

ASRS Database Report Set

Cockpit Resource Management (CRM) Issues

Report Set Description.....Crew Resource Management (CRM) inflight situations
(conflicts, NMACs, and emergencies).

Update Number.....30.0

Date of UpdateJanuary 31, 2019

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

Number of New Records in Report Set22

Type of Records in Report Set.....For each update, new records received at ASRS will
displace a like number of the oldest records in the
Report Set, with the objective of providing the fifty
most recent relevant ASRS Database records. Records
within this Report Set have been screened to assure
their relevance to the topic.

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, CA 94035-1000



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

A handwritten signature in cursive script that reads "B. Hooey".

Becky L. Hooey, Director
NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

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

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

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

Report Synopses

ACN: 1590629 *(1 of 50)*

Synopsis

B737 First Officer reported track and altitude deviations occurred on the RNAV RNP Approach to 16R in DEN following an FMC programming error.

ACN: 1586088 *(2 of 50)*

Synopsis

Fractional aircraft First Officer reported SOP deviations and CRM breakdowns contributed to a speed deviation departing ORD.

ACN: 1584377 *(3 of 50)*

Synopsis

Light Transport Captain reported a heading deviation on departure due to the First Officer entering the wrong route into the FMS.

ACN: 1584334 *(4 of 50)*

Synopsis

B737 First Officer reported overshooting altitude and climb speed on departure due to FMC programming mistakes.

ACN: 1583873 *(5 of 50)*

Synopsis

Air taxi Dispatcher reported company Part 135 dispatchers are allowed to work very long hours and that fatigue has compromised safety.

ACN: 1581927 *(6 of 50)*

Synopsis

ERJ First Officer reported a deviation from SOP that led to stick shaker activation while performing a missed approach.

ACN: 1580815 *(7 of 50)*

Synopsis

C150 student and instructor reported becoming disoriented and entering an unusual attitude in IMC conditions during practice instrument approach.

ACN: 1580539 *(8 of 50)*

Synopsis

B737-800 flight crew reported that autoflight mismanagement led to a "Don't sink. Pull up" warning on departure.

ACN: 1579409 *(9 of 50)*

Synopsis

CRJ-700 Captain reported overshooting a crossing restriction on the assigned RNAV departure.

ACN: 1576559 *(10 of 50)*

Synopsis

Air taxi First Officer reported a communication breakdown with the Captain while avoiding airborne traffic.

ACN: 1576497 *(11 of 50)*

Synopsis

Flight Attendant reported problems with emergency row passengers and a Customer Service Representative not moving the people out of the emergency row.

ACN: 1575119 *(12 of 50)*

Synopsis

A Boeing 777 pilot reported an electrical system anomaly that was successfully managed despite ambiguous Flight Manual and MEL guidance.

ACN: 1574775 *(13 of 50)*

Synopsis

Air carrier flight crew reported declaring minimum fuel with ATC after incurring delay vectors due to unanticipated weather conditions at the destination.

ACN: 1573325 *(14 of 50)*

Synopsis

CRJ First Officer reported the Captain descended early on a visual approach and failed to follow SOP's on several occasions.

ACN: 1572898 *(15 of 50)*

Synopsis

C150 instructor pilot reported a loss of engine power and off field landing due to fuel starvation.

ACN: 1568535 *(16 of 50)*

Synopsis

A319 Captain reported descending early on arrival clearance.

ACN: 1567527 *(17 of 50)*

Synopsis

Military Pilot reported a NMAC because they missed an ATC restriction.

ACN: 1558191 *(18 of 50)*

Synopsis

CRJ-200 Captain reported receiving a low altitude warning from the Tower during approach to ATL airport.

ACN: 1545993 *(19 of 50)*

Synopsis

Air carrier flight crew reported a problem extending spoilers, communicating with each other, and their combined effect on the descent profile.

ACN: 1540058 *(20 of 50)*

Synopsis

Boeing 777 flight crew did not agree among themselves, which Noise Abatement procedure was to be used for their situation.

ACN: 1536553 *(21 of 50)*

Synopsis

ERJ-175 First Officer reported a breakdown of CRM on final resulting in an unstabilized approach.

ACN: 1536552 *(22 of 50)*

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: 1531173 *(23 of 50)*

Synopsis

Air carrier Flight Attendant reported that the work environment was very stressful due to the cabin crew pairing.

ACN: 1524730 *(24 of 50)*

Synopsis

A Piper Seneca instructor pilot reported a rejected takeoff due to an airspeed indication anomaly. An examination of the pitot tube revealed some contamination, which was cleared out, and a subsequent takeoff attempt was successful.

ACN: 1524509 *(25 of 50)*

Synopsis

B737NG First Officer reported encountering windshear on two separate approaches into DEN, executing a go-around after the first encounter, but landing after the second, even though they received a terrain alert.

ACN: 1519255 *(26 of 50)*

Synopsis

B767 flight crew reported an early flap retraction resulting in a stick shaker followed by poor CRM during the event.

ACN: 1517385 *(27 of 50)*

Synopsis

Air carrier First Officer reported receiving a late landing clearance due to communication problems with the Tower.

ACN: 1517142 *(28 of 50)*

Synopsis

CE-560XL First Officer reported the Captain lined up with the wrong runway and flew an unstabilized approach when correcting to the assigned runway.

ACN: 1516729 *(29 of 50)*

Synopsis

Air carrier Relief Pilot reported being fatigued enroute due to a short rest period in flight due to a breakdown of CRM.

ACN: 1516715 *(30 of 50)*

Synopsis

B787 First Officer reported the flight deck windscreen shattered and the checklist did not give a clear resolution which led to poor CRM.

ACN: 1515333 *(31 of 50)*

Synopsis

Air carrier First Officer reported an emergency divert due to deteriorating weather at destination, no planned alternate, and resulting in landing with less than legal minimum fuel.

ACN: 1515328 *(32 of 50)*

Synopsis

A321 flight crew reported an airborne conflict after taking a call that was meant for another aircraft.

ACN: 1513871 *(33 of 50)*

Synopsis

B737 flight crew reported accidentally switching off the Hydraulic pumps in flight instead of the engine anti-ice switches.

ACN: 1511631 *(34 of 50)*

Synopsis

Air carrier First Officer reported breakdown of automation management and CRM during initial approach.

ACN: 1507977 *(35 of 50)*

Synopsis

ERJ-145 First Officer reported breakdown of CRM and Captain's professionalism.

ACN: 1507083 *(36 of 50)*

Synopsis

Air carrier First Officer reported they may have entered Restricted Airspace without clearance. A CRM breakdown contributed to the event.

ACN: 1503827 *(37 of 50)*

Synopsis

ERJ-170 Flight Attendant reported the flight crew was unable to open the aft galley compartment that contained the demo equipment and AED.

ACN: 1499211 *(38 of 50)*

Synopsis

A320 flight crew reported that they started and continued takeoff roll without the use of flight directors and autothrust.

ACN: 1498775 *(39 of 50)*

Synopsis

A regional jet pilot reported experiencing multiple physical symptoms resulting in an inability to continue the flight. A diversion to a suitable airport to seek medical help was accomplished.

ACN: 1498435 *(40 of 50)*

Synopsis

MD-11 Captain reported executing a go-around following a wake turbulence encounter and a firm touchdown in gusty wind conditions.

ACN: 1493765 *(41 of 50)*

Synopsis

Air carrier First Officer reported a normal landing preceded by a brief stick shaker event due to landing with an unstable tailwind.

ACN: 1488023 *(42 of 50)*

Synopsis

Air carrier flight crew reported difficulty in interpreting displays of the FMS which resulted in an altitude deviation during the approach.

ACN: 1487596 *(43 of 50)*

Synopsis

B747 flight crew reported that the seatbelt/harness for the second observer seat did not release properly, and that Maintenance initially failed to accurately document the repair.

ACN: 1484960 *(44 of 50)*

Synopsis

CE560XL Captain reported executing a go-around when the approach became unstabilized following confusion in the cockpit as to the ATC clearance.

ACN: 1483495 *(45 of 50)*

Synopsis

Gulfstream Captain reported they passed the Runway 28L hold short line on Taxiway A1 at HWD.

ACN: 1478509 *(46 of 50)*

Synopsis

CE-560 flight crew reported overshooting assigned altitude on descent due to inadvertent autopilot disconnect and distraction with iPads.

ACN: 1477655 *(47 of 50)*

Synopsis

B737 flight crew reported unconsciously starting the APU while the unit was still being serviced by a Mechanic.

ACN: 1477289 *(48 of 50)*

Synopsis

Captain of a corporate turbojet reported issues with flying with contract pilots.

ACN: 1476975 *(49 of 50)*

Synopsis

BD700 flight crew reported taking off without being released by ATC at an airport with a closed Tower.

ACN: 1476304 *(50 of 50)*

Synopsis

A Flight Attendant reported an incident with a Captain acting strangely and making passengers uncomfortable.

Report Narratives

Time / Day

Date : 201811
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : DEN.Airport
State Reference : CO
Altitude.MSL.Single Value : 11000

Environment

Flight Conditions : VMC

Aircraft

Reference : X
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
Nav In Use : GPS
Nav In Use : FMS Or FMC
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 : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Last 90 Days : 180
Experience.Flight Crew.Type : 3122
ASRS Report Number.Accession Number : 1590629
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - 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 : Issued Advisory / Alert

Assessments

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

Narrative: 1

As per the ATIS we were expecting the visual, ILS, or the RNAV RNP to RWY16R. I had briefed the Visual backed up by the ILS. When we checked in with Approach we were told to expect the RNAV 16R. Using good teamwork and CRM we set up said approach. After a few minutes of setup I briefed the RNAV approach, I confirmed IAF CLFFF at 11,000 FT on the FMS and LNAV and VNAV PTH on the FMA but I didn't properly VVM [Verbalize, Verify, Monitor] the rest of the approach on the FMS, As we crossed CLFFF and did not start descending we realized something was not set up properly. At this time we had RWY16R in sight. We realized our oversight and began a turn so as to stay on the course, just as we were going to call the field in sight the controller told us to turn to a heading and descend to 8,000 FT. Shortly thereafter he cleared us for the visual. We landed without incident.

Synopsis

B737 First Officer reported track and altitude deviations occurred on the RNAV RNP Approach to 16R in DEN following an FMC programming error.

Time / Day

Date : 201810
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ORD.Airport
State Reference : IL

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : C90
Aircraft Operator : Fractional
Make Model Name : Medium Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Flight Phase : Climb
Route In Use.SID : O'HARE FOUR
Airspace.Class B : ORD

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Fractional
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1586088
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
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

During pre-departure briefing, the crew discussed the ORD 4 departure procedure with special attention paid by the SIC (pilot monitoring) to the 250 knots until advised notation on the SID. The PIC (pilot flying) seemed especially concerned instead with two "At or Above" altitude requirements on the SID that are noise abatement limitations that would be easily met with a normal climb at the departure weight and temperature. The PIC seemed distracted by the altitude requirements to the point of entering additional waypoints in the flight plan and the corresponding altitudes.

During taxi out, complicated taxi instructions from Ground Control on a large, unfamiliar, air-carrier centric airport led to substantial confusion during taxi and a breakdown in crew communication. Multiple deviations from SOP by the PIC including typing in the FMS while taxiing, incomplete or non-existent acknowledgment of SIC communication, and other SOP non-compliance contributed to a high stress level in the cockpit. Immediately following a normal departure, the PIC deselected autothrottle (as is his habit) and refused the SIC offer to select a vertical mode for climb (also his habit) while he hand-flew the climb out. The crew turned to the ATC assigned heading and acknowledged the climb instructions to an altitude above 10,000 feet. A few minutes later, the crew was handed off to a different Departure Controller who informed the crew "resume normal speed" and assigned a climb to a higher altitude. It was at that point the SIC realized the aircraft was at 300 knots and had exceeded the 250 knots until advised limitation listed on the SID. ATC made no mention of the exceedance and the crew continued the flight uneventfully.

In my opinion, poor crew interaction, multiple SOP violations and poor automation usage decisions by the PIC contributed to a feeling of general distraction in the cockpit and improper monitoring of flight path and speed control during climb out. Because of the PIC's refusal to use autothrottle, vertical mode control, or autopilot during climbout from a very busy terminal area, the SIC was forced to spend additional effort monitoring basic flying in between multiple frequency changes and clearance readbacks. Consequently, an important detail like compliance with a speed limitation was missed. The PIC's violations of SOP (including all programming of the FMS, even while hand-flying) and his indifference and even hostility to SIC input led to a complete breakdown in CRM. This PIC is known for difficulties in the cockpit and by most accounts is unwilling or unable to change his habits or cockpit demeanor. Short of refusing this crew pairing in the future, I'm not sure what suggestions to make.

Synopsis

Fractional aircraft First Officer reported SOP deviations and CRM breakdowns contributed to a speed deviation departing ORD.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : VNY.Airport

State Reference : CA

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZLA

Aircraft Operator : Fractional

Make Model Name : Light Transport, Low Wing, 2 Turbojet Eng

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Climb

Route In Use.SID : WLKKR THREE

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Fractional

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1584377

Human Factors : Communication Breakdown

Human Factors : Fatigue

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Clearance

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

On departure from VNY on the WLKCR3 SID, ATC told us we were right of course somewhere between HEYJO and CSTRO waypoints. We confirmed our clearance but he inquired if we were headed to COREZ. We replied "no" then he gave us a left 20 degree turn then direct COREZ. ATC seemed to be without concern. We complied and the remainder of the flight proceeded normally. Once stable in cruise flight, my FO (First Officer) and I reviewed our clearance to find out what may have happened. During preflight planning, the FO received the PDC clearance and transcribed a revised route (slightly different from our filed release) on the release paperwork. When I conducted the departure brief, waypoints were again checked but COREZ was not listed from what I reviewed. I checked the PDC approved flight plan written on the release and compared it to the FMS PDC flight plan and added it after the CSTRO waypoint because that was our new clearance (the original filed flight plan was WLKCR3 CSTRO COREZ...). Apparently my FO selected the CSTRO transition in the FMS instead of the COREZ transition and I missed that. Additionally, the page displayed on the FMS which I referenced may have been the "filed" page not the "cleared" page. After that takeoff briefing, we shut down the aircraft and waited for our [passengers] starting a 2 hour slide. Owner services called me to say our pax would be an additional one or two hours late. Pax showed at over three hours after original takeoff time. Before we departed, we reviewed departure procedures again and verified our clearance from the departure brief.

I have wrestled a couple of days on this simple mistake in order to capture and articulate the events which contributed to its occurrence. It was day 6 of 7. Both pilots are east coast based and working the late shift on the west coast since day 2 finally going to sleep between 0200 and 0500 eastern DST - causing a 4 - 6 hour shift in our normal circadian rhythms. At first the shift was difficult but I adjusted as the days progressed. Also, my FO was a 6-month new hire. He demonstrated expected high levels of anxiety from day one which compounded throughout the tour. I attempted to put him at ease using various leadership and management techniques acquired from over 37 years of flying and a life well-seasoned. My efforts mostly worked but nearly every leg, he made errors in SOPs, flows, FMS entries and flying techniques. Had I not intervened more, I estimate 2 to 3 more reports would require filing for this tour alone. I thought my vigilance was preventing errors while providing some mentoring to a young new-hire. The cumulative effect of this extra effort, along with our long duty days ending in the wee hours of the morning on the west coast aligned the holes in my ORM, CRM cheese more than normal.

So, on day six and what was to be our last flight of the tour, I missed an error when the flight plan was reviewed. The FO installed the correct SID but with the incorrect transition. When comparing this to the FMS the waypoint COREZ was not included...so I directed him to add it because it was the clearance. Simply we were to fly the WLKCR3 RNAV departure COREZ transition not the CSTRO transition. To add to the confusion, our filed flight plan included both SID ending waypoints which almost never occurs.

Moving forward I will be even more vigilant when flying with low-time new-hire FOs taking extra time discussing and reviewing FMS entries especially when not "cleared as filed" flight plans. Also, it is easy to overlook the final waypoints in this SID as they both start with the letter "C", laterally not too far apart and both included on the filed flight plan.

Synopsis

Light Transport Captain reported a heading deviation on departure due to the First Officer entering the wrong route into the FMS.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC

Aircraft

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

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 Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 2745
Experience.Flight Crew.Last 90 Days : 106
Experience.Flight Crew.Type : 1516
ASRS Report Number.Accession Number : 1584334
Human Factors : Time Pressure
Human Factors : Situational Awareness
Human Factors : Confusion

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

As the flying pilot departing on the [Departure] out of ZZZ Airport I exceeded the crossing altitude at the ZZZZZ waypoint by 200 feet. The crossing restriction is to cross ZZZZZ below 6000 feet MSL. I crossed it at 6200 feet and as I was leveling off and returning to 6000 feet ATC gave us a climb to 14000 feet. Neither ATC or the crew mentioned the altitude deviation.

I departed runway XXR in LNAV/VNAV. I followed the SID laterally with the autopilot off and prior to ZZZZZ the airspeed bug accelerated to the Econ climb speed of plus 300 knots. The command bars did not command me to level off at 6000 feet as I approached ZZZZZ. The pitch bar rose to the top of the attitude indicator. At this point the Captain opened my airspeed window via airspeed intervention and dialed my speed back to 250 knots.

Prior to departure I programmed the FMC at the gate for (a different departure) with an L3 climb. Looking back on what could have gone wrong I think I may have entered this data incorrectly. I entered 1599 feet at L3 with the proper clean maneuvering speed for our weight, but I may have not entered the L2 data correctly. 250 knots to 10000 feet. This would explain why the VNAV accelerated to Econ climb speed passing 800 feet AGL. If this is true then I think the reason it happened is because I was rushing to get everything done prior to pushback. I was trying to do it all so all the Captain had to do was double check my work. This is not good CRM on my part and I must stop it.

Synopsis

B737 First Officer reported overshooting altitude and climb speed on departure due to FMC programming mistakes.

Time / Day

Date : 201810

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Small Transport, Low Wing, 2 Recip Eng

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Person

Reference : 1

Reporter Organization : Air Taxi

Function.Dispatch : Dispatcher

Qualification.Dispatch : Dispatcher

Experience.Dispatch.Dispatch : 2

ASRS Report Number.Accession Number : 1583873

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Time Pressure

Events

Anomaly.Deviation - Procedural : Other / Unknown

Detector.Person : Dispatch

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Staffing

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Company Policy

Primary Problem : Company Policy

Narrative: 1

I'm writing to bring attention to fatigue issues with FAR 135 [dispatchers]. I am a Dispatcher. Specifically, since there are no restrictions on the amount of hours a [dispatcher] can work, leadership at my company allows some [Dispatchers] to work extremely abnormal amounts of hours. Specifically, [Dispatchers] are allowed to work a double shift for several consecutive days. "Double Shifts" are an average of 16 hours long and can go as long as 20, always with no formal breaks. Younger [Dispatchers] are signing up for this many hours for the Overtime Pay. However, this is leading to many mistakes

that are relatively minor, for now. Missing radio calls from pilots in the air; not recognizing adverse weather conditions along a flight path until someone alerts the [Dispatchers]. Not recognizing when a pilot is in danger of going over duty and/or flight time limits, etc. Other [Dispatchers] working nearby are assisting in identifying and correcting these mistakes and lack of recognition from fatigued [Dispatchers], but it is not in the context of a healthy CRM "checks & balances" relationship nor positive teamwork.

Due to staffing shortages, management appears to only be happy that all shifts are covered, and are not concerned about the overall cost and liability to all parties involved, especially our passengers. Certainly training and development can play a role in reducing these common mistakes. One only has to cite any number of fatigue studies done by the FAA to know that fatigue can make any of these small mistakes to become serious mistakes that could have grave consequences. After raising my concerns several times, and not wanting to face potential consequences of using my company's safety reporting system, I feel it prudent to report it here. Fatigue rules exist for Part 121 operations for a reason. Just because Part 135 operations involve fewer passengers, why safety should be allowed to be compromised. Safety systems work best when they are proactive, not when reacting to a worst-case event. I believe safety is being compromised by having zero duty time restrictions for [Dispatchers] at my [company].

Synopsis

Air taxi Dispatcher reported company Part 135 dispatchers are allowed to work very long hours and that fatigue has compromised safety.

