

ASRS Database Report Set

Cockpit Resource Management (CRM) Issues

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

Update Number.....29.0

Date of UpdateJuly 31, 2018

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

Number of New Records in Report Set15

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. 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 amplified 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 black ink that reads "Linda J. Connell". The signature is written in a cursive, flowing style.

Linda J. Connell, 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: 1531173 *(1 of 50)*

Synopsis

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

ACN: 1524730 *(2 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 *(3 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 *(4 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 *(5 of 50)*

Synopsis

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

ACN: 1517142 *(6 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 *(7 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 *(8 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 *(9 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 *(10 of 50)*

Synopsis

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

ACN: 1513871 *(11 of 50)*

Synopsis

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

ACN: 1511631 *(12 of 50)*

Synopsis

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

ACN: 1507977 *(13 of 50)*

Synopsis

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

ACN: 1507083 *(14 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 *(15 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 *(16 of 50)*

Synopsis

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

ACN: 1498775 *(17 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 *(18 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 *(19 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 *(20 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 *(21 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 *(22 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 *(23 of 50)*

Synopsis

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

ACN: 1478509 *(24 of 50)*

Synopsis

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

ACN: 1477655 *(25 of 50)*

Synopsis

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

ACN: 1477289 *(26 of 50)*

Synopsis

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

ACN: 1476975 *(27 of 50)*

Synopsis

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

ACN: 1476304 *(28 of 50)*

Synopsis

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

ACN: 1472242 *(29 of 50)*

Synopsis

B737 flight crew reported a decreasing oil quantity indication on the Number 1 engine, followed by a subsequent loss of oil pressure. The engine was shut down and a successful diversion was accomplished.

ACN: 1469490 *(30 of 50)*

Synopsis

Piaggio 180 Captain reported landing without a clearance after they were distracted by a wake turbulence encounter.

ACN: 1469136 *(31 of 50)*

Synopsis

Gulfstream IV First Officer reported they descended below the altitude they were cleared to on the LGMK VOR 6 Approach.

ACN: 1468417 *(32 of 50)*

Synopsis

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

ACN: 1467476 *(33 of 50)*

Synopsis

ERJ175 flight crew reported receiving a stick shaker warning when intercepting the glideslope from above with the speed brakes deployed.

ACN: 1467455 *(34 of 50)*

Synopsis

MD11 flight crew experienced a loud squeal passing through 8,000 that continued to grow louder, making communication difficult. Crew elected to return to the departure airport after dumping fuel.

ACN: 1467251 *(35 of 50)*

Synopsis

GIV flight crew reported turning earlier on departure due to the FMC not being programmed correctly.

ACN: 1467196 *(36 of 50)*

Synopsis

General aviation flight instructor reported a NMAC after departure from a CTAF airport.

ACN: 1465460 *(37 of 50)*

Synopsis

Air carrier flight crew reported almost colliding with another aircraft while taxiing.

ACN: 1465019 *(38 of 50)*

Synopsis

EMB-175 Captain reported the FO mistakenly twisted the altitude selector knob instead of the speed selector knob causing the aircraft to drop below assigned altitude.

ACN: 1462284 *(39 of 50)*

Synopsis

B737 First Officer reported that the one of the flight crew's oxygen masks became separated from its oxygen feeder hose, resulting in oxygen escaping from the disconnected hose resulted in complete loss of aircrew oxygen supply. The crew diverted to an alternate airport.

ACN: 1459409 *(40 of 50)*

Synopsis

An Air Carrier First Officer reported a breakdown in CRM between himself and the Captain and operations not in compliance with Company Policy after he had not included the Captain in the selection of a pre-flight secondary altitude request.

ACN: 1458967 *(41 of 50)*

Synopsis

Corporate Jet Captain reported he made an early turn on the ZZ000 1 departure from SAN and corrected back to course after query by SCT TRACON.

ACN: 1458687 *(42 of 50)*

Synopsis

SCT Departure Controller and flight crew reported an aircraft departed and turned left instead of right causing an airborne conflict.

ACN: 1458655 *(43 of 50)*

Synopsis

C182 instructor pilot and student reported taxiing onto the runway creating a conflict with a landing aircraft.

ACN: 1456507 *(44 of 50)*

Synopsis

A B737 Captain reported pilot preflight distractions, interruptions, and task loads resulting from the company's current Flight Attendant training policy to include the crew in more of the cabin activities, needs, and wants.

ACN: 1454820 *(45 of 50)*

Synopsis

CRJ-700 Captain reported returning to the departure airport after a compressor stall, but delaying the landing gear extension until 800 feet above the ground.

ACN: 1454754 *(46 of 50)*

Synopsis

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

ACN: 1448430 *(47 of 50)*

Synopsis

Learjet flight crew reported a heading deviation on the SKYLINE 6 Departure from OAK.

ACN: 1447468 *(48 of 50)*

Synopsis

A military helicopter pilot reported a flying low altitude VFR flight in the LAX basin which inadvertently entered BUR airspace.

ACN: 1444941 *(49 of 50)*

Synopsis

B737NG First Officer reported experiencing windshear shortly after gear retraction. An EGPWS wind shear warning and an airspeed loss both occur as the Captain recovered using maximum thrust.

ACN: 1444463 *(50 of 50)*

Synopsis

BE-350 Captain reported having CRM issues with a Captain-qualified First Officer.

Report Narratives

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 : Rejected Takeoff
Result.Flight Crew : Requested ATC Assistance / Clarification
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 obviously 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 : Aircraft
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Manuals
Contributing Factors / Situations : Procedure
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 : Time Pressure

Human Factors : Workload

Human Factors : Distraction

Human Factors : Human-Machine Interface

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 : Unstabilized Approach
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
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 : Aircraft
Contributing Factors / Situations : Human Factors
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 "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.

