another aircraft on final for Runway 11.

Time / Day

Date : 201501

Place

Locale Reference.Airport : MTJ.Airport
State Reference : CO
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.UNICOM : MTJ
Aircraft Operator : Air Carrier
Make Model Name : Medium Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Phase : Taxi

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
ASRS Report Number.Accession Number : 1231398
Human Factors : Situational Awareness

Events

Anomaly.Conflict : Ground Conflict, Less Severe
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
When Detected : Taxi
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

MTJ is an uncontrolled airport with NO tower facility. Landing and departing aircraft were using runway 35. Weather was clear VFR with light winds. We landed on Runway 35, cleared at A3 and taxied south on Taxiway A toward Taxiway C. After landing and during taxi we maintained a listening watch for other traffic on the local Unicom frequency. We heard another aircraft (private non commercial small jet type, I think some kind of Beechjet) making numerous position reports for a landing on runway 35. There was a Airbus, a MD80, and a Q400 lined up on Taxiways A8 and D waiting to depart on Runway 35. While on Taxiway C, approaching the intersection with Runway 31, we announced on Unicom that we were crossing Runway 31. During taxi the First Officer and I were both watching for the (Beechjet?) aircraft that was suppose to be landing on Runway 35 and did not see him. Prior to crossing Runway 31, both the First Officer and I looked in both directions for approaching aircraft. Neither of us saw any so I turned on all aircraft lights and proceeded across Runway 31 toward the terminal building. As I entered the runway, the (Beechjet?) aircraft came on the frequency and berated us for crossing in front of him. The First Officer and I both spun our heads and suddenly viewed the aircraft on short final for Runway 31. At this time there was approximately 1 mile separation between us, while not a near miss it certainly was an uncomfortable and unsafe condition to be in. We informed the private aircraft that he was landing on Runway 31 and NOT Runway 35 as he had been broadcasting on the Unicom frequency. We expedited our crossing to clear the runway as quickly as possible. He continued his landing and did not go-around as he should have. Upon gate arrival, I queried the other airliners on the field to confirm that the (Beechjet?) aircraft was in fact announcing that he was landing on Runway35. Someone responded and confirmed that the (Beechjet?) aircraft was indeed announcing that they were landing on Runway 35.

The First Officer and I spent a lot of time discussing this incident and trying to figure out how this happened and what we could have done differently to prevent it. We could not come up with anything other than to have seen the aircraft sooner, and I'm not sure how we could have done that, as we were watching for him. It seems that we did everything right. We were

on the correct frequency, we made numerous position reports, and we listened and watched intently for other aircraft, and we looked before crossing the runway. This aircraft just appeared from nowhere. When we did see him, his single nose landing light was illuminated. We don't know exactly when he turned it on or if it was on before the runway incursion. The aircraft was small, and there is rising terrain along the approach to runway 31. During his approach to MTJ we heard him talking to Denver Center about needing to do some S turns to get down. The best we can figure is that he got high, started S turning and lost situational awareness of the location of Runway 35, and then lined up on Runway 31 thinking he was on 35. The small aircraft blended in with the rising terrain behind Runway 31 (from our view point) that obscured this aircraft preventing us from seeing it. The day following the incident we were contacted by Captain X, who was flying the Airbus that was waiting to depart on Runway 35 when this incident happened. He witnessed the event and offered his support and information. He confirmed that the (Beechjet?) aircraft landed on the wrong runway, and that he and his FO were looking for the aircraft as well and did not see it either. Everyone got lucky this day, however this incident further highlights an enormous safety concern I have always had regarding commercial airline service at uncontrolled airports. ANY AIRPORT THAT HAS REGULARLY SCHEDULED AIRLINE SERVICE WITH MULTIPLE FLIGHTS INVOLVING MULTIPLE AIRLINES SHOULD HAVE A CONTROL TOWER WITH A RADAR FACILITY. PERIOD. How many people need to die, and how big do the news headlines have to be in order to get the FAA to rectify this preventable safety hazard?

Synopsis

An air carrier Captain reported crossing Runway 31 at MTJ with a light jet on final about a mile out they had not seen. Reporter commented that this airport has mixed airline and light aircraft traffic and should have a Tower for a safe operation.

ACN: 1205918 (79 of 95)

Time / Day

Date : 201409
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : IAH.Airport
State Reference : TX

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : IAH
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 145 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Takeoff / Launch
Route In Use.SID : GUMBY1

Component

Aircraft Component : FMS/FMC
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 : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1205918
Human Factors : Workload
Human Factors : Confusion
Human Factors : Fatigue
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Track / Heading : All Types
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 : Requested ATC Assistance / Clarification
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

During preflight I entered the flight plan that was amended via PDC to the Gumby1. I entered RWY 9 for departure. After the receiving flow and checklist the First Officer briefed the GUMBY1 and the waypoints were checked. We had a slow boarding and slow pushback waiting on bags. When we finally got underway I was pushing to get off the ground and finish the day. We were given a different spot for ramp exit than the one I was expecting. I did not change the departure runway in the FMS. We accomplished the taxi and before takeoff checklists and were immediately cleared onto 15L to Line up and wait. I transferred the controls to the First Officer, pilot flying (PF), and we waited for takeoff clearance and to complete the before takeoff checklist. We were cleared for take off RNAV CRTMN, "confirmed" CRTMN in the FMS and completed the checklist. We began the take off roll. At about 60 KIAS after I was confident the engines were stable and making good power I widened my scan to double check the FMS. That's when I noticed the mistake at around 75 KIAS I called it out and told the PF to continue. My thought was that I could make the correction before the turn at 600 feet and that it would be safer than doing an abort at 75 KIAS. We called pos rate, gear up, speed. After setting speed I re-entered the departure and CRTMN still did not show up. We immediately asked for a vector to get the aircraft cleaned up and then try to sort out the screw up. I asked for direct DWSUN and they gave us direct GUMBY and we were back onto the departure. With no further issues. After we cleared 10,000 feet I started to back track [to] find my error and then realized that I had not entered the correct runway.

Threats for this day were an early morning wake up to commute in after little sleep helping care for a sick child. A new hire First Officer with low time in the aircraft. My error in not realizing that my First Officer was swamped in the hustle to get airborne. The unwanted situation was a result of the error in entering the wrong runway and not catching it on the cross check. We looked at the FMS and saw the magenta where it was supposed to be and said CRTMN was in the box before we advanced the thrust.

SLOW DOWN! Put a finger on the FMS and CONFIRM the first fix! Complacency crept and amplified by fatigue that led to this situation. Also fatigue played a role in me not being able to realize exactly what mistake was made and correcting it immediately. In the future I will take measures to assure that I get an adequate amount of sleep before the start of my trip. I will also slow my pace in the cockpit to help keep errors at bay.

Synopsis

EMB-145 crew failed to change the departure runway in their FMS when cleared to Runway 15R at IAH (vice their planned Runway 9). They took off with the wrong waypoints displayed for their clearance via the GUMBY RNAV SID. Assistance from ATC got them back on course. Fatigue and an inexperienced First Officer were cited as contributing factors.

ACN: 1202663 (80 of 95)

Time / Day

Date : 201408
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DFW.Airport
State Reference : TX

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : DFW
Aircraft Operator : Air Carrier
Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class B : DFW

Component

Aircraft Component : FMS/FMC
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 : First Officer
Function.Flight Crew : Pilot Not Flying
ASRS Report Number.Accession Number : 1202663
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Distraction
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 : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

On downwind to DFW, Approach informed us we could expect an extended final for Runway 17C. Within a few seconds they gave us a short vector for base. I noticed the pilot flying (PF) placed an intercept course in the FMS. We were giving an intercept heading and were instructed to intercept the localizer for runway 17C. The PF was flying purple needles and I was in green.

As we rolled out on final, we, unknowingly, were perfectly aligned for 17R. The PF was showing on course. Immediately the Tower called and said it appeared we were off course and told us to check our LOC frequency. At the same moment I looked down and noticed the full scale deflection on the LOC. As I quickly looked down to verify the frequency the Captain's charts fell behind his seat. I told the PF we were on the wrong runway, pointed out the runway out the window, and pointed at my HSI. The PF did not seem to believe me and we continued the approach. Maybe two seconds later the Tower called again and said that we were indeed aligned for 17R. The PF executed a low level sidestep maneuver for the correct runway. We landed with flaps 22, and at least 60kts over ref. There was no loss of separation or further communication from tower.

I had previously challenged the PF on another leg about using magenta needles inside the FAF on a LOC based approach. He stated we could use them outside the FAF however he never changed then back to green after passing the fix. This threat quickly turned into an error. Additionally, an unstabilized approach to landing was flown. The aircraft landed in an unplanned configuration (flight computer was only calculated for flaps 45).

My biggest take away, and perhaps my biggest frustration, is I should have called a go-around. There obvious red flags during this approach which just screamed for us to go around, take our time, and get it right. In the future, I certainly won't hesitate to challenge the PF and call a go-around when needed.

Synopsis

An Air Carrier was vectored downwind, then given a turn to intercept DFW Runway 17C but the Captain misprogrammed the FMC for 17R and would not accept the First Officer's comments until ATC issued a new clearance. An unstabilized approach resulted.

ACN: 1186944 (81 of 95)

Time / Day

Date : 201407
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : IAH.Airport
State Reference : TX
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1186944
Human Factors : Distraction
Human Factors : Time Pressure

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
ASRS Report Number.Accession Number : 1186946

Human Factors : Distraction
Human Factors : Workload

Events

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

Assessments

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

Narrative: 1

Wrong RNAV departure transition selected after runway change. Originally we were filed for the BNDTO 1 departure JCT transition so that is what was printed on our release. However, our clearance was amended to the PITZZ 1 departure CRGER transition. We were unsure of the runway that we were to be assigned, so we input Runway 15R because the day before we were given the exact same scenario. The FMS was loaded correctly and verified to match the amended clearance prior to taxi. However, when we called for push back and advised Ramp Control of our assigned departure we were told to expect Runway 15L. Being a very studios First Officer, the non-flying pilot input Runway 15L however he selected the PITZZ 1 JCT transition. I was taxiing and looked down and verified the JCT transition against the release instead of the amended clearance. Therefore we now had the wrong transition loaded in the FMS with the correct runway. After departure we were advised by ATC that we were tracking the wrong transition.

One threat is that two different departures have the same name in the transitions. Another threat is that ramp control is advising crews of the runway to expect while taxiing. Therefore any changes to the FMS are done during a higher workload period such as taxiing. Some airports have RNAV departures that are runway specific and it is very important to input the correct runway. However, in Houston we would have been better off leaving the wrong runway in the FMS because the procedure is the same for both departure runways.

In the future, I think I will cross out the amended clearance on the release and then write down the new clearance above the original filed route. Also, I think Clearance Delivery should include the expected runway for departure with the clearance. That way we can verify the flight plan while at the gate without the distractions of taxiing. I believe this is especially true at airports where the runway is very important for the departure flown, such as ATL. I understand that the runway may change after taxi out, however when this occurs ATC should recognize that we crew need time to make the changes without distractions.

Narrative: 2

Flight was given clearance in IAH for the BNDTO 1 RNAV departure (JCT transition), but was amended to the PITZZ 1 Departure (CRGER transition). The day prior, the exact same scenario occurred and the crew was assigned Runway 15R, so we therefore assumed we could expect the same Runway (15R) this day, which was then loaded into the FMS. However, during pushback the Ramp Controller assigned Runway 15L instead. During the high workload management time of pushback/engine start/taxi, the crew changed the runway to 15L in the FMS, but during this time incorrectly loaded the originally assigned transition (PITZZ 1.JCT), as opposed the newly amended transition (PITZZ 1.CRGER). This error went unnoticed until ATC noticed we were off course after departing the PITZZ intersection, when the aircraft began turning on the incorrect transition. ATC clarified the instructions, and the FMS was re-loaded and the aircraft resumed on its proper course.

Due to the high workload management time of pushback/engine start/taxi, along with a short taxi time to the runway, the Captain and First Officer could have taken more time to cross-check FMS inputs and verify their correctness. When receiving an amended clearance or runway change, I will take more time to make sure the proper procedures are entered into the FMS, then cross-checking that with the Captain, charts, and any other source which would ensure accuracy. This may require delaying a taxi, or moving to a spot that's out of the way to allow for this to happen. The company should suggest that runway assignments are provided before the aircraft pushes back. At many of the airports we fly in/out of, runway assigned are often given while the aircraft is taxiing to the runway (at very busy airports), which allows room for errors, much like the one being reported, to occur. While I understand this may not be practical 100% of the time, being able to properly program and brief a procedure while the aircraft is stationary at the gate would significantly reduce the possibility of error.

Synopsis

Air Carrier flight crew reports a track deviation departing IAH on the PITZZ 1 RNAV. The SID was changed by Clearance Delivery prior to taxi and the runway was changed by Ground Control during taxi. When the SID is reentered into the FMC after the runway change the wrong transition is selected.