Time / Day

Date : 201809

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility : Thunderstorm

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 : 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 : First Officer

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 : 1581927

Human Factors : Communication Breakdown

Human Factors : Workload

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - 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

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Human Factors

Narrative: 1

A combination of inclement weather on approach, and ATC keeping flight crew at a higher altitude than comfortable in order to shoot a stabilized approach resulted in the flight crew's decision to execute a go-around.

Upon go-around PF (FO) (Pilot Flying, First Officer) exclaimed "missed approach, toga, flaps 2". PM (CA) (Pilot Monitoring, Captain) immediately began coordination with ATC. ATC instructed the crew to fly runway heading at an assigned altitude. PM failed to stay within SOP of the go around profile while talking to ATC. Simultaneously PF became task saturated to flying the missed approach.

ATC issued a new altitude and heading. PM began twisting new heading and setting new altitude. PF then began flying the turn. During the turn PF noticed the airspeed decreasing and the PLI (Pilot Limit Indicator) appear. PF pushed the nose down and exclaimed "gear up, speed up!" reaching for the gear handle and twisting the speed bug. At this moment the stick shaker occurred and the PF recovered. Following this occurrence the crew shot another approach and discussed what happened on the ground.

From this pilots perspective this was a breakdown in CRM and SOP. As PF I was focused on flying the aircraft and relied on my PM to handle his call outs and secondary tasks. Once the "positive rate" callout was neglected the system collapsed. I would suggest that because missed approaches are not that common, it would be wise to brief the proper callouts and procedures during the approach briefing, I intend to do so moving forward.

Synopsis

ERJ First Officer reported a deviation from SOP that led to stick shaker activation while performing a missed approach.

Time / Day

Date : 201809
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Turbulence
Weather Elements / Visibility.Visibility : 0
Light : Daylight
Ceiling.Single Value : 1300

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Cessna 150
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Final Approach
Route In Use : Vectors

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 4500
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 200
ASRS Report Number.Accession Number : 1580815
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Confusion

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 : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
ASRS Report Number.Accession Number : 1582100
Human Factors : Workload
Human Factors : Human-Machine Interface
Human Factors : Confusion
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

While flying in IMC with a student, my student became spatially disoriented. She was being vectored to a left heading of 040 to set up for the ILS XX at ZZZ. I watched her turn past her heading. I told her to turn back. She continued to the left. I was starting to question if her heading was really that off or if we were experiencing a vacuum failure. She said your flight controls. I took over but was already getting disoriented when I took the controls and struggled to regain control of the aircraft. My student became afraid we could stall, although we were not slow. She pushed the controls forward. We lost about 1,500 feet in a turn before regaining control of the aircraft. I feel that my student became spatially disoriented while I fell behind what was happening due to my questioning of the instruments. We lost altitude due to the unusual attitude. She and I are both current instrument rated pilots. She passed a check ride [a few months ago]. I passed a multi-commercial check ride [a few months ago]. We have both flown approaches since then. Neither of us had been in an unusual attitude in actual conditions before. We did unusual attitudes on a simulator the next day. We will both do it in the plane as soon as weather and schedule permits.

Narrative: 2

I was working on my commercial rating, but the ceilings were too low to do maneuvers. I still needed total time and I was scheduled to fly the next day for a fly-out, and I had never flown that airplane before, so we decided to take that airplane IFR to familiarize ourselves with it. My instructor had never flown that particular airplane IFR. I was, and am, a VERY low-time pilot in actual IMC. We decided to shoot one approach.

ATC cleared us to 3,000 feet, heading 090, with vectors for the ILS XX. We entered the clouds at ~1,300 AGL. Everything went well initially, but early on I asked my CFI to be in charge of tuning radios and putting things into the GPS because I knew it would task-saturate me. However, I continued to talk on the radios. I turned left to a heading of 100 at ATC's instruction, and leveled out at 3,000 feet. While finishing my briefing of the approach, ATC gave me another turn to the left, and I blew past the heading because I was fixating on the gradual descent shown on the VSI. With the airplane in a left descending turn and ATC talking on the radio directing us to turn back to the right, I began to feel disoriented and uncomfortable, and I gave the controls to my CFI. She said, "What are you doing? Are you okay?" and I said something like, "I feel a little disoriented, please take the controls" and she said "I have the controls".

We proceeded to enter an unusual attitude with a steeply banked right turn, according to the attitude indicator. My CFI called ATC and told them that we were having trouble, and that we had lost our vacuum pump. I looked at the vacuum gauge and it was in the green; I told my instructor the vacuum looked like it was working and I thought we were in an unusual attitude. I began to panic and completely lost my scan. At some point, hearing the panic also in my CFI's voice, I decided to take the controls again, but said nothing. Based on engine noise and afraid of deteriorating airspeed/impending stall, I pushed the stick forward. That must have put us into a dive because a few seconds later I heard the engine getting loud so I pulled the throttle back and looked at the ASI, which showed an IAS of ~130 MPH...in the yellow arc... so I began to bring the airplane back to a level pitch. I felt we were level again in controlled flight and began looking for the ground - I announced as I soon as I could see the ground, and leveled out under the clouds. ATC began to vector us to ZZZ at our request, then vectored us back to ZZZ1 when we changed our mind. We realized we did not know the weather at ZZZ and we did not want to fly back into the clouds inadvertently.

We flew back to ZZZ1 at 1,400 feet MSL without incident, staying visual, and landed.

Factors involved in this loss of control / unusual attitude in IMC incident were as follows:

1. Pressure to fly to build total time.
2. Pressure to fly this particular aircraft since I was scheduled in it the next day and had never flown it before.
3. Me being a low-time pilot, and an extremely low-time actual IMC pilot.
4. Me having never flown this particular aircraft, and having done all my IFR training in a C-172, which has very different control feel compared to a C-150.
5. Me relying on my CFI to be able to get me out of trouble.
6. My CFI being relatively unfamiliar with the incident aircraft and not having any IFR experience in it, and having most of her recent experience in 172's as well.
7. My CFI relying on me to not get myself into trouble and getting "behind" the situation.
8. Overcast at 1,300 feet AGL; hard IMC conditions at the time of loss of control.
9. Possible temporary loss of the vacuum system.
10. Panicking - on my part and my CFI's
11. Failing to maintain an instrument scan leading up to the incident and while I was panicking.
12. Failure on my part to uphold the initial "positive transfer of control" - since I took the

controls back without speaking and we were probably both trying to control the aircraft at that point / loss of trust in my CFI to recover the situation when I heard her panicking.

13. Mild fatigue on my part - I had slept for maybe 5-6 hours the night before, which is not quite enough for me in general.

14. Task saturation on my part - inability to think about briefing the approach, talk on the radio to ATC, and maintain my scan / control the aircraft.

The only factor in our favor about this event was that we had a 1,300 feet ceiling, no adverse weather conditions, and no rising terrain or obstructions.

The best way to prevent this would have been to realize that it was stupid, especially as a low-time pilot, to take an unfamiliar airplane (both in terms of model of airplane and avionics on board) into actual IMC without practicing in it first under the hood in VMC [and] learning the control pressures and the avionics in a safer environment. We should have stayed on the ground. We could have flown the simulator to build time.

Better ways to respond as the situation unfolded would have been for me to turn ALL non-flying tasks over to my CFI (better Crew Resource Management) when we entered the clouds so I could concentrate 100% on flying the airplane. When I first began to feel disoriented, I could have taken a deep breath, leveled the wings, and continued a careful scan, before worrying about ATC's instructions. After my CFI took the controls, she could have done the same thing - leveled the airplane and made sure she had positive aircraft control before trying to comply with ATC's directive to turn right. In the middle of it, I do not know if I should have taken the controls back or not from my instructor, because I do not know if she had positive aircraft control or not, but I should have said something about it. It was dangerous for me to make control inputs based on engine noise alone while in a (literally) blind panic. We were lucky to survive.

Other ways to prevent future such incidents, besides the above, is to pay very close attention to the IMSAFE and PAVE checklists before each flight, especially IMC flights. I plan to gain more actual IMC time in familiar airplanes with CFI's who are also very familiar with the given airplane in IFR situations. I plan to never take an unfamiliar airplane or avionics suite into actual IMC before flying a proficiency check under the hood in VMC or a proficiency check in IMC with an instructor who is high-time in that airplane. I will maintain my proficiency by flying MANY more approaches/holds/etc., per 6 months than are prescribed to stay legal as an instrument pilot. I will maximize my crew resources as needed to ensure that I can maintain aircraft control and not task-saturate. In general, I will avoid single-pilot IFR/IMC operations until I have a few hundred hours of actual IMC time. I also need to train myself to think rationally and maintain an instrument scan even in high-stress situations - this will be harder to do.

Synopsis

C150 student and instructor reported becoming disoriented and entering an unusual attitude in IMC conditions during practice instrument approach.

Time / Day

Date : 201809
Local Time Of Day : 0601-1200

Place

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

Environment

Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B737-800
Crew Size.Number Of Crew : 2
Mission : Passenger
Flight Phase : Takeoff
Airspace.Class B : ZZZ

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
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1580539
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Distraction
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)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 440
ASRS Report Number.Accession Number : 1580572
Human Factors : Workload
Human Factors : Training / Qualification
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Speed : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

As Pilot Flying (PF) I was to fly the Departure. Performance [program] had generated flaps 25, engine bleeds off, takeoff for us. We had briefed in detail both the departure procedure, which as published showed "Assigned headings 360 degrees clockwise through 080 degrees climbing right turn to 2400 feet, heading 100 degrees before proceeding on course," the call outs we were going to expect, and paid particular attention to how challenging the multiple heading, altitude, and configuration changes were going to be given our heavily loaded -800 aircraft and the short runway.

We both missed the fact that our takeoff was supposed to be an "Engine Bleeds Off" takeoff until we were taxiing to the runway and called Tower to let them know we would need a moment at the end of the taxiway to configure and call them when we were ready for departure. I mentioned to the Captain that other than in the simulator I had never done an engine bleeds off takeoff. The Captain configured the bleed panel for departure and said, "Don't worry about the bleeds; just fly the aircraft and I'll reconfigure them once we are cleaned up." At that point in the event I was solidly "in the Yellow" and probably getting "into the Red" on our CRM model.

We reconfirmed the configuration of the bleeds panel, completed our departure plan and Before Takeoff Checklist then called for takeoff. Tower cleared us for takeoff, "on departure turn left heading 250, cleared for takeoff." The Captain transferred the controls

to me and we both acknowledged that it was going to be even more complicated by an initial right turn to 100 degrees and at 2400 feet, a climbing left turn to heading 250 while leveling at 3000 feet and cleaning up the flaps.

I advanced the throttles and set takeoff thrust. The takeoff roll and call outs were normal and we got airborne. At 400 feet I called for Heading Select and started my right turn. As we approached the minimum cleanup altitude, the Captain said "watch your speed" and I assumed he was afraid that I would overspeed the flaps so instead of calling "Set Speed" in the ensuing confusion I called "Flaps 15" and began a gentle nose over to catch the expected climb profile. Because the Speed bug had not been moved to the "UP" position, the autothrottles pulled back to mid-range thrust as designed to maintain the initial speed setting.

We were just under 2000 feet MSL and we started our left-hand turn to the assigned heading of 250 with the aircraft at flaps 15. I was aware that something was wrong and focused on the flight director and attempting to fly the aircraft when I noticed the red light indicating the autothrottles were off. The Captain said something to the effect of "there's something wrong with the autothrottles" and then said he was re-engaging them. I found out later that he had disengaged them, pushed them forward to get more speed, and then re-engaged them thinking that he had corrected the problem.

We were turning north at under 2000 feet MSL in a left hand turn at about 160 knots. The handling of the aircraft seemed very sluggish and the Captain and I were very confused as evidenced by our lack of communication. What little we did say was focused on getting airspeed. Finally, when we got the Gear warning horn, "Don't Sink", and "Pull Up", I disengaged the autothrottles and moved them forward, rolled partially wings level and got the nose above the horizon on a climbing profile and cleaned up the flaps. It was at that point that we realized our error in failing to set the Speed bug appropriately.

Narrative: 2

We conducted a full Departure Briefing to include a heavy takeoff and the initial departure procedures. Due to some confusion at the gate during pushback, we failed to run a Pushback Checklist. After pushback was complete, I realized this, and we conducted the briefing. We caught the engine bleeds-off takeoff requirement late and configured the aircraft. It was a max thrust takeoff on Runway XXR with an assigned heading "left turn to 250". After takeoff, we started our initial turn in accordance with the SID to 100 degrees. I became focused on the VMO/MMO and minimum maneuver speed tapes- given our heavy weight.

At our cleanup altitude I don't remember the Pilot Flying call for "Set speed, flaps 15, climb thrust", and I failed to monitor for the calls as I was still focused on the speed tapes. I do remember bringing the flaps to 15 as the autothrottles retarded the thrust levers. I disengaged to autothrottles and advanced the thrust levers. The First Officer appeared focused on following the flight directors and flying the SID; turning left to the assigned heading. After the airspeed started to increase I re-engaged the autothrottles, but was slow to set climb speed, and the throttles again retarded. Simultaneously as I again disengaged the autothrottles and manually advanced the thrust levers, we received a momentary "Don't Sink" and a "Pull UP" warning. As the thrust lever advanced the aural alerts ceased. The FO (First Officer) continued to fly the flight director and now with the thrust levers advanced and airspeed increasing we continued the departure and cleaning up on schedule.

I cannot tell you how many times I have replayed this event in my mind. I can't remember

ever having lost situational awareness so fast. Had I called/queried Set speed, flaps 15, climb thrust we could have properly executed the departure. When I dug down deep into my errors, I first failed to timely conduct checklists. Second, I became singularly focused on the airspeed tapes and failed to properly monitor automation (autothrottles) and the minimum cleanup attitude call outs. I also failed to properly communicate changes in automation and flap settings. We also failed to properly respond to the aural warning. As a crew we became laser-focused on separate indications and failed to properly communicate our individual loss of situational awareness; we were both in the Red. I have done many uneventful flaps 25, -800 takeoffs from ZZZ as both the Pilot Flying and Pilot Monitoring. Although there were a few distractions prior to takeoff, the only other differences were my focus on our airspeed, and on the large left turn requirement. As this event is now indelibly embedded in my mind, in the future I will slow down and fully review checklists and aircraft configuration impact on departure procedures. I will also guard against tunnel vision and adhere to assigned duties.

Synopsis

B737-800 flight crew reported that autoflight mismanagement led to a "Don't sink. Pull up" warning on departure.

Time / Day

Date : 201809

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DTW.Airport

State Reference : MI

Altitude.MSL.Single Value : 9000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : D21

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 : Climb

Route In Use.SID : LIDDS ONE

Airspace.Class B : DTW

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1579409

Human Factors : Fatigue

Human Factors : Distraction

Events

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

On the LIDDS 1 RNAV departure out of DTW we leveled at the first crossing restriction per our clearance of climb via except maintain 7000 [ft]. Prior to JOELU we were told to proceed direct KZLOV after JOELU. I asked the FO/PM (First Officer/Pilot Monitoring) to configure the FMS per ATC's instructions. After JOELU I set 15000 [ft.] in the altitude pre-select and confirmed it with the FO. I then proceeded to climb to that altitude. Around 9000 ft. we were told to climb and maintain 17000 [ft.] and then received a phone number to copy. As soon as they said this I had realized my error.

[This event] occurred after an early commute. I woke up at XX:00am to catch an [early] flight. After arriving in DTW, my schedule was modified to include a new flight not originally scheduled. In the brief I did not list new departures out of DTW as a threat, but rather focused on the LLWS. Below 10,000 ft. I was not keeping conversation to only pertinent flight matters, but discussing [CRJ]700 differences as I had not flown one in a while. I did cross check the altitude with the FO(PM) and he confirmed the altitude. Not that it was his job ultimately to catch my error but there was a breakdown of CRM here. Complacency also kept me from correctly adhering to the fundamental execution of a departure procedure and listening for standard phraseology - in this I simply acted in error. The Aviation Instructors Handbook would define this as a "slip".

I suggest not commuting early without proper rest. Briefing an obvious threat - complacency due to familiarity of DTW remained even though we had an entirely new set of departures. Making more space for the PM to feel as though he can speak up. Also per the Aviation Instructors Handbook, it is recommended to use reminders and develop routines to reduce errors. Many use the nose wheel light as a reminder that they are cleared to land. I have several of these triggers in place to remind me of various task in different phases of flight. I will be developing one as well for climb via clearances.

Synopsis

CRJ-700 Captain reported overshooting a crossing restriction on the assigned RNAV departure.

Time / Day

Date : 201809

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DEN.Airport

State Reference : CO

Altitude.MSL.Single Value : 8500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : D01

Aircraft Operator : Air Taxi

Make Model Name : Medium Large Transport, Low Wing, 2 Turbojet Eng

Operating Under FAR Part : Part 135

Flight Plan : IFR

Flight Phase : Climb

Route In Use : Direct

Airspace.Class E : D01

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 17600

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 75

ASRS Report Number.Accession Number : 1576559

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Airborne Conflict

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

Miss Distance.Horizontal : 1320
When Detected : In-flight

Assessments

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

Narrative: 1

After takeoff, climbing out of 7000 ft MSL as the non-flying pilot (PNF) I made initial contact with DEN TRACON, DEN advised us of traffic at our 9 o'clock and 8,500 feet. We were in a climbing left turn to DVT VOR climbing at 2500 FPM [Feet Per Minute]. The pilot flying (PF) made no attempt to stop the turn or climb. I said to the PF "Stop your turn, we are climbing into traffic." The PF responded to me with "Don't you yell at me, I'm the Captain and if you have a problem with that you can take it up with [name redacted]" ([Name redacted] being the owner of the operation).

I repeat to the PF that we were climbing into traffic and that he needed to stop his turn to avoid conflict with the traffic. Only to have him repeat his warning with other accusation.

I believe there was a total breakdown of CRM [Crew Resource Management] as a factor in this event however; the PF did not make any attempt to avoid or locate the other traffic which ATC had advised us was only 1/2 mile away at our 9 o'clock and only 1,500 ft above.

Synopsis

Air taxi First Officer reported a communication breakdown with the Captain while avoiding airborne traffic.

Time / Day

Date : 201809

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Cabin Lighting : High

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : General Seating Area

Cabin Activity : Safety Related Duties

Reporter Organization : Air Carrier

Function.Flight Attendant : Flight Attendant (On Duty)

Qualification.Other

ASRS Report Number.Accession Number : 1576497

Human Factors : Distraction

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Other

Events

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

Anomaly.Deviation - Procedural : FAR

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

Were Passengers Involved In Event : Y

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

After the last passenger was seated, I waited until the A [Flight Attendant] finished her Opening public address and held the Safety Information Card and gave the Over Wing Exit Emergency Briefing to the aft over wing exit doors. All passengers in that area responded with a verbal YES that they are willing and able to assist in a possible evacuation. Then, I moved to brief the forward over wing exit seats. When I asked for a verbal confirmation that they were willing and able, the man in seat F said NO. Then, his wife hit him and told him he was supposed to say yes. He quickly corrected himself and said YES, explaining he couldn't hear me over the music. The lady in seat C said she could hear me both times when I briefed and she has a hearing aid. I was concerned he wouldn't be able to hear Flight Attendant commands during a real evacuation, so we talked about the exit doors and I asked him questions about the doors from the briefing. He did not seem to understand or hear me well enough to carry a conversation from 3 people away. I told him no problem I can reseat him in an available aisle seat. His wife got upset and asked me why several times, and they told me they would not move. They became very combative and argued when I answered their questions.

I needed to finish my briefing and asked the rest of the passengers in the row if they were willing and able and everyone else said YES, except a man in seat A who said I DONT KNOW and he doesn't understand how the door operates. I explained how to open the door and referred him to the safety information card and directions on the exit door as a visual reference. He asked me where the life vest was and seemed confused what to do. I told him it was under the seat. He had his hands out in front of him and shook them like he didn't understand. I told him no problem we have another aisle seat he can sit in that would make everyone more comfortable. Neither man would voluntarily move seats, even when I hit the call light and got help from [another Flight Attendant]. At this point, the fact that they could not follow flight attendant directions concerned me more in the event of an evacuation. Together, [the other Flight Attendant] and I went up to the forward galley to ask for a Supervisor and talk about the situation as a crew. When the Supervisor arrived, she asked me where the passenger was and I walked her out to the row and showed her the two men. She asked them if they were okay to sit there and then told me we're good. Before I could talk to her about what she said and their response, she closed the forward door and pulled the jet bridge back.

Supervisors do not determine if a passenger is willing and able to sit in an exit row seat. CRM needs to occur without pressure to push the plane.