Time / Day

Date : 201708

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 36000

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZZZ

Component

Aircraft Component : Oil Pressure Indication

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 2877

ASRS Report Number.Accession Number : 1472242

Human Factors : Workload

Human Factors : Time Pressure

Human Factors : Troubleshooting

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 2556
ASRS Report Number.Accession Number : 1471953
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Diverted
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Inflight Shutdown
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Climbing northbound out through FL240 we noticed Engine 1 Oil Qty slowly declining. Upon level off at FL360 the Qty was indicating 0%. No checklist/procedure for Low Oil Qty in B737 Quick Reference Handbook (QRH), but we continued to monitor all engine parameters specifically the Engine 1 Pressure and Temperature. We had just finished an ACARS message to [maintenance control] informing them of this indication when we notice the Oil Pressure fluctuating and begin a declining trend. Messages sent to [maintenance] and Dispatch with our concern this is a real problem with the Engine 1 Engine Oil System. At this point I transferred control of the aircraft to the First Officer. I Contacted Dispatch via VHF radio and we agreed that ZZZ 80 miles behind us was the best and safest option with excellent weather, 13000 foot runways and Company Maintenance. By this time the Pressure was in the Yellow Caution Zone, still fluctuating and still dropping. Now the First Officer was flying and communicating with ATC while I monitored and coordinated the situation. Under my direction the First Officer [advised ATC] with Center and requested a course reversal for an emergency descent and divert to ZZZ. Flight Attendants were advised of the situation via "TEST" (Time available, Emergency, Signal, Transmit additional instructions) and passenger were given a PA informing them of an Engine Problem, a Diversion and that our ETA was about 20 minutes from now. By the time we were heading for ZZZ and descending through FL240 the Oil Pressure was in the Red (single digits), the QRH was used starting with Engine Low Oil Pressure checklist which directed us to the Engine Shutdown Check List. Engine 1 was shutdown using the checklist and all items up to the Landing portion were completed by 10000 feet. Requested a straight-in approach instead of landing to the north which was the airports configuration at the time. Called Flight Attendants on inter-phone for a 5 minute warning and also assured passenger via PA that all checklists were complete, Engine on left side had to be shut down and that all would be well. At 3000 ft and a 10 mile final I took control of the aircraft for the single

engine approach and landing which was uneventful. Stopped about halfway down runway for an Aircraft inspection by Airport Fire Rescue. We were cleared of any leakage or aircraft damage which allowed us to continue to the assigned gate. Maintenance personnel confirmed that we had a serious oil leak somewhere in the accessory drive/starter section of the engine confirming our cockpit indications were correct.

My first officer did a tremendous job of flying and communicating with ATC while I managed the problem, ran all of the QRH checklists meanwhile communicating with FA's and passenger. Threat and Error Management (TEM) and Crew Resource Management (CRM) procedures were used throughout the event. The flight attendants were cool, calm and collected on the inter-phone and did a great job of keeping the passenger calm and safe during this event. I was able to greet all passengers as they left the airplane and all seemed relieved and happy with the crew and very happy with the outcome. Was able to debrief all crew members and we all agreed that the event went very well and that all of our years of training and experience had paid off.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

B737 flight crew reported a decreasing oil quantity indication on the Number 1 engine, followed by a subsequent loss of oil pressure. The engine was shut down and a successful diversion was accomplished.

Time / Day

Date : 201707

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : IAD.Airport

State Reference : DC

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : PCT

Make Model Name : P180 Avanti

Crew Size.Number Of Crew : 2

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class B : IAD

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : IAD

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase : Initial Approach

Airspace.Class B : IAD

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 105

Experience.Flight Crew.Type : 230

ASRS Report Number.Accession Number : 1469490

Human Factors : Distraction

Events

Anomaly.Deviation - Procedural : Landing Without Clearance

Anomaly.Inflight Event / Encounter : Wake Vortex Encounter

Detector.Person : Flight Crew

When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

I was PIC and pilot flying, SIC was pilot monitoring and handling radio communication. The Approach Controller issued a speed restriction and gave us a warning for wake turbulence. Shortly after he gave us a heading to intercept the final approach course, and cleared us for the visual approach. The Controller issued frequency change to Tower, just as we encountered wake turbulence. We discussed the issue and adjusted our glide-path accordingly to avoid another wake turbulence encounter. We completed the before landing checklist items and on the roll-out realized that we did not switch to Tower for our landing clearance.

Distraction and lack of effective CRM resulted in missing required ATC communication during a critical phase of flight. The current approved checklist for the aircraft does not mention landing clearance on the "Before Landing" checklist.

Synopsis

Piaggio 180 Captain reported landing without a clearance after they were distracted by a wake turbulence encounter.

Time / Day

Date : 201707

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : LGMK.Airport

State Reference : FO

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 15000

Aircraft

Reference : X

ATC / Advisory.Center : LGGG

Aircraft Operator : Air Taxi

Make Model Name : Gulfstream IV / G350 / G450

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Direct

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 4500

Experience.Flight Crew.Last 90 Days : 40

Experience.Flight Crew.Type : 700

ASRS Report Number.Accession Number : 1469136

Human Factors : Time Pressure

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Flight Crew

When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

PIC loaded the VOR Approach. At first, he proceeded direct to the VOR 6 point, part of the procedure turn, when instructed to proceed direct to the VOR. However, this was resolved with FO input (reluctantly accepted by PIC), and we proceeded direct to the VOR 5,000 feet. PIC asked if we were cleared for the approach. I said "Let me confirm". Altitude alerter set at 5,000. ATC said: "Maintain 5,000 to the VOR. Upon reaching the VOR, cleared for the approach." PIC said to reset altitude selector to 3,500, which is the published VOR crossing altitude. Tone of cockpit up to that point was less than full CRM with PIC expressly stating that he preferred less input from FO. FO queried PIC, but PIC insisted on 3,500. As I recall, this was non-radar environment. ATC asked our altitude as we approached/crossed VOR. 4,000. ATC: You were instructed to maintain 5,000. I have traffic below you. Maintain 4,000 now." Apparently, we still had acceptable separation at that point.

CRM is important at all times and even MORE (not less) important when operating in foreign airspace (accents, unfamiliar procedures), and under the pressure of slot times (PIC seemed stressed about departure/arrival slot times).