Time / Day

Date : 201406
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : BHM.Tower
State Reference : AL
Altitude.AGL.Single Value : 1000

Aircraft

Reference : X
ATC / Advisory.Tower : BHM
Aircraft Operator : Air Taxi
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Landing
Route In Use : Visual Approach
Airspace.Class C : BHM

Component

Aircraft Component : VHF
Aircraft Reference : X
Problem : Improperly Operated
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 1350
Experience.Flight Crew.Last 90 Days : 130
Experience.Flight Crew.Type : 125
ASRS Report Number.Accession Number : 1178351
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew
Analyst Callback : Completed

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : Taxi
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 was dodging thunderstorms enroute to BHM and approaching from an abnormal direction, I was planning on the localizer 24 approach, and had that briefed, tuned, and set on two different navs. I picked up the airport around 18 NM out, and was

cleared for the visual approach, at that time went visual, mistook Runway 6 for 24 and no longer used my navs for course guidance. After being cleared for the approach I was switched to Tower, after checking in with Tower I was cleared to land 24, not seconds after getting cleared to land 24 there was a high frequency tone that I originally thought was being transmitted by an aircraft (I was later informed that this is a known issue from the TV towers on the hill southwest of the field) and at this stage of the flight needing to focus, there were storms just east of the field, I turned my radio down which unintentionally was all the way down. I immediately turned in to land on what I mistook for Runway 24. From what I understand Tower did try and call me to advise me of my lining up to the wrong runway but due to the interference from the antennas I had my radios all the way down. It wasn't until I was well off the runway after calling for taxi that I realized my radios were all the way down.

Callback: 1

The reporter clarified the location of the antennas on a ridge line about 7 NM southwest of the field.

Synopsis

A General Aviation pilot reports being cleared for the visual approach to Runway 24 at BHM but becomes confused and lines up for Runway 6. A loud squeal from the radio caused by TV antennas 7 NM southwest of the field causes the radio volume to be turned way down and calls from the Tower go unheard.

ACN: 1165586 *(83 of 95)*

Time / Day

Date : 201404
Local Time Of Day : 0601-1200

Place

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

Environment

Light : Daylight

Aircraft

Reference : X
Aircraft Operator : Fractional
Make Model Name : Citation Excel (C560XL)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Phase : Parked
Maintenance Status.Released For Service : Y
Maintenance Status.Maintenance Type : Unscheduled Maintenance
Maintenance Status.Maintenance Items Involved : Testing
Maintenance Status.Maintenance Items Involved : Inspection

Component : 1

Aircraft Component : Elevator ControlSystem
Manufacturer : Cessna
Aircraft Reference : X
Problem : Malfunctioning

Component : 2

Aircraft Component : Aircraft Logbook(s)
Aircraft Reference : X

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft.Other
Reporter Organization : Fractional
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1165586
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Troubleshooting

Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Maintenance
Analyst Callback : Attempted

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : Pre-flight
Result.General : Flight Cancelled / Delayed
Result.General : Release Refused / Aircraft Not Accepted
Result.General : Maintenance Action

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Logbook Entry
Contributing Factors / Situations : Manuals
Primary Problem : Human Factors

Narrative: 1

This morning is the 4th reference of a problem with the elevator cable on Aircraft X, a Cessna 560XLS aircraft, rubbing against bare metal and causing obvious abrasion. The first two logbook write-ups were signed-off with "No defects noted" in the Corrective Action [section of logbook]. The third was signed-off similarly today. In yesterday's logbook, I wrote: Repeat Discrepancy. There is direct contact between the elevator cable and the metal bracket that secures the pulley assembly to the aft bulkhead. Contact causes abrasion of the metal bracket. The phenolic alignment block appears to be mounted too low so that it's lower edge is flush with the metal bracket. This prevents the phenolic block from insulating the elevator cable from contact with the metal bracket. The pulley assembly bracket seems to be too loosely riveted to the aft bulkhead allowing cable run to droop and contact the metal bracket.

The Corrective Action entered was cycled Elevator System several times at various speeds. No rubbing noted unless downward pressure is applied to cable damper. Applied touchup paint to damper structure. Clearance checks good at this time. Work performed In Accordance With (IAW) 560XL Maintenance Manual Cessna Manual (MMCM) 27-31-00. Yesterday's squawk on Aircraft X contained three elements.

- 1) Suspected misalignment of phenolic block, preventing it from doing its job of insulating the elevator cables from rubbing against bare metal.
- 2) Looseness of mounting point for Cable Pulley Assembly, allowing it to assume different alignments, some of which do not provide for proper cable clearance and in fact cause the cable to rub against the bare metal of the brackets. There doesn't appear to be anything preventing the Damper Assembly from migrating to a position that causes cable to metal contact.
- 3) Cable rubbing against metal edge of bracket holes. In the Corrective Action, there is no mention of any corrective action for the misaligned phenolic block, nor any reference to the Technician checking this alignment and certifying that it is within Manufacturer's limits. The alignment of this block is unchanged from yesterday. There is also no mention of any corrective action for the loose mounting points for the cable damper assembly, nor any reference to the Technician checking this alignment and certifying that it is within manufacturer's limits. This looseness is still present today. I had the opportunity to compare the alignment of the similar phenolic block on Aircraft Y, another Cessna-560 XLS aircraft this morning. It appears to be mounted very differently and does in fact prevent cable rub against bare metal. There is also approximately 10-times more clearance between the elevator cable and the Cable Damper Bracket Assembly.

The mounting of the Cable Damper Assembly on Aircraft X also does not appear to have the looseness in its mounting point that is present in Aircraft X. The various Technician's focus during the three times this condition has been squawked has been whether or not the cable rubs the metal edge, and if there is a certain amount of clearance. In three logbook Corrective Action blocks, there has been no mention of any adjustment being performed. In the preflight inspection subsequent to each of the logbook signoffs, the condition that causes the cables to rub against bare metal was observed to be still present. In any case, the cable rub is secondary to the real issues. The issue is what is allowing cable rub? That the phenolic block appears to be misaligned, and therefore unable to insulate cable to metal contact; and the Damper Assembly appears to be too loosely mounted to the aft bulkhead The Technician's Corrective statement is ambiguous as to whether the alignment of the block, and the looseness of the Damper Assembly mount is within Manufacturer's design limits. I have no access to any reference that specifies the tolerances allowed for the above. I have to assume that they were not checked. What exactly is the design requirement for this phenolic block mounting, and is Aircraft X as it stands today within the Manufacturers' acceptable variance? What is the tolerance for looseness of the damper mount? I just want to ensure all aspects of this repeated write-up are certified corrected or within limits before we take the aircraft flying. At the very least I need revised Corrective Action statement that certifies that these conditions were checked and found to be within limits. In light of all the above, I have no choice but to AOG the aircraft again.

I have forwarded information on Aircraft Y, which appears to be configured correctly regarding all the above. I have also forwarded information about Aircraft X, which show obvious differences in the configuration of the elevator cable, cable damper assembly and phenolic block. The simple question is whether Aircraft X as it stands today, is configured according to the manufacturer's certification, or within allowed variance of that certification. I have asked that question in the correspondence sent [to] Maintenance Control. In a meeting with CE560XLS Assistant Chief Pilot (ACP) and Maintenance

Controller, it appears they are discussing everything but the answer to the two simple questions. It appears this meeting is focused more upon blaming the crew for writing this situation up, than on answering the simple questions as to whether the aircraft is airworthy. This is the fourth conversation in four days regarding the cable configuration on Aircraft X. Historically, when an aircraft discrepancy is recorded in a certain aircraft, I am almost immediately moved to a different aircraft to continue duty. I have been assigned to this aircraft and not flying for four days now. This [Company behavior] appears similar to [a situation] from a couple years ago - the only other time I have been repeatedly assigned to a certain aircraft with a known problem. In that case I was apparently kept on that aircraft in an attempt to force me to fly it against my safety reservations. This situation feels the same. It is my opinion that the company is trying to pressure me to fly this aircraft without addressing valid concerns as to its airworthiness. Fix the aircraft, or provide a certification that the aircraft is configured within Manufacturer's approved design variances.

Synopsis

A pilot believes his company is trying to pressure him to fly a Cessna 560XLS aircraft by repeatedly assigning him to the same aircraft that he has rejected several times for an elevator control cable having direct contact with the metal bracket that secures the pulley assembly to the Aft bulkhead. Previous Corrective Action sign-offs in logbook did not address the looseness of the cable Damper Assembly or phenolic alignment block.

ACN: 1159168 (84 of 95)

Time / Day

Date : 201403
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DEN.Airport
State Reference : CO
Altitude.MSL.Single Value : 10000

Environment

Flight Conditions : IMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : D01
Aircraft Operator : Air Carrier
Make Model Name : Light Transport, Low Wing, 2 Turboprop Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Nav In Use.Localizer/Glideslope/ILS : Runway 34L
Flight Phase : Initial Approach
Route In Use : Vectors
Airspace.Class B : DEN

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : D01
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 200 ER/LR (CRJ200)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 35L
Airspace.Class B : DEN

Component

Aircraft Component : Traffic Collision Avoidance System (TCAS)
Aircraft Reference : X

Person : 1

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

ASRS Report Number.Accession Number : 1159168
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1159172
Human Factors : Confusion
Human Factors : Situational Awareness

Person : 3

Reference : 3
Location Of Person.Aircraft : Y
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 : 1159169
Human Factors : Confusion

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

We were being vectored by the Denver TRACON for the ILS 34L approach. The ATIS advertised triple simultaneous ILS approaches to 34L, 35L, and 35R. We were in instrument meteorological conditions and expected an approach to near minimums. We began to accrete ice, so I began to look up our ice accumulation approach speeds. We were issued a turn to final and the First Officer mentioned a concern he had with an aircraft on our TCAS display. Just as I was about to query ATC we were given a turn to final and clearance to intercept the 34L localizer. At that moment we received a traffic advisory (TA). The First Officer turned off the autopilot and tightened the turn. We then received a resolution advisory (RA) instructing us to descend. I took the controls and complied with the RA. The TCAS then gave a climb command. I added emergency power and complied. After obtaining the necessary FPM climb we, once again, got a "Descend, Descend" command from the TCAS. At this point I pulled the aircraft in a very steep bank in the direction that ATC gave us and complied with the last descend command given by the TCAS. At this point I passed controls back to the First Officer and I saw we were still on the west side of the 34L localizer. The First Officer complied with the remaining radar vectors and climbed back to 10,000 FT. At this point the aircraft was shuddering noticeably due to moderate mixed icing conditions, but we were able to maintain airspeed of 210 KTS (assigned) and climb with adequate safety margins. I asked the Controller for a phone number so the situation could be further discussed on the ground.

I was told an RJ flew through the 35L localizer and was not on his assigned altitude. This was consistent with what we witnessed on the TCAS. I called the TRACON after arrival and was told that the parallel traffic was 2,000 FT below his assigned altitude and was established on the inbound course for 35L. I was told that this was the cause of the traffic alerts given. This did not explain the lack of lateral separation that was encountered as it would not be expected to receive an RA if we were on the west side of our approach course and the other aircraft was established inbound on the proper course. He also said that separation was lost. Vertical separation was 0 and lateral separation was no closer than 2 miles. These runways are well within this range and evasive maneuvers were necessary to avoid collision. So in our view, lateral separation must have also been lost if the other aircraft turned westbound and transgressed into our course at our altitude. I am also unsure as to why we were getting conflicting resolution advisories. I do not know the situation in the other cockpit but we attempted to comply immediately with the RA instructions and ended up getting very concerning instructions. The other aircraft

appeared to be heading westbound before any TCAS advisories were given (The TRACON Supervisor told me that they were complying with an ATC instruction). I don't know the timing of these events on the east side of the airport, but it seemed that we were put into a very dangerous situation due to either multiple errors or approach design tolerances. Proper compliance with TCAS instructions, approach clearances, and altitudes. I am unsure as to what role ATC had in vectoring the aircraft into our course, but undoubtedly some responsibility as discussed on the phone with the TRACON Supervisor.

Narrative: 2

Vectored for ILS 34R in IMC. We got an RA and had to respond to it because of parallel traffic for one of the 35 runways. Either ATC error or parallel traffic not listening to instructions.

Narrative: 3

We started on the CREDE 2 RNAV arrival with WOLFF transition later we were changed to the LDORA 1 RNAV arrival. We had done a full briefing of the arrival. We were cleared to descend to 12,000 FT and assigned 210 KTS while descending via. At LDORA we were cleared for the 35L approach. I as the pilot flying, [I] had briefed the 35L ILS, weather, airport, TEM, MDA, missed Approach and the correct frequency for 35L ETC. For some reason I mistakenly selected 35R on the FMS. When we reached LDORA intersection I realized FMS had the incorrect approach, and we quickly selected 35L in the FMS. At that moment all happening at the same time on the wrong selected approach descended to 11,000 FT, in IMC entering icing conditions, an uncommanded descent happened thus causing an RA. I executed the maneuver at the same time ATC called and gave us a heading and a climb immediately to 12,000 FT, which we did. I hand flew the airplane asked for the autopilot at 12,000 FT but the airplane would start an uncommanded descent, this occurred 3 times till the forth time it settled back at 12,000 FT. Autopilot worked normal for the rest of the approach. I take responsibility for making an unintentionally mistake.

The factors were runways very similar, easy to mistake 35L for 35R. Not triple checking the correct approach selected on the FMS. Airplane autopilot confusion/uncommanded descent. It would have helped if ATC would have told us to maintain 12,000 till CHAPP then clear for the 35L approach this would have triggered and given us time to correct the problem, also if the runways were not so similar to select the wrong runway like I did in the FMS.

Synopsis

A Light Transport flight crew experiences a TCAS RA with a CRJ during simultaneous instrument approaches to Runways 34L and 35L at DEN. TCAS issued a descend, then a climb, then another descend instruction to avoid the CRJ which was apparently at the wrong altitude.