Synopsis

Flight Attendant reported problems with emergency row passengers and a Customer Service Representative not moving the people out of the emergency row.

Time / Day

Date : 201809
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZZ.ARTCC
State Reference : FO
Altitude.MSL.Single Value : 20000

Environment

Flight Conditions : VMC
Light : Night

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
Flight Phase : Climb

Component

Aircraft Component : AC Generator/Alternator
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 8805
Experience.Flight Crew.Last 90 Days : 210
Experience.Flight Crew.Type : 6084
ASRS Report Number.Accession Number : 1575119
Human Factors : Confusion
Human Factors : Troubleshooting

Events

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

Assessments

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

Narrative: 1

During climb out, aircraft's right generator and associated IDG (Integrated Drive Generator) failed. The right IDG was disconnected. Associated checklist item. "APU selector if available start". APU was started. If APU were to be used for the remainder of the flight, a diversion would be required. After all checklists were completed and situation stabilized, myself and the other [relief pilot] proceeded to crew rest.

Upon return, we were briefed on the resolution to this problem. Captain, Dispatch, [Maintenance Control] and fleet managers were conferenced into satcom discussions. As reference, MEL required the use of the APU for the entire flight. However the MEL was disregarded due to it being a dispatch requirement. Crew guidance of this problem was therefore the checklist, 2.XX.X. Eng gen off L. The question arose as to the interpretation of "APU selector if available start". This statement appears to give discretion to the crew. If the APU was required for flight, I believe the checklist would be written, "APU start. If not available, consider divert." What is the meaning of "if available"? Does this allow for operational considerations? Checklists rarely state "if available" to any item.

Via conference call, it was agreed by Captain, Dispatch, [Maintenance Control] and fleet managers that the APU was not required for the remainder of the flight. I believe we used excellent CRM and all available resources to reach this conclusion. However the vagueness of the checklist was enough to warrant writing this [ASRS Report].

Synopsis

A Boeing 777 pilot reported an electrical system anomaly that was successfully managed despite ambiguous Flight Manual and MEL guidance.

Time / Day

Date : 201809

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZSHA.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 40000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Rain

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZSHA

Aircraft Operator : Air Carrier

Make Model Name : Widebody, Low Wing, 2 Turbojet Eng

Crew Size.Number Of Crew : 4

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 7461

Experience.Flight Crew.Last 90 Days : 209

Experience.Flight Crew.Type : 518

ASRS Report Number.Accession Number : 1574775

Human Factors : Workload

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
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 4615
Experience.Flight Crew.Type : 2014
ASRS Report Number.Accession Number : 1575124
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
Function.Flight Crew : Relief Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 3044
Experience.Flight Crew.Last 90 Days : 208
Experience.Flight Crew.Type : 447
ASRS Report Number.Accession Number : 1574770
Human Factors : Workload

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 Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 10482
Experience.Flight Crew.Last 90 Days : 180
Experience.Flight Crew.Type : 1263
ASRS Report Number.Accession Number : 1574748
Human Factors : Workload

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

I was the Captain and pilot flying to 25PD. On descent for approach and landing into 25PD, unexpected weather that was not forecast for the time of our arrival had created traffic delays that were increasing in length. The delays were exacerbated by three runway changes within approximately an hour of our arrival. Thunderstorms moving through the area, rain, and reduced visibility in the arrival corridors precipitated the changing runways even though conditions at the airport were mostly VMC with few clouds. ATC seemed to be overwhelmed by the changing conditions and having to reorient arriving traffic as the runways changed. Preflight forecast weather was for temporary TSRA (Thunderstorms and Rain) in the vicinity, but with clearing weather and low clouds three hours prior to our ETA.

Shanghai Control gave us our first vector off course prior to airway fix DUMET headed south and clear of weather. Continuing on vectors while descending we were given two successive orbits to the right, followed by a left orbit. There was some initial confusion by the PM (Pilot Monitoring) and [the Relief Pilots] whether or not instructions to orbit from ATC were for a single turn or continuous multiple turns in orbit. I, as the PF (Pilot Flying), interpreted the ATC instructions as given, "Fly an orbit to the right/left" as meaning a single complete turn to the right or left. Inquiry with ATC confirmed this understanding, and was supported by the [Relief Pilots] search of area information found in the [International Operations Manual]. Meanwhile, all four pilots, using our best CRM/TEM (Crew Resource Management/Threat and Error Management) skills, vocalized our rising concern for the ever deteriorating REMF (Remaining Fuel on Board) state, making contingency plans, and running "what if" scenarios out loud amongst us. No EFC (Expected Further Clearance) or expected time of delay was ever issued. The length of the vectors caused added concern that we might have been forgotten in the melee of aircraft. We inquired a couple of times as to the length of our delay. At one point we were told five minutes, and at another that we were headed for landing. We had clearly become part of an insidious creeping approach delay. Minimum Fuel and Emergency Fuel contingencies were discussed. ZSSS/SHA diversion was considered. We pressed on, analyzing the traffic display ahead of us on TCAS, and choosing to continue to 25PD as our best and safest alternative.

With 10.6K lbs. of fuel remaining, I decided to declare Minimum Fuel. Approach Control acknowledge our declaration and advised us of a 60 km run until landing. I had the PM advise Approach Control that we were unable to run 60 km; unable to accept further delays. We did not ask for priority handling, but were given an immediate right turn to base leg and an intercept to final, Runway 17R. Another flight was heard being given orbit instructions soon afterward, presumably in deference to our handling priority. Approach and landing were normal, but for the preceding landing aircraft that delayed landing clearance until about 650 feet AGL. Landing fuel, 9,300 lbs., was noted clear of the runway. Block fuel was 6,800 lbs.

An item of note is that Civil Aviation Administration China (CAAC) requested and was provided with a statement from the Captain describing the fuel state onboard and the decision to declare Minimum Fuel.

Narrative: 2

[Report narrative contained no additional information.]

Narrative: 3

[Report narrative contained no additional information.]

Narrative: 4

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported declaring minimum fuel with ATC after incurring delay vectors due to unanticipated weather conditions at the destination.

Time / Day

Date : 201808

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 8000

Environment

Flight Conditions : VMC

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 D : 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 : 1573325

Human Factors : Workload

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Automation : Aircraft Terrain Warning

Detector.Person : Flight Crew

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

While flying the [approach, the] aircraft descended to approximately 800 AGL during visual approach prior to the final segment. Following descent clearance and subsequent clearance to fly the [approach], and on the offshore segment of the approach, tower instructed us to "square off" the turn to final for traffic in the pattern. Additional traffic was called to our 3 o'clock position. At this time I confirmed the instructions to the CA (Captain) (Pilot Flying) and immediately began a visual scan for the traffic. I glanced back to the PFD and called "You're at 1,250 feet," to call attention to the CA that we were getting low for our distance from the airport. I went back outside the aircraft momentarily to scan for the called traffic. Next time I looked inside we were at 800 feet AGL. I immediately called the deviation to the CA, saying, "check altitude - 800 feet." As the CA corrected immediately tower called, "Low altitude alert, 700 feet." The CA regained altitude to approximately 1,200 AGL prior to commencing final descent to the airport. The flight continued without further incident.

The CA had disconnected the AP during the initial descent phase of the visual approach. During the descent, the CA was sequencing waypoints manually on the FMS, including programming and cleaning up the approach. Throughout the flying day, the CA was very hands on and performing several PM (Pilot Monitoring) tasks while he was PF (Pilot Flying). I feel that should SOPs regarding PF/PM duties had been adhered to during the flight the likelihood of the incident occurring would have been significantly reduced. I also feel that disconnecting the autopilot and hand-flying the approach would not have been a bad thing in itself should PF/PM duties had been followed. The CA hand-flying a visual approach while being heads-down into the FMS contributed to the lack of attention to altitude. The adjustment of the approach per ATC instructions was a contributing factor. The additional traffic called by tower (but not depicted on TCAS) at our 3 o'clock (which was in the direction of our turn back to the airport) took my attention as PM from monitoring flight data to an outside visual scan for traffic.

Reinforcement of CRM during critical phases of flight. Reinforcement that hand-flying the aircraft requires complete attention to flight instruments by the PF.

Synopsis

CRJ First Officer reported the Captain descended early on a visual approach and failed to follow SOP's on several occasions.

Time / Day

Date : 201808
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Cessna 150
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class E : ZZZ

Component : 1

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

Component : 2

Aircraft Component : Fuel
Aircraft Reference : X

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 600
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 550

ASRS Report Number.Accession Number : 1572898
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Procedural : FAR
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

It was a normal training flight. We had planned to practice Simulated Emergencies and basic maneuvers. Like always, since we have reduced fuel we estimated how much fuel we would need. We calculated roughly 7 gallons were all we were going to need for our 1.5 hr flight today. The weather was clear. Winds were 200 at 10 knots. Fairly calm.

Upon arrival to the airplane, we began the preflight. Everything checked out to be ok, except for the right tank. The right tank had some water contaminate in the fuel. We had to sump the tank 3 times to get the water out and to be able to verify that the fuel was clean. Once we verified that the fuel was clean, we manually dipped the tanks to find that we had a total of 17 gallons. 9 gallons in the left tank and 8 gallons in the right tank. Seeing that we had 7 gallons we knew that that should give us roughly 2.5 hrs of flight allowing us to meet VFR fuel requirements of a reserve and then some. From there we started the plane up, with no issues. The run up was text book perfect. We had no issues with flying the plane.

We departed from ZZZ and made a slow climb, avoiding Bravo airspace, up to 6,000 feet MSL. We started our maneuvers like Steep Turns and Slow flight. We were in slow flight with reduced power for roughly 30 minutes. We then practiced a Simulated Emergency Engine Failure, which allowed us to get to an altitude appropriate for Ground Reference maneuvers. From there flew over to ZZZ1 for 1 touch'n'go and 1 go-around. We then departed the area to the north back to ZZZ.

Once we were above the VFR Waypoint at 4,000 feet, we called to Tower and received clearance to enter Right Traffic 17R and to Report Mid-Field Downwind. Shortly after reporting back the call we felt the engine start to sputter. In attempt to give the airplane as much possible power, we gave the airplane a full rich mixture, fuel pump on, and full throttle. We noticed no change in power, so we started to prepare ourselves for a forced landing. I considered turning and trying to glide towards ZZZ since we were so close, but being only 1,500 feet off of the ground the math didn't add up. We wouldn't have made it to ZZZ. Fortunately, my student has a couple of thousands of hours in helicopters, so he took the radios, and I flew the plane. We executed good Crew Resource Management. He helped me by pointing out obstacles to avoid on our way down. I had made my 180 degrees turn to face into the southerly wind and when landing on the [highway] was assured I nosed down to allow myself to have some extra speed to bleed off during the

landing flare. I tried to stay 15-20 feet off the ground while bleeding the speed to allow car traffic to see me. As we slowed down, I slowly bumped in flaps helping keep us aloft. Traffic cleared and we had plenty of space to touch down. We did not hit anything. The touch-down was very soft. There were no injuries to [the student] nor I. There was no damage to the airplane itself.

Synopsis

C150 instructor pilot reported a loss of engine power and off field landing due to fuel starvation.

Time / Day

Date : 201808

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZTL.ARTCC

State Reference : GA

Altitude.MSL.Single Value : 22000

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Center : ZTL

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 : Descent

Route In Use.STAR : CHSLY 3

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 22000

ASRS Report Number.Accession Number : 1568535

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure
Primary Problem : Ambiguous

Narrative: 1

Filed cruise [altitude was] FL240. Just north of BURRZ intersection, cleared to descend via CHSLY3 Arrival. Set and confirmed bottom altitude of 6,000 feet. Activated managed flight on FMCG. Aircraft began descending. At approximately FL230, First Officer pointed out that crossing altitude at BURRZ was to be FL240 and that descent should not have started until BURRZ. I began to stop descent using vertical speed zero. At FL220 aircraft leveled off, at which time ATC asked if there was a problem he needed to know about. I told him I miscalculated descent and asked if there was going to be a conflict or problem. He said no [and] told us to contact next frequency for lower. Next frequency said nothing different and then gave us a phone number to call on the ground. Also, he failed to reissue a "descent via" clearance which I had to question immediately because that failure starts a difficult catch up scenario in this airplane.

Once on the ground I contacted ATC by phone. I spoke to Washington Center Operations Manager. I asked if this was a big deal for me and this is what he said exactly. He said NO, it was not because [our company] has been aware of this problem with their Airbus 320 series aircraft for over 2 years now and that this incident happens all the time every day with CHSLY3 Arrival and they are trying to rectify situation. He said he had to report it so it could be added to the database and that all I had to do was file [a report] and notify my Chief Pilot. That's it. My situational awareness is mostly to blame. I'm also very low time in this aircraft and still honing my skill. CRM could also have contributed.

Synopsis

A319 Captain reported descending early on arrival clearance.

Time / Day

Date : 201808

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : SAN.Airport

State Reference : CA

Relative Position.Angle.Radial : 270

Relative Position.Distance.Nautical Miles : 5

Altitude.AGL.Single Value : 300

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : SAN

Aircraft Operator : Military

Make Model Name : Mentor/Turbo Mentor (T-34)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class E : SCT

Aircraft : 2

Reference : Y

Make Model Name : Helicopter

Airspace.Class E : SCT

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Military

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1560

Experience.Flight Crew.Last 90 Days : 90

Experience.Flight Crew.Type : 238

ASRS Report Number.Accession Number : 1567527

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

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

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Aircraft X was executing a VFR transition from south to north with approval from Lindbergh Tower. There were two other aircraft doing the same thing, another [military trainer aircraft] with [same squadron] callsign and a helicopter. This was in addition to the regular tower communication for their normal operations (takeoff and landing). Tower cleared Aircraft X into the Bravo airspace, but I think he gave me a restriction. I rogered up the clearance but missed the restriction. I was about to come up and ask but at that time had a near- midair with a helicopter coming opposite direction. After that, I heard the tower talking to someone on VHF about my missed restriction of 1,000' AGL. I'm very sorry about this. I will brief my [team] during our [review] so that everyone is aware of this possibility of happening and the importance of using good CRM with everyone on freq.

Synopsis

Military Pilot reported a NMAC because they missed an ATC restriction.

Time / Day

Date : 201807

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ATL.Airport

State Reference : GA

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Initial Approach

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Not Flying

ASRS Report Number.Accession Number : 1558191

Human Factors : Communication Breakdown

Human Factors : Workload

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Unstabilized Approach

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 : FLC complied w / Automation / Advisory

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

I was Pilot Monitoring (PM) for this leg as First officer (FO) was flying a visual approach backed up by ILS. The FO had the autopilot connected and was managing the approach with the thrust levers and the V/S wheel on the FCP. At 1,000 feet the FO was approximately 1/4 dot low on the glideslope. I stated he was low and he responded with "Correcting." He was slow to correct and the initial correction was to add thrust without decreasing V/S. He disconnected the autopilot but didn't adequately adjust his pitch. I stated glideslope as we were approaching 1 dot. About the same time the Tower announced a low altitude warning using our call sign which I responded to with correcting. The FO adjusted pitch and power and we were stabilized by 500 feet. We landed normally. FO's fixation error while flying the approach possibly due to task saturation caused him to get low on the glide path while in visual conditions. I should have been more directive in my communication with him and checked the deviation sooner. Continue to emphasize CRM and directive clear communication between PM and Pilot Flying (PF). I should have been less concerned with not wanting to micro-manage a relatively experienced FO and directed a positive correction sooner.

Synopsis

CRJ-200 Captain reported receiving a low altitude warning from the Tower during approach to ATL airport.

Time / Day

Date : 201805

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : AUS.Airport

State Reference : TX

Altitude.MSL.Single Value : 23000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZHU

Aircraft Operator : Air Carrier

Make Model Name : Widebody Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Descent

Route In Use.STAR : SEWZY4

Airspace.Class A : ZHU

Component

Aircraft Component : Speedbrake/Spoiler

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 : 1545993

Human Factors : Distraction

Human Factors : Time Pressure

Human Factors : Troubleshooting

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
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1545996
Human Factors : Troubleshooting
Human Factors : Time Pressure
Human Factors : Communication Breakdown
Human Factors : Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

Initially vectored off routing to AUS while en-route to WINDU. Given descent while on westerly heading to FL330 from FL360. Descended initially on profile, then cleared direct SSOLO at FL330. Frequency change. Given further descent to an altitude I don't recall. Now high on profile, attempted to deploy spoilers several times but left wing spoilers were stuck closed/retracted. Told pilot monitoring the spoilers weren't coming out, but he didn't hear me. I suspect the inter cockpit communication was stepped on by Center, or a frequency change. Asked pilot monitoring to inform Center we weren't going to make restrictions at SSOLO about 15 miles prior to SSOLO. I believe he had to repeat that call to Center. Pilot monitoring informed Center, and after some confusion Center replied, "do the best you can." Spoilers were still unusable so we ended up making the below FL230 restriction at 310 knots rather than 280 knots. Soon thereafter, I was able to get full spoiler deployment and we made the rest of the speed and altitude restrictions on the SEWZY4 arrival. Pilot monitoring did a nice job of quick 3:1 math to help me get below FL230 at SSOLO. I wrote the spoilers up in the AML in AUS.

Had the spoilers deployed normally we would have made our restrictions at SSOLO. I

could have communicated more clearly to the pilot monitoring that the left wing spoilers were stuck retracted. I assumed he heard my initial description or saw the configuration display showing the condition during several repeated extension attempts, but some clear yelling from me over Center's chatter would have clarified the condition for the pilot monitoring. I'm going to put some human error on Houston Center's shoulders for the slow response to a couple calls from us about not making the restrictions at SSOLO, and the "do the best you can" response was, I felt, vague and something I thought ATC was trying to get away from in their terminology.

I fly [to] AUS quite a bit and a late descent from cruise is very common on the SEWZY4, spoilers are usually required to get on profile. Perhaps a better arrival design would be in order. I covered the CRM issues and Center's communication/responses. I don't think we violated anything at SSOLO with Center's "do the best you can" clearance but submitting this in case the FAA's eye in the sky thinks differently. That is all.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported a problem extending spoilers, communicating with each other, and their combined effect on the descent profile.

Time / Day

Date : 201805

Place

Locale Reference.Airport : EDDF.Airport

State Reference : FO

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B777 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

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 : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 14624

Experience.Flight Crew.Last 90 Days : 240

Experience.Flight Crew.Type : 2648

ASRS Report Number.Accession Number : 1540058

Human Factors : Communication Breakdown

Human Factors : Confusion

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 : Pilot Not Flying

Function.Flight Crew : First Officer

Experience.Flight Crew.Total : 3535

Experience.Flight Crew.Type : 505

ASRS Report Number.Accession Number : 1540180
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : Pre-flight
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Manuals
Primary Problem : Company Policy

Narrative: 1

There seems to be several discrepancies in the FOM (Flight Operations Manual), Flight Manual, plus the 10-7p TO (Take-off) data in Frankfurt. Specifically we are referencing the ICAO Noise Abatement of 9-Mar-18. 3.90.8 references 1500 and 3000 respectively. However, 3.80.4 of the normals say to use the uplinked FMC acceleration heights for both NADP1 and 2 via the takeoff data. When we pulled up the data, it said 1500/1500 which is different from the previous pages in the FOM or FM.

Also the language in the 10-7 is ambiguous. I know we had difficulty with takeoff numbers on [Runway] 25C/7C in the past. Are we still having problems? My FO (First Officer) said [FOM] indicated this was old information. Now with the last change I have TO data that says 1500/1500 for noise abatement but pages in the FOM, FM that say different.

Narrative: 2

On [the] ground, Captain wanted flying FO (First Officer) to overwrite the uplinked Thrust Reduction/Acceleration Altitudes (1500/3000) to match the classic NADP-1 (Noise Abatement Departure Procedure 1) altitudes of 1500/3000. I tried to explain that due to a recent FM (Flight Manual) change, we are supposed to use what is on the "Takeoff Data Message" and just make sure it uplinked correctly. Fortunately, he agreed at the time since we were taxiing to the runway which did not allow for much discussion (a CRM threat unto itself).