Synopsis

Gulfstream IV First Officer reported they descended below the altitude they were cleared to on the LGMK VOR 6 Approach.

Time / Day

Date : 201707

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Haze / Smoke

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class B : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1468417

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1468415

Human Factors : Situational Awareness

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

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - 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 : Regained Aircraft Control
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

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

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

Narrative: 2

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

The second I felt uncomfortable I should have said something. Even though he is a new

Captain I almost felt shocked by what was happening and almost froze.

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

Synopsis

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

Time / Day

Date : 201707

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Turbulence

Ceiling.Single Value : 1800

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class B : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 7530

ASRS Report Number.Accession Number : 1467476

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1467014

Human Factors : Distraction

Human Factors : Confusion

Human Factors : Training / Qualification

Events

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

Assessments

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

Narrative: 1

Descending through the ZZZZZ fix on the ILS approach, the First Officer (FO) was maintaining a speed of 210 Knots using Full Boards. We hit turbulence while descending through the clouds and the load factor increased and quickly the speed dropped and the stick shaker came on. I quickly called for the command of the controls and the FO quickly removed his hands from the controls. I then added power and lowered the nose and removed the boards to close and thus regain full control authority. I then re-intercepted the Glide Slope and then gave the controls back to the FO. I then continued with the gear and flap settings and by the 1000 feet call all was configured and by 500 was stable and the landing was spot on.

I believe that I have been noticing a trend where the FOs do not really understand the use of flight boards, especially when inputting full amount. They seem to fixate on the descent and omit the visual indications such as the yellow band and incremental Pitch Limit Indicator (PLI). For some reason, these visual indications are either omitted or not used as an impending warning to probable events such as a stall. I notice that in almost every flight I have to discuss the use of Boards or in some cases I have had to assist in closing boards because the yellow band turned RED.

In some cases FOs have taken the assist personally and have increased tension in the cockpit because in their perception the assist was taken as intrusion. I further believe that CRM has been taken out of context and has made FOs the premier Flying pilot that "is the sole manipulator of controls." For example, I had an FO, recently, who thought that having an EMB 190 type certificate made him loggable PIC when flying.

They seem to look at themselves as PIC rather than first officers who are still flying and assisting the Captain. I believe this false sense of understanding, hierarchy, has misguided FOs and thus relied on a false sense of a pilot who never has the need to ask questions.

I think that during training or Initial Operating Experience (IOE), the FO needs to be reminded of the need to keep learning and that just because they passed IOE is by no means an excuse to overlook the Captain's experience. CRM should be shared information that allows for Safety but in some cases new FOs are relying less on sharing and more on acting as individuals in command authority when the sole manipulator of controls.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

ERJ175 flight crew reported receiving a stick shaker warning when intercepting the glideslope from above with the speed brakes deployed.

Time / Day

Date : 201707

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

Relative Position.Distance.Nautical Miles : 25

Altitude.MSL.Single Value : 8000

Environment

Flight Conditions : Mixed

Light : Night

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : MD-11

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 121

Mission : Cargo / Freight

Route In Use.Other

Component

Aircraft Component : Cockpit Window

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 : 12500

Experience.Flight Crew.Last 90 Days : 70

Experience.Flight Crew.Type : 5500

ASRS Report Number.Accession Number : 1467455

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

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 : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 18750
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 8000
ASRS Report Number.Accession Number : 1467456
Human Factors : Situational Awareness

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Relief Pilot
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 15700
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 4000
ASRS Report Number.Accession Number : 1467457

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Issued New Clearance
Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

Passing through approximately eight thousand feet, a vibrating low-volume howl began to emanate from the First Officers window. Within what seemed to be approximately a 3-4 second time lapse, this sound became completely unbearable. Communications with ATC as well as communications within the cockpit were extremely difficult, rendering the requirement for maximum volume selections and overhead cockpit speakers on and at maximum volume, to optimize our ability to discern ATC communications. Visual and physical inspections of the First Officer window revealed that the window was properly secured. The window also had an accompanied vibration. The Captain conducted excellent CRM utilization and leadership with all crew members. We determined that a continued

flight would not only be detrimental to safety, but would also, and in short order, render permanent hearing damage to us all. All crew members determined that an immediate level off during our climb was needed, followed by communications with ATC regarding our need to return to [departure airport], as well as the need for us to fuel dump to achieve a safe landing weight for the aircraft. During our eventual descent, we noticed that the extremely loud noise quickly dissipated close to the same altitude it began. All checklists were accomplished. Updated weather information and landing performance was gathered followed by appropriate briefings, to return to our departure airport. A successful landing was ensued with appropriate debriefs with local maintenance personnel whom later shared with us the degradation of the First Officer window seal.

Narrative: 2

After takeoff climbing through 8,000 feet the FOs window developed a very loud high pitch squeal and vibration in the window. I ask ATC to hold our altitude that we were working a problem. The higher the cabin altitude climbed the louder the noise, to the point where we were having difficulty communicating. After we assessed our situation I decided to return. Asked radar for a fuel dumping area and we were cleared to dump. We also contacted OPS and got a release for a return, which we received. We ran all of our checklists, terminated the dump and briefed the approach. Once we had everything squared away, we flew the ILS for an uneventful landing. MX found a broken window seal. Reasons to dump fuel and return:

- 1) Noise level becoming unbearable and inhibited communication between crew members and hearing ATC,
- 2) Concern for a window failure due to vibration,
- 3) A 9 hrs over water flight. I feel I must recognize the crew for remarkable performance and our use of CRM, made for a safe uneventful return.

Narrative: 3

An extremely loud noise and vibration suddenly originated from the FO window during climb at approximately FL80. The FO window was closed and locked with the locking lever in the locked position. ATC communications and crew cockpit communications became extremely difficult as we climbed out on the SID. Several clearances were repeated by ATC and aircrew due to extreme noise. Continued painful noise exposure was deemed intolerable and imprudent by the crew. Climb was stopped and fuel dumped for a normal landing at departure airport. The noise subsided during the descent to an uneventful landing.