ACN: 1144824 (85 of 95)

Time / Day

Date : 201401
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ATL.Airport
State Reference : GA
Altitude.MSL.Single Value : 5000

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ATL
ATC / Advisory.TRACON : A80
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 200 ER/LR (CRJ200)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Climb
Route In Use.SID : COKEM7
Airspace.Class B : ATL

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ATL
ATC / Advisory.TRACON : A80
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 200 ER/LR (CRJ200)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR

Mission : Passenger
Flight Phase : Initial Climb

Aircraft : 3

Reference : Z
ATC / Advisory.Tower : ATL
ATC / Advisory.TRACON : A80
Aircraft Operator : Air Carrier
Make Model Name : A320
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Facility : A80.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Departure
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1144824

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 : Commercial
ASRS Report Number.Accession Number : 1146304
Human Factors : Human-Machine Interface
Human Factors : Time Pressure

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1145729
Human Factors : Human-Machine Interface
Human Factors : Time Pressure

Events

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

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

I was working North Departure and had been for maybe half an hour prior to the event. We were in a slight lull, definitely not heavy on departures. Aircraft X's strip printed and I was waiting for him to check-in. As my scan came back to Aircraft X, I noticed he was not on his SID. The aircraft actually appeared to be heading southwest directly toward an A320 that had departed [Runway] 27R. I tried to make contact with Aircraft X, but they were not on my frequency yet. At that point it looked as though they were correcting back to the northwest. As that was happening, Aircraft Y tagged on my scope. Aircraft X was a northbound departure, and Aircraft Y was a westbound departure. Aircraft X turning back to the northwest meant that they were now cutting off Aircraft Y. Rather than call the Local Controller and coordinate at that exact moment; I gave them an opportunity to resolve the issue while I notified my CIC and the South Departure Controller. At that point, calling the Local Controller and talking would have only added to problem. They obviously had to ensure separation first. Not even 30 seconds later, the Local Controller called me and coordinated Aircraft X on a 305 degree heading and Aircraft Y on a 320 degree heading. As this was happening I noticed Aircraft Z tagging off the departure end. Aircraft Z was a northbound departure, so now Aircraft Y on a 320 heading was a factor for Aircraft Z on the SID. I immediately called the Local back and told him to stop departures. From this point on, visual separation was applied by Tower on all three departures. So far as the separation is concerned, I was informed visual was applied. Better trained Local Control. Adhere to what is coordinated over the land line.

Narrative: 2

Our day started out delayed 2 hours that morning due to Maintenance. We arrived in ATL late and rushed to re-board and catch up to our schedule, as I performed the walk around the Captain programmed the FMS which is normally my duty. Prior to the Before Start Checklist I briefed our taxi, and departure, which was the COKEM 7 departing Runway 26L in ATL. Upon entering Runway 26L I stated, "Runway 26L, COKEM 7, 250 KTS, 10,000 FT." Although I verified the magnetic heading coincided with the runway markings, I failed to look at the FMS/MFD to verify the proper departure runway which I normally do for every departure while stating the parameters above. At 400 FT AGL I called for "NAV Mode", at 600 FT AGL I called "Autopilot On." The aircraft entered a shallow turn left of centerline, I immediately looked at the FMS and my MFD and noticed the departure runway entered was [Runway] 27L and the aircraft was turning to the first fix off of [Runway] 27L which is CPARK. I immediately selected HDG SYNC/HDG Mode and started a turn towards MPASS which was the correct first fix off of Runway 26L. Simultaneously, Tower also noticed our position and gave us a heading to MPASS; after a few short vectors, we were directed on course.

Narrative: 3

Departing [Runway] 26L [from] ATL on the COKEM SEVEN Departure. First fix should have been MPASS. We didn't realize that the flight plan had been entered with the wrong runway. I mistakenly imputed Runway 27L into the FMS. That put the first fix as CPARK. When we reviewed the flight plan prior to departure the departure diagram showed 3 x marks at the end of the runway I saw CPARK and thought that was the proper fix. After takeoff Tower quickly realized we were left of course and gave us a right turn back toward MPASS. We realized at that point we had an error in the flight plan. Once we were enroute we went back through the waypoints and discovered the error.

I have thought long and hard about all of the errors that should have been caught prior to departure. This should never have happened. Here are some of the things that we missed as a flight crew that caused us not to catch the error. First off, I was trying to save time and help out the First Officer. He went out to do the walk around. I decided to input the flight info into the FMS this is not usually a task that I perform. While entering the departure runway from the list I put [Runway] 27L instead of [Runway] 26L. This was caused by me rushing through the task and not checking to make sure I put the data in properly. The second opportunity to catch the mistake is when the First Officer got back. We went through the flight plan and looked at the departure plate and superimposed the waypoint from the wrong runway. We never looked at the runway only the waypoints, we just both assumed it was correct. The last opportunity we had prior to taking the runway and I think this is the part that could be modified. The Captain is supposed to verify the runway, departure, and first fix. So while taxiing the aircraft I am supposed to re-task and verify. I don't want to look away from looking outside to verify because that is dangerous so I always do it from memory, 26L, COKEM 7, MPASS. I have always wondered why it is done this way. My personal opinion is it would be easier for the First Officer at that time to go heads down and review the FMS for errors in runway, departure, and first fix. I think this is a major distraction for the Captain to be tasked with that during taxi prior to takeoff. I think the mistake could have been caught at that point if done this way. On the runway the pilot is supposed to verify runway is inline with the runway you are on. I was trained this way as pilot flying to check this. I should have done it as pilot not flying as well. Looking back we had been rushing to catch up all morning. We had gate return earlier on the first flight of the day due to maintenance. It was snowing heavily and Operations was having problems with ground equipment. This was a long process that was very stressful. By the time we got to Atlanta we were both frazzled, so to speak. Then with no time to recover it was immediately on to the next flight. I should have seen the break down and slowed us down, but instead got wrapped up in the all the tasks that needed to be completed in the shortest amount of time possible. Never again. I take full responsibility as the Captain. I will make not excuses. I can only learn from my mistakes and know that this is what happens when I allow the flight deck to become rushed. I apologize to Atlanta Tower and commend them for catching the error so quickly.

Synopsis

An A80 Controller and the CRJ200 flight crew involved describe a heading error on departure and the resulting conflicts that develop.

ACN: 1143606 (86 of 95)

Time / Day

Date : 201401
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : BNA.Airport
State Reference : TN
Relative Position.Distance.Nautical Miles : 10
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : Mixed
Weather Elements / Visibility.Visibility : 13
Light : Daylight
Ceiling.Single Value : 4000

Aircraft

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

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
Experience.Flight Crew.Last 90 Days : 261
ASRS Report Number.Accession Number : 1143606
Human Factors : Confusion
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1143603
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.Deviation / Discrepancy - Procedural : Clearance
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
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Airport
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

Captain was flying pilot. We were progressing on the SWFFT ONE Arrival to BNA/Runway 31. ATC cleared us to the ONUGE intersection and to track in the Localizer to 31, which we did. An opening in the cloud base gave us a view to a Runway 31. I reported to Tower field was in sight. Tower immediately replied cleared the visual approach to Runway 31. Aircraft was level at 4,000 feet MSL and the glideslope had not even started to come down. Visually the runway appeared in front of us through the broken layer of clouds. We were getting much too high for a stable approach. I stated to the Captain something was wrong, but I was confused by what I saw outside and what the ILS was telling me. Captain called for the gear down and I lowered the gear handle. I think the Captain keyed the radio and told the BNA Tower we were too high for the runway and turned the aircraft to the left, off the Localizer. We might have lost 100 in altitude as well, but the Tower responded that we were not high and asked if we were lining up on Smyrna's runway? Captain immediately turned the aircraft back to the right and centered up the Localizer again. He quickly climbed back to 4,000 FT and followed the ILS approach to Runway 31. I responded to the Tower something like, "Yes, we lined up on the wrong runway." At that point, I could see BNA Airport further ahead on the horizon. We flew the visual approach to Runway 31 at BNA with no further incident. We rushed through the instrument briefing prior to our descent into Nashville. It was the first time for me to fly that arrival from the southeast and land on Runway 31. The Captain failed to mention there was a note on the approach plate about confusing MQY Runway for BNA's runway ten miles to the southeast. I failed to see the same warning too. Every approach should be given enough thought about what could happen besides the standard mechanics of Localizer frequency, inbound course, runway elevation, etc.

Narrative: 2

Narrative 2 contains no additional information.

Synopsis

Air carrier flight crew, cleared for a visual approach to Runway 31 at BNA, confused MQY for BNA until advised by ATC.

ACN: 1119041 (87 of 95)

Time / Day

Date : 201309
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZSPD.Airport
State Reference : FO
Relative Position.Angle.Radial : 020
Relative Position.Distance.Nautical Miles : 30
Altitude.MSL.Single Value : 2300

Environment

Flight Conditions : Mixed
Weather Elements / Visibility.Visibility : 7000
Light : Night
Ceiling.Single Value : 1500

Aircraft

Reference : X
ATC / Advisory.TRACON : ZSPD
Aircraft Operator : Air Carrier
Make Model Name : Widebody, Low Wing, 2 Turbojet Eng
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Flight Phase : Landing
Flight Phase : Final Approach
Route In Use.STAR : DUMET 23F

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Experience.Flight Crew.Total : 9150

Experience.Flight Crew.Last 90 Days : 65
Experience.Flight Crew.Type : 4150
ASRS Report Number.Accession Number : 1119041
Human Factors : Other / Unknown
Human Factors : Confusion

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 9969
Experience.Flight Crew.Last 90 Days : 122
Experience.Flight Crew.Type : 7469
ASRS Report Number.Accession Number : 1119049
Human Factors : Situational Awareness
Human Factors : Confusion

Events

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

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

ZSPD ATIS reported landing on 34 and 35L. We loaded, set up, and briefed the ILS 35L from the DUMET 21A [?]arrival. During our descent to 6,900 FT, we were advised to prepare for the ILS 34 and the DUMET 23F arrival. I requested the ILS to 35L and was told to standby. We were 10 miles from Dumet and knew that we had to comply with our clearance. I selected the ILS 34, DUMET 23F arrival. I was then offered 13 transitions to choose. None of the choices appeared obvious to me for linking the arrival to the approach, so I began selecting the ones that I believed might work and then checking the route and legs page to scan the results. I was trying to close my discontinuity with the proper transition. None of the selected choices appeared to cleanly link the arrival and approach properly. As I did this drill, we were given descents to 5,900 and 4,900 FT as well as a frequency change. I again requested 35L with the new Controller and he issued a clearance to 35L. This new clearance required a full approach set up. As I turned to my chart page to set the LOC and final approach course, the Captain advised me that he had set the new (ILS 35L) frequency and final approach course in the box. I checked both as well as the ident. I never changed the FMC for the new runway. We continued with descents and vectors as well as configuring the aircraft for approach and landing. We were given a vector to final and told to intercept the localizer and advise when we were established. We looked down at the HSI and saw that our turn occurred very close to the HSI "map picture" of what we thought was our approach to 35L. We adjusted our heading to intercept final since we assumed that the Controller had "missed" the turn and made it to late. I again checked the frequency and final course as well as the ident. All items checked out. Controller then advised us that we were lined up on 34 not 35L. Missed approach. On our next attempt, once established and configured, we were cleared for the ILS and told to "maintain 170 KTS until 7 NM." My Captain then announced that he was going to autoland, as the aircraft required one within the week. At 500 FT we got a "too low flaps" call. Flaps only set at 20. Go around. Third approach ended without further incidence.

After shutdown, we determined that the following items contributed to this event.

- 1) Mind set enroute that we would be given the arrival and approach that we briefed. ANTICIPATION BIAS
- 2) Getting runway and arrival clearance different from what we had set up, in close to the field.
- 3) Needing to load new clearance in close to the field. DISTRACTION/STRESS
- 4) Difficulty loading FMC as transitions are labeled in a very AMBIGUIOUS way. No transitions were obvious choices.
- 5) Having multiple altitude clearances issued as well as frequency changes while attempting to load FMC. TASK OVERLOAD causing further DISTRACTIONS
- 6) Being issued our anticipated clearance which needed to be loaded. Manual set up of approach and "quick" brief of approach

also needing to be accomplished in very short period of time.

7) Not double checking all items, but assuming that my Captain had set up the box when he advised me that he had the new approach ready to go.

8) Not combining good listening (Runway 35L) with good looking (Runway 34 on HSI)

9) Assuming we were right and that the Controller made a mistake by turning us late causing us to miss the LOC from capturing. This assumption caused us to adjust our heading to make the HSI map picture appear correct. During our 3 hours on the ground in ZSPD I reviewed the DUMET 23F with the ILS to 34. This was the item that I got bogged down on and caused the most distraction and absorbed the greatest amount of our valuable time. I went through all of the transitions (without the previous stress). I still did not see any instant way to identify the transition that I would need, but at least figured out some pattern of how the transitions are set up, and how to make them work in linking up arrivals with approaches. It would be nice if the software on the FMC and the chart plate were more obvious for selecting the appropriate transition. We discussed the need for remaining in our habit patterns and checking the work of the other pilot when in high stress, high workload environments. How critical precise communication is, at all times. How important it is to not get frustrated with foreign controllers and the associated language barriers. That is how they do business and it will not change. Not to linger on previous errors (first approach) thus allowing them to cause you further problems (second approach).

Bottom line is this: we became time crunched and task overloaded. Listen and look at all times. This becomes much more critical when FMC programming is changed and then changed again. I was aware that a problem might develop as we were issued the second clearance to Runway 34 as I briefly considered putting in the DUMET 23F and leaving the 35L approach in the FMC. I was afraid that if we did not get our request, I would forget that I had not set in the ILS to 34 and that it would cause us problems later on. The opposite ended up occurring. We prepared for the 35L approach, because it made sense at [the late hour] with very little traffic inbound to ZSPD, as well as the fact that ATIS advised that 35L was the landing runway. We did not want to taxi from the east side of the field after a Runway 34 landing. Controllers should know that that is the runway we want since landing on 35L requires a 2-3 minute taxi to the gate verse a 20+ minute taxi from 34. This strategy saves valuable time and fuel. Controllers should be briefed to only offer the best operational runway to our flights. This would mean west side runways for all landing configurations. What the ZSPD controllers offer, only costs time and money and started a chain of events that I personally wished had never happened.