Once enroute however, he explained how vehemently he disagrees because internationally it is always NADP-1 and the FM says NADP-1 says it is always 1500/3000. I tried to explain that those altitudes do vary at some international airports such as EDDF. However, the 10-1P Jeppesen pages for EDDF no longer specify at all, which left me with no leg to stand on since he was not accepting the takeoff data message as valid information. I did show him where it says twice in the FM, and once in the FM that we are supposed to use the takeoff data message numbers but it took an hour of arguing before he seemed to accept my explanation. He also pointed to an outdated warning on the -9 page that warns that Runway 7C data may not uplink. He said that means we shouldn't use it if it does work. I tried to explain that we then need to file a Report since under his interpretation, we used invalid V-speeds and reduced thrust etc as well. In other words, it is outdated info

and now the uplink works and we can use it.

Summary, due to conflicting information in our resources and a lack of general knowledge (keeping up with changes) by some pilots, it was a very difficult CRM environment. I am pretty sure that we complied but even the captain mentioned that he has previously flown out of EDDF and the entire crew agreed they should just overwrite the uplinked numbers and ignore the takeoff data message.

Synopsis

Boeing 777 flight crew did not agree among themselves, which Noise Abatement procedure was to be used for their situation.

Time / Day

Date : 201804

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3160

Environment

Flight Conditions : VMC

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

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)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1536553

Human Factors : Communication Breakdown

Human Factors : Training / Qualification

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Anomaly.Inflight Event / Encounter : Fuel Issue

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Executed Go Around / Missed Approach

Result.Flight Crew : Returned To Clearance

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

Visual Approach became extremely unstable (speed in excess of 170, VSI -1200) accompanied by multiple EICAS CAUTION Messages including Auto Throttle FAIL & FD VERT MODE OFF. First Officer (FO) called for Go-Around (GA), Captain (CA) ignored SOP & wanted to continue, FO repeated Go-Around accompanied with 'unstable'. CA resisted, FO initiated Throttle advancement, CA Froze and unable to perform required actions and callouts, FO assisted by prompting CA of required actions & callouts, FO made multiple repeat calls for the CA to press the TOGA buttons, eventually FO intervened by doing it myself. FO told ATC Tower "Aircraft X, going around, declaring minimum fuel."

CA exceeded Flap Speed Limitation & aircraft was climbing at very high speed, Speed Tape in the Red, FO exercised and took control of the aircraft and communications to bring the aircraft out of an unsafe situation and to a stable safe speed within the limitations. Aircraft stable passing 3,160 feet. ATC failure to acknowledge minimum fuel advisory and to provide GA instructions for the GA from a Visual Approach. Passing 3,300 feet, ATC finally acknowledged and provided conflicting and non-applicable GA instructions, ATC said, "Aircraft X climb and maintain 3,000, runway heading". FO whilst flying pushed hand PTT mic and stated, "Aircraft X unable 3,000, passing 3,300, you gave it to me late, I am able 4,000." ATC failed to respond and seemed more focused on other aircraft. FO asked CA, "can you please acknowledge all ATC instructions and enter them accordingly such as HDG etc."

On downwind vector, FO asked ATC "Aircraft X, I want to clarify Altitude 4,000," ATC response, "Negative Aircraft X, 3,000 HDG 360 contact departure". Departure contacted and descended to 3,000.

All Pilot-Skill Errors above, pertaining to CA's actions, not myself - the First Officer. All selected items above to honestly indicate cause and, mitigating factors.

Synopsis

ERJ-175 First Officer reported a breakdown of CRM on final resulting in an unstabilized approach.

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 - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

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.

Time / Day

Date : 201803

Local Time Of Day : 0601-1200

Environment

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Cruise

Cabin Lighting : High

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : General Seating Area

Cabin Activity : Service

Reporter Organization : Air Carrier

Function.Flight Attendant : Flight Attendant (On Duty)

Function.Flight Attendant : Flight Attendant In Charge

ASRS Report Number.Accession Number : 1531173

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Attendant

Communication Breakdown.Party2 : Flight Attendant

Events

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

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : FAR

Detector.Person : Flight Attendant

When Detected : Pre-flight

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Flight Attendant X was very pleasant on the first day of our trip. FA (Flight Attendant) X was not in compliance the first day of work. [She] was eating out of first class basket before anyone was served, not briefing the exit row before main cabin door was closed and texting once she finished her service. The second day, FA X was working first class.

When we arrived in ZZZ with almost a four hours and a half sit, I arrived in the crew lounge and was watching TV. FA X came in shortly after me [while] I was watching TV and texting. I look up and FA X pulls the plug from the TV and I said to FA X why are you behaving like this?

FA X said you are not watching TV and I said I was and did not appreciate her behavior and she said she would do again if I turn the TV back on and she did for a second time. This time ripped it out of the wall and I said to FA X you are being disrespectful and to not do that again. She left the room, came back at the same time another crew member came in the room. She had her phone so loud. FA Y said would you please turn your phone down. She said that the volume was on the lowest setting for her phone. FA Y offered FA X headphones. She said they would not work on her phone. The show FA X was watching was using profanity every other word and it was very loud. Any crew member who walked in immediately walked out and sat outside the crew room. FA Y and myself left the room. We both felt very uncomfortable with FA X's behavior. The crew room is supposed to be a place to rest and relax. I did not feel comfortable with FA X's behavior [and] called my manager and explained what had happened and to see if once we arrived [at our destination,] if another FA could take her place. The manager said I know you have high expectations and informed me this was a CRM [issue] and we needed to work things out. Requested at some point to send an email in regards to what happened. When we arrived in ZZZ1, it was late and I was very tired and had an early report the next day. Did not have time to do a report in regards to the CRM. Following our ZZZ sit, I arrived to the aircraft for our next trip to ZZZ1, FA X said we needed to make it through these next 2 days. She was not sure what came over her in the crew room. I agreed with FA X let's work together. We performed our safety demo and part of the demo was to wear the life vest and performed how to wear the vest. FA X would only hold the vest during our demo. After our demo, I mentioned she needs to wear it versus holding it. On the third day of our first leg, FA X was leaving bins half open and the closet door open. This happened more than 8 times and had requested to please make sure they are closed and locked. She would just look at me and walked away. The service cart was left unattended at the exit row. FA X left her service cart and walk to the front galley and called the flight deck. I saw the cart sitting in the aisle at row 12. We did have turbulence on and off during the flight. I walk back to the cart and checked with passengers for service. She was requesting [that] a passenger wanted to purchase Pringles. Prior to FA X making the call to the flight deck, FA X had touched the FA call button twice in a row and I held my index finger to say give me a minute with okay I will be there. I was in the middle of my service with first class.

I was not comfortable and felt the safety on the aircraft for the passengers and myself was not safe and FA X would not comply with the safety of the aircraft. I had requested for a manager to meet the aircraft once we arrived at our destination due to the situation through ACARS.

I was not sure what the reason was for her calling the flight deck. I spoke to the flight deck in regards to problems of safety in flight. FA X called the flight deck and said I was ignoring her and not helping her on requested items. I explained as before, I was serving first class and [I] would be there shortly. I said to the CA (Captain) [that] there was a communication problem and FA X was leaving bins opened and unlocked service cart left in the aisle at row 12. FA X walked up to [the] galley to call the flight deck and left the cart in the aisle. I requested the flight deck to please notify ACARS there was an issue with safety on board and FA X was not keeping the bins closed and locked, left her cart at the exit row and not talking to me. After FA X's service in the main cabin, she began texting on her phone for the remainder of the flight and would not respond to me.

On arrival, two regional managers came to the aircraft to talk and discuss the issues. I had explained to FA X, once all passengers had left the aircraft, a manager would be coming to talk with us in regards to our flight. Before I could address the reason for the call, FA X started the conversation in regards to the incident in ZZZ crew room and made false accusations in regards to what happened to the point of making up things that did not occur. The main reason for the meeting was to discuss the safety issues. I explained the issues of FA X not listening to my request to please lock and close all bins and several occasions to please close the closet door after she opened it to remove an item. The manager asked if we both could work this flight together if not, and you choose not to, you will have a missed trip and a meeting with a manager. FA X said she was okay and I said I had a problem flying with FA X from inflight safety as well making false accusations that did not occur.

Synopsis

Air carrier Flight Attendant reported that the work environment was very stressful due to the cabin crew pairing.

Time / Day

Date : 201803

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : PA-34-200T Turbo Seneca II

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Takeoff

Route In Use : Direct

Route In Use : Vectors

Route In Use : Visual Approach

Airspace.Class D : ZZZ

Component

Aircraft Component : Pitot-Static System

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1950

Experience.Flight Crew.Last 90 Days : 250

Experience.Flight Crew.Type : 200

ASRS Report Number.Accession Number : 1524730

Human Factors : Troubleshooting

Human Factors : Communication Breakdown

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

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Rejected Takeoff
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

During the pre-flight inspection, no abnormalities were found and the passenger plus the pilot and copilot began to board the aircraft. After engine start up, we taxied to [the] runway as directed by ATC for an eastbound departure. As the plane approached the departure end of [the] runway, ground control advised the aircraft to hold short of the runway and monitor tower. After a brief wait, we were cleared for takeoff and proceeded with the take-off roll. At this time, the Pilot Monitoring (me) noticed that the indicated airspeed was very low compared to the ground speed at that time and struggling to rise as the aircraft sped up. Shortly after, the indicated airspeed dropped to 0, and that is when we decided to reject the takeoff.

After the initial "surprise" factor, we were instructed by ATC to turn left on taxiway Hotel at which point we mistakenly read back as a "right" turn instead. We quickly corrected ourselves as we turned left on that same taxiway. After completing the required checklists, ATC asked us to explain the reason for aborting the take-off, at which point I explained that I suspected a "probe might be covered by something" without much further details. Soon after, ATC requested to taxi and contact ground for further instructions. As soon as we reached [the taxiway], ground again asked the reason for the aborted take-off receiving the same answer as above. We then decided to request to move to a secluded area to shut down the left engine, so this way to be able to access the pitot tube in order to inspect it safely without causing a traffic disturbance; which was granted after moving further into the ramp area.

After reaching our designated spot to do our checks, I stepped out the aircraft to check the pitot tube. Upon closer examination, I noticed there were very fine grains of sand and other materials like grass bits around and sticking out of the pitot tube's ram air intake. I then proceeded to remove everything I judged to be blocking the hole and climbed back into the airplane. At this point, we requested taxi to the active for take-off and after being questioned again about the motive of the aborted takeoff, the aircraft was cleared to taxi to [the runway] once again. The takeoff and flight occurred with no further complications safely landing a few minutes later.

As we approached [the airport], tower advised us that [Tower] wanted to talk to us about what had happened after we landed. After copying the number down, we landed the

aircraft and taxied to the hangar. On the phone, [Tower] request further information on the aborted take-off and, apparently, had some problems hearing our call-sign on read-backs. We explained the situation and after some recommendations by [Tower], we ended the phone call.

I believe this problem can be prevented by doing a more thorough preflight inspection, paying attention to smaller details. Thankfully nothing major happened and in my opinion the crew behaved the way it was trained to do. Also ATC played a big part in helping us solve our problem by facilitating our requests to relocate our aircraft.

By using good judgment and CRM, I feel that situations like these can be avoided and corrected in a timely and safe manner.

Synopsis

A Piper Seneca instructor pilot reported a rejected takeoff due to an airspeed indication anomaly. An examination of the pitot tube revealed some contamination, which was cleared out, and a subsequent takeoff attempt was successful.

Time / Day

Date : 201803

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DEN.Airport

State Reference : CO

Altitude.AGL.Single Value : 300

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Windshear

Aircraft

Reference : X

ATC / Advisory.Tower : DEN

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

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 : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1524509

Human Factors : Fatigue

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Automation : Aircraft Other Automation

Detector.Automation : Aircraft Terrain Warning

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

Nearing the end of an [all-night flight to] DEN. Flew squarely through Window of Circadian Low (WOCL) and was feeling fairly fatigued. I First Officer (FO) was flying a ILS/visual approach to 16R. No reports of windshear from ATIS or Approach Control. 1,000 feet AGL the aircraft in front of us reported a 15 knot gain and 20 knot loss. CRM'ed possibly going around but elected to continue approach with a 20 knot target add. At 300 feet AGL experienced a wind shear loss far in excess of 20 knots. Initiated go-around. During go-around Predictive Wind shear System (PWS) announced "Windshear, Windshear" Followed SOP, added max power until verifying we were out of windshear.

Remainder of go-around and vectors were uneventful. Requested 17R as there was no reported windshear to that runway. At 1,500 feet AGL the aircraft in front of us reported windshear and a loss of 15 knots. We decided that it would be more appropriate for the Captain to finish the approach. Transferred aircraft control in compliance with SOP. Elected a 20 knot target once again. At 300 feet AGL we got a windshear gain and Flaps blew up to 25. GPWS momentarily announce "Too Low, Terrain" before immediately quieting as we got another immediate 15-20 kt loss and the flaps moved back to 30. This happened very quickly before go-around could even be considered/announced. The approach immediately re-stabilized and the Captain accomplished a safe landing, on speed, in the touch down zone.

Synopsis

B737NG First Officer reported encountering windshear on two separate approaches into DEN, executing a go-around after the first encounter, but landing after the second, even though they received a terrain alert.

Time / Day

Date : 201802
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 200

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B767 Undifferentiated or Other Model
Crew Size.Number Of Crew : 3
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Climb
Flight Phase : Takeoff
Airspace.Class B : ZZZ

Component

Aircraft Component : Leading Edge Slat
Aircraft Reference : X
Problem : Malfunctioning

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 8132
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 634
ASRS Report Number.Accession Number : 1519255
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Communication Breakdown

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

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Relief Pilot
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Type : 609
ASRS Report Number.Accession Number : 1519288
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Became Reoriented
Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

This trip began as a three pilot crew. ALL 3 members of the crew had never flown together. The Captain was Pilot Flying (PF) and I was the pilot Monitoring (PM) and the IRO. The PM and IRO met at the briefing room 1:40 prior to departure and reviewed the paperwork waiting for the Captain to arrive. At 1 hour prior to departure, we proceeded to the aircraft across the hall and began our duties. The IRO called operations via the agents to find the Captain's location at about 50 minutes and the Captain arrived inside 40 minutes during boarding. He gave a quick brief to the Flight Attendants (FAs) while settling in and proceeded to tell stories of his upcoming retirement. A quick brief of the departure and card items was accomplished and the checklist where completed.

We taxied to the runway for departure without issue and were cleared for takeoff. Upon rotation, a LE SLAT ASYM EICAS MSG flashed for a second and then disappeared. Climbing through 200 feet without flap/slat movement it did it again to which I commented that's weird and the IRO stated "yeah". As the PF began his turn to heading 190 he called flaps 1 with a positive trend vector to flap speed, the PM received the tower handoff to departure. At approximately 1000 feet, another LE Flap ASYM EICAS MSG appeared and disappeared during the PM radio call to departure then the stick shaker activated.

The PM called airspeed and the PF called out we are overspeeding and pulled back on the yoke. The PF disconnected the Autothrottles and pulled power back while pulling nose up. The IRO CALLED STICK FORWARD, the PM placed his hand on the yoke pushing forward and putting hand under the PF's on the thrust while the PF advanced the power to Max power regaining his Situational Awareness of our shaker stall event versus an overspeed. The PF began to call for flaps up not paying attention to being slow, the PM did not comply saying airspeed, and we need to accelerate in order to retract flaps.

The PF again commanded flaps up without compliance from the PM who called AIRSPEED again when the IRO stated very forcefully we are below flap speed, we need to accelerate to configure. The IRO's loud verbalization gained the attention of the PF and he began to be receptive of the PM and IRO's verbalization and actions to regain aircraft control. The aircraft was stabilized and accelerated to climb speed without further incident. The IRO stayed on the Flight Deck until leveling at initial cruise altitude.

Once the IRO departed for crew rest, the PF made continuous comments about why the aircraft was overspeeding during climb out and that was the reason for pitch up and power reduction. In fact all the IRO and PM were able to see was decreasing airspeed and increasing pitch while the PF called overspeed ignoring the stick shaker and misinterpreting the red low speed hash on the airspeed tape. The PF lost complete Situational Awareness of the event, it took both the PM, and IRO to bring him back [to] reality while recovering the aircraft.

Narrative: 2

This was a three person unfamiliar crew on a flight, where the Captain was Pilot Flying (PF), First Officer (FO) was Pilot Monitoring (PM), and I was IRO. Me and the flying FO met in the flight briefing area on time, reviewed the flight plan for over an hour, and still had not met the Captain. We proceeded to the aircraft and attended to our duties. 40 minutes prior, we still had no Captain so I requested the gate agent call operations. The Captain arrived 30 minutes prior to departure and introductions were made. The Captain seemed preoccupied with his impending retirement as this was his second to last pairing. A quick crew briefing was completed that mainly focused on the Pilot Flying portion of the departure-briefing card. Push back and taxiing out were normal.

We departed flaps 5 Reduced. At Rotation speed an EICAS message LE SLATS ASYM flashed on for a second and cleared. No verbal callout was made but I know the PM saw it as well. Around 1000 feet it flashed again and was verbalized. Approaching 2000 feet at 200 kts with a solid acceleration trend vector the PF called for flaps 1 as he rolled into a turn.

Just after the flap handle was moved the EICAS flashed again, which drew our attention for less than half a second and we went immediately into the stick shaker. The PM called "speed" and the PF pulled back on the yoke. I called "forward stick" and the PF immediately complied and recovered the undesirable state. At the same time, I witnessed the PM confirming max thrust, stow speed brakes and guarding the yoke from any further

pulling back from the PF.

The aircraft was at 190 kts at its slowest, which was 10 kts below flaps 1 speed. It was obvious to the PM and myself the PF had lost Situational Awareness as he repeatedly stated "we were overspeeding" which we were most definitely were not. The aircraft was heavy and not accelerating well. At 210kts with no airspeed trend vector, the PF called for "flaps up" (10kts to slow). My eyes immediately went to PM and saw he wasn't complying with command. PM stated we need to accelerate first. The PF again called for flaps 1 and then again, even before we could verbally respond I stated, "Captain, you are below flap speed, I strongly suggest you accelerate the aircraft and do not reconfigure until appropriate!"

That snapped him out of it, and we continued climb out and cleanup without further incident. I remained on the flight deck until cruise and only went on break after subtly confirming with PM that he was okay alone upfront with PF. There was very little initial discussion about the event as the PF was still hung up on an "overspeed" event that neither the PM or myself witnessed.

I didn't want to press the issue at the time, I was more concerned with the PF getting a solid rest break without being all spun up over the event. After his rest, we spoke further and he thanked me, for calling "forward stick" when he pulled back into the stick shaker but in my opinion, he still hasn't grasped the gravity on the event. This was a scary event particularly sitting in the IRO seat but the PM's actions and lack of action when appropriate kept the event from getting much worse. He was in a tough situation and I commend him.

Synopsis

B767 flight crew reported an early flap retraction resulting in a stick shaker followed by poor CRM during the event.

Time / Day

Date : 201802
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ADQ.Airport
State Reference : AK
Altitude.AGL.Single Value : 400

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : ADQ
Aircraft Operator : Air Carrier
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class D : ADQ

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 : Flight Instructor
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 2750
Experience.Flight Crew.Last 90 Days : 175
Experience.Flight Crew.Type : 685
ASRS Report Number.Accession Number : 1517385
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

Upon arrival into the Kodiak area we were kept high by Anchorage Center due to an outbound IFR helicopter. Once cleared for a visual approach we contacted Tower. The Tower advised us to report a 2 mile right base to Runway 26, to which the Captain (Pilot Monitoring) replied that we would need to maneuver out a bit to lose altitude due to the late approach clearance from Center. Tower replied that was approved and to report turning final. We turned an approximate 6 mile final and as we were in the turn we noticed additional traffic on TCAS inbound towards the Kodiak airport as well. The Captain called our turn to final and also queried Tower about the traffic, to which the Tower Controller's response was almost inaudible. After two additional attempts to understand the Tower Controller we finally understood Tower was not talking to that traffic yet. We believe the controller was having issues with his microphone.

Shortly thereafter that traffic, another helicopter, called in for landing. Additionally, a Cherokee called in over Buskin Pass for landing. There was another VFR aircraft apparently on the landing rollout on 26 and one additional VFR aircraft being vectored for 29. The controller was apparently very task saturated and seemed to lose certainty as to which aircraft was where. We asked the controller for a landing clearance twice while on final, stating our position each time, to which we were told to continue both times. Finally, at approximately 400 feet AGL we received a landing clearance. We landed without incident and expeditiously taxied to taxiway Foxtrot to exit 26. On taxi in the controller asked us to call him and provided a phone number. The Captain and I attempted to reach the controller numerous times on the phone while we were on the ground in Kodiak with no luck. When picking up our IFR clearance for our outbound flight I mentioned to the controller that we were trying to reach him via phone to which he only replied "roger."