Synopsis

MD11 flight crew experienced a loud squeal passing through 8,000 that continued to grow louder, making communication difficult. Crew elected to return to the departure airport after dumping fuel.

Time / Day

Date : 201707

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : LGAV.Airport

State Reference : FO

Altitude.AGL.Single Value : 1500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Dusk

Ceiling : CLR

Aircraft

Reference : X

ATC / Advisory.Center : LGGG

Aircraft Operator : Air Taxi

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 : Initial Climb

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 23000

Experience.Flight Crew.Last 90 Days : 90

Experience.Flight Crew.Type : 2300

ASRS Report Number.Accession Number : 1467251

Human Factors : Human-Machine Interface

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 Taxi

Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 4500
Experience.Flight Crew.Last 90 Days : 40
Experience.Flight Crew.Type : 700
ASRS Report Number.Accession Number : 1469151
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
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
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

I am employed with an air charter company as PIC operating under FAR 135. The company manages an aircraft that can be operated under FAR 91 when utilized by the aircraft owner. I was assigned a series of flights with a pilot to fly as SIC operated part 91 that was working for various company's part time as a SIC on the same type of aircraft. On departure on this flight shortly after takeoff I made a turn too soon that is in violation of the SID that was caused by an error programmed in the FMS. The error was recognized by ATC, myself, and the SIC at the same time. ATC gave us vectors. As PIC I am ultimately responsible however I believe that if our company operating procedures were utilized and understood better through training to the same level as required by FAR 135 standard operating procedures would better prevent this type of error.

Narrative: 2

Very rushed departure out of LGAV. After lengthy delay on ground for security check of our passengers, and I think we also had a slot time to meet, ATC issued us the SID as we were taxiing or about to taxi. It was difficult to find the SID on iPad, but I did locate it. While taxiing, PIC was having difficulty finding SID. I don't think he ever found it. He asked me to read the text description, which I did. It required flying straight out for a specified distance, and then turning right to first NAVAID in the flight plan. PIC acknowledged the verbal description. ATC asked if we were ready for takeoff and PIC said "yes", although I preferred more time (Hadn't even fastened my shoulder harness). We took off in LNAV (PIC's decision) and PIC turned right to NAVAID after takeoff as SID was apparently not loaded in FMS. ATC told us that it appeared that we had turned early.

CRM is always important, and is even more important when operating in foreign country and under perceived time pressure. CRM best practice would be to ask FO if he is ready,

rather than unilateral decision, and to fully brief the departure, etc. Company policy is to take off in heading mode, and this is an example of when heading mode would have assured initial compliance with SID.

Not aware of any traffic conflict in connection with this incident.

Synopsis

GIV flight crew reported turning earlier on departure due to the FMC not being programmed correctly.

Time / Day

Date : 201707

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : OKB.Airport

State Reference : CA

Altitude.MSL.Single Value : 1200

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 9

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : OKB

Aircraft Operator : Personal

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Personal

Flight Phase : Initial Climb

Airspace.Class E : OKB

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : OKB

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Initial Climb

Flight Phase : Initial Approach

Airspace.Class E : OKB

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

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 : 900

Experience.Flight Crew.Last 90 Days : 8

Experience.Flight Crew.Type : 47
ASRS Report Number.Accession Number : 1467196

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 375
Miss Distance.Vertical : 150
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

This was the return leg of a personal pleasure flight to Oceanside, CA (OKB). I was the PIC pilot flying for the first leg and had swapped seats and was not flying on the return flight. Not being PIC for this leg, and despite being the more experienced aviator, I was relaxing and mentally disengaged with more of a passenger mindset, given I was with a properly rated, current and qualified pilot in the left seat of a single-pilot aircraft. We briefed the takeoff procedures after the run-up, and the PIC had verbally noted the "fly friendly" noise abatement sign at the departure end of the runway, and I reiterated the sign text: follow the river to the shoreline. A C172 departed in front of us for closed traffic, and when the PIC began taxiing towards the runway immediately after they began takeoff roll, I recommended we hold for separation given our dissimilar aircraft. After the 172 had gotten airborne, we taxied onto Runway 24 and departed. This was sooner than I personally would have departed, but I did not verbalize this and felt it would be a non-issue since they were remaining in the pattern and we were a west departure. In the moments after takeoff leading up to the event, I was enjoying the view out my side of the aircraft while casually glancing over to keep an eye on the traffic that departed in front of us. I noticed our courses diverging and made a call-out that the traffic was now at 11 o'clock, which was acknowledged. There was a scattered layer above us, which momentarily caused a level off. On my next glance I noticed the 172 had turned northbound and our courses were nearly perpendicular and we were co-altitude, so I again called out that the 172 was 11 o'clock, northbound, same altitude, which was again acknowledged, but no action was taken. As we continued westbound I saw the situation developing, and I issued another verbal warning to the PIC, which was acknowledged, but again no corrective action was taken and the aircraft continued to converge. I immediately looked inside and saw the PIC with his head down at the iPad and at that point I assumed the controls and initiated a pitch up and climbed the aircraft through a break in the clouds. Aircraft 2 passed below and behind at an estimated range of 400 feet diagonally. While I do not believe the situation was unsafe, the separation was not comfortable nor expected by either aircraft. I should have taken action sooner, and believe I would have had I been participating in the flight more actively. It is worth noting that I often fly into [an airport with parallel runways], so I am frequently exposed to aircraft being closer than normal during arrival and departure, which may bias my opinion of whether or not a collision hazard existed. In those situations, however, the aircraft are typically on parallel or divergent courses, which was not the case here, and had I not taken action, a collision hazard would have certainly existed regardless of any subjectivity.