Narrative: 2

Lined up for ILS approach on wrong runway. Controller issued vectors around to correct runway. At altitude we set up for and briefed expected/normal arrival with ILS 35L and transition. While in descent we were given runway on other side of airport 34 and a different arrival. We requested runway change and began to re build the FMC. We were passing transition level down to 6,900 FT sorting through 13 transitions and getting behind. We received a frequency change, then lower altitude. Had not found correct transition yet but were then given descent and vectors to ILS 35L, runway we desired. We reset FMC and ILS frequency with a "quick" re-brief. We were given final vector to intercept ILS 35L approach. We discussed the late vector and (Pilot Monitoring) re-identified the ILS 35L frequency. (Pilot Flying) I thought the vector was late and going to take us through HSI/ILS final so I began to change my heading to align with final. Approach questioned our heading. We now realize our mistake. Vectors around for our correct ILS 35L.

When we reset FMC we reselected or just extended off the previous ILS 34. As we were on second approach we were given speed 170 KTS to seven miles. This gave us time to reflect on previous problem. We now let our past dictate our thoughts and did not complete our landing checklist and did not complete our configuration. We promptly completed a go-around. (Unstable approach). New Vectors, ILS, land, taxi and shutdown. Summary: Rushed on arrival in descent caused distraction-received our runway change but previous stress rushed the set up because we thought we were closer than we really were. Flew to a picture while watching for instruments to catch up. PROBLEM identified but we did not move on and allowed it [to] affect our next approach, which was unstable for configuration. The go-around brought us back to reality. Lessons Learned:

1. I will be rushed again. Recheck when the instruments do not match the HSI picture.
2. Biggest lesson. I will make mistakes. Once they happen, Move on and get your head back on the task at hand. Fly first, land- then debrief.

Synopsis

Air carrier flight crew experiences confusion during descent and approach to ZSPD due to a late runway change and lack of familiarity with the arrivals and approaches. Two go-arounds result, the first due to line up with the wrong runway and the second due to flap setting.

ACN: 1112901 (88 of 95)

Time / Day

Date : 201308

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 2

Altitude.AGL.Single Value : 300

Environment

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

Aircraft

Reference : X
ATC / Advisory. Tower : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Diamond Aircraft Undifferentiated or Other Model
Crew Size. Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace. Class C : ZZZ

Person : 1

Reference : 1
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function. Flight Crew : First Officer
Function. Flight Crew : Pilot Flying
Qualification. Flight Crew : Multiengine
Qualification. Flight Crew : Commercial
Qualification. Flight Crew : Flight Instructor
Qualification. Flight Crew : Instrument
Experience. Flight Crew. Total : 2421
Experience. Flight Crew. Last 90 Days : 99
Experience. Flight Crew. Type : 407
ASRS Report Number. Accession Number : 1112901
Human Factors : Fatigue

Person : 2

Reference : 2
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function. Flight Crew : Captain
Function. Flight Crew : Pilot Not Flying
Experience. Flight Crew. Total : 13820
Experience. Flight Crew. Last 90 Days : 115
Experience. Flight Crew. Type : 920
ASRS Report Number. Accession Number : 1113556

Events

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

Assessments

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

Narrative: 1

On an empty leg to pick up a medical team and patient late at night, I inadvertently landed on the wrong runway. I was pilot flying at the time, and when we heard enroute from Approach Control the runway in use, I thought I heard 17R. So from then on I was fixated on the right side. The Captain (pilot not flying), did not hear 17R, but correctly heard 17L, so started setting up for that runway, backing up the instruments to track the localizer and glideslope, even though it would be a visual approach. We both were tired, and felt rushed as usual, so the Captain did the approach briefing instead of me. As we got within approximately 10 NM of the airport we saw the beacon, and called the airport in sight. The Controller then cleared us for the visual to 17L, but I again thought I heard 17 Right. I continued descending for the right side, and even though I noticed that the glideslope and localizer were acting funny, I was too tired to register what the issue was. The Captain was

also exhausted, having been up all day long as well, so when I mentioned the issue, he agreed that something was strange with the instruments, but was not able to figure it out. Since our aircraft has a history of Instrument issues, we didn't worry about it further. As I continued towards the runway, we switched to Tower, who cleared us to land on 17L. I again did not notice the Left, and still continued lining up for 17R. When I was within 2 NM of the threshold to 17R, the Controller apparently realized our error and quickly cleared us to land on 17R. We read back the clearance, and that is when it dawned on the Captain and I that something was wrong. I continued and landed without incident, and taxied to the FBO, without further mention of an issue from the Tower or Ground Control.

Luckily there was no other traffic in the area, both on the ground and in the air. Obviously this situation could have been much worse, we were simply lucky that our fatigue did not cause a worse issue. This is the first major issue I have experienced, and consider it to be because of the inherent fatigue that is caused from a 24 hour on call schedule of the air ambulance industry. I have lost track of the number of times I have been fatigued, but have chosen to fly anyways because I am locked into an extremely punitive monetary contract with my air ambulance company. I was told by my Chief Pilot that if I called in fatigued, it would be ok once, but more than that, and I would be looking for another job. I cannot afford the monetary hit I would take if I quit, but I am way past my personal line of safety. Being called out at 9-10 pm for an all-nighter and flying until 10-11 am (after having been up all day) causes instant fatigue. This type of schedule must not be allowed to continue before something much worse happens.

Narrative: 2

Having the airport in sight the Approach Controller had cleared us for a visual approach to 17L. I had programmed the ILS 17L into the box and we had discussed the approach setup with the Copilot who was flying. In this aircraft you can't set up the captains side for the approach until you are on vector headings or it confuses the navigation/autopilot system. So after going to vectors, you must dial in the frequency, course heading and make some changes in the GPS to activate the approach. I had been heads down doing this and as I looked up the Copilot was rolling out on final. We were both wondering why we were getting erroneous errors from the glide slope and the localizer was to the left. About the time this all made sense, the Tower Controller told us we were cleared to land on 17R. We landed and in the discussion later, the Copilot told me he knew he was landing on 17R, that's what he thought we had been cleared for, yet I remember going over and restating, ILS set for 17L, and cleared for 17L. There was no other traffic in the area, so it posed no conflict with other traffic. The airport runway lighting was almost invisible, until you were lined up with them, making it more difficult to see the entire airport. I attribute this primarily on my part to fatigue. I was very tired, as we often are on this job. The flight crews are typically scheduled on call for 24 hrs for 5 days straight, (or more) and you never know when you can rest. You could be up all day, and when you are going to be get called for a 14 hour trip. It's not unusual to be up for 25 to 30 hours getting back from a trip.

Synopsis

Air Ambulance crew reports being cleared for the visual approach to Runway 17L but the flying First Officer believes that 17R is the clearance and continues to believe so until short final when the Tower changes the clearance to 17R. Extreme fatigue was cited as a factor by both pilots.

ACN: 1102365 (89 of 95)

Time / Day

Date : 201307
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ORD.Airport
State Reference : IL
Altitude.MSL.Single Value : 1000

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.TRACON : C90
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 145 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Approach
Airspace.Class B : ORD

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Design
Problem : Improperly Operated

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1102365
Human Factors : Confusion
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.Aircraft Equipment Problem : Less Severe
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 : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We were cleared for the ROYKO into ORD and set up for Runway 28. At some point after briefing the arrival and approach, we were given a new clearance to the WATSN for Runway 27L. I briefed the new approach and runway we updated the FMS and continued flying. For some reason, even though we thoroughly double checked the FMS for the new arrival, we did not verify the new runway and left 28 in the FMS. We were given the clearance to intercept the final approach course about 30 miles out and to pass GRABL at 7,000. Knowing that pilots were having trouble with dipping below the glide slope prior to GRABL, I decided to try a new technique for me (I usually fly green needles at this point) and planned to follow the FMS until GRABL then switch over to green needles. The pilot not flying backed me up with green needles on his side. I kept looking for GRABL, but because my FMS was on 5 miles I did not see the full approach, but just the fix in front of me. The pilot not flying mentioned that his needle was about 1-2 dots to the right, and I said that was strange since my FMS needle was slightly left but mostly right on. I said perhaps it was because we were more than 18 miles out? He contemplated and thought perhaps this was why. At some point ATC asked us if we knew that we were cleared for the approach because we were high. We said yes, we were aware and were coming down. At about the same time ATC called, I was going to ask the pilot not flying to put me on green needles because the approach did not "feel" right to me and that it seemed I should have hit GRABL by now. I requested he change me over and he switched my side to green needles and I was slightly to the left of course and high, but was able to get back on glide slope easily and with, to my knowledge, no disruption to ATC. The problem we discovered was that although I briefed the new runway and entered all the frequencies and course in to the RMU, and I had put in the new arrival correctly, no one had updated the runway on the FMS. Since it was a single FMS, I thought the pilot not flying had entered it in while he was entering data on it. He in fact was getting ATIS, but because he was flipping back and forth he did not notice the wrong runway was in the FMS either. I did not see the runway was wrong on the PFD because I had it to 5 miles and only had the first fix in front of me. The situation was made worse because I had decided to hand fly the approach (to keep in practice since the weather was OK) I was hyper focused on flying perfectly and so worried about going below the 7,000 at GRABL. Also ATC had issued several speed changes so I was really worried about that as well.

Threats/errors were my hyper focus on flying, losing my situational awareness, not making a complete crosscheck/verify when there was a change to the FMS, and not using the automation available to me (autopilot). The single FMS was also a threat because I could not easily look at the screen and see the wrong runway.

I should have used the autopilot when there were so many changes from ATC - the workload was increased and I should have recognized it, I should have briefed and cross checked the FMS more carefully (especially when it's single FMS,) and when things looked/feel incorrect, I should have been more vigilant in figuring out why.

Synopsis

A flight's ORD arrival runway was changed, but the FMS runway was not so the ILS did not update and the aircraft got high on glide slope before correcting to an uneventful landing.

ACN: 1090428 (90 of 95)

Time / Day

Date : 201305
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ORD.Airport
State Reference : IL
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Light : Night

Aircraft

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Check Pilot
Function.Flight Crew : Pilot Not Flying
Experience.Flight Crew.Total : 16400
ASRS Report Number.Accession Number : 1090428
Human Factors : Distraction
Human Factors : Human-Machine Interface
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Confusion

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
Experience.Flight Crew.Total : 10000
Experience.Flight Crew.Type : 28.2
ASRS Report Number.Accession Number : 1090430
Human Factors : Workload
Human Factors : Distraction
Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected.Other
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

We had three runway changes. The first runway for departure was 10L. When we called for push they changed our runway to 9R. We loaded the DATA and requested new numbers. After we pushed and started engines they changed the runway for the third time to 32L at T10. They then issued taxi instructions. We told them to standby. The F/O started the runway change checklist. About halfway through the checklist they changed our taxi instructions again. I believe this is where we were distracted. The First Officer entered Runway 32R not 32L. He entered intersection T10. While he was requesting new numbers I was looking to see how to get to the runway with the new taxi route. Ground Control wanted us to move so I told the First Officer we could taxi and when the takeoff data showed up we could look at it then. There was a line of weather approaching and our radar was questionable so I wanted to leave as soon as we could. As we approached 32L at T10 a heavy airbus departed and then an RJ. The numbers came over the printer so we completed the runway change checklist. As I was taking a quick look at the takeoff data they cleared us for takeoff. I did not catch that the takeoff data was for 32R, not 32L. Just a side note: There is no T10 intersection on 32R although the FMC allowed the First Officer to enter it and it accepted it. I called for the takeoff checklist as I taxied onto the runway and started a rolling takeoff. Just as we lined up on the runway heading and were verifying the runway we had a NAV SHIFT on both NDs. I think this confused me a little and I responded with runway verified as I looked at the runway heading not the runway on the ND. I always look at both (except this time). I handed the aircraft over to the First Officer. He pushed the throttles forward and said check thrust. Just as I took the throttles we got an EICAS message that said FMC runway disagree. I looked at the ND and knew immediately what had happened. We were picking up speed because we were so light (60,000lbs under landing wt) and I knew the runway was 9,000 feet long so I chose to continue the takeoff. The last 5 times I was in ORD I took off on Runway 32L at T10 so I knew it was safe. Maybe not the best idea but that's what I did. If I had been unfamiliar with the runway I would have rejected the takeoff. The numbers for all 3 runways that night were the same. Runway 9R is only 7,967 feet and 32L at T10 is almost 9,000 feet so I knew it was safe to continue the takeoff. Don't get me wrong. I am EXTREMELY upset about this. I can't believe I let this happen. Looking back I see several mistakes that were made. I also broke some of my own personal rules that I use to not let things like this happen. Never again, I hope.

Narrative: 2

As we were aligning with runway, Captain turned over aircraft control to me as we began rolling takeoff. About that time I announced Runway 32L verified. I looked at map and saw a minor map shift which caught me off guard. I then pushed up throttles and about time I hit TOGA, we got an FMC Runway Disagree warning. That is when I noticed 32R on map. I had continued to follow/push throttles during this time. Because of our very light weight (41 SOB and 52k fuel), we were accelerating fairly fast. Captain acknowledged warning and told me to continue. Takeoff and climb out were normal, as was remainder of leg to our destination. Passing 10,000 feet, we discussed runway situation. We pulled up takeoff page and it was populated with 32R/T10. We found this odd considering takeoff data didn't reflect that but it populated takeoff speeds. I took a picture of it. We discussed chain of events that led to wrong runway in box. Three runway changes, a Ground Controller asking us to taxi more than once, and improper verification of takeoff data both of us. We had three separate takeoff data and because we had taken off from this runway and intersection before, led the both of us to not stop the aircraft (and chain of events) and completely verify proper runway in FMC. We both agreed that we allowed ourselves to get rushed both by the Ground Controller and by the potential thunderstorms to south and west. The whole time when Runway 32R was selected, I believed I was seeing 32L. The fact I entered it twice is baffling to me. I also fell prey to fact box accepted and sent a takeoff data when I requested 32R/T10 that doesn't exist.