On climb out on our departure we asked the controller if we needed to contact him once we reached our next destination to which he replied, "It's okay, don't worry about it anymore." As we continued on our flight the Captain and I discussed the event thoroughly and agreed that he and I exhibited good CRM, decision making, and traffic awareness. We strongly feel that the controller was task saturated and had a high workload with lots of inbounds. A contributing factor could have been the apparent microphone issues that controller was having. Another contributing factor is the lack of radar in the Kodiak area. When considering the possibility of a go-around, or traffic escape maneuver, there was inbound traffic in all quadrants that did not have terrain. Due to potential traffic conflicts we continued the approach. Neither of us feel that any regulations nor ATC instructions were violated. I am filing this report to communicate the event and raise awareness to the high amount of traffic in the Kodiak area.

Synopsis

Air carrier First Officer reported receiving a late landing clearance due to communication problems with the Tower.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 500

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Corporate

Make Model Name : Citation Excel (C560XL)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class D : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 400

Experience.Flight Crew.Last 90 Days : 45

Experience.Flight Crew.Type : 45

ASRS Report Number.Accession Number : 1517142

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

While approaching on a Part 91 corporate mission, ATC advised us to expect a visual approach. VMC weather conditions were encountered along the entire route of flight, and winds at the field indicated roughly 10-15 knots out of the South. My Captain was Pilot Flying (PF) and due to the clear weather gave an exceptionally terse briefing for what we could expect as we transitioned into the terminal area and executed the visual approach.

Around 10 miles Northeast of the airport I suggested programming an instrument procedure into the FMS as a back up aid to situational awareness. However, PF indicated that an instrument backup would not be needed since we could clearly see the field, and he had landed there before. Being relatively new to the company and multi crew cockpit environments, I am still finding my voice in the right seat and left the suggestion at that, turning my attention to other arrival duties. After calling field in sight, ATC cleared us for the Visual Approach and handed us off to the Tower controller who requested that we advise when we were on a left base. In the distance I could clearly see what I understood to be the runway, informing the tower controller when I felt we were on a 2-3 mile left base. Instead of gradually turning left to join the final PF proceeded to obliviously fly straight through the extended runway centerline.

This is where the next major breakdown in CRM occurred. I had correctly identified the runway we were supposed to land on, but upon passing it assumed that PF, as the more senior crewmember, must have had a good reason for doing so. Eventually, we incorrectly joined the final for the closely positioned intersecting runway which had been NOTAMed closed for improvements. PF did not see the construction equipment at the end of the runway and realize his mistake until we were roughly at 700 feet. With the aircraft continuing to descend towards the closed pavement, I immediately readied for a missed approach and verbalized to the PF that I was "ready to call 'go-around.'" From where we were, now no more than 500-600 feet, it seemed impossible to me that we could ever safely correct and maneuver back to the originally assigned runway. What followed was a textbook display of the Macho, 'I can do it' attitude as the PF again dismissed my suggestion, insisting that the landing could still be made. The approach quickly destabilized, as he began what essentially amounted to a low altitude circle to land maneuver, involving steep bank angles and inconsistent descent rates. We overshot the centerline for our assigned runway again, this time in the opposite direction. By my estimate, we were no more than 30-50 feet over grass and still trying to correct for centerline before touching down slightly fast. I did my best to relay airspeed and altitude information throughout the duration of the maneuvering, but felt deeply uncomfortable with what the PF was attempting. We made it to the ramp without further incident, other than the passengers onboard wondering why we had executed such an interesting landing.

Upon reflection, there were many breakdowns in crew coordination that left me feeling unsettled and foolish. While I am very junior to the PF and lack substantial multicrew experience, time and time again my training stressed the importance of strictly adhering to Standard Operating Procedures and remaining within the parameters of a stable approach. After debriefing the incident on the ground, the PF was ultimately aware that he should have executed a missed approach, and indicated that he would have complied had I more aggressively called for one. In hindsight, I would have much more firmly commanded a go-around the moment the approach destabilized, rather than merely suggest I was ready to initiate the maneuver. However, it is the responsibility of both pilots to understand the parameters of safe flying.

It is always going to be important to remind myself that there is not a "power distance relationship" in the cockpit when it comes to safely operating the airplane. Speaking up when you notice deviations from Standard Operating Procedures, safe operations, or just plain feeling uncomfortable can save bad situations from becoming worse. Never become complacent flying visual approaches, and always provide a briefing that includes many of the items you find within a conventional instrument approach briefing. It is up to us pilots to ensure that the highest standards of safety and professionalism are being met every day within every facet of the aviation industry.

Synopsis

CE-560XL First Officer reported the Captain lined up with the wrong runway and flew an unstabilized approach when correcting to the assigned runway.

Time / Day

Date : 201802

Environment

Light : Night

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

Mission : Passenger

Flight Phase : Cruise

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Relief Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1516729

Human Factors : Fatigue

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

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

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

Were Passengers Involved In Event : Y

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

The crew (all four) had been assigned to this trip for several days. I received no notification from the Captain of a break schedule different than a 50/50 split - as recent guidance has suggested. Normally if I am told that I will have a short 1st break (less than 5 hours) as the Relief First Officer (IRO), I take a nap before the night time departure. In the absence of such notification I did not take a nap.

At operations I became aware that the flying Captain and First Officer (FO) had just arrived shortly before show time and had not taken a nap. During flight planning the Captain did not discuss breaks and left for the airplane saying "he had to make a phone call."

Boarding went quickly and we were pressed to push back early, still hadn't discussed breaks.

During climb out the Captain turned to me and asked if I was figuring out the breaks - he said the relief crew will have a 4 hour break first break. I mentioned that I had no notification of a split break schedule and wasn't prepared for a short break. He said he doesn't do that anymore (notifying the crew). Then he said we should just go back and he would figure the breaks.

It took me awhile to fall asleep and it wasn't a good sleep. I was asleep when the flying pilots woke me up for a crew changeover (approximately 3.5 hours after I had laid down to sleep). I think I may have gotten about 2 hours of sleep.

I felt quite tired when getting back into the cockpit and this did not improve after drinking coffee and getting up for several bathroom breaks. At one point I caught myself doing a "head bob" and looked over to see that the relief Captain's eyes were closed. It was extremely difficult to stay awake for the 7.5 hour shift as the "flying pilots" took their break - with such a short inflight break before resuming duties on the flight deck and a flight in complete darkness/nighttime. Both the relief Captain and I noticed that we were having trouble speaking. The noticeable fatigue became worse with every hour until we were relieved after 7.5 hours on the flight deck.

Synopsis

Air carrier Relief Pilot reported being fatigued enroute due to a short rest period in flight due to a breakdown of CRM.

Time / Day

Date : 201802

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZZ.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 37000

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B787 Dreamliner Undifferentiated or Other Model

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Component

Aircraft Component : Cockpit Window

Aircraft Reference : X

Problem : Failed

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1516715

Human Factors : Troubleshooting

Human Factors : Training / Qualification

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Communication Breakdown.Party2 : Dispatch

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

I was the flying First Officer on Aircraft X, performing Pilot Monitoring duties. Approximately 5 hours into the flight at 37,000 feet, the other First Officer and I heard what sounded like a gunshot going off on the flight deck. We could not immediately ascertain the source of the noise, but our attention was drawn to the front windscreen on the Captain's side, which was producing considerable arcing.

We looked closer to discover the entire Captain's front windscreen had shattered, and was now arcing.

I donned my oxygen mask and noted that we had an EICAS non-normal message, "WINDOW HEAT L FWD". I opened the checklist and turned off the FWD PRIMARY WINDOW HEAT switch. At which point we both noticed the window continued to arc.

I called the Captain, who was on break, informed him that his Forward Window had shattered, and he said he'd be right up.

I began a search of the Flight Manual Non-Normals and found the unannounced Non-normal checklist labelled "Window Damage, FWD L, R", and began the checklist.

We had already cut off the Primary Window Heat switch, per the EICAS checklist, and the checklist then asked if the window was deformed or an air leak was observed. As it was completely dark outside we could not ascertain the extent of the damage to the windscreen, but we could see multiple large cracks across the entire windshield.

The checklist said to land at nearest suitable airport in the event of window deformed or air leak, and we began looking at alternates, of which there were only two within an hour's flight time.

The Captain returned to the Flight Deck and the Relief First Officer (IRO) took his jumpseat. The Captain immediately slowed the aircraft to 250 knots and asked for a descent to 33,000 feet, in order to decrease the differential pressure on the window. Upon reaching 33,000 and 250 knots I noted that our differential pressure had decreased from 8.6 PSI to 4.7 PSI. In addition, the Captain turned off the Backup L FWD Window Heat switch in an attempt to stop the electrical arcing, and the arcing stopped. It is important to note that neither of the Non-Normal checklists that we completed ever mentioned the Backup Window Heat switch!

The Captain then had me take over as the Pilot Flying and he initiated a Satellite Call with Dispatch and [maintenance], and asked the [operations] to join the call.

The [maintenance] Representative was polite but to be honest, quite limited in his ability to provide the type of technical knowledge we needed on the 787 in order to make an informed decision. As we asked him for technical information on the viability of the remaining layers of the windscreen, his only input was that the window had multiple layers and that we had "only lost the outer layer". At no time did [maintenance] or Dispatch offer to call Boeing for further technical expertise on the shattered windshield. Had I thought of it at the time, I would have asked them to do so, since we did not feel any comfort in the expertise offered by [maintenance] for this event.

The Dispatcher and [Operations] advocated for us to continue [to] our destination, since there was 787 maintenance there, and the passengers would be taken care of.

I had advocated to the Captain that we turn around and head for [diversion airport], which, at the time of the window shattering, was 4 hours away, the same flying time that it would take us to continue to [our destination airport].

My reasons for heading for [diversion airport] were: Same flying time as it would be to continue to destination; it was a [company] station with [company] maintenance; there were multiple airports we could land at enroute, should the situation worsen; ATC coordination would get easier as we continued Northbound, making contingencies easier to handle.

Ultimately, after discussion with the [operations] and Dispatcher, the Captain decided to continue to [our destination airport], with the knowledge of 787 maintenance and a [company] station for support on landing.

While we landed safely in [our destination airport], I had multiple concerns about our further flight into with a compromised jet. Once we committed to continuing southbound, we had only two suitable airports identified by Dispatch should our situation had worsened, and one of those was a 6500 foot runway.

If the windscreen damage had worsened, and we had to descend to 10,000 feet in accordance with checklist procedures, ATC communication would have been impossible. ATC comms are marginal at best at 33,000 feet; 10,000 feet would have most likely left us with no ATC support during a divert.

This event taught me many things; that our Flight Manual is woefully lacking in both its Non-normal procedures (no mention of Backup Window Heat at all), as well as the systems descriptions and amplifying information. It's the worst flight manual I have ever used in years of flying.

This event left me with less than optimal faith in the depth of technical advice available from [maintenance]. The representative's only advice was like he was reading it from a script. When we're looking at a severely damaged windscreen, and [maintenance]'s best advice is that it "should be ok" doesn't inspire confidence.

Also, after reflection, I think that we would have been better served had we [relayed our situation to ATC], even if we continued to [our destination airport]. My reason for this is simple; if our situation had worsened, I.e., loss of pressure and/or windscreen total failure, it would have been impossible for us to adequately communicate with [Foreign] ATC to coordinate for a divert. We would have been down at 10,000 feet, most likely out of radio contact, and ATC would have no idea why or where we were going. Who knows if

we would even have the ability to tell them. By an early [notification], we would have had the opportunity to tell them of our intentions should the problem have gotten worse, and Dispatch could have been coordinating as well.

In all, I am proud of the way our crew handled this event. I think that it has uncovered gaps in our technical knowledge, checklist and flight manual procedures, and expertise available from [maintenance].

Synopsis

B787 First Officer reported the flight deck windscreen shattered and the checklist did not give a clear resolution which led to poor CRM.

Time / Day

Date : 201801

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : BOI.Airport

State Reference : ID

Altitude.MSL.Single Value : 8000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Icing

Light : Night

RVR.Single Value : 1200

Aircraft

Reference : X

ATC / Advisory.Center : ZLC

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

Nav In Use : FMS Or FMC

Flight Phase : Descent

Airspace.Class E : ZLC

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)

ASRS Report Number.Accession Number : 1515333

Human Factors : Time Pressure

Human Factors : Workload

Events

Anomaly.Deviation - Procedural : FAR

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Fuel Issue

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Landed in Emergency Condition

Result.Flight Crew : Diverted

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

Flight was dispatched from airport with 300 lbs. greater than minimum fuel. Weather in the destination airport of Boise, Idaho was forecast to be at greater than 6 SM thus no alternate was legally required. We flew to the destination and about 20 minutes out, after having briefed the 25R CAT I approach; we were advised by Center that the visibility in Boise, ID had rapidly dropped to 1600 Runway Visual Range (RVR). Thus, myself and the Captain ran the procedures checklist in preparation for a CAT II approach. Within about 10 minutes before our scheduled arrival into Boise, we were then advised that the visibility had dropped to less than 1200 RVR at the airfield which was less than our company certified RVR for CAT II.

The Captain decided to divert to Salt Lake City and things became very very busy in the cockpit. After having climbed out from 8000 feet back to 25,000 feet while the Captain was neck deep in workload, I did some rough calculations and had learned that we will land in Salt Lake City with about 300 lbs. of fuel. After discussing with me that Salt Lake City will have Company Facilities that can accommodate the will be displaced passengers, I told him that I disagreed with the SLC decision overall due to my fuel concern and instead suggested 2 nearer options.

I was not able to pull the charts for Twin Falls, so I suggested PIH airport with a 9000+ foot runway. Captain did not argue with me and employed excellent CRM and respectfully chose to go to PIH per my suggestion. We advised ATC minimum fuel plugged and briefed and diverted to PIH airport. Despite all our efforts, we had still received a red EICAS Warning message on both tanks upon arriving downwind of the traffic pattern at PIH and landed thirsty with 1200 lbs. of fuel with a red fuel lo EICAS message for tanks 1 and 2. No further incidents after landing.

Suggestions: Further and more accurate studies of the meteorological progressions of Weather in Boise, Idaho. We were told that Weather in that airport has had a history of deteriorating rapidly, and so, albeit legally done it does not make sense to dispatch aircraft to that airport without an alternate and alternate fuel until we can get more accurate prognostic reports of the weather in that region. Weather was forecast to be 6 miles Visibility but it was not the case when we got there. No one did anything wrong or illegal or inappropriate, from an operational standpoint but it does not seem right for this to happen again.

Synopsis

Air carrier First Officer reported an emergency divert due to deteriorating weather at destination, no planned alternate, and resulting in landing with less than legal minimum fuel.

Time / Day

Date : 201801
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 37600

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : A321
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Airspace.Class A : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Airspace.Class A : ZZZ

Person : 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 : 1515328
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 Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1515330
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Clearance
Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Diverted
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

While in cruise at FL380 the ride began to deteriorate so I asked ATC for FL360. ATC said there was traffic to the east at FL360 and we would have to take a turn off track for FL360. I responded that we would accept a heading in order to get the descent. We were given a HDG 180 and a speed. Soon after I heard "Flight XXXX descend FL360", I read back the clearance and we began a descent. During descent through FL376 we received an RA for an aircraft at 12 o'clock opposite direction at FL370. We quickly located the aircraft visually and began a turn to the left. Almost simultaneously the RA became a TA and ordered a climb. We complied with the TA, climbing to FL380. I had visual contact with the traffic at all times. During the event ATC commanded a turn to 090 and his climb/descent command was unclear. I responded 'HDG 090 and climbing FL380' to comply with the TA command. Once stable at FL380, we were given direct and a descent to FL360. I queried ATC as to who the descent to FL360 had been for and he responded "Flight YXYX".

I would say that expectation bias played a role in this event. We had asked for FL360 and had been given a heading by ATC in expectation of a descent clearance. When I heard "Flight XXXX descend FL360", that was exactly what I had expected to hear. My attention

initially during the descent was on the aircraft that had originally been given as a conflict to the east at FL360, this aircraft was the reason we were given the 180 HDG. This aircraft was now well behind us and off to the west. Hence I was not expecting traffic at 12 o'clock.

In future I will be sure to have more of a 'big picture' understanding of the traffic environment before accepting clearances. I feel like we did a good job of responding to the threat during a difficult maneuver at high altitude. Our CRM was good and the threat of collision was quickly and safely removed.

Narrative: 2

Level at FL380 we encountered continuous Turbulence, we requested a descent to FL360 to find smooth air. Center assigned us a heading of 180. After a few minutes we heard ATC call "Flight XXXX descend to FL360." The FO (First Officer), PNF (Pilot Not Flying), read back FL360 with our callsign Flight XXXX. As we began our descent to FL360 a TA was received at FL376, followed by a RA received at FL372. A climb was directed by the RA. At the same time ATC issued a command, that was partially stepped on, however, I did hear "turn to HDG 090." I, PF (Pilot Flying), turned off the autopilot and advanced the throttles to TOGA detent and began a climbing turn to HDG 090 with the VSI in the Green bar. A clear of conflict was received at FL379, in which I began to level off at FL380. The other aircraft involved took evasive actions, also. After passing the aircraft, stabilizing at FL380, back on speed with autopilot on; we were given a descent to FL360 and direct to ZZZ.

The cause of this RA is unknown to me. I am not sure if ATC misspoke or if we mistakenly took someone else's ATC call. I have noticed that similar call signs have become an issue recently, with the expansion of [our company].

Synopsis

A321 flight crew reported an airborne conflict after taking a call that was meant for another aircraft.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 25000

Environment

Flight Conditions : IMC

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 : Climb

Airspace.Class A : ZZZ

Component

Aircraft Component : Hydraulic System

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 Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 1842

ASRS Report Number.Accession Number : 1513871

Human Factors : Training / Qualification

Human Factors : Confusion

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 : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1514142
Human Factors : Training / Qualification
Human Factors : Human-Machine Interface
Human Factors : Distraction
Human Factors : Time Pressure

Events

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

Assessments

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

Narrative: 1

On climbout auto pilot on we passed through a cloud layer and FO (First Officer) turned on engine anti ice. After reaching clear air the FO turned off what he thought was the engine heat.

Several minutes later a hyd caution light illuminated. The B system showed low pressure. I was the pilot monitoring so I started the hyd B low pressure checklist. We soon determined that both hyd B switches were in the off position. The system was restored to normal and we continued with flight.

Narrative: 2

I was PF (Pilot Flying). Extremely busy and high threat departure. Ground staff and pushback crew were challenged with ground delays and sudden release of many flights at the same time for push; due to multiple runway changes and rapidly changing weather conditions. After a protracted challenge in getting a pushback crew, we were pushed at the end of a very long line of departing flights. Further weather challenges changed our runway assignment a total of four times, with multiple new departure procedures. We managed a safe ground operation to protect the departure. Once finally airborne, it was obvious we had both been exposed to a lot of stress and we began to relax a little as operations seemed to revert to normal.

However, a lot of weather was still in the area along with traffic in nonstandard locations necessitating vectors a lot of ATC radio chatter in icing conditions and turbulence in the climb. While climbing through approximately FL200 and with AP (Autopilot) B engaged, the Captain was looking for traffic and answering a radio call while we had climbed above icing conditions. I verbalized, "Engine Anti-Ice Coming Off"; and placed my hand on what I thought were the ENG AI (Anti Ice) switches, while looking for traffic. I turned two switches off. I clearly did not 1) "verify and monitor"; the system action and expected

reaction to; 2) confirm ENG AI blue lights transit and turn off, and 3) verify the EICAS "ENG TAI" (Thermal Anti Icing); indications turning off. A brief while later we received the "HYD"; master caution light. I called for the checklist for "HYD"; and we soon realized I had turned off both SYS B Hydraulic pumps instead of the ENG TAI. We quickly restored normal system operation, and accomplished a precautionary system scan. We referred to what would have been the appropriate checklist to confirm normal system operation.