As with most abnormal events in aviation, there were numerous links in the chain of events, and there were missed opportunities to break that chain sooner. This was a case involving both poor communication and poor CRM. During the debrief of the event, the PIC stated he was just flying straight out to the shoreline as he was used to when flying out of many southern California airports, and did not notice or follow the river, which turns slightly south, as the 172 did. I wish the PIC would have verbalized to me that he was overwhelmed, confused or unsure of the departure routing, and I would have been able to assume the role of a proactive crew member and help the PIC stay mentally ahead of the aircraft instead of just sight-seeing. If I had better situational awareness of my pilot's workload, I could have stepped in earlier in the flight to assist. While unable to see the river from the right side of the aircraft, I am still guilty of not querying the PIC when I initially noticed our departure courses diverging. We should have been following behind the preceding traffic which would have averted the need for corrective action. Additionally, had I pushed for additional separation between our aircraft on departure that would have given additional time to maneuver behind the preceding 172 when they began the crosswind turn over the shoreline, building additional lateral separation. The PIC, a VFR private pilot, mentioned during the debrief of the event that he was distracted by the clouds. This fixation likely contributed to the PIC's inaction and loss of situational awareness. The weather was reporting CLR at the field, had it been reporting clouds or had I personally looked at weather and seen the marine layer approaching, I would have filed for an IFR departure, we would have been able to climb above the traffic in front of us, and ATC would've been there acting as a third set of eyes for safe separation.

While often mentioned, it is worth reiterating that cockpit technology serves to aid in our situational awareness, and is no substitute for true situational awareness of what's happening both in and out of the cockpit. This should continue to be stressed to pilots in training, and to experienced pilots who use this technology. The FAA is already in the process of realigning training to focus on decision making, task priority, and situational awareness in lieu of purely maneuver-based evaluation. Instructors also need training in these subject areas so students are properly educated. I support this shift and believe it could prevent future occurrences of events such as this. In addition to teaching standard traffic patterns, pilot training also needs to highlight the existence of numerous non-standard procedures that pilots will encounter, particularly at uncontrolled fields, and the importance of proper pre-flight planning to review and understand these procedures prior to stepping into the cockpit. I believe flight planning applications can sometimes be detrimental to the formation of good habits for proper pre-flight planning, because they can tempt pilots into a feeling of security with having all the information available on-demand at your fingertips. Instructors need to stress the importance of thorough pre-flight planning even more so with the advent of this technology.

It should be general good practice that whenever occupying a crewmember seat that a rated pilot always stay engaged in the flight's progression and be ready to offer assistance regardless of who is pilot in command. I had made the trip to relax and get away for an afternoon, and my decision to disengage from the planning and execution of the return flight proved detrimental, and was a missed opportunity to act as a mentor to a fellow aviator.

Synopsis

General aviation flight instructor reported a NMAC after departure from a CTAF airport.

Time / Day

Date : 201707

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ORD.Airport

State Reference : IL

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Ground : ORD

Aircraft Operator : Air Carrier

Make Model Name : Medium Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Aircraft : 2

Reference : Y

ATC / Advisory.Ground : ORD

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 : Taxi

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 180

ASRS Report Number.Accession Number : 1465460

Human Factors : Communication Breakdown

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Confusion

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

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1465456
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Conflict : Ground Conflict, Critical
Detector.Person : Observer
When Detected : Taxi
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

After landing on runway 27R we were directed by ATC to wait for a gate at the T-pad east of runway 15 approach end. We waited 45 minutes for the gate to open and then were cleared via Taxiways T - H - J - J1 - B. we were told that at B - A10 there would be [an aircraft] exiting the Ramp, if the aircraft was still there, we could 'double back' to make our gate. We were looking at the distance and both called out the [aircraft exiting the ramp] which we determined would be out and not a factor.

As we were looking for the aircraft ATC pointed out to us and passing the B-A7 intersection (south towards A10) an E145 was quickly approaching from the left, I saw 'something' in my peripheral vision and when I turned to look, the Captain in the jump seat that day was already tapping the PF on the shoulder alerting him of the approaching aircraft. The PF immediately stepped on the brakes as the E145 overtook us on B -and to our opinion was that the E145 never even noticed us traveling south and cleared ahead of them.

I believe this was a close call due to the speed at which the E145 was moving, they would

not have had the opportunity to stop. Our speed allowed for an uneventful, albeit heart pounding, stop. I am doubtful any passengers sensed anything nor the two FAs.

Aircraft merging into B from A5-A7 seem to pose a danger for aircraft on taxiway B. We briefed the Hot Spots and in my notes I further detailed them for my attention. This point on B however, will get special consideration from me in the future. I have issues with the 'listen and do' policy at ORD (if it is an official policy?), how do they know that everyone has understood their clearances as intended by ATC? The system there seems to be relying heavily on the experience level of the airmen operating there. I can only assume the E145 was following what they understood to be their clearance, though taxiing WAY too fast I might add. We were surely following our clearance.

This area needs to be denoted as a Hot Spot. ORD needs to start listening for read-backs. ATC needs to monitor Taxi speeds.

Narrative: 2

Upon landing we were issued a wait time for our gate. We sat in the "Tango Pad" off the T taxiway at ORD. When our gate opened up we received taxi instructions from the ground controller (T, J2, J, B, A10, gate). As we were taxiing on the taxiway "J", we began to approach the intersection where taxiway "J" and "B" merge. Just prior to that, the FO and I were referencing the outbound traffic that was parked at our gate previously assigned. I became fixated on that aircraft as we approached the intersection. Just then, our jump seater tapped me on the shoulder and pointed out a converging aircraft on my left hand side. I immediately applied heavy braking to slow the aircraft and prevent it from striking the other aircraft. It was an E145. We never received any "give way" instructions from the controller. After the aircraft passed in front of us, we continued to the gate uneventfully.

The area where taxiway J and B merge should be a spot of awareness or "hot spot" listed on the 10-9 page. Especially during times where "west flow" is in effect. It is in close proximity to the "penalty box", and any aircraft exiting that might come into conflict with aircraft on taxiway J. Also, better CRM should have been used by both crew members.

Synopsis

Air carrier flight crew reported almost colliding with another aircraft while taxiing.