Synopsis

An air carrier crew continued the takeoff at ORD with the incorrect takeoff runway in the FMC after ATC issued several taxi route changes along with three runway changes.

ACN: 1075651 *(91 of 95)*

Time / Day

Date : 201303
Local Time Of Day : 1201-1800

Place

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

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class B : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Q400
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class B : ZZZ

Person

Reference : 1
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Function.Air Traffic Control : Departure
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1075651

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Air Traffic Control
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Landing Runways 34L and 34C, departing on Runway 34R. The Final for [Runway] 34C was getting strung out to about a 20 mile final when a B737 checked on frequency on a west downwind, I advise him of the length of the final for [Runway] 34C and ask him if he would prefer a shorter final to [Runway] 34L, they replied affirmative and told him to expect [Runway] 34L. When I turned the B737 base, I instructed him to report sighting a DH8D landing 34C, eventually he did and I instructed the B737 to maintain visual separation from the DH8D landing [Runway] 34C and you're cleared for the visual approach for [Runway] 34L. The B737 accepted visual separation and read back Visual Approach Runway 34L. Another Air Carrier was trailing the B737 and on approach to [Runway] 34C, I issued traffic and when the trailing Air Carrier reported the B737 in sight I instructed him to maintain visual separation, and the B737 was landing [Runway] 34L and you, (trailing Air Carrier), are landing on 34C, all read back correctly, and sent to Tower frequency. The B737 flew threw the final for [Runways] 34L and 34C and then came back to my frequency saying he's deviating for traffic. Both aircraft go around, and I am instructed to issue the TRACON phone number to the B737. When the Captain of the B737 spoke to the Operations Manager, he said he knew he was cleared for [Runway] 34L and read it back, but the Copilot (flying the aircraft) had it in his mind he was landing Runway 34R and crossed over both finals of 34L and 34C, and lined up for 34R. The Captain said he told the Co-pilot he was lined up for the wrong runway and tried to adjust, but by that time trailing Air Carrier had closed the gap and was very close. The B737 didn't tell me, or the Tower about this maneuver, so no one knew what he was doing until he came on my frequency announcing his now deviation to the east. When the Captain of trailing Air Carrier called the TRACON he told the Operations Manager he was going to file a NMAC.

Synopsis

TRACON Controller described a conflict event when traffic cleared for an approach to Runway 34L but flew through the final for Runway 34L and 34C resulting in a declared NMAC. Pilot error was listed as the causal factor.

Time / Day

Date : 201303
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DEN.Airport
State Reference : CO
Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 50
Light : Dawn
Ceiling.Single Value : 30000

Aircraft

Reference : X
ATC / Advisory.Tower : DEN
Aircraft Operator : Air Carrier
Make Model Name : Widebody, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class B : DEN

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 4700
Experience.Flight Crew.Last 90 Days : 0
Experience.Flight Crew.Type : 270
ASRS Report Number.Accession Number : 1073138
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were cleared for a visual approach for Runway 17R at Denver. We were descending from 9,000 feet northeast of the airport on a heading to intercept the localizer. My Captain set 6,000 feet in the Alt Alert and continued down. I set 7,000 feet stating it was as low as we could go at Joules and it was 8,000 feet minimum outside where we would intercept. He said he was visual and wanted to intercept from below. As I tried to understand what he was going to accomplish he rolled out on Runway 17L and commented, "Why no localizer?" I said it was the wrong runway [and we needed] to come right. Checked the frequency and inbound course. He made a radical turn back to the west. And by the time I caught up ATC questioned our altitude, [which was] 1,000 feet. I punched the Altitude Hold button and responded to the Controller that we would level. The Captain disconnected the autopilot and flew the visual approach without another problem. I think I should have insisted on the the 8,000 feet outside of Joules (the other way point one out from Joules), but became concerned with the lateral issue of intercepting the localizer. Another factor was that the Captain was getting a Line Check from a Check Airman on board and had not flown in 4 months. He had failed a simulator check prior to this flight, I believe. I had not flown in 4 months either and had only two or three flights total in the right seat. I am a downgraded Captain. It would have been better to pick a more seasoned, current First Officer. I also think that not flying into DEN in 8 years made it challenging.

Synopsis

A First Officer with little experience in type reported that the Captain descended to 6,000 feet before JOULES intersection and lined up for DEN 17L instead of 17R, but corrected to final as ATC questioned the aircraft's altitude.

ACN: 1043338 (93 of 95)

Time / Day

Date : 201210
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : SNA.Airport
State Reference : CA
Relative Position.Distance.Nautical Miles : 0
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Night
Ceiling.Single Value : 35000

Aircraft

Reference : X
ATC / Advisory.Tower : SNA
Aircraft Operator : Air Taxi
Make Model Name : Learjet 35
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Takeoff / Launch
Route In Use : Direct

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Captain
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 3200
Experience.Flight Crew.Last 90 Days : 10
Experience.Flight Crew.Type : 1050
ASRS Report Number.Accession Number : 1043338
Human Factors : Distraction
Human Factors : Fatigue
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 2150
Experience.Flight Crew.Last 90 Days : 42
Experience.Flight Crew.Type : 175
ASRS Report Number.Accession Number : 1043324

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight

Assessments

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

Narrative: 1

In night VMC conditions we lined up on and inadvertently took off from the wrong runway. Santa Ana has parallel runways, 19L and 19R. We mistook 19L for 19R. 19L is shorter (2,887 FT) and closed when the Tower is not operating. 19R is the longer of the two (5,701 FT) and the preferred runway.

Upon reaching the end of the taxiway we turned onto 19L, I remember seeing and verifying the runway numbers but it did not register to us that I had said 19L when we, indeed, needed to be using 19R. I lined the plane up, stepped on the brakes, stood the power up and released the brakes. We used nearly every bit of the runway for takeoff. We did not, however, use any portion of the 400 FT overrun.

It wasn't until we cleaned the plane up after our initial climb that we discussed the seemingly short takeoff run, discovered our error and realized the seriousness of the situation and the potential catastrophe we averted. It was a shock to both myself and my First Officer that we both had failed to properly identify our intended runway of use.

The problem was exacerbated by the lighting conditions, our lack of sleep, our failure to use the airport diagram to our advantage, our failure to recognize the runway markings and failure to back one another up as a fail safe. I had been awake for about 19 hours prior to the occurrence. I suspect the First Officer had been up at least as long. Although the outcome was successful it was a scary lesson to learn.

Always, always use the airport diagram before and while taxiing, always verify that the runway being used is in fact the runway of intended use, always take enough time to ensure a thorough thought process has been used to determine the correct course of action. I narrowly averted a potential disaster and the lessons learned are permanently seared into my memory.

Narrative: 2

...we attempted to call SCT Departure on 128.1 to get our IFR release to depart. After several failed attempts on both aircraft radios to contact Departure Control the decision was made to re-attempt in the air. We switched over to CTAF and lined up and departed Runway 19L...

Synopsis

After an already long day and facing one last leg departing early in the morning hours the flight crew of a Lear 35 took off from the very short Runway 19L at SNA vice the twice as long 19R as intended.

ACN: 1042772 (94 of 95)

Time / Day

Date : 201210
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : SCT.TRACON
State Reference : CA

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
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.Localizer/Glideslope/ILS : Runway 24R
Flight Phase : Initial Approach
Route In Use : Vectors
Route In Use.STAR : RIIVR2

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Design

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1042772
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
ASRS Report Number.Accession Number : 1043059

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Aircraft
Primary Problem : Procedure

Narrative: 1

We had briefed the RIIVR2 Arrival and ILS 25L approach. Passing GRAMM we still had not been handed off to SoCal Approach. Approaching RUSTT we were handed off to Approach and cleared for RIIVR2 Arrival and ILS 24R approach. This left us high and briefed for the wrong runway. Because we would not be able to satisfy RIIVR crossing restriction, we requested and received relief.

While setting up and briefing ILS 24R we passed RIIVR and realized we were navigating to LUVYN still on the ILS 25L approach track. We had insufficient time to enter the ILS 24R procedure in to the FMS and complete the approach briefing for the new runway prior to the IAF due to the late ATC clearance. We requested and received a heading to intercept the ILS 24R approach and were then cleared for the approach.

The approach and landing were uneventful. Approach Control did not advise of any loss of separation.

Narrative: 2

Light traffic into LAX, so ATC allowed us to keep our speed up but then they seemed behind the ball on issuing clearances. We were issued step-down descent clearances initially and were told to expect GRAMM at FL180.

I was already in the [mental] "get the plane down to VNAV PATH" mode. I normally brief my non-flying partner that "if we get a different runway, you do the FMS while I make sure we comply with altitude, speed and course," but I did not say that this time. I was still in altitude-chasing mode when the CA noticed we hadn't changed the FMS to 24R. There was no time to re-brief the new approach and I failed to change the FMS or ask the CA to do it.

Stop issuing late runway changes at LAX. This is something that happens over and over. 90% of the time there is plenty of time to make the changes, but 10% of the time it's one of those "where are we going" moments.

Synopsis

Late descent clearances and an unexpected runway change inbound to LAX on the RIIVR2 STAR overtaxed the flight crew of a B737-800 and required Approach Control vectors while the newly assigned ILS was programmed and activated.

ACN: 1035852 *(95 of 95)*

Time / Day

Date : 201209
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LAS.Airport
State Reference : NV
Altitude.MSL.Single Value : 8000

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.TRACON : L30
Aircraft Operator : Air Carrier
Make Model Name : MD-82
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Initial Approach
Route In Use.STAR : GRNPA
Airspace.Class B : LAS

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1035852
Human Factors : Confusion
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

Planned TYSSN3 arrival in LAS; ATC cleared us to descend via TYSSN3 RNAV arrival. At KADDY, after starting a descent to 10,000 FT, ATC cleared us to maintain 12,000 FT and to contact LAS Approach. Approach gave us a vector at TYSSN and informed us that we would fly the GRNPA1 RNAV arrival. After several vectors and descend to 8,000 FT we were cleared direct to TRROP at 5,200 FT at 210 KTS; first point for us on the arrival. After that clearance we were cleared to "intercept the 19R RNAV approach off of the GRNPA1 arrival." There are NO points on the GRNPA1 arrival that are on the 19R RNAV approach. The last point on the GRNPA1 arrival is LEMNZ and you must fly through the final approach inside the FAF to get to it. I think this is an illegal clearance. We were told by Approach to contact LAS Tower. We asked LAS Tower about the clearance and were recleared the visual approach to 19L.

The landing was uneventful. After landing I called the LAS Approach Control Supervisor and was told that was a legal clearance for the 19R RNAV visual approach. I could not find any information on a 19R RNAV visual approach.

Remake the GRNPA1 arrival to have a longer transition to the 19 runways or delete it. Both 19R and 19L RNAV arrivals have the exact same points up to the FAF. The MAP points are the only differences in the approach. Possible problems in the future of having the wrong approach loaded in the GPS and landing on the wrong runway.

Synopsis

An MD-82 Captain believed a LAS TRACON clearance to intercept the GRANPA RNAV STAR at TRROP, cleared for the RNAV 19R approach was illegal.





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ACN: 1880912 (1 of 20)

Time / Day

Date : 202203
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 35000

Environment

Flight Conditions : IMC
Light : Night

Aircraft

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Malfunctioning

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 16539
Experience.Flight Crew.Last 90 Days : 238
Experience.Flight Crew.Type : 9539
ASRS Report Number.Accession Number : 1880912
Human Factors : Troubleshooting
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

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 : 966
Experience.Flight Crew.Last 90 Days : 143
Experience.Flight Crew.Type : 625
ASRS Report Number.Accession Number : 1880919
Human Factors : Situational Awareness
Human Factors : Confusion
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

[Our flight] from ZZZ-ZZZ1 had a MEL for the right FMC. It was inoperative but not collared or required to be per the MEL. The flight was uneventful and normal until about 80 miles west of ZZZ2. The left FMC then failed, the auto-throttles failed, VNAV went to Altitude Hold, and the Autopilot went into CWS Roll mode. ATC was notified we had a dual **FMC failure** losing all long range NAV and we requested radar vectors until further notified. The ATC request was granted. First Officer was great at making suggestions for our situation and recommended we requested priority handling to see if the other FMC still worked. First Officer and I considered our options and we made a plan. Our workload was increased and we had lost our normal mode of navigation so we [requested priority handling]. We consulted the Quick Reference Handbook, but considered the fact that the MEL effectively prevented us from potentially using the other FMC if it did work due to the restriction to not move the switch from the operative side for all "phases of flight". The Quick Reference Handbook also did not consider the fact we had a MEL. In light of our situation, and priority handling, I decided to use my Captains authority to see if the right FMC was working normally. The FMC source select switch was placed to normal and it was confirmed the right FMC worked normally and then the switch was placed to both on the right FMC. The rest of the flight was uneventful. The [priority landing] was continued all the way to the gate since we had to deviate from the MEL using [the] Captains authority. The passengers were never notified or made aware of the above issue. The Fire Rescue vehicles were requested to stay out of sight. The Flight Attendants were made aware of our situation in case the fire trucks did decide to converge on us, but were briefed that the flight was operating mostly normal.