Why did I do this? I believe an unacknowledged threat still existed from the departure where it was highly complex and a threat laden situation. We managed that situation well, and when the operation seemed to return to normal, I believe I went through an "awareness dip" of sorts, lowering my guard and situation awareness. While we were still managing a heightened risk during the climb; weather avoidance, ATC communications, turbulence and a short flight, comparatively it seemed to be a low threat environment. Normally I call for the Engine Anti-Ice system configuration as the PF, in higher threat environments, and verify and monitor the action. Because the PM (Pilot Monitoring) was saturated with ATC and traffic calls, I went ahead and verbalized then actioned the system configuration change myself; but did not back myself up with two indication confirmations. I did not back myself up at the time, I believe, due to a timely distraction of turbulence and an immediate attention to aircraft performance in making sure the airspeed and attitude was appropriate while we transitioned some rough air. The Captain was saturated with radio calls, traffic and weather planning. While not intentional, I took away the critical safety net of "VVM (Verbalize Verify Monitor)" in system operation in this deceptively complex and threat laden departure. Not only did I not cater for cross monitoring of the PM, I did not catch my own error.

We appropriately trapped the error from progressing and repaired the operation after the Master Caution annunciation. I feel it was a real wake up call for me as I am typically quite aware of this type of threat and elemental nature of SOP compliance, VVM and Situation Awareness. I was surprised and embarrassed to find myself in this situation. My take away is it's never too late or early to inventory one's own "back to basics" CRM, VVM, TEM (Threat and Error Management) assessments.

As a contributing factor, the ergonomics and cockpit design in the B737 can lead to system controls being quite close, identical in look and operation and easily mistaken with proximate system controls. The VVM concept is a good catch for this, but ergonomics in my opinion have progressed to a level where I am surprised we still have 1950's cockpit design in a relatively new aircraft. A push button control (like the B-777 or 747) for EAI (Engine Anti Ice), while leaving the Hydraulics to a switch, could completely remove this sort of threat from a design standpoint.

We reviewed the situation after landing and we both learned a lot. The TEM/VVM/CRM training works.

Synopsis

B737 flight crew reported accidentally switching off the Hydraulic pumps in flight instead of the engine anti-ice switches.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : N90.TRACON

State Reference : NY

Altitude.MSL.Single Value : 7500

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : N90

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 : Descent

Airspace.Class E : N90

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 : 1511631

Human Factors : Human-Machine Interface

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types

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

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Ground Incursion : Runway

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Overcame Equipment Problem

Result.Flight Crew : FLC Overrode Automation
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

At FL310 enroute, ATC issued a late descent clearance to cross BRIGS at FL210 with subsequent clearances to descend to FL190 then FL180. During descent to FL180, ATC issued clearance direct to PLUME to cross PLUME at 9000'. Captain Pilot Flying (PF) programmed direct to PLUME and the crossing restriction of 9000' into FMC as I completed the remainder of my Pilot Monitoring (PM) arrival duties (including acquiring ATIS due to the difficulty acquiring the ATIS via COMM 2 and an ACARS NO COMM earlier in the flight). Approximately ten miles from PLUME descending through 14,500', as I realized we were high on the descent, ATC queried us due to the high altitude approaching PLUME.

ATC then cleared us direct to SARDI to cross SARDI at 7000', further stating that it had to be a crossing at 7000' at SARDI. Just as the Captain was programming the FMC direct to SARDI to cross SARDI at 7000', the FMC cycled to the next waypoint and Captain inadvertently selected direct to CCC (the fix after SARDI). As the aircraft began to turn toward CCC, I informed Captain of the FMC programming error. I then immediately selected HDG SEL and set a heading direct to SARDI to avoid a course deviation as Captain reprogrammed FMC for direct SARDI and to cross SARDI at 7000'.

When Captain realized the automation would not provide the immediate required descent rate to comply with the crossing restriction, he reduced the level of automation by disengaging the autopilot then autothrottles assuming manual control of the aircraft. Due to the late descent, multiple crossing restrictions and the required descent rate, both Captain and I were well aware the descent was a priority and therefore the speed would be excessive despite our offshore location. Regardless, I advised Captain of what he already knew; excessive airspeed inside 12 miles offshore below 10,000' would and did occur.

Crossing restriction of 7000' at SARDI was missed by approximately 500' as Captain attempted to slow aircraft below 10,000' from a speed of approximately 285 knots as we approached the shoreline. Had the Captain not assumed manual control of the aircraft when he did, we would have arrived at SARDI well above the 7500' that we crossed the fix with a potential loss of separation.

During landing rollout, ATC issued taxi clearance to exit runway with a right turn on Taxiway E at end of the Runway, which I restated to Captain as I located Taxiway E on the Jepp 10-9. During landing rollout, as I was responding to taxi instructions, we received a call from [the Flight Attendant (FA)] of a Threat Level 1 after a Passenger threatened one of our FA's. Captain answered FA call then made a right turn onto [adjacent] Runway. As Captain turned, I directed him to make an immediate right turn on B3 after I realized where the aircraft was located, scanned the [runway] approach corridor and saw an inbound aircraft on final approximately five miles from the runway.

I immediately advised Tower we were exiting [the runway] at B3. Based upon the Captain advising Tower of the Threat Level 1, we required Police to meet the aircraft (as I was determining where the Captain had turned the aircraft on the airport surface since it was

other than Taxiway E at the end of Runway [we landed on]). Ground cleared us via any route we selected to the gate. Captain taxied aircraft promptly to the Gate via B3, C and S as I completed the After Landing Flow then contacted operations to advise them we were on the ground and required Police to meet the aircraft at the Gate for a Threat Level 1 Passenger.

Synopsis

Air carrier First Officer reported breakdown of automation management and CRM during initial approach.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : EMB ERJ 145 ER/LR

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Airspace.Class A : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1507977

Human Factors : Communication Breakdown

Human Factors : Distraction

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

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

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

After an otherwise very quiet flight, I briefed our arrival and approach plan prior to reaching top of descent. The descent was stable per my briefing. I was very focused on my instruments, so when the captain threw his right arm out with the checklist in his hand, I was incredibly startled since I could only see it out the corner of my eye. My initial thought was that he was going to hit me, until I realized that he was in fact only holding the checklist. I closed my eyes for a moment, took a deep breath and composed myself. The following is the ensuing dialog:

FO: "What can I do for you?"

CA: "Here...you want the arrival checklist so bad, YOU can run the damn checklist"

FO: "Captain, please run the arrival checklist"

CA: "No, if you want the ****ing checklist, YOU can run the damn checklist!"

I took a deep breath and evaluated the captain's emotions. I could not comprehend why he might behave in this manner since nothing was previously brought to my attention, and trying to figure it out only threatened the stability of the arrival and compounded the threats. To hopefully avoid a total CRM meltdown, I tried to help him see the issue from another angle.

FO: "Captain, are you SURE you don't want to just run the checklist? It's our SOP, and if God-forbid anything happens to this airplane and the FAA has to pull our tapes, they're going to view this as willful non-compliance and BOTH of our certificates are at risk and we could BOTH face disciplinary action. Is that really worth it to you? Can we please just run the checklist?"

I said this as I looked at the captain to try to get a read on him, and he only appeared more angry. His breathing seemed to be getting heavier, and I determined that the situation was not going to improve. The captain broke his glare at me, looked through the front windscreen and placed the checklist back between the window and glare-shield without saying a word. At that point my goal was to avoid further escalation, and remain calm. To hopefully deescalate the situation, I elected to read the arrival checklist verbally myself to ensure compliance and avoid an in-flight altercation.

We were originally assigned runway XYR, but were then switched to XYL and given vectors for the approach. I made the appropriate change in the FMS and verified the proper ILS frequencies were selected. We were then advised of a medical emergency inbound, and we were assigned [another runway]. Again, I made the changes in the FMS and verified the proper ILS frequencies and missed approach procedures.

After I called for the final configuration change for landing and the landing checklist, the captain recited the checklist from memory, rather than reading from the physical checklist. He used old, non-standard terminology ie: "landing gear down, 3 green....flaps set 45" as opposed to the current checklist. I verified with the physical checklist that he had at least checked the appropriate items, albeit with improper nomenclature and continued the approach. I had no faith that any form of correction at that point would have led to a favorable outcome.

After landing and transferring controls back to the captain we taxied uneventfully to the

gate, where he called for the parking checklist. We ran the parking checklist although he did not look at any of the items. I went through each item silently after the fact and visually verified that everything was in its correct position prior to exiting the aircraft.

Threats: crew member who has not learned or reviewed current SOP, willful/conscientious non-compliance, captain's hazardous attitude

Errors: choosing not to learn and willfully not comply with current SOP

UAS: I don't believe we ended up in a UAS (Undesired Aircraft State), though we were certainly headed for one based on the captain's actions. I did everything I thought I could to ensure compliance with SOP while mitigating threats to a manageable level. I do wish to know if we DID in fact reach a UAS, and would very much like to learn from this experience.

Based on my training and experience, I believe that I handled this as calmly, professionally, and tactfully as possible.

I'm not sure how this captain has gotten away with running checklists (or in this case, not). I was hopeful that painting a clearer picture of the repercussions of will-full non-compliance would be enough to convince him to run the checklists per SOP, but it only served to anger him. I was so uncomfortable being near someone so unprofessional and angry that I feared my personal safety might be at risk if I attempted to debrief him after parking. If the emotional side was not an issue, I would have politely asked for any kind of clarification or justification for his decisions not to run the checklists per SOP.

Having to deal with this type of situation is inherently uncomfortable, extraordinarily stressful, and can be downright scary. However, I believe that the integrity of the operation for both legal and safety reasons should, and can never be sacrificed so I elected to speak up to the captain. We often talk about situations like this in training, but I feel like many pilots don't fully embrace the possibility of it happening to them. I know that it took me a few seconds to fully accept that this was actually happening, and that the situation doesn't only happen in hypothetical CRM training scenarios.

I'm not certain how best to proceed, but I do wish to somehow share my experience with the pilot group to demonstrate that this (very unfortunately) CAN happen. I feel that I handled the situation to the best of my abilities, but I can always improve and learn how to better handle future endeavors.

Synopsis

ERJ-145 First Officer reported breakdown of CRM and Captain's professionalism.

Time / Day

Date : 201712

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : EYW.Airport

State Reference : FL

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZMA

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 Plan : IFR

Mission : Passenger

Flight Phase : Climb

Airspace.Class E : ZMA

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 721

ASRS Report Number.Accession Number : 1507083

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors : Distraction

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Airspace Violation : All Types

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : Object

Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Upon reaching the hold short line runway 9 Key West the captain noted that the selected airspeed readout showed amber dashes. I said that I thought it was because something was missing in the FMS. The captain said that we could just use manual speeds and flipped the speed selector switch to manual. I asked him if he wanted to take a minute and figure it out. He said it was fine (all paraphrased, I don't remember the exact words). At some point we received the takeoff clearance. We were assigned runway heading. I don't remember if I called or the tower gave it unsolicited. At this point I was still trying to process the amber dashes issue. The captain called for the Before Takeoff checklist, and we got "takeoff okay."

On the roll I missed the 80 knot callout (that never happens). I was still distracted. Around 90-95 knots the captain asked, 80 knots? With the flaps 4 takeoff V1 was rapidly approaching and I made the V1 call. Rotate. I missed the "positive rate" call. That also never happens. At 400 ft he called for heading and I selected HDG. We got handed off to Miami Center. I flipped the frequency, but did not call. I usually wait for flap retraction so I'm not on the radio while the captain is asking for flap retraction. At 1000 ft he asked for VNAV and I selected VNAV, but we didn't get it. The takeoff crossbar remained, and a message appeared on the FMS. Something like "vertical mode not available" or "vertical guidance unavailable." We went through the flap retractions in the climb while the captain was manually selecting speeds. Also at some point the auto throttles were disconnected. I'm not sure if it was the captain or a result of the VNAV/amber dashes issue. My call to Miami was delayed because of the distraction of the VNAV issue and the extra steps in retracting flaps from 4 instead of 2. We ate up miles on runway heading.

Miami gave us "direct CURSO." It took me three tries to set up the simple task of direct to CURSO. We had now continued further on runway heading. We selected the direct to and turned toward CURSO. Shortly after the turn, at between 4000 and 4500 we got GND PROX with an aural "terrain terrain" and the Terrain Awareness Display showed a red circle just inside my 5 nm ring on the MFD. The magenta line went right through it. I immediately knew it was the tethered radar balloon. I told the captain it's the balloon. He said that it was okay, that we were climbing. I said NO, were not going to out climb that! I received no response, so I took the yoke, disconnected the autopilot and turned the airplane to the left. I think we stayed out of the restricted airspace, but I cannot confirm that.

After clearing the balloon Miami gave us a 040 vector to CURSO. We resumed direct to CURSO. When I accessed the PERF DATA page to begin the process of getting the landing speeds there was no data. I believe it was at this time that the captain re-entered the zero

fuel weight, and the PERF DATA page populated the data I was looking for. The captain stated that he believed the zero fuel weight was the source of the original problem with the airspeed readout and the vertical mode. I was able to get the landing speeds and we continued the flight without incident.

It's imperative that we as FOs trust our instincts. While we have much less experience on the plane than the Captain, we are still fully qualified on the equipment. Slow down procedures. There was a very fast pace in the cockpit prior to closing the door. It was an atmosphere of everything needs to be happening fast. As we closed 11 minutes early, I even asked the question, "Why is everyone in such a hurry? We're early." I got no response. First red flag.

Synopsis

Air carrier First Officer reported they may have entered Restricted Airspace without clearance. A CRM breakdown contributed to the event.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Ground : 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 : Taxi

Cabin Lighting : High

Component

Aircraft Component : Galley Furnishing

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Galley

Cabin Activity : Safety Related Duties

Cabin Activity : Boarding

Reporter Organization : Air Carrier

Function.Flight Attendant : Flight Attendant (On Duty)

Qualification.Flight Attendant : Current

Experience.Flight Attendant.Airline Total : 0

ASRS Report Number.Accession Number : 1503827

Human Factors : Communication Breakdown

Human Factors : Workload

Human Factors : Time Pressure

Communication Breakdown.Party1 : Flight Attendant

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : FAR
Detector.Person : Flight Attendant
When Detected : Aircraft In Service At Gate
When Detected : Routine Inspection
Result.General : Maintenance Action
Result.Flight Crew : Returned To Gate

Assessments

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

Narrative: 1

I had arrived and boarded the plane prior to report time and I had told the gate agent to board 25 minutes before departure, the captain dismissed my statement and instead told the gate agent to board 10 minutes earlier. I then boarded the plane and introduced myself to the captain. He made it a point to tell me that he wanted to get out as soon as possible and beat the snow. When doing the security check I made the captain aware that I was unsuccessful at opening the aft galley compartment that contained the demo equipment and AED. He came to the back with me and tried for himself. He was also unsuccessful at opening it. He said is it ok that that you just see the yellow thing. I told him that if I can't get in I can't check to see if my equipment is functioning. He said he didn't want to get maintenance out because it would cause delays and he wanted to get out as early as possible because of the coming snow. I told him I understood and reiterated that the "heart machine" is in there along with the demo equipment. He made it known that he understood and was like "yeah that's what's blocking the door." He kept asking me the same questions in different ways, asking me if I was ok with flying without it opening. I responded, this is the first time this has happened to me, I'm new. I'm telling you what the issue is and I can't do what I'm supposed to do in regards to the equipment so I'm not sure what else I'm supposed to tell you. I'm looking to you. He responded "it'll be fine" we can go like that.

When the other FA came on I told her that I would have to read the demo announcement and the captain came out to let us know that we would be boarding now (way before standard 25 minute boarding time). Still not done prepping in the back I stopped talking and went to the back to finish. He then came to the back and was asking if I was ready to board, and mentioned how we didn't want to be stuck on the ground for 2 hours. I told him I was but was asking what the word and flight time was, because we were never briefed. We boarded as normal and when the door had closed I reminded the other FA that I would have to read the demo announcement. She asked why and I explained that I can't get the door open but the captain told me it was ok. She came to the AFT and tried to open the door herself and was also unable to open it. She asked me if I was comfortable flying like that. I told her I don't know, I told the captain the issue and he said it was ok so I assumed it was ok. She said "no, it's not ok" and called the flight deck. The captain seemed to be confused by what she was telling him and I stepped in and reminded him of the issue that I had just previously discussed with him. He told us to try again and if we still can't get it open we would return to the gate. After numerous attempts we called and told him we still couldn't get it open. We got to the gate and the captain came directly out of the flight deck and began to tell the gate agents how we had to call maintenance, that "we were back there..." looking at it and we can't fly like that and we had fixed it before but it must of slipped out again. This was not true, we had not fixed it at all.

I believe the captain would advise me the best, safest and most compliant way so I ignored my own judgement and allowed him to make the final call. I'm glad the senior flight attendant wasn't afraid to speak up for the both of us. One shouldn't be afraid to question the captain's call and should make sure to discuss (CRM) everything with the whole crew before boarding.

Synopsis

ERJ-170 Flight Attendant reported the flight crew was unable to open the aft galley compartment that contained the demo equipment and AED.

Time / Day

Date : 201711

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : A320

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Takeoff

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 Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1499211

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1499652
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - 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 : Procedure
Primary Problem : Human Factors

Narrative: 1

Captain and FO started and continued takeoff roll without the use of flight directors and auto thrust. FO noticed at approximately 80 KIAS that the FMA had no information in it. FO cross checked the Captain FMA and noted a lack of information as well. The speed bug was set to 100 Knots and approaching 100 KIAS FO stated V1 (where the speed bug was set). The improper V1 call was immediately recognized by the Captain. The proper V1 and Vr information was displayed, called out, and rotation and lift-off happened at the appropriate time. Once safely airborne FO and Captain reselected their respective FD button and guidance returned within 5 to 10 seconds. FO attempted to restore autothrust by selecting the appropriate button and pushing speed to enter the "managed" speed mode. FO and Captain recognized that the aircraft was not accelerating on the appropriate schedule and noted 100 KNOTS was still in the airspeed box with a "dot" next to the airspeed. The Captain then spun the airspeed to 250 and re-selected "managed" mode. At this point the aircraft was in the normal flight director and autothrust.

Captain and FO suspect that the flight directors and auto thrust kicked off at some point prior to 60 KIAS on the takeoff roll. While it is certainly possible that both flight directors and autothrust kicked off, it was not associated with any ECAM. It is possible that an ECAM message was inhibited based upon the critical phase of flight, it is much more likely that the flight directors were not selected on prior to take-off. Once the FO recognized that there was an issue with the FMA it took far too long to communicate the issue to the Captain, trap the error, and correct it. Depending on if/when the flight director turned off could point to poor flow/checklist adherence and poor automation management. The best way to avoid this situation in the future is to adhere to flows and checklists (depending on when the flight directors kicked off). Also, much better communication between FO and Captain. While the airworthiness and regime of flight were never in question FO CRM was poor at best. Adherence to briefed procedure to include anything non-standard seen by the FO should be plainly stated; the reason for this was a combination of poor SA regarding the level of automation being employed until approximately V1 and poor communication with the Captain while attempting to restore the appropriate level of automation for the regime of flight (take-off).

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

A320 flight crew reported that they started and continued takeoff roll without the use of flight directors and autothrust.

Time / Day

Date : 201711

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 38000

Environment

Flight Conditions : IMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

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 : Cruise

Airspace.Class A : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 1300

ASRS Report Number.Accession Number : 1498775

Human Factors : Fatigue

Human Factors : Physiological - Other

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Physical Injury / Incapacitation

Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

It was the final leg of the duty day and our flight had been delayed due to a late inbound aircraft. I felt slightly more fatigued than normal prior to the start of the flight. Before the inbound aircraft had arrived at the gate I had complained to the crew of some minor cold symptoms, but I thought I was still fit to fly. We decided to proceed with the flight as normal and we accepted the flight release.

After push back there was a lengthy delay in taxi time and it took a great deal of time to reach the runway departure point. Upon reaching the departure point I resolved that I was still feeling good and we proceeded to depart. Everything was normal up until about an hour or so into the flight at cruising altitude. We were cruising at 38,000 feet and getting close to about an hour and 20 minutes left on the flight time. I began to feel cold and grabbed my jacket to cover up and keep warm. As time progressed into the flight I started to break out into a cold sweat along with a warm body temperature. It was at this time I feared that my cold symptoms were worsening and my body temperature was beginning to elevate. To make matters worse I started to feel an elevated heart rate and shallow breathing. At this point I decided to inform the captain that I might be feeling symptoms of hypoxia. The captain immediately checked pressurization of the aircraft and we both crosschecked that the pressurization was normal in the cabin and there was no need to don the oxygen mask. However, as a precautionary measure we decided that I should wear the O2 mask and try breathing normally to see if the symptoms would improve. I tried to take normal breaths from the O2 mask, but my symptoms only worsened gradually. We also asked for a descent to a lower altitude to get to a lower cabin pressure to see if my breathing would improve. This also did not help me.