Time / Day

Date : 201707

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1800

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Rain

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

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 : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1465019

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 - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Regained Aircraft Control

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 : Human Factors

Narrative: 1

During the final portion of flight, the Approach Controller issued a final vector to intercept the localizer to [land] and instructed us to maintain 2000 ft until established. The First Officer was the pilot flying. I was the Monitoring Pilot in Command (PM). The altitude pre-selector window was showing 2000 ft and I believe we were already leveled at that altitude. We captured the localizer and a few seconds later I noticed we were at 1800ft descending in FPA mode, below the glideslope, still outside the final approach fix. I told the First Officer that we were to maintain 2000 until established; as I was speaking the First Officer re-selected 2000 ft but the airplane remained descending in FPA, almost immediately the First Officer disengaged the autopilot and manually raised the nose to go back to our assigned altitude of 2000 ft. The altitude alert also sounded as the First Officer was correcting the deviation. The lowest altitude that I saw on the tape was 1700 ft. While the autopilot was off I selected FLCH to restore proper flight director guidance, soon afterward the First Officer requested the autopilot back on, and I engaged it. The airplane leveled off at 2000 ft and shortly after captured the glideslope. The remainder of the approach was uneventful. At the gate the First Officer and I discussed what had happened and he told me that he wanted to dial back the speed, but mistakenly twisted the altitude selector knob instead of the speed selector knob. I am not sure how we ended up in FPA mode since, like I said before, I believe we were leveled at 2000ft in ALT mode. But after discussing the situation with the First Officer, I'm second guessing myself and I think it is possible we were in leveling at 2000 ft in ASEL mode, when he mistakenly changed the altitude. This would have resulted in FPA becoming the active vertical mode.

I identified the following contributing factors to this scenario:

- IMC conditions and light rain at 2000 ft. Convective activity in the area.
- Report time was [morning] and PIC (myself) had been flying all [evening] shifts, several past midnight, in the two weeks prior, and had not had a report time for a flight before [morning] in three weeks. I believe the above factors played a role in slowing down my scan, which resulted in a deviation of more than 100 ft.

[Suggestion] There should not be pairings that result in a sudden shift from [evening] operations to [morning] operations and vice versa, since it is very difficult to readjust while in the middle of a trip or a reserve stretch. Put more emphasis on CRM and crew communications during training events. Had the First Officer expressed his intentions of slowing down I would have paid immediate attention to his actions, and could have caught the error instantly.

Synopsis

EMB-175 Captain reported the FO mistakenly twisted the altitude selector knob instead of the speed selector knob causing the aircraft to drop below assigned altitude.

Time / Day

Date : 201707

Local Time Of Day : 0601-1200

Environment

Flight Conditions : VMC

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Route In Use : Oceanic

Component

Aircraft Component : Oxygen System/Crew

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1462284

Human Factors : Communication Breakdown

Human Factors : Troubleshooting

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Analyst Callback : Attempted

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.ATC Issue : All Types

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Procedure

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

After boarding was completed for our flight we pushed off the gate on time. The taxi out to runway was uneventful. The takeoff, climb and initial cruise portions of our flight were also uneventful. Approximately 2 hours into the flight we called back to the Flight Attendants to initiate a Lavatory Break. We discussed that as the Pilot Flying (PF) I would use the Lavatory first and the Captain (CA) second. While out on the Lavatory Break, I heard a loud whoosh noise from up in the Flight Deck. This noise caught my attention so I immediately called up to the Flight Deck to request entry back in. When I got back into my seat the CA was holding the oxygen hose and his mask together in his hands while we could hear a hissing sound. The CA explained that the Oxygen hose for his crew mask would not stay attached to the mask. At this point we initiated a positive exchange of control and I re-assumed control of the Aircraft as the Pilot Flying (PF). I then took hold of the mask and the Oxygen hose and attempted to hold them together to save as much crew oxygen as we could. As a crew we thought we would be able to put the mask and the hose back together to save the oxygen from leaking out. The CA made several attempts at re-securing the oxygen hose to the mask but did not succeed. I also made several attempts at securing the oxygen hose back to the oxygen mask. Due to the positive pressure of Oxygen coming from the hose, we were both unsuccessful at securing the Oxygen hose. After several minutes we became unable to even hold the oxygen hose to the mask. At this point there was nothing to even slow the flow of the crew oxygen and we began to lose crew oxygen at an extremely fast rate. When this event began we had just passed the point where our enroute alternate changed. As this event was unfolding, the CA and I started to discuss our options including other enroute alternate options. We notified [dispatch] of our situation right after it occurred, explained what our situation was and asked for a descent to FL250. We never got a definitive response from [dispatch]. After we heard the controller repeatedly contact other aircraft we asked again for an emergency descent down to FL250. [Dispatch] was still extremely slow to get back to us. This delay eliminated one of our divert options because we were starting to track away. Finally we decided that we could not wait any longer and needed to start down. We told ARINC that we were executing an emergency descent to FL250. On the way down we elected to continue down to FL230. Since one divert airport was no longer an option we elected to change our destination to the next divert Alternate airport due to the fact that we [were using an alternate means of communication] and could not communicate with the Company to receive an accurate fuel burn and time to our destination alternate at the lower altitude. ARINC then gave us a frequency to contact Center. We elected to continue the descent down to 14,000 as we were trying to formulate our game plan. We then maintained 14,000 feet until we were sure that we had adequate fuel to continue the flight to the Alternate. After repeatedly trying to contact Center on our VHF Radio and not getting a response we attempted to contact ARINC again on our HF radio. When even this didn't work we went back to trying to contact Center. While in the descent the CA and I utilized our CRM and decided on the tasks that we were to deal with. He began to speak to the Flight Attendants and Passengers and let them know what our situation was and that we were headed to the Alternate airport. While the CA was doing this I was continuing to fly the aircraft but also still trying to reach Center on the assigned frequency as well as on 121.5. After multiple attempts to Center, I heard two other aircraft on guard informing Center that we were trying to reach them. I then contacted the other aircraft on guard and asked them to relay to Center our descent, problem, where we wanted to go and that we had been unable to make contact with them on the assigned frequency. One aircraft continued to assist us by relaying our position and status to Center until we were able to reach VHF range. After we changed our destination to our enroute Alternate, and things