Narrative: 2

The airplane came into ZZZ with a write up for dual FMC fail on ground during taxi in. The left FMC was changed out earlier in the day for a different issue. Maintenance reset the FMCS in ZZZ and did some tests and thought the right FMC had failed so they deferred the right FMC. MEL was complied with and the FMC switch was placed in both on left position. Once in cruise, and near ZZZ2, we were presented with a FMC caution light and flags on the Navigation Display. The auto throttle disconnected. Captain was Pilot Flying. First Officer was monitoring. We both noticed the failure at the same time and had somewhat expected this to happen since there was history of this. Pilot Flying assumed control of the airplane in anticipation that the Autopilot would kick off. A heading was requested from ATC and the Autopilot remained on and a known power setting was set. We referenced the Quick Reference Handbook but the Quick Reference Handbook did not fully apply to the situation since we were already on both of left for the FMC. The Captain requested priority handling out of caution as our workload had increased and we and lost all long range NAV. Captain and First Officer both questioned the validity of the

maintenance deferral and felt that it would be best to try the deferred right FMC. The Captain exercised authority to deviate from the MEL and while still in heading select, we positioned the FMC switch to both on right. Within 10 seconds the right FMC came up and appeared valid. We agreed that the best course forward was to continue to operate on FMC right. The crew exercised excellent CRM. The Captain showed excellent leadership effectiveness in handling the situation calmly and methodically. Both crew exercised excellent situational awareness as we both noticed the fault and were able to quickly react. We had great communication and the Captain welcomed all input from the First Officer. Monitor Crosscheck was good as we verified that the right FMC did indeed present valid data. Workload management was good as we split tasks and kept each other in the loop. Captain temporarily gave control of the airplane to the First Officer while he managed the situation with ATC, Dispatch, and Maintenance Crew. We used the highest level of automation available during each phase of the event. I honestly do not think I would handle the situation any differently next time except maybe query maintenance in ZZZ more thoroughly as I did not have a great gut feeling about the deferral. However, we knew that conventional NAV was available as well as help from ATC with many divert options available encountered as we were not over water.

Synopsis

B737 flight crew reported a failure of an FMC with the other FMC already on MEL. The Captain exercised his authority to reactivate the MEL'd FMC and continued the flight to destination airport.

ACN: 1878321 (2 of 20)

Time / Day

Date : 202202
Local Time Of Day : 0001-0600

Place

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

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Turbulence

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B757-200
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Flight Phase : Climb
Airspace.Class A : ZZZ

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

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 : 1878321
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Confusion

Person : 2

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

Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1878595
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

During climb-out at approximately FL260, both FMC's went blank, [and the] Captain's PFD (Primary Flight Display) had numerous yellow flags. Raw data attitude, speed, and altitude indications were not affected when compared to the standby attitude and FO's (First Officer) instruments, based on the call-outs he was making. AT (Autothrottles) disconnected; autopilot remained engaged but in a degraded state. Complied with QRH for L FMC FAIL EICAS message. Captain's PFD returned to normal after QRH. L FMC FAIL and FMC MESSAGE EICAS Message remained entire flight. During this issue we also had FMC R OUTPUT LOSS scratchpad message. SINGLE FMC R OPERATION scratchpad message at block-in. After completing the checklists and re-automating the airplane, we confirmed we had good lateral navigation from the FMS, but no vertical navigation returned. After discussing why, I noticed the zero fuel weight did not come back after the R FMC was reselected. After re-entering the zero fuel weight, all of the VNAV capabilities returned and operated normally. We continued to ZZZ1 without any more issues. Not sure what caused this issue. We thought originally [that] we had a lightning strike, but ZZZ1 Maintenance found no evidence of one. There was a lot of static electricity and St. Elmo's Fire on the windscreen prior to the **FMC failure.**

Narrative: 2

During climb-out passing approximately FL260 both FMC's went blank and numerous yellow flags appeared on the left and right PFDs (Primary Flight Display). Near simultaneously, the AT (Autothrottles) disconnected but the autopilot remained engaged in a degraded state. The raw data of pitch and airspeed remained intact so the CA (Captain) continued climb utilizing that information. We notified ZZZ Center that we had lost navigation capability and requested to maintain current heading and climb to FL390 while we assessed the situation. We ran the QRH for the following EICAS messages: L FMC FAIL and FMC MESSAGE. The CA's PFD returned to normal once he switched to FMC-R per the checklist. After completing QRH checklists, the L FMC FAIL, FMC MESSAGE remained displayed [for] the remainder of the flight. Additionally, we had an FMC R OUTPUT LOSS scratchpad message and SINGLE FMC R OPERATION scratchpad message at block-in. After running all the checklists, the CA re-automated the airplane and we determined that lateral navigation was intact but were suspect of vertical navigation as VNAV was not providing valid data. After consulting with Dispatch and Maintenance Control, we decided to continue to destination. We did not declare an emergency but discussed our vertical navigation limitations with each ATC controller enroute. We did not have any further issues during enroute, arrival and landing at ZZZ1. I originally suspected a lightning strike as we were climbing through heavy precipitation with a few white flashes just prior to the event. However, upon landing at ZZZ1, Maintenance personnel did not see any obvious lightning strike damage. Therefore, I surmise that there was an electrostatic event that occurred as there was significant St. Elmo's Fire on the windscreen just prior to and during the event.

Synopsis

B757-200 flight crew reported the FMCs failing during the climbout.

ACN: 1871835 (3 of 20)

Time / Day

Date : 202201

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person

Location Of Person.Aircraft : X
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 10000
Experience.Flight Crew.Last 90 Days : 102
Experience.Flight Crew.Type : 102
ASRS Report Number.Accession Number : 1871835
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition

Assessments

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

Narrative: 1

At cruise, experienced a dual **FMC failure** over RAAKK intersection. FMC's powered back on after about one minute. Reported to ATC and they verified we were safely on course. ELB (Electronic Logbook) entry made. Flight continued normally.

Synopsis

Pilot reported experiencing a momentary dual **FMC failure** during cruise.

ACN: 1790145 (4 of 20)

Time / Day

Date : 202102
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZZ1.ARTCC
State Reference : US

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZZZZ1
Aircraft Operator : Air Carrier
Make Model Name : B737-800
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121

Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class A : ZZZZ

Component : 1

Aircraft Component : EICAS/EAD/ECAM
Aircraft Reference : X
Problem : Malfunctioning

Component : 2

Aircraft Component : Central Computer
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 : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1790145

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.Flight Crew : Diverted
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Prior to departure Maintenance was called due to FOs (First Officer's) MAP failure on navigation display. Maintenance did a reset and signed off logbook as reset ok for service. FOs MAP was restored. Approximately 2 hours into flight and approximately 30 mins from ZZZZ1 enroute to ZZZZ, FOs MAP failed, followed by Captain's CWS (control wheel steering) fail, autothrottle failure, and SINGLE FMC operation message. Very shortly later, approximately 10 seconds, LNAV/ VNAV failed, both FMCs failed. Opposite autopilot selected, autopilot B. Captain's CWS was restored and one FMC was restored allowing for the engagement of LNAV/VNAV, and autothrottle was restored. FOs MAP still indicated a failure. Within approximately 60 seconds we had another dual **FMC failure**, followed by another LNAV/ VNAV failure, autothrottle failure, Captain's CWS failure. At this time with over two hours left to ZZZZ and navigating by raw data we decided it was the best course of action to divert to ZZZZ1 where the weather was favorable for landing with these navigational failures. We notified ZZZZ1 Center of our issues and intent to land in ZZZZ1. Around this time the Captain's FMC was restored automatically and we were once again able to navigate with LNAV/VNAV and the autothrottle and Captain's CWS was restored and autopilot was operational. As we neared ZZZZ1 we informed ATC of the need to hold to burn off fuel due to being overweight for landing which took approximately 10 minutes. The remainder of the flight was uneventful, we landed on Runway X and commenced the ILS approach in VFR conditions. The FOs MAP warning flag remained in view for the rest of the flight. My FO, Fas (Flight Attendants) did outstanding jobs. Great communication. ZZZZ1 ATC also very professional and helpful. In the 21 years I've been on the 737 both as an CA (Captain) and FO I've never experienced a dual **FMC failure**. I've experienced several single **FMC failures**, but not dual failures leading to several other navigation failures.

Synopsis

Captain reported a diversion to a precautionary landing following the loss of both Flight Management Computers which caused the loss of Cockpit Display Units and most navigation systems.

ACN: 1711758 (5 of 20)

Time / Day

Date : 201912

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 : B747-400
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Flight Phase : Cruise
Airspace.Class A : ZZZ

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1711758

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Approximately 3 hours after takeoff, STAR & APPROACH updated. We noted PROG P2/2 no destination ETA and FUEL REMAINING values. Also, no fuel values for fuel used on engines 1-4. Wind ALT & OAT inserted. Shortly thereafter, Captain LEGS page blanked then restored. Then DUAL **FMC FAILURE** - Right FMC VTK, then LNAV- VNAV-ATS failures., with CDU message TIMEOUT-RESELECT displayed. As Pilot Monitoring, I reinserted data into perf init., route, legs pages. Normal operation for a while, then thereafter, 3 more dual **FMC failures**. After 4th failure, I was unable to restore FMC ops. QRH CL accomplished. ATC was advised. ATC RVs requested. Normal flight thereafter today VMC APPROACH Runway XL ZZZ.

Suggestions: Upgrade legacy FMCS to NG. Continuous training.

Synopsis

B747 Captain reported multiple FMS failures that resulted in a diversion.

ACN: 1707658 (6 of 20)

Time / Day

Date : 201912
Local Time Of Day : 0601-1200

Place

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

Aircraft

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1707658

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Shortly after departure from ZZZ we were given radar vectors for the climb after we notified ATC that we were unable to make the next altitude at the next fix on the departure.

About five minutes into the climb there was a scratch-pad message re-syncing other FMC (Flight Management Computer) followed by timeout reselect, autothrottle disconnect and EICAS message and autopilot disconnect and EICAS message.

After reselecting FMC everything appeared normal and I reselected the Autopilot and connected the auto throttle and reengaged VNAV (Vertical Navigation).

Shortly thereafter same happened again with the loss of all initial information in the CDU (Control Display Unit) and no waypoints in either route 1 or 2 and a magenta line through VNAV mode annunciation. The FO (First Officer) notified ATC that we were working a "problem" and received further climb and heading instructions. The FO loaded all the information back into the CDU and I reengaged the automation. Received a direct to a fix on our route from ATC and continued the rest of the flight without further incident.

I think we had a dual **FMC failure** where the left one recovered fast enough to not trigger an FMC EICAS message.

Synopsis

B747 flight crew reported a possible dual FMS failure during climb that resulted in a course deviation.

ACN: 1689367 (7 of 20)

Time / Day

Date : 201910
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Flight Phase : Cruise
Airspace.Class C : ZZZ

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Experience.Flight Crew.Total : 11307
Experience.Flight Crew.Last 90 Days : 145
Experience.Flight Crew.Type : 8075
ASRS Report Number.Accession Number : 1689367
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Approaching ZZZ we had a Dual **FMC failure** for about 32 minutes. We completed QRH for dual **FMC failure**. Advised ATC and [Maintenance Control]. Finished flight with conventional navigation. VOR to VOR and vectors for an ILS in ZZZ1.

Synopsis

B737 Captain reported Dual Flight Management Computer failure in flight.

ACN: 1650919 (8 of 20)

Time / Day

Date : 201905
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 26000

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B747-400
Crew Size.Number Of Crew : 3
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Cruise
Flight Phase : Climb
Route In Use : Direct
Airspace.Class A : ZZZ

Component

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

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1650919
Human Factors : Troubleshooting
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1650924
Human Factors : Situational Awareness
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Diverted
Result.Flight Crew : Landed in Emergency Condition

Assessments

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

Narrative: 1

On climb through 26000 feet the left FMC failed followed immediately by the right. We reselected both FMC's after a minute delay when FMC prompts appeared on both CDU's. Reengaged autopilot and auto throttle. At level off both FMC's failed again

and we went through the same procedures. A while busy with that the aircraft started climbing rapidly in VNAV PATH out of 34000 feet. I disconnected all automation and returned to 34000 feet, called for left AP command, ALT HOLD and SPD. I did not reselect VNAV for the remainder of the flight. ATC did not mention the off altitude condition to us. 5 minutes later FMCs again both failed. Reselected them. Never got a chance to run the dual **FMC failure** checklists before the "timeout reselect" prompts appeared in the CDU scratch pad at this time.

I then turned over the aircraft to the Pilot Monitoring and initiated a conference call to Dispatch, Maintenance Control and the Duty Pilot. I recommended we divert to ZZZ for repairs. They concurred and we got a reroute after reporting the **FMC failures** and coordination to ATC. Along the way to ZZZ approximately 3.5 hours flight time the FMC's failed no less than 12 times, and we reset after timeout reselect appeared on the CDU's. Each time the LNAV faulted along with the auto-throttle. We went to HDG select and manual thrust until the FMC's reset. We never got off course more than 1 mile en-route. At one point the FMC's took so long to recover we got through the whole Dual **FMC failure** checklist and then the FMC's recovered. I deemed it prudent to reselect them on as it reduced the workload while they were in working order and we were in RVSM airspace.