The captain inquired at this point that I might be getting sick. I agreed with the captain and said to him that if the symptoms worsened I might like to deviate from the planned course for a landing at the nearest airport. We decided to continue on course for what seemed like another 20 minutes until I decided that my symptoms were not getting any better and I was becoming increasingly ill. At this point I became concerned about my ability to safely perform my duties as pilot monitoring and as a side of caution for my fellow crew and passengers I asked that the captain would [advise ATC] and divert to the nearest suitable airport. We utilized CRM and the captain made a precautionary declaration to ATC that we needed to divert. We were cleared and began our course change. The captain contacted the company via ACARs and informed them of my condition. He also got in touch with STAT MD for the required medical information on my physical state and other information. I did my best to perform my job functions and provide the captain with the landing weather ATIS and runway numbers, but my symptoms were getting bad with what seemed like an increasing body temperature and possible fever. I informed the captain of my state of being and from there we requested emergency medical equipment on the ground. There was light snow in ZZZ but the weather conditions were good for a normal CAT I ILS and we were able to get down quickly. We arrived at the planned gate with the emergency equipment standing by. The captain opened his cockpit window and we were greeted by medical staff. They inquired my condition and concluded that I might be dehydrated and that they would perform further tests to see about my condition. At this point the flight was safely terminated and I was escorted into the terminal for a blood and temperature check. It was concluded by medical staff that I was running a high fever of 103 degrees with some dehydration along with it. After further medical care it was determined that I had a cold virus that caused me to have the fever. The fever is what gave me the symptoms of shallow breathing and rapid heart rate. In the interest of safety we did not take these symptoms lightly, and I believe we made the best decision to terminate the flight early. Cold and fatigue symptoms should not be taken lightly. If these

symptoms occur in the future I will call off the trip or ask for a fatigue call. Better communication with the crew and company on my condition prior to departure is also important.

Synopsis

A regional jet pilot reported experiencing multiple physical symptoms resulting in an inability to continue the flight. A diversion to a suitable airport to seek medical help was accomplished.

Time / Day

Date : 201711

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : EWR.Airport

State Reference : NJ

Altitude.AGL.Single Value : 60

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 5

Light : Night

Ceiling.Single Value : 5000

Aircraft

Reference : X

ATC / Advisory.Tower : EWR

Aircraft Operator : Air Carrier

Make Model Name : MD-11

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Final Approach

Airspace.Class B : NYC

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 : 14300

Experience.Flight Crew.Last 90 Days : 15

Experience.Flight Crew.Type : 2300

ASRS Report Number.Accession Number : 1498435

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Analyst Callback : Attempted

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
Experience.Flight Crew.Total : 6000
Experience.Flight Crew.Last 90 Days : 80
Experience.Flight Crew.Type : 3000
ASRS Report Number.Accession Number : 1498436

Events

Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
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
Contributing Factors / Situations : Weather
Primary Problem : Human Factors

Narrative: 1

Routine flight to EWR. Captain (I, new to seat) as PF, cleared for ILS 22R. Tower reported gain/loss of 10 kts reported at 300 ft. Aircraft ahead of us reported no gain or loss. Winds 280-300/18 gusting to 28/30. I was on autoflight through 300, started to align at 150 ft, no real turbulence or shear through approach until about 60 feet where we got hit with some wake type turbulence. With the crosswind as it was I made mental note to prevent autothrottles from going to idle too soon, but probably missed that as we hit firmly on the right main (upwind). I applied right aileron into wind but did so in excess and aggravated the situation. The FO (PM) called for go around as he got the words out first. Procedurally called for go around thrust and flaps 28. I pegged the landing attitude to avoid derotation, not sure how high we may have bounced but kept the attitude until clearly we were climbing. Throttles were through the overboost bar, called for autoflight (now without auto throttles) cleaned up, restored the FADEC system to enable autothrottles, reloaded approach to try 22L again. Once all checklists were finished FO offered/insisted he do the next approach. He had 12 years experience in his seat, I had 9 flying legs in my seat. Made sense. We landed, debriefed. Maintenance checked for any engine exceedance and were none. The demonstrated crosswind capability of the MD-11 is 35 kts, the winds were within limits. I overcorrected with aileron aggravating the situation probably led to the firm landing. We had a CRM brief covering go around calls from either crew to immediately respond and it worked as briefed. I am a new captain on this aircraft but had prior experience as an FO, but just the same you need to gain experience. I should have disconnected the autopilot sooner than 300 ft to get a better feel for the aircraft on approach. The FO did an exemplary job. It's important to brief the go around procedure and the call outs along with it. We seldom perform them and many times an approach is just fine until the last few feet, remain vigilant.

Narrative: 2

I am submitting this report from the recommendation of the Union. Right out of the gate in ZZZ I could tell the CPT was unsure and uncomfortable. He told me he was a new CPT and only had a few legs after training followed by vacation, then this flight. His last TO & LNDG was some time in September. He was making mistakes [before departure] which clued me in that he might not know what he's doing, not just a little rusty. For instance; on taxi during the flight control check he didn't grab the tiller while checking the rudder. Lights still on passing 10K, and 18K. En route to EWR he briefed the arrival and approach

shortly after TOC. We still had an hour to TOD. Because of the winds up there (in EWR), he said something in his brief about what the book says about kicking the AP off and starting the crosswind alignment. Once we got in line up there, airplane after airplane was landing. On final there were ~ 45 KTS of Xwind. Landing winds were 300/18G27 on RWY 22. Tower reported +/- 10 KTS of AS by all AC type. Approach was uneventful until the CPT clicked off the AP. He immediately started over controlling the jet, but I didn't know by how much at the time. I wasn't flying. I didn't know how much of the instability was caused by him and how much was caused by the winds. During the flare I thought we were going to hit the right wing on the runway. I didn't just call for a go around, I executed the go around and I was on the controls with him until we were safely climbing away from the ground. I didn't know it at the time, but I actually pushed the throttles through the overboost bar. That landing was the exact scenario that other MD11's have crashed out of. We leveled off and I could barely keep my composure on the radio. Once I reprogrammed the box, I told the CPT he was not flying the next approach and that I could tell he was uncomfortable and unsure of himself and I was going to fly the next approach. He agreed. I flew the approach to an uneventful landing. Once in parking in EWR I told the CPT that he just almost crashed us. He nodded his head. I also made some calls to the Union with the intent of taking myself off the flight but I couldn't contact anyone to give me advice. The CPT had mentioned something about wanting to redeem himself in my eyes on the way back to ZZZ. I didn't want to interrupt the system by taking myself off the flight so I told the CPT that I wouldn't take myself off the flight, but I am going to fly back, NOT him. He said "Thank you and OK". On the way back there were more mistakes. While taxiing out in EWR on taxiway R, we were cleared for TO on 22R at W. He started to take the runway on Y. I Fixed that mistake. Somewhere around 20K ft while he was over there filling out an event report, I got his attention and pointed to the landing and taxi lights that were still on, (and the turnoff lights were off) and he shook his head, retracted the landing lights, turned off the landing lights, turned off the taxi lights, and turned on the turnoff lights, then went back to his event report. I didn't say anything and just reached up and turned off the turnoff lights while he wasn't looking. The flight data should be pulled and looked at closely on this flight. I'm trying to save someones life. Maybe even the CPTs himself. Something needs to be done. Even though I literally got scared to death, I'm glad I was the FO on this flight and not a new hire FO. I would be glad to come in and talk to someone about this if you need further information. Thanks.

Synopsis

MD-11 Captain reported executing a go-around following a wake turbulence encounter and a firm touchdown in gusty wind conditions.

Time / Day

Date : 201711

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 750

Environment

Flight Conditions : VMC

Light : Night

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 : Final Approach

Airspace.Class D : 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 : 1493765

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

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

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Automation : Aircraft Other Automation

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : FLC Overrode Automation

Assessments

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

Narrative: 1

We were executing a visual approach. I was the Pilot Monitoring. Weather conditions were night VMC with a 30 knot tailwind at altitude. Prior to arrival, we received the ATIS and determined that the wind was 160 at 9 knots (a 9 knot tailwind component) on a dry runway. The landing performance data indicated a factored field length of 4,500 feet for Runway XX1, or 3,700 feet for Runway XX2. (The runway is 7,000 feet total length.) I suggested to the Captain (who was the Pilot Flying) that we should execute a visual approach to Runway XX2. The Captain declined my suggestion and elected to proceed with the straight-in landing on XX1, since the tailwind was within our SOP limitations. We were fully configured and stabilized on the approach before arriving at 1,000 feet HAT (Height Above Threshold). The speed bug was set to the proper Vref speed for our landing weight. I noted that the tailwind at 1,000 feet HAT was 22 knots, and requested a wind check from the Tower. The wind was still at 9 knots, within our SOP. Given the turbulence, I felt uncomfortable with the Captain's decision to land XX1. I commented that "the van is going to be here late anyways, so we're not really saving any time." The Captain elected to continue and land on XX1. I noted that the green line was bouncing around significantly, at times jumping 5 or 10 knots above the speed bug. The Captain maintained the aircraft's speed at the top of the bug. At an altitude that I do not recall (I believe it was between 500 feet and 1,000 feet HAT), the stick shaker activated momentarily. The aircraft's speed was stable and at the top of the bug, and the bug was set correctly. The windshear warning did not activate. As I wasn't touching the controls, I didn't feel the shaker; I only heard it. I said "Whoa, whoa!" but the shaker stopped before I could call for a go-around. The Captain said "We're fine, we're landing," and continued to a normal landing. On the ground we discussed the event and I suggested that we should have gone around.

Given that we were properly configured and on speed for our landing weight (in fact we were a few knots fast), I believe that the rapidly changing wind direction and speed is what caused the shaker to momentarily activate. The green line's erratic behavior, I am guessing, was influenced by these rapidly changing conditions. However, I also believe that if we had elected the more conservative option (executing a visual pattern to land on Runway XX2, rather than pushing the SOP tailwind limit in order to land straight in), we may not have experienced the shaker. I would say the contributing factors here were 1) the Captain's desire to minimize the time enroute, and 2) my failure to decisively call for a go-around. I have flown with this Captain at least 50 times, and he has nearly 20 years experience in the airplane. I therefore deferred to his judgement, both on the question of which runway to land on, and when he announced he was continuing to land after the shaker event, I did not call for a go-around.

In both new-hire and recurrent training, more emphasis should perhaps be placed on an important aspect of CRM, namely, that if either crewmember (especially First Officers paired with very senior Captains) feel uncomfortable about any aspect of the aircraft state, that they should and must voice that discomfort. I did so, but in a very mild and indirect way. Once that decision was made to land on the tailwind runway, though, I'm not sure

anything could have prevented that shaker from activating, aside from the crew flying the approach much faster than V_{ref} , which would have introduced yet another threat.

Synopsis

Air carrier First Officer reported a normal landing preceded by a brief stick shaker event due to landing with an unstable tailwind.

Time / Day

Date : 201710
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ORD.Airport
State Reference : IL
Altitude.MSL.Single Value : 3800

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Rain

Aircraft

Reference : X
ATC / Advisory.TRACON : C90
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
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 09R
Flight Phase : Final Approach
Airspace.Class B : ORD

Component

Aircraft Component : DME
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 Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 8044
Experience.Flight Crew.Type : 5672
ASRS Report Number.Accession Number : 1488023
Human Factors : Human-Machine Interface
Human Factors : Troubleshooting
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 Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 12090
Experience.Flight Crew.Type : 10608
ASRS Report Number.Accession Number : 1488051
Human Factors : Troubleshooting
Human Factors : Confusion
Human Factors : Human-Machine Interface

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Approaching ORD from the West Southwest, we were told that the ATIS had just changed and to expect LOC 9R. 10C and 9L ILS were the arrival runways we were expecting. Weather about 800-4. We had briefed ILS 10C and retrieved landing data for the short runway, 9L, to get ahead in the event we were assigned 9L.

I installed ILS 9R in the FMS noting several LOC only approaches in the database but no LOC only for 9R. After installation, while receiving many vectored turns typical of ORD, I briefed the approach using the QRH as a guide. During the route review, we noticed a step down fix, inside the FAF, that was not loaded. I again checked for a LOC only approach in the FMS and after again finding none, I asked the Captain to program YONUT at or above 1700 in the box. We now had waypoints from DEVON, just outside the FAF, LANSE, through the missed approach procedure programmed with altitudes verified. The brief ended with a disagreement over minimum autopilot disengagement altitude, Derived Decision Altitude (DDA) vs. 50ft below DDA. An "old way" versus "the current way"? I don't know, so I referred to Flight Manual and we were both now on board with DDA as minimum disengagement altitude. Brief done.

Now on a long, but tight, right down wind at 8000 feet I consider asking the Captain to program some of the outer fixes on the LOC course because we're now outside of WASCO over 20 miles from the field. I decided to instead brief that the fixes were defined off of the ILS DME and we can use the DME for situational awareness on the step down fix locations once on final. THIS IS ONE THING THAT, had we programmed the fixes, WOULD HAVE ELLIMINATED OUR FUTURE ERROR.

Next, we are given 2 turns to final, "cross WASCO at or above 7000, cleared "the approach". Appropriately, the Captain read back includes the runway assignment and a request for confirmation. I set the intercept heading in heading mode and state that I'm arming NAV for the intercept due to common LOC instability at long range. We are at 8000, on LOC in NAV with the final extended from DEVON.

NOW THE ERROR... I look at the magenta ILS info lower left of PFD to find good ident, proper frequency and no DME. I think to myself "I thought the ILS DME is supposed to be there".....So....I scan the instruments and find this green number upper right of the ND (Navigational Display) that looks about right and comfortably decide that all is well..... Yeah, as I sit and write this, I can hardly believe it. But here's the kicker, I made no mention of my thoughts regarding the DME issue and began calling distances to the next waypoint/stepdown off of the ND distance to active waypoint which was either LANSE or YONUT (I don't recall which was displayed). It should have been LANCE with the course extended through DEVON. ([It occurs] that I am reading ILS DME). We are both totally focused on the approach and have both latched onto the distance we read most often. Range to next way point. NOT GOOD!

This continues with excellent CRM until, while level at 4000, we set 2300 for LANCE. We are now in LOC capture with FLT TRK/FPA selected. I state that we are passing 12.3DME (DEVON) as I pull to begin out of 4000, Devon appears at the top of the ND and we both realize we've done something wrong. We reset 4000 in the window, reverse to a climb from 3800 back to 4000, I look straight at the magenta ILS DME that is now working. We never heard a word from ATC.

We now have instant SA (situational awareness). We confirm that we had both failed independently in the same way. Reconfirm our SA and focus back on the now to complete the approach and landing without further abnormalities. We then debrief thoroughly at the gate. This is my/our error. I own that. But looking at the approach, ORD 9R DME should have been receivable from our base turn and it wasn't. That was step one in the confusion.

Narrative: 2

Last minute change to a short wet runway, LOC 9R [a] non-precision approach. Installed ILS 9R in the FMS noting several LOC only approaches in the database but no LOC only for 9R--Had to manually build LOC only off of the ILS and add waypoint inside FAF since this was not in the aircraft database. On approach had to pull landing performance info for wet short runway. Frequent Changes to Company SOP and infrequently used limits caused increased task saturation while verifying DDA (Derived Decision Altitude) vs DA and Autopilot disconnect limits inside of 20nm as a result of a late runway change to a Non Precision approach, pulling new landing data, noting that we were very at our bingo fuel for our alternate, etc.

Sometime around 8000 MSL, I considered programming additional waypoints outside of the outer FAF on the LOC course. I was busy getting updated ATIS and Landing data and crosschecked the step-down altitudes against the distance displayed on my upper right side of my ND (Navigational Display). As I was busy and all looked as expected, I actually thought to myself that I might be being a bit anal and adding additional cluster and distraction to an already highly rushed approach. I independently decided that DME would be sufficient to determine the step-down fixes. (This could have been that critical error that could have led to a significant event, had we simply programmed the additional waypoints, we wouldn't need to be writing our reports now.)

SOP prevailed throughout the approach, and I actually found myself feeling quite pleased with how well both pilots were performing in this highly rushed approach. As we got ALT CAP (Altitude Capture), we were setting next altitudes, call outs and checklists were getting done. Weather radar checked and I felt we were getting caught up to be ready for an uneventful landing in Chicago.

While level at 4000, we preset 2300 for LANCE. (We are now in LOC capture with FLT TRK/FPA selected as we observe 0.3 DME) a 3 degree descent is initiated and I scan the ND waypoints. NO! The FAF is way ahead of us, "Stop the descent and climb immediately to 4,000 FT!" I rescan and realize that we've been referencing the wrong digital display for our distance on the ND. As I am taking this in the actual ILS DME appears on our display. We were about 5 miles outside of the FAF.

I shudder to think what could have happened if we had continued our descent. We are fortunate that all of our errors occurred above the published MSA of 3,400 FT. For what it's worth, we never heard a word from ATC. We both reassess and verify our current location on the approach. Confident that we have accurate position info we decide to continue the approach. We then debrief thoroughly at the gate and again at our hotel.

Synopsis

Air carrier flight crew reported difficulty in interpreting displays of the FMS which resulted in an altitude deviation during the approach.

Time / Day

Date : 201710
Local Time Of Day : 0601-1200

Place

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

Aircraft

Reference : X
ATC / Advisory.Ramp : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B747-400
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Cargo / Freight
Nav In Use : FMS Or FMC
Flight Phase : Taxi
Maintenance Status.Maintenance Type : Unscheduled Maintenance
Maintenance Status.Maintenance Items Involved : Repair

Component

Aircraft Component : Flight Crew Harness
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 : Relief Pilot
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1487596
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Maintenance

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
ASRS Report Number.Accession Number : 1487854

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1488432

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Maintenance
Detector.Person : Flight Crew
When Detected : Taxi
Result.General : Maintenance Action

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Incorrect / Not Installed / Unavailable Part
Primary Problem : Incorrect / Not Installed / Unavailable Part

Narrative: 1

Flight pushed out on time. Captain was PIC (Pilot In Command) in the left seat, First Officer as PM (Pilot Monitoring) in the right seat, [myself a relief Captain] in the middle observer seat and a [Relief] First Officer in the left observer seat.

While still hooked up to the tow tug, abeam [the] gate and with two engines started, [the Relief] First Officer encountered trouble with his 5 points quick release harness (hard to close and extremely difficult to release. It would not release via quick release tab and took extreme force tugging on the belt to release it). Relief First Officer communicated the issue and I confirmed the troublesome operation of his belt. Captain asked on headset for Maintenance to come back onboard via the E&E door. Maintenance confirmed the problem with the belt and left the aircraft to secure a borrowed belt. The cockpit crew coordinated with ATC to stay put until a decision was made to either continue, or return. The (Dispatch Deviations Guide) DDG was checked for possible relief, which the DDG did not offer (Most Observer Seat equipment can be deferred, but the seatbelts and O2 are not part of it. A note makes it the PIC decision based on safety and, as was decided by the Captain, the non-functioning seatbelt was unequivocally a required safety item). He called Maintenance Control Center (MCC); Both MCC and local Maintenance agreed a return to the gate was warranted.

It appears the installed belt was the wrong part and the tab was thicker than the other belts, was of a different geometry and with squared hole and tab in lieu of the required rounded tab and round hole. See attached picture of placards on correctly installed belt on trouble-free middle observer seat versus picture of placard on removed belt from left observer seat.

Maintenance provided [the] Captain with the signed-off logbook; The corrective action was clearly in contradiction with the observed performed Maintenance action as it stated "cleaned mechanism of debris ops check normal" when the belt portion was actually

replaced. [The] Captain declined the logbook based on the misleading corrective action. Maintenance brought back the logbook with the original incorrect corrective action lined through and the new corrective action properly annotated underneath (See attached copy of logbook page). Captain accepted the Logbook sign-off and the flight departed. [Flight Operations] called [the] Captain directly on his personal phone to inquire as to the reasons for the BTB (Block Turn Back).

Narrative: 2

[Report narrative contained no additional information.]