started to calm down, we realized that we were still [not communicating]. This brought up the point that we were unable to receive landing information from the ACARS as well as other messages from dispatch. We saw that the runway was 6,000 long. Discussing our options the CA and I agreed that this Alternate was not a good option for us. We elected to change our destination due to its 10,000 foot runway and that it also had company Services and support due to it being a line station. At some point during the descent we also noted that the Crew Oxygen Bottle had completely emptied itself and was now reading 0 psi. Upon arrival we immediately contacted Operations and asked for a phone, which we then called Company Maintenance Control and Operations. During the flight the CA repeatedly asked ATC multiple times to contact the company due to the fact that we were NO COMM and could not reach the company. After speaking with the company the CA said that ATC never called the company and that they had only sent a couple of messages. Maintenance came out to the plane and we explained to them what happened. We sat on the ground for approx. 2 hours when we were finally informed that the aircraft could not be fixed and that a rescue aircraft was on its way down to pick up our Passengers. Maintenance replaced the Oxygen bottle overnight and the CA and I ferried the flight back the next morning.

Synopsis

B737 First Officer reported that the one of the flight crew's oxygen masks became separated from its oxygen feeder hose, resulting in oxygen escaping from the disconnected hose resulted in complete loss of aircrew oxygen supply. The crew diverted to an alternate airport.

Time / Day

Date : 201706

Place

Locale Reference.Airport : OGG.Airport

State Reference : HI

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Large Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 1370

ASRS Report Number.Accession Number : 1459409

Human Factors : Situational Awareness

Human Factors : Other / Unknown

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

Were Passengers Involved In Event : N

When Detected : Pre-flight

Result.Flight Crew : Became Reoriented

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

While preparing the airplane for departure from OGG, I called Clearance Delivery to request our clearance and crossing altitude per OGG's Gate Hold procedure. We were

flight-planned at FL370 and the CRZ page, after full performance initialization, indicated our maximum altitude would be FL375. Thus, I requested our primary altitude be FL370 and secondary FL360 as the next-best option as we were unable FL380. R465, our filed route, is a one-way airway and it is customary to fly "wrong-way" altitudes in the interest of efficiency.

When I completed my request, the captain asked me, "What's 360?" I replied, "Our secondary altitude, in case 370 isn't available." Yesterday, the captain had told me he had been to OGG a few times but not that often, so I assumed his question indicated he hadn't previously observed the practice of requesting a secondary altitude, much less one that appeared incorrect at first glance. Instead, he stated, "I don't want 360." Again misreading his intent, I stated, "You know R465 is a one-way track, right?" He said, "I don't care. You didn't ask me. I don't want 360, I want 350." Perplexed by the illogic of that position but submitting to his authority, without further discussion I called Clearance to amend our secondary request to show FL350. The captain subsequently stated that I was not flying alone and needed to consult him on such matters. I did not and do not disagree with this statement. I had made an assumption about best practice regarding altitude without discussing it with him in the interest of time, but in doing so cut him out of the communication loop. He neglected to iterate why FL350 was preferable to him, but not wanting to appear to antagonize him, I did not ask.

A few minutes later, the ground crew was ready to push but he had not yet initiated the departure briefing or called for the preflight checklist. I pulled out my briefing card and asked "Are you ready to talk about it?" He said, "All my [stuff's] the same as yesterday, go for it." I looked at him in disbelief. "Really, you don't want to discuss your items? Fuel plan, anything?" I asked, since several of the briefing items listed in [the company guidance] were not, in fact, the "same as yesterday." "Is there something about the fuel you don't understand?" was his reply. I tried to wrap my head around the irony of having moments before been lectured about cutting him out of the loop regarding a secondary altitude request and then subsequently having to advocate for something as basic as a [company] mandated departure briefing. "I mean, I know how much fuel we have. But a taxi plan, you don't want to talk about anything? You just talked about me not being single-pilot. How is this different? What about a shared mental-model?" He pulled out his phone and waved it at me. "Are we going to have a problem here? One phone call and we spend another night." The stark safety implications of a captain threatening to remove a first officer from duty for requesting a departure briefing didn't sink in until later. Instead, trying to de-escalate the situation, I said, "No, captain, if that's how you want to run things." But I was angry at this point, and this likely sounded sarcastic. We skipped the items normally briefed by a captain, and I briefed the Pilot Flying items.

The flight continued without further incident, although no extraneous conversation between us transpired. I understand that Captain's Authority is a foundational tenet of airline safety because I have exercised it myself as a Part 121 captain in my career; I have taught it as an indoc instructor; I have respected it working with captains on special assignment and most importantly flying the line. [The company manual] clarifies that while the Captain is the final decision-making authority, it is the responsibility of all crewmembers to contribute to the decision-making process. Our safety-critical workplace demands that input from others be considered, but ultimate decision making must rest with a well-trained and capable leader. Those decisions have to be followed, as they were in this case. But in this case SOP was willfully disregarded, and Captain's Authority was wielded as a disciplinary weapon.

Synopsis

An Air Carrier First Officer reported a breakdown in CRM between himself and the Captain and operations not in compliance with Company Policy after he had not included the Captain in the selection of a pre-flight secondary altitude request.

Time / Day

Date : 201706

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : SCT.TRACON

State Reference : CA

Altitude.MSL.Single Value : 2800

Environment

Flight Conditions : Mixed

Weather Elements / Visibility.Visibility : 9

Light : Daylight

Ceiling.Single Value : 3400

Aircraft

Reference : X

ATC / Advisory.TRACON : SCT

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 : Initial Climb

Route In Use.SID : ZZ0001

Airspace.Class B : SAN

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 4400

Experience.Flight Crew.Last 90 Days : 22

Experience.Flight Crew.Type : 150

ASRS Report Number.Accession Number : 1458967

Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Flight Crew : Returned To Clearance

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

During departure from SAN on cleared route ZZ0001. IPL aircraft climbed on heading 275 deg to initial ALT of 520 MSL and continued climb but instead of continuing on course to JETTI waypoint the crew began an early left turn toward ZZ000 waypoint approximately 2.7NM prior to reaching waypoint JETTI while continuing climb to 12000 MSL. Upon reaching the initial altitude of 520 MSL and prior to switching from KSAN tower to SOCAL Departure Control the Co Pilot (CP)/Pilot not Flying (PNF) queried the Pilot in Command (PIC)/Pilot Flying (PF) if we were supposed to begin a turn and the PIC incorrectly assessed that we were required to turn left and changed the Flight Director from NAV to HDG mode (which was preselected for a left turn) rather than continue follow the FMS programed SID in the Flight Director NAV mode. Deviation began approximately 1 minute into flight, error identified by crew with 10-15 seconds upon query by SOCAL approach and initial input for correction made within 15-20 seconds after identification of deviation.