We did not have more than the one altitude excursion at level off and course excursion less than a mile while in HDG SEL temporarily. We stayed in Alt Hold SPD and LNAV for most of the flight. VNAV seemed to make the problems worse since it strayed off altitude after our level off so we left it off and used FLCH for the remainder of the flight. Upon landing with no corrective action decided on by MX, scheduling gave us less than a 2 hr ground time and then to proceed ZZZ-ZZZ1, which would have put our crew at 20 hours of duty. I then called fatigue followed by the other Captain as well as I did not feel fit or safe to continue. Scheduling set us for 10 hrs rest in ZZZ but on arrival in my room I called scheduling and requested 18 hours rest which was granted. Be advised this exact malfunction was written up on 3 legs in the past 2 weeks prior to our flight. Each corrective action was pulled L and R FMC CBs and reset ops check good. We asked the mechanic prior to departure on our first flight of the day ZZZ2 to ZZZ3 about all the repeats and he said "[Company] told him to reset the breakers on both FMC, run a test and if it passed sign it off, and keep the airplane moving" We had no problems on the first leg with the FMC's it was only on the second leg of the day ZZZ3 ZZZ4 when the problems appeared.

Next time I see repeat write ups I will ask to see the maintenance manual for the proper corrective action on the malfunctioning system. I no longer believe just resetting system breakers is the cure all for an ailing system. I should have dumped fuel to maximum landing weight and returned to the departure airport. Even though the FMC's were working most of the time, the root cause of the problems with them could have been shorted wiring which would have led to an electrical fire next. One of the first things Maintenance Control asked if we had reset the FMC Circuit Breakers. In flight, really? I should have demanded a route overland or closely offshore, the reroute we got from Dispatch took us well offshore. I cut some off that off by asking direct to the arrival about halfway through the flight. It wasn't as safe as remaining close to the Continental U.S. Maintenance needs to actually fix the airplanes in this fleet vs. doing the MINIMUM required to get rid of the discrepancies. I'm sure it's not their fault, they are getting orders from HQ "to keep the airplanes moving". Lives, customers and the existence of this company is being put under unnecessary risk. The company states that safety is priority one. In my experience, increasingly I'm finding on the line this is not the case, and we're raising the risk of another fatal accident in the near future.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

A Flight Crew reported diverting due to malfunctioning FMC's.

ACN: 1650707 (9 of 20)

Time / Day

Date : 201905

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 26000

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B747-400

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Climb

Airspace.Class A : ZZZ

Component

Aircraft Component : FMS/FMC
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 : First Officer
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1650707
Human Factors : Troubleshooting
Human Factors : Human-Machine Interface

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Diverted

Assessments

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

Narrative: 1

Aircraft had been written up several times for dual **FMC failure** en-route and subsequently had been signed off by Maintenance by resetting FMC circuit breakers and clearing any messages. We asked Maintenance this morning in ZZZ1 after the aircraft had been written up for dual **FMC failure** what their fix was going to be. Was told and I quote, "Maintenance Control wants us to reset it and get this plane out on time." None of us were happy with that statement, but given the message was cleared and both FMC's were working normally we decided to take the airplane. Departed ZZZ1 to ZZZ2 and all was fine, we programmed box to have entire route including a return into ZZZ1 in case of both FMC's failing we could navigate back to ZZZ1 with minimal input. Flight concluded without any anomalies. ZZZ2 to ZZZZ is a different story, around 26,000 feet we received an Auto-throttle Autopilot caution and dual **FMC failure**. We couldn't even finish checklist and both FMC's came back operational. Happened same thing 2 more times during climb and that's when we all decided that we were not crossing [ocean], Class 2 navigation with intermittent FMC's. Contacted Dispatch via satellite communication, spoke with Dispatch, Duty Pilot and Chief Pilot to discuss our options and all came to same conclusion. ZZZ was our best option. We got at least 13 different times a **FMC failure** or dual **FMC failure**. We were able to fully complete checklist for DUAL FMC fail once, and the FMC's would eventually come back online. Ran all applicable checklists, backed up the arrival and connected the approach in the box to ensure if it failed for good we had ease of navigation. Had our flap speeds all figured out in case and had a good crew synergy working.

Given our incident in ZZZ3, I'd suggest we no longer reset circuit breakers and get plane out on time as per Maintenance Control's quote from ZZZ1 this morning. This is not the first time this has happened, it was a multi-repeat item and a big ticket item as well. For future reference I will insist that the problem be addressed and looked at in greater detail before departing. The airplane has several "repeat"/chronic issues that are being reset and sent on their way.

Synopsis

B747-400 flight crew reported dual **FMC failure** multiple times on the same flight.

ACN: 1614810 (10 of 20)

Time / Day

Date : 201901
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC
Light : Night

Aircraft

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 20000
ASRS Report Number.Accession Number : 1614810

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Landed As Precaution
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Dual FMC (Flight Management Computer) failure. We thought the FMC's would come back in a minute or two, but they did not. We called Center and asked for vectors back to [departure airport], explaining our dual **FMC failure**. We went through QRH procedures, but were unable to recover the FMC's. CA (Captain) screen was blank. FO (First Officer) could see airport identifiers on his. We had a VTK (Vertical track) and Landing Alt amber lights on the PFD (Primary Flight Display). About 35-40 minutes later, ACARS messages started printing indicating to me, the aircraft thought it was on the ground. I got a close-out deleted and expired messages. I had selected both FMC's to FO side as per QRH with that side giving best information. After the close out deleted message, I was able to reload the Perf Init page and everything came back to normal, except the amber landing alt and no amber hook on CA side. We continued to [departure airport] and landed uneventfully.

I suspect the aircraft had a failure which may have been caused by system failure indicating we were on the ground. Or perhaps that was a result of another failure with the FMC's.

Synopsis

B737-800 Captain reported returning to departure airport after experiencing a dual **FMC failure**.

Time / Day

Date : 201808
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZZ.ARTCC
State Reference : FO

Environment

Flight Conditions : Marginal
Weather Elements / Visibility : Rain
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZZ
Aircraft Operator : Air Carrier
Make Model Name : B747-800 Advanced
Operating Under FAR Part : Part 121
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Flight Phase : Climb
Route In Use.SID : ZZZZZZ

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1570079

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 : 1570080
Human Factors : Troubleshooting
Human Factors : Workload

Person : 3

Reference : 3
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
ASRS Report Number.Accession Number : 1570081
Human Factors : Communication Breakdown
Human Factors : Workload

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

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Observer
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : FLC Override Automation
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Just after takeoff we had a dual **FMC failure**. Captain was pilot flying and took control of aircraft while both First Officers ran checklists and com. Captain asked NFP (non-flying pilot) to quickly tell ATC we have lost all navigation capability and get a vector. Busy frequency and when able to broadcast he was unable to transmit. Observer FO (First Officer) took communications and told ATC. By this time ATC could see we were off course and asked if we had terrain ahead in sight and we replied yes and could maintain clearance. CA (Captain) started a turn to [the] right. ATC had us turn back to heading 140 for a moment and then 090 climb to 9,000 feet. At this time we got basic Nav back per checklist and continued on course. Contacted Dispatch, [Maintenance], [Chief Pilot] via SATCOM. Elected to continue at least to [an alternate airport] if not all the way to [our destination], had lots of fuel to burn or dump regardless. We had concerns about class 2 Nav without FMC limitations in Vol 1. About 1hr into flight recovered L FMC only and continued to [our destination]. Heavy rain [at origin airport] and we suspect that water got into E/E [Electrical/Electronic] compartment?

Be more proactive during heavy rain to ensure ground crews and flight crew keep L1 door shut. Now that myself and [the] crew have experienced a dual **FMC failure** at one of the worst times of a flight, I will certainly be better prepared in the future. Thankful for a good experienced crew and CRM. We talked it through once established on a safe heading and altitude and got the company personnel involved via SATCOM.

Narrative: 2

I was in the observer's seat. There had been moderate to heavy rain from the time we reached the aircraft until departure. On takeoff roll, I noticed the flaps indication on the upper EICAS [Engine Indicating and Crew Alerting System] flash to the expanded view, momentarily, three times. I took note, and decided to wait until airborne to mention it. Shortly after takeoff, at about 1,000 feet, we got the EICAS message "NO LAND 3." Shortly thereafter, several more EICAS messages appeared, including AUTOTHROTTLE and AUTOPILOT. Captain manually disengaged the AP (autopilot), FO (First Officer) cycled the FDs (flight displays). Captain attempted to re-engage the AP, but by then the CDUs (control display panels) read "TIMEOUT-RESELECT" and all of the Nav data had dropped from both NDs (navigation displays). Captain advised that his plan was to continue hand-flying, and asked the FO to advise ATC that we needed a vector. FO tried to, but found that he was unable to transmit. I was able to tell them that we needed a vector because of a navigation system failure, but there was some confusion. The controller didn't give us a vector right away, but advised that we were below the minimum altitude for that sector, and asked if we could see the terrain and maintain clearance. I advised that we could, and he gave us a heading of 140. After a few moments, he said that we were now above the minimum altitude and gave us a new heading of 090, and I believe an altitude of 7,000. By now the FO in the right seat had the use of the radio again, and we continued the climb. He also began running the ECL (Electronic Checklist), which regained us the use of the flight plan and the AP, but not the autothrottle. With a course visible on the ND, we elected to initially continue on course using HDG and FLCH. Once things had calmed down a bit, the FO took over flying and radio duties while the Captain made a SATCOM call to company. As we continued, we considered alternates and fuel dump requirements, but about an hour into the flight we regained use of the left FMC. At this point, we re-engaged LNAV, VNAV, and autothrottles, and decided to continue to [our destination].

Narrative: 3

Shortly after takeoff we had a dual **FMC failure**. My CDU (Control Display Panel), right seat pilot monitoring, displayed the menu page without a prompt for the FMC to be selected. I had at this time lost my navigation on my ND (Navigation Display). A few moments later the Captain who was flying lost his FMC navigation. Autopilot was on when the dual **FMC failure** occurred. FMA's (flight mode annunciators) on both sides had yellow lines through LNAV and VNAV modes. Captain selected HDG select and FLCH. I told ATC we lost Navigation Display and requested a heading to fly. ATC was concerned with our altitude since we were below their Minimum Vector Altitude. I advised ATC we had the terrain in sight as we were climbing at normal rate. As we got above ATC MVA they gave us a heading and altitude to keep us on the departure. I told ATC we needed to run a checklist and would at this time continue on the departure. After running the Dual **FMC Failure** checklist we were able to navigate the departure with the stand by navigation. I took control of the aircraft and radios while the Captain

and second observer talked to Dispatch and Maintenance about possibly going to [an alternate airport] or to continue to [our destination]. We were able to get the left FMC working and double checked the aircraft status so that it was ok to make the crossing to [our destination] with one FMC.

We believe that the heavy rain during the loading of the aircraft may have gotten moisture into the E and E compartment. We continued to [the destination] with no further problems.

We got to the aircraft while it was raining and observed that the L1 door was closed. During our time on the flight deck I notice the L1 door opening and closing through the rest of the loading process. So the loaders were cautious about the rain getting into the aircraft. I suggest maybe we could lay towels or something that might absorb the moisture as the L1 door opens and closes to help prevent water from accumulating and possibly getting to the E and E compartment or getting somewhere that might adversely affect navigation equipment.

Synopsis

B747 flight crew reported that during climb the aircraft lost all navigation systems and had a dual **FMC failure**.

ACN: 1518791 (12 of 20)

Time / Day

Date : 201802
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC
Light : Night

Aircraft

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1518791
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance

Assessments

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

Narrative: 1

While flying the RNAV Visual to Runway XX we had a complete **FMC failure** while turning final to include loss of reference speed. I had not picked up the PAPI so I executed a go-around. We were given a heading of 190 and climb to 7,000 ft. We cleaned up on schedule and requested vectors to the ILS Runway YY. As I was climbing through 6,000 ft ATC gave us a new level off altitude of 6,300 ft. I flew through 6,300 ft to approximately 6,500 ft at which time I returned back to 6,300 ft. He vectored us around to the Runway YY ILS and we landed. Earlier in the flight we lost our FMC temporarily but route 1 had dumped. I had done a route copy so when the FMC came back we selected Route 2. We verified the FMC was operating correctly so we continued to our destination. Both VNAV and LNAV were working properly the entire flight until final when all guidance was lost.

I don't think this event could have been avoided due to it being an equipment failure. It was night time we were turning final on a very tight visual with no vertical or lateral guidance. The VREF had disappeared even though we were at VREF speed I felt it wouldn't be safe to continue the visual approach not knowing what other systems might be inoperative so I executed a go around in VMC conditions.

Synopsis

B737-800 pilot reported a loss of FMC guidance on approach.

ACN: 1506944 (13 of 20)

Time / Day

Date : 201712
Local Time Of Day : 1801-2400

Place

Altitude.MSL.Single Value : 38000

Environment

Light : Night

Aircraft

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

Component

Aircraft Component : FMS/FMC
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)
Experience.Flight Crew.Last 90 Days : 397
Experience.Flight Crew.Type : 14000
ASRS Report Number.Accession Number : 1506944
Human Factors : Human-Machine Interface

Human Factors : Troubleshooting
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

Dual **FMC failure** while at cruise for about 30 seconds. LNAV, VNAV, Autothrottle disengaged, FMC's went blank then returned without the option to select the FMC mode. Everything returned before we could even select a checklist. Reengaged all modes and they worked properly for the rest of the flight. Dispatch and Maintenance were both notified.

Synopsis

B737 Captain reported temporary dual **FMC failure**.

ACN: 1481579 (14 of 20)

Time / Day

Date : 201709
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : CZQX.ARTCC
State Reference : NF
Altitude.MSL.Single Value : 37000

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
ATC / Advisory.Center : CZQX
Aircraft Operator : Air Carrier
Make Model Name : B747 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Cruise

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 2426
ASRS Report Number.Accession Number : 1481579

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew

When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

After entering Class II airspace after radar service terminated we had a dual **FMC failure**. I immediately went back to the last VHF frequency we were working and the Controller still had us on radar. We entered a holding pattern and completed the QRC. We did not pull and reset the CB as was optional in the checklist. Right FMC recovered after about 5 minutes. The left FMC did not recover. We coordinated with [Dispatch, Maintenance, and Operation] and passenger advocacy. We all agreed the best course of action was to continue to destination.