Narrative: 3

During pushback and start, [Relief] First Officer discovered that his seat belt (second observers seat) was not functioning properly - to the point of being unusable without extreme force and totally unsafe. [The] Captain elected to not start any more engines (we had numbers 1 and 4 started at this time). We consulted the DDG (Dispatch Deviations Guide) for relief (there was none), called (local) Maintenance to board the aircraft, called Maintenance Control for consultation, notified Ramp Control and sent a series of delay messages via ACARS to company to keep dispatch/operations informed. It was decided to return to the gate under tow. Upon closer inspection, it became evident that the seat belt appeared to be the wrong part (based on part numbers being different when compared with other cockpit seatbelts, as well as notable differences in the shape, size and thickness of the seat belt metal tab/bayonet, Local maintenance and Maintenance Control, after realizing there was no relief in the DDG, concurred and went to retrieve another seat belt off [another aircraft].

After being replaced with the loaner seat belt, the logbook was signed off and handed back to us. However, [the] Captain noticed that the sign off corrective action stated: "Cleaned mechanism of debris ops checks normal". He refused this sign-off as being inaccurate and misleading. Maintenance then changed the sign-off (corrective action) to "Replaced seat belt..." which [the] Captain accepted.

As things were being wrapped up and we prepared for a second push and start, Vice President of Flight Operations called [the] Captain on his phone to ask what the reason was for the block turn back.

We blocked out a second time and departed. Suggestions:

1. The process of issuing, verification and control of correct parts appears to be an on-going issue and should be addressed.
2. While I think we all agree that as humans, mistakes will be made (and admittedly, this was a relatively low-threat type of mistake and was caught and properly corrected) - I am much more concerned and troubled by the misleading sign-off. I believe it is merely a symptom of a larger issue. I do not believe that a line mechanic did this of his own volition. (To what end?) It is no secret around that a [local] Maintenance Supervisor has recently instructed his line mechanics to no longer discuss anything with the pilots that could remotely result in a disruption of the schedule (even potential safety related items or pertinent information). Common sense would likely indicate that this supervisor had pressure from higher up the food chain to keep the operation moving. Some relevant questions that I believe should be asked are: Did the supervisor at [this airport] (or possibly someone above him) dictate this logbook sign-off in order to cover up installation of a wrong part? Was it an attempt to avoid placing blame on the Maintenance department for the resulting BTB and delay? Was it done to shift blame and make it appear (to anyone

reading the logbook after the fact and without any real knowledge or context), that this was evidence of a frivolous Maintenance write-up by the pilots - who coincidentally, happen to be defendants in an ongoing federal lawsuit by the company against the pilots union for an alleged work slowdown? Some combination?

3. In the end - It is imperative that flight crews not lose trust in the maintenance staff. It creates a caustic environment for all involved, and in aviation, the stakes are too high. Directives to not openly and properly communicate issues with flight crew and misleading "corrective" sign-offs are detrimental and are a breach of safe protocols. Large amounts of time, effort (and money) have been invested over the years to teach us all the importance of CRM and that includes being able to get and share straight, honest and accurate information from the maintenance department. A true culture of safety starts at the top and filters its way down through the ranks. Any pressures (actual or implied) by management to push staff - whether maintenance or pilots or others- to maintain schedule over safety or other legitimate issues or to shift blame degrades this and is antithetical to what is written in the company manuals regarding safety and ethics.

Synopsis

B747 flight crew reported that the seatbelt/harness for the second observer seat did not release properly, and that Maintenance initially failed to accurately document the repair.

Time / Day

Date : 201709

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : BJC.Airport

State Reference : CO

Altitude.MSL.Single Value : 7000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Turbulence

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : D01

Aircraft Operator : Air Taxi

Make Model Name : Citation Excel (C560XL)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Nav In Use.Localizer/Glideslope/ILS : Runway 30R

Flight Phase : Initial Approach

Airspace.Class B : DEN

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 : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1484960

Human Factors : Distraction

Human Factors : Situational Awareness

Events

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

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - 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 New Clearance

Assessments

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

Narrative: 1

This situation occurred While in IMC conditions, and being vectored onto an ILS approach into BJC. We had just checked on with DEN approach and were issued a descent. As I was descending, the PM began turning anti-ice on, and became distracted discussing anti-ice and why they felt it was necessary to have it on at a higher temperature (OAT was 11C and anti-ice was not required). This unnecessary explanation caused the flight crew to miss part of a radio call from ATC. I was able to catch part of our call sign, and the fact that a heading was being assigned, but I didn't catch the actual heading. After getting back the PMs attention to the radio calls, I informed them that the last radio call was for us, and to query the heading assigned. PM replied to ATC with "please repeat."

ATC did not reply to PM's request, and instead told us we were "5 miles from ALIKE, maintain 7000 until established, cleared for the ILS 30R approach." Since we did not have a proper heading yet, but were cleared for the approach, I rolled the heading bug to an intercept heading that I thought would capture the localizer and selected APPROACH mode, in an effort to move us into the proper direction. At this time, PM replied to ATC's radio call with, "Maintain 5000 until established," and rolled the ASEL to 5000, as we were still descending to 7000. ATC replied, "negative - maintain 7000" - PM repeated to "maintain 7000" I then realized the PM was lagging behind the procedure we were flying, so I rolled the ASEL back to 7000 as the PM read back the instructions to maintain 7000. It was at this point I should have disconnected autopilot and hand-flown the ILS approach we were cleared for, and as I heard it, instead of attempting to correct the PM's actions. After the PM finished their radio call, I immediately made the radio call to clarify the heading ATC originally assigned us, as the PM still had not retrieved that information.

ATC replied with the heading, and then indicated we had flown through the localizer, so he assigned a new heading, and asked us to slow our airspeed. Shortly after that, ATC canceled the approach clearance, and gave us a left turn to heading 200, and climb & maintain 8000. At this point we were no longer in a position to make a stabilized approach. I disconnected the autopilot and we complied with this new instruction. We were given new vectors back onto the approach and landed safely, with happy passengers who, fortunately, had no idea any of this had occurred.

There was a breakdown in communication between flight crew due to an unnecessary discussion about anti-ice usage at a time where a sterile cockpit is required. This breakdown of communication and loss of proper monitoring with ATC caused the need to be re-vectored back to the ILS. The missed vector could have been considered a Pilot Deviation by ATC though nothing was said to us about it. The approach became unstable due to a breakdown in Crew CRM, which led to missed calls and misunderstandings with ATC. I should have become aware that PM was becoming overwhelmed with the approach, and taken over flying the aircraft earlier in the approach, so PM's inputs would not have affected the path of the aircraft. In a post-flight debrief we discussed our communication breakdown & determined a better job could have been done in not discussing issues not immediately pertinent to the phase of flight. This is especially important during the high

workload we were experiencing at the time (IMC, vectors to an approach, descending, slowing & configuring). As the PIC I should have been more forceful with ending the anti-ice discussion so the PM could focus on the tasks at hand. I should have more quickly initiated the radio call to ATC to confirm the missed vector and assigned altitude when it was clear the PM was not situationally aware of what needed to be done. I will be sure to take all these lessons learned and apply them to my future flights.

Synopsis

CE560XL Captain reported executing a go-around when the approach became unstabilized following confusion in the cockpit as to the ATC clearance.

Time / Day

Date : 201709

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Ground : HWD

Aircraft Operator : Air Taxi

Make Model Name : Gulfstream Jet Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 15154

Experience.Flight Crew.Last 90 Days : 60

Experience.Flight Crew.Type : 2325

ASRS Report Number.Accession Number : 1483495

Human Factors : Distraction

Events

Anomaly.Deviation - Procedural : Clearance

Anomaly.Ground Incursion : Runway

Detector.Person : Flight Crew

When Detected : Taxi

Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

While taxiing to RWY 28L on taxiway A1 at HWD, I passed the hold short line before I realized it. There were several contributing factors:

1. The hold short line markings were not very well marked (faded).
2. The hold short line markings were located in an unusual (non-standard) location relative to the run up area. They are located before the run up area, instead of between the run up area and the runway threshold which is normal, so during taxi, we were expecting and looking for them further ahead beyond the hold short area.
3. Taxiing uphill on that taxiway with the sun shining in our eyes made it difficult for the crew to see any markings, and especially the hold short line until we were right on top of it (First Officer saw it just as we crossed it, I did not see it at all as I was looking up at the time).
4. An outside distraction occurred at the moment we were about to cross the hold short line: I was looking up at two light single engine aircraft maneuvering close together on what seemed to me to be an unusually low and tight base to final turn right in front of us. Because I was looking up at them for a few seconds, I did not see the hold short line as I crossed it, though my First Officer noticed it just as we were about to cross it. He failed to call it out. We are conducting additional CRM and SOP training to address that failure.

Because of the unusual location of the hold short markings for Runway 28L on taxiway A1, I think that the airport should put up a vividly marked sign at the entrance to taxiway A1 that warns of the unusual location of the hold short line. Maybe a white sign with a red border or similar.

Synopsis

Gulfstream Captain reported they passed the Runway 28L hold short line on Taxiway A1 at HWD.

Time / Day

Date : 201709

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 12000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Make Model Name : Citation V/Ultra/Encore (C560)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Ferry

Flight Phase : Descent

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

ASRS Report Number.Accession Number : 1478509

Human Factors : Situational Awareness

Human Factors : Distraction

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1478510

Human Factors : Workload

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Human Factors : Distraction

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Air Traffic Control
Were Passengers Involved In Event : N
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 : Procedure
Primary Problem : Procedure

Narrative: 1

We were descending from 16000 to 12000 with the autopilot on. I called 1000 to go at 13000 ft. Pilot Flying responded 13000 for 12000. About that time ATC called and asked if we had destination weather and what runway and approach we wanted. I responded and then opened my iPad to confirm the airport and approach. As I was looking at the iPad, ATC called and asked what altitude had we been cleared to. I responded 12000 and saw that we were descending through 10500. Pilot Flying (PF) then stopped the descent and started to correct back to 12000. ATC then instructed us to continue the descent to 9000. I asked PF how and why he had not leveled off at 12000. He told me that the autopilot had inadvertently disconnected without him knowing it, and that he had been looking at his iPad and not monitoring the airplane. I need to monitor the PF and airplane better during critical phases of flight. Just because he responded to the altitude callout does not mean that he or the autopilot is going to do it.

Narrative: 2

This was clearly a CRM failure. While it was a beautiful day with unlimited visibility, the Pilot Flying (PF) should never have looked down at his iPad to assist the PM with any other issue. The primary responsibility of the PF is to fly the aircraft safely with precision. In this case, both pilots had their heads down and neither pilot noticed the assigned altitude had not been captured. This is a basic failure of a structured CRM environment which we must adhere to in the interest of safety and professionalism. In this case both pilots were experienced captains with thousands of flight hours; however, professional CRM practice fell short on this occasion.

Synopsis

CE-560 flight crew reported overshooting assigned altitude on descent due to inadvertent autopilot disconnect and distraction with iPads.

Time / Day

Date : 201708

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : BOS.Airport

State Reference : MA

Altitude.AGL.Single Value : 0

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 : APU

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 9599

Experience.Flight Crew.Type : 4691

ASRS Report Number.Accession Number : 1477655

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Ground Personnel

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.Type : 960

ASRS Report Number.Accession Number : 1477882
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Ground Personnel

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Other / Unknown
Detector.Person : Flight Crew
When Detected : Aircraft In Service At Gate
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Approximately 12 minutes prior to push, the APU was started. After APU start, the blue "APU Maintenance" light illuminated. Per CRM, I advocated to the Captain that, per the FM (Flight Manual), we could legally operate and write it up at our destination. The FM allows continued operation with this light on. The Captain, however, desired to have Maintenance address the problem. Maintenance was then called and the Mechanic arrived at the cockpit in a very timely manner and investigated via the FMC. The FMC Maintenance page read "APU oil low." The Captain and the Mechanic then agreed to close the main cabin door while the Mechanic added the oil, and then communicate through the cockpit window. While the Mechanic was adding oil to the APU, a ramp person yelled up to the captain through the cockpit window, "It's going to be okay." The Captain interpreted this to mean that it was now okay to start the APU. Unknown to me, the Captain then started the APU. After realizing the error, the Captain immediately shut down the APU. A few minutes later, the mechanic was finished servicing the APU and walked up the cockpit window. The Captain was highly apologetic to the mechanic. Fortunately, neither the mechanic nor anyone else was hurt. The flight then proceeded normally.

This was a miscommunication problem. While it's true that the ramp agent was merely trying to be helpful, nonetheless, a communication error occurred somewhere between the Mechanic, the Ramp Agent, and the Captain. I believe the primary factors involved were expectation bias and time pressure. The Captain had an expectation bias and heard what he wanted to hear since we were at/near pushback time. Better monitor and cross check between us could have prevented this mishap.

Narrative: 2

About 15 minutes prior to scheduled pushback, saw the APU required maintenance. Maintenance determined oil was needed. At push time, I asked mx on the radio if it was OK to close the door and start the APU without anyone coming back to the flight deck. They said it was OK to use the APU (I saw the oil had been serviced) and it did not require a new Maintenance Release, but I didn't ensure the aircraft was clear. I attempted to start the APU and then immediately shut it down when I realized I didn't know if there was still a technician outside the rear of the aircraft by the APU.

Synopsis

B737 flight crew reported unconsciously starting the APU while the unit was still being serviced by a Mechanic.

Time / Day

Date : 201708
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 45000

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Corporate
Make Model Name : Gulfstream IV / G350 / G450
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Oceanic
Airspace.Class A : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Engineer
Experience.Flight Crew.Total : 22000
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 60
ASRS Report Number.Accession Number : 1477289
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy

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

Assessments

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

Narrative: 1

We received a SELCAL towards the end of our flight, requesting a position report. I'm not sure which way point after the fact as I now decided to fill out this report. No conflicts reported.

We were maybe 5 or 10 minutes past the reporting point and within the 2 minutes of the previous report.

We made the report immediately upon responding to the ARINC request.

It is worth looking at the circumstances. I was using a contract pilot, NFP (Non Flying Pilot). There is a pilot shortage so this person was not my first choice. He has a history of sometimes, not always, difficult CRM, which is manifested by being defensive and sometimes not following SOP.

Problems began when he, rather than establishing enroute HF communications, made a report of a coast out position that was not requested, nor did he request a SELCAL check. This was a bit odd. When I asked him what he meant, he was defensive saying "this was his standard procedure". We eventually got the SELCAL check.

He shortly after that entered the wrong altitude (no big deal) in the altitude prompter as 16000, when the controller had said 15000. I asked him to confirm the altitude with the controller, he did so but with some attitude. My request was kind and appropriate.

He was somewhat silent after these two events.

I later asked him to put on the COWL heat and he said, "you do it".

I, without confrontation as the FP (Flying Pilot), put on the COWL heat.

He later said "I'm not your monkey" and that he didn't like when I asked him to do things that he thought I should do myself. Our SOP is to not have the FP pushing buttons when the NFP is free to do it.

There was some tension for the remainder of the flight, which was already late, and this added to the exhaustion of both of us.

This is why I think we flew past the waypoint, he the NFP missed it, and I did too.

He is very competent in many ways, and that is why I continue to use him, (although his personality is challenging). Choosing contract pilots in this environment is kind of "name your poison". The best pilots are hired, the ones that are available, always have issues.

My challenge is to work with the issues and prevent any confrontations in the cockpit. This was accomplished, but I have to walk gently with some personalities.

I have a heightened awareness when working with a different pilot, and I have to re-TRIPLE my efforts.

He called me three days later to apologize, which is what he always does.

One would ask, why do I use him? He an otherwise nice person to be with on the road and he is very his honest about this "issue" he is working on. We both try to work with it. He is mostly competent, which is better that some of the other choices I've had to work with.

He is not the first or even second person I call, but he was the ONLY one available. It is getting harder all the time to fill our temporary needs.

On balance, the flight was conducted safely but I am reminded to pay extra attention to all of the details.

Synopsis

Captain of a corporate turbojet reported issues with flying with contract pilots.

Time / Day

Date : 201708
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 15
Light : Dawn
Ceiling.Single Value : 10000

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Corporate
Make Model Name : Global Express (BD700)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Takeoff
Route In Use : Oceanic
Airspace.Class D : ZZZ

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 13725
Experience.Flight Crew.Last 90 Days : 120
Experience.Flight Crew.Type : 3200
ASRS Report Number.Accession Number : 1476975
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 : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 7850
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 12
ASRS Report Number.Accession Number : 1477817
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
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

We boarded our passengers and contacted departure for our clearance as the local control tower was not yet open. We received our clearance and "Hold For Release" instructions after several failed attempts due to bad radio reception.

We then taxied the aircraft out to the departure end of runway while listening to local traffic advisory frequency. At the departure end we attempted to contact departure several times to obtain our departure clearance and were unable again due to bad reception.

It was then that I told my co-pilot that we would and "pick-it-up" on the go. This was a bad decision on my part as well as not communicating what that meant to my very new co-pilot.

We departed VFR and my co-pilot checked in. I heard the confusion while flying yet was busy to avoid [an adjacent airport] as well as keeping eyes on sight of a departing or arriving aircraft and I was maneuvering to avoid any conflict. However the communication was confusion when the controller asked if we were VFR and my copilot was responding "no we have an IFR". I was telling my co-pilot "No, we were Hold For Release" which just added more confusion as he did not understand. This was when I transmitted "yes, we are VFR". I was to find out later that there may have been a conflict with traffic on final with an aircraft on long final. I was aware of the long final aircraft and made an immediate right turn on departure.

Overall I should had made every effort to call TRACON on the ground first to receive my clearance as well as used better CRM to communicate with my co-pilot.

In retrospect as well and in regards to this entire trip and having only 7 days home since its inception. I think there were chain of events relating to Human Performance affecting my bad decision making. I was generally feeling homesick and anxious to get home. I should have recognized this as a senior Pilot early on.

Narrative: 2

[Narrative contained no additional information.]

Synopsis

BD700 flight crew reported taking off without being released by ATC at an airport with a closed Tower.

Time / Day

Date : 201708

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Person

Reference : 1

Location In Aircraft : General Seating Area

Cabin Activity : Safety Related Duties

Reporter Organization : Air Carrier

Function.Flight Attendant : Other / Unknown

Qualification.Flight Attendant : Current

ASRS Report Number.Accession Number : 1476304

Human Factors : Situational Awareness

Human Factors : Confusion

Events

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

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Attendant

When Detected : Pre-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

After boarding, we sat on the airplane for over 1 hour without pushing. Communication from Captain was very unusual and concerning. He gave one announcement saying we had minimal fuel and we might not make it to [our destination] and might divert. He further said we can't hold with the fuel onboard during his normal welcome onboard announcement. He made another announcement after sitting without any information that the temperature was too hot to take off and we would be pushing and just burning extra fuel to make sure we were within weight limits and then hope we make it to [the

destination].

This got a lot of passengers scared, nervous and simply wanting off the airplane. He brought lack of confidence in the safety of this flight. During the course of the next hour, we tried to get information from him and we couldn't. He did not want to speak with us and was very short when we told him people wanted to get off the plane. Cabin temperature was communicated to him that it was too hot and people were not comfortable.

After nearly 1h30m, he said the jet way would be coming back and he never told us the working crew. We had to call him and ask if we should disarm the door as we heard the jet way coming. Upon gate agent opening the door, he refused to open the door. Finally after several minutes of waiting, he had the FO open and told them to deplane. Then he locked the door again during the whole deplaning without communication. Service director came to the plane and tried to establish communication with the Captain, and was met with resistance as well and just had a bad attitude towards all working employees.

He dismissed any and all attempts to establish communication with the inflight crew. He left the airplane and didn't come back till after it was time to re-board but never told us what was going on. I tried to let him know that I was going to be 20 minutes away from crew legalities and he dismissed it and said he had legalities too and never wanted to know the time.

During the flight he called in the middle of our service and demanded we take out the passenger meals in order to cook his food. We told him we were in the service and it was going to take a few minutes to accommodate his meals in the oven since the passengers' food was cooked. He began to threaten myself over this, by stating his contract says he can eat whenever he says he wants it and we should stop all passenger food service to accommodate his meal heating.

He said he would divert the airplane over this. That is concerning as he never communicated any special requests during his briefing or at any stage. His behavior was unprofessional and disrespectful. I did not personally feel safe at this stage. Crew Resource management was not followed and it was a disservice to our passengers. He also made ATC radio calls over the PA during the flight and dismissed us when we called to let him know. He terminated the airplane's power still with passengers onboard as well.

Synopsis

A Flight Attendant reported an incident with a Captain acting strangely and making passengers uncomfortable.