Synopsis

B747 Captain reported continuing to the destination after experiencing dual **FMC failure**. One FMC was successfully recovered.

ACN: 1451147 (15 of 20)

Time / Day

Date : 201705
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : LFFF.ARTCC
State Reference : FO
Altitude.MSL.Single Value : 3500

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : LFFF
Aircraft Operator : Air Carrier
Make Model Name : Large Transport
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Nav In Use : FMS Or FMC
Flight Phase : Climb

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Failed

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1451147
Human Factors : Troubleshooting

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier

Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1451451
Human Factors : Troubleshooting

Person : 3

Reference : 3
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
Function.Flight Crew : Relief Pilot
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1451454
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Diverted
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Between Flap Retract and Slat retract, above 3,500 feet MSL we experienced dual **FMC failure**. Lost all Nav information, Autothrottles, and FMS derived speed information. We informed ATC and requested vectors to OPALE. I think we were still prior to PG092 on the OPALE 2G departure, but not sure since it was not present on the standby flight plan. Asked departure for radar vectors to run checklist. As we were leveling at FL100, we were given a climb to FL140, started the climb then were told to remain at FL 100. I think we climbed to about 10,400 feet before descending back to FL100. Ran QRH checklist and talked to dispatch. Dispatch preferred us to land at EGSS. We advised [center] we could continue to EGSS.

Continued uneventfully to EGSS. We informed each controlling agency of our limitations and landed uneventfully. The First Officer (FO) remained pilot flying while the Reserve FO and I ran checklists. Reserve FO did an outstanding job running the checklist and backing us up on everything. FO did a great job also, flying the airplane while we had our heads buried trying to figure out if we could get an FMC back.

Narrative: 2

[Report narrative contained no additional information.]

Narrative: 3

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported a dual **FMC failure** shortly after flap retraction on departure. Flight diverted to an enroute field.

ACN: 1410362 (16 of 20)

Time / Day

Date : 201612
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 33000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

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

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 10000
Experience.Flight Crew.Last 90 Days : 200
Experience.Flight Crew.Type : 2500
ASRS Report Number.Accession Number : 1410362

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

On preflight, Captain had momentarily loss of FMC, after a couple seconds FMC worked OK. On taxi out to runway in FO's FMC went inoperative. Taxied back to gate. Mechanics worked on FMCs and finally signed off that they were both good to go. Takeoff to cruise altitude of FL330 uneventful. Approximately 1.5 hours into the FO's FMC failed. We ran the appropriate QRH. Continued on with Captain's FMC still good. Shortly after [that] Captain's FMC failed, and FO's came back. We ran appropriate QRH. This [cycle] of Captain and FO's FMC working then not working [happened several times] until both failed completely. "GPS left invalid" flashed. Auto throttle kicked offline. ND and PFD screens on both sides flickered for about 60 seconds then stopped. Coordinated with Dispatch, decision made to divert into [an alternate], due to primary Nav system loss, destination [weather] IMC, rain, sleet, gusty winds, destination airport high density aircraft, heavy cockpit work load, and unsure of what emergency really was outside of dual **FMC failure**. With screens flickering we didn't know if there could be a compounded emergency. [ATC was advised]. Vectors provided to uneventful visual made by FO. Waited 1.5 hours on tarmac till a gate was provided.

Synopsis

B737-NG Captain reported diverting to an alternate airport experiencing dual **FMC failure**.

ACN: 1334269 (17 of 20)

Time / Day

Date : 201602
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZZ.Airport
State Reference : FO
Altitude.MSL.Single Value : 36000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

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

Component : 1

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Malfunctioning

Component : 2

Aircraft Component : Autoflight System
Aircraft Reference : X
Problem : Malfunctioning

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Relief Pilot
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 14715
Experience.Flight Crew.Last 90 Days : 240
Experience.Flight Crew.Type : 11688
ASRS Report Number.Accession Number : 1334269
Human Factors : Troubleshooting
Human Factors : Workload
Human Factors : Time Pressure

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 6101
Experience.Flight Crew.Last 90 Days : 120
ASRS Report Number.Accession Number : 1333740
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Troubleshooting

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Crew Rest Area

Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 13333757
Human Factors : Troubleshooting
Human Factors : Situational Awareness
Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Track / Heading : All Types
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Aircraft : Equipment Problem Dissipated

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

FMC selector Switch in L and POS REF 2 page L as primary. On track at FL360 we had a Dual **FMC failure**, shortly after making a RTE modification to the Arrival airport. We got the following malfunctions: Amber Autopilot Caution followed by VNAV with a line through it. No magenta course line on either MAP with RTE 1, RTE 2, and the legs page operating normally. LNAV was engaged and in green. We tried to repair the loss of the route on our MAP by going to RTE2 to activate that. In the interim we went FLCH opened the speed window to M84. While trying to clean up RTE 2 we got "Standby One" in the FMC scratch pad with the following indications: LNAV with a line through it, MAP inop on both MAPs, loss of all data in RTE 1. We went to HDG select to keep on course. Standby One lasted about 1 min, during that time we could not operate either FMC. After it went away our MAPs came back as well as the FMCs. We put our next point on the Fix page while waiting and when the FMCs came back put that point in RTE 1. Then rebuilt the rest of the RTE. LNAV was available again so we reengaged it. We fixed VNAV by putting in a Cruise Altitude and reloading the PERF page, then reengaging it. About 30 minutes after the event we got radar contact with ATC and reported that we had a loss of NAV for a short period of time. They confirmed we were on course. As far as I know we were on course the entire time even when in Heading select.

Narrative: 2

DUAL **FMC failure** following a few minutes after the PF executed an arrival transition correction. MCP with VNAV and amber line thru FMA followed shortly by both FMCs failing and map failure on both ND displays. We confirmed who was flying and who was working the problem, tried RTE 2, got a STANDBY ONE, prepared to do a DR (time and heading turn), recovered the box and manually entered the next 3 points which were in quick succession, approximately 40 miles from the FIR the situation became stable. The other pilot confirmed the points independently and we engaged LNAV and VNAV after entering a CRZ alt. ZFW and other parameters required reload. Once the next 2 points were accomplished and position was confirmed with ATC with VHF check in we loaded the remaining points, independently confirmed by the other pilot and called the Captain to the deck from break to review and confirm. We chose to wait until [entering our arrival country's] airspace to load the arrival or runway.

Narrative: 3

[Report narrative contained no additional information.]

Synopsis

While at cruise on an oceanic route, B777 flight crew modified the destination airport's arrival in the FMC RTE 1 page. A dual **FMC failure** occurred shortly after, but the crew rebuilt the route and returned both FMCs to normal operation.

ACN: 1315329 (18 of 20)

Time / Day

Date : 201512
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : RKSI.Airport
State Reference : FO

Aircraft

Reference : X
ATC / Advisory. TRACON : RKSI
Aircraft Operator : Air Carrier
Make Model Name : B747 Undifferentiated or Other Model
Crew Size. Number Of Crew : 2
Operating Under FAR Part : Part 129
Flight Plan : IFR
Flight Phase : Descent
Airspace. Class A : RKSI

Component

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Malfunctioning

Person : 1

Reference : 1
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function. Flight Crew : Captain
Function. Flight Crew : Pilot Not Flying
Qualification. Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number. Accession Number : 1315329

Person : 2

Reference : 2
Location Of Person. Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function. Flight Crew : First Officer
Function. Flight Crew : Pilot Flying
Qualification. Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number. Accession Number : 1315594

Events

Anomaly. Aircraft Equipment Problem : Less Severe
Anomaly. Deviation - Track / Heading : All Types
Detector. Person : Flight Crew
When Detected : In-flight
Result. General : Maintenance Action
Result. Flight Crew : Overcame Equipment Problem
Result. Flight Crew : Requested ATC Assistance / Clarification
Result. Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

When inbound to RKSI and just checking into ICN approach control. We were filed for the KARBU 1P arrival and ATIS was saying landing Runway 33R and 34, and this arrival is for those runways as well. ATC on initial contact clears us for KARBU 1N which is for Runway 15 and 16 and he said information X current. So [the first officer] pulled up new ATIS while I was changing over to KARBU 1 N arrival, all while being over KARBU. KARBU 1P goes 267 degrees to NOTIN then 231 degrees to SI 857, which is what was in the FMC and we were filed for. So while I was pulling up KARBU 1N which is KARBU 267 degrees to EGOBA then 266 degrees to SEL, we had a dual **FMC failure**, autopilot disconnected, auto throttle disconnected, all sorts of EICAS messages and FMC saying timed out standby. Once we had FMC coming back and could pass along to ATC that we had an FMC navigation problem we did. Then ATC preceded to put us on a vector and so never flew the arrival and he then said landing Runway 33R. I believe we were off course due to what was planned and in the FMC and would have had us left of course, due to not being able to get the FMC to change the arrival due to the failure. After shutdown we wrote up the [FMC] and I spoke with maintenance.

Narrative: 2

While descending on the karbu1p arrival into RKSI, the controller gave us new arrival instructions. The pilot monitoring was loading the new arrival into the CDU when we experienced a dual CDU failure. At that point we were unable to comply with the controllers instructions. After what seemed like an eternity, the pilot monitoring was able to explain our situation and he issued us a heading. We then were able to recover CDU operation and landed normally.

Synopsis

A B747 flight crew experiences a dual **FMC failure** while attempting to enter a new arrival per ATC instructions during descent into RKSI. Radar vectors are requested from ATC and received with normal FMC operation regained later in the descent.

ACN: 1178554 (19 of 20)

Time / Day

Date : 201406
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZSHA.ARTCC
State Reference : FO
Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZSHA
Aircraft Operator : Air Carrier
Make Model Name : B747-400
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Climb

Component

Aircraft Component : FMS/FMC
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 : Check Pilot
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1178554

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Track / Heading : All Types
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

On departure from ZSPD, in a climb between approximately 6,000 feet and FL250 and in contact with Shanghai Departure Control, we experienced the following event: Both FMC's timed out and "time-out-reselect" was shown in the scratch pad. In short order we then lost flight directors, autothrottle, LNAV/VNAV and autopilot as well as ACARS. EICAS messages did not indicate an **FMC failure**, but showed all the associated messages typical of an **FMC failure**. We attempted to reload the route, which failed, when both FMCs timed out again. This time all information was removed/dumped from the FMCs, including performance. All EICAS messages were advisory only and required no QRH procedure. The left radio also was unusable which created a delay in communicating with ATC, that radar vectors were required until we could re-establish navigation capability. This resulted in a lateral course deviation of approx. 5-7 miles.

A second attempt to reload all performance and routing was successful and all systems were restored. Maintenance history revealed that approximately 15 days ago, the L FMC had failed in flight as was reported in the logbook. We then opted to select the R FMC as the master FMC for flight guidance, A/P and A/T for the rest of the flight. Shanghai Control provided radar vectors until we restored navigation capability. We were then handed off to Fukuoka Control. The flight continued and landed ahead of schedule without further ado. If we had had a FMC FAIL EICAS message, we would have followed the procedure, which would have led us to select CDU Center or Right respectively and given us an ND depiction of the route to fly. Without EICAS **FMC failure** message, we were only concerned with flying the airplane and recovering our route and performance so as to return to normal navigation. This was not a "normal" non-normal event that followed a linear course of action. It required intuitive input and creative responses to restore normal operations.

Synopsis

B747-400 Captain experiences a dual **FMC failure** shortly after takeoff although no EICAS annunciation of **FMC failure** was present. The first attempt to reload the FMC's is not successful and ATC is advised and vectors requested. The second attempt to restore the FMC's is successful and the flight continues to destination.

ACN: 1086987 (20 of 20)

Time / Day

Date : 201305
Local Time Of Day : 0601-1200

Place

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

Environment

Flight Conditions : Marginal
Weather Elements / Visibility : Rain
Weather Elements / Visibility : Turbulence
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : DC-10 30
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight / Delivery
Flight Phase : Descent
Airspace.Class A : ZZZ

Component : 1

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

Component : 2

Aircraft Component : FMS/FMC
Aircraft Reference : X
Problem : Malfunctioning

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1086987

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1086994

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Declared Emergency

Assessments

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

Narrative: 1

Descending through FL190 all three of the Captain's DUs [Display Units] went blank. I immediately transferred the airplane to the First Officer whose DUs were fine. I then did the in range checklist and made sure our altimeters were set correctly.

The First Officer subsequently lost his FMC. The Captain's side came back but only in the standby mode. We able to get first officer's side [FMC] back but it subsequently failed again.

We decided to declare an emergency to get radar vectors to final and receive priority handling since there was mountainous terrain and fuel was starting to be a factor although either at the time was VMC. We determined the landing speeds from the QRH for our weight, [and] then flew a visual approach to a landing runway. The First Officer flew the visual approach since his side had better data when compared to the standby airspeed. We figure we had a dual **FMC failure**, probably caused by rain at our departure airport.

Narrative: 2

...deviating around weather using our on board radar north of the arrival course...

FMC data returned after landing.

Prior to our departure, heavy thunderstorms were experienced at the ramp. The aircraft's electronics bay may possibly have been contaminated with rain water. After arrival at the ramp, mechanics reported to us that a lot of water was dripping from the underside of the aircraft.

Synopsis

A DC-10 flight crew suffered recurring failures of display units and FMCs during their descent to a safe landing in VMC. Heavy rains at the ramp prior to their departure may have entered the aircraft before takeoff as ramp personnel noted water dripping from the underside of the aircraft as they taxied in the ramp following the incident.