Upon notification from SOCAL approach that radar track showed our aircraft deviating from the published SID in an early left turn the PIC/PF, assessed his situational awareness of aircraft location in relation to the published departure was not accurate, reviewed position on FMS Map, determined was in an incorrect early left turn prior to waypoint JETTI and began correction to a right turn towards the published SID course when SOCAL approach cleared to continue turn toward ZZ000 waypoint. PIC/PF selected a DIRECT TO ZZ000 waypoint and continued route.

Incorrect interpretation of SID procedure by CP/PNF, failure to maintain adequate situational Awareness by PC/PF at time of incident and incorrect decision of PC/PF upon query by CP/PNF.

Contributing Factors: Perceived "rushed" environment and reduction in time planned for thorough briefing departure and planned procedures to execute it due to passengers arriving unannounced 30 min prior to scheduled departure. Assigned crew on this flight had not recently flown as a crew and typically PC would operate as PNF to manage navigation duties during high workload however based on co-pilots high experience level PC made decision to act as PF.

PC was overconfident of CP decision/recommendation process. PC did not take the time adequately brief planned departure route and procedure planned to execute. Action by PC to accept recommendation of early turn without a more thorough assessment/cross check of correctly programed onboard navigation equipment was the incorrect action.

A thorough crew de-brief was conducted by PIC and CP following completion of flight. We reviewed our flight tracks from web based resources on Foreflight and Flight Aware and openly discussed the chain of events and key moments in the flight where the deviation actually occurred , what we should have done prior to, during and after the deviation to mitigate its occurrence in the future.

PIC review Crew Resource Management study material from recent recurrent flight training. PIC will also complete online training courses applicable to Crew Resource Management.

As the Director of Operations and primary pilot, I will discuss options with owner to utilize

outside crewmembers more frequently to help build greater familiarity among crews. When operating as PIC I will more actively evaluate my decision to operate as PNF or PF based on a more detailed evaluation of the anticipated flight workload, crew experience and familiarity with the planned flight route.

Always make time to conduct a thorough brief of planned routes focusing on SID procedures and focus on key navigation steps and planned utilization of Flight Director modes throughout critical segments of the procedure.

Synopsis

Corporate Jet Captain reported he made an early turn on the ZZ000 1 departure from SAN and corrected back to course after query by SCT TRACON.

Time / Day

Date : 201706

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : SCT.TRACON

State Reference : CA

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : SCT

Make Model Name : Challenger CL600

Flight Plan : IFR

Flight Phase : Initial Climb

Route In Use.SID : OSHNN7

Airspace.Class B : LAX

Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : SCT

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Climb

Route In Use.SID : DARRK1

Airspace.Class B : LAX

Person : 1

Reference : 1

Location Of Person.Facility : SCT.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Departure

Qualification.Air Traffic Control : Developmental

ASRS Report Number.Accession Number : 1458687

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Distraction

Person : 2

Reference : 2
Location Of Person.Aircraft : Y
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1458899
Human Factors : Workload
Human Factors : Human-Machine Interface
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Time Pressure

Person : 3

Reference : 3
Location Of Person.Aircraft : Y
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1459244
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Workload

Events

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

Assessments

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

Narrative: 1

Aircraft X departed LAX Runway 25 complex on the OSHNN7 RNAV SID. On initial contact, I turned Aircraft X to heading 190 to shorten the route for his flight and climb reference other traffic. I observed Aircraft Y, appear to be deviating from the Runway 24 complex departure course for the DARRK1 RNAV SID. I advised the Malibu Radar controller, who was responsible for Aircraft Y that Aircraft Y appeared to be deviating and immediately issued a safety alert to Aircraft X and advised a left turn to heading 160. Aircraft X reported Aircraft Y in sight.

This has happened multiple times since the implementation of METRO-PLEX. These conflicts keep reoccurring and are an imminent safety threat.

Narrative: 2

Aircraft Y, with me as Pilot Flying was notified that we had deviated from our assigned DARRK1 SID RNAV departure from LAX runway 24L and that we had gotten within two miles of another aircraft. ATC then provided us a heading to fly and a number to call. Upon review of the FMS it was determined that the RNAV departure had been input incorrectly as an RNAV departure for runway 25L vice runway 24L.

This was my leg as Pilot Flying and with my unfamiliarity with LAX I had incorrectly programmed the FMS for runway 25L DARRK1 SID vice runway 24L DARRK1 SID. Upon my brief, and through the T.O. check I was incorrectly and erroneously fixated and briefed runway 25L vice runway 24L. This error was influenced with a short taxi and a last minute intersection take-off on runway 24L/E7. An aircraft two ahead of us on taxiway E prior to taxiway E6 had an issue that required other aircraft to use taxiway E7 for takeoff and that required rerunning the takeoff numbers for runway 24L/E7.

Upon reaching [destination] the Captain called ATC.

Contributing factors:

1. Pilot Flying unfamiliarity with LAX contributed with the transposition of runway 25L with runway 24L.
2. The distraction of redoing the takeoff data at the last minute was a contributing factor although that should have also been a reminder of the correct runway.
3. We had flow into XXX from ZZZ and arrived late and were thus 11 minutes delayed. I believed that this may have also contributed to a feeling of being rushed.

Avoiding Recurrence:

1. Be more careful with the Before Takeoff check to ensure correct FMS SID is programmed correctly.
2. Ensure that the aircraft is flying the correct RNAV and correct if wrong.
3. Ask for a delay if given a last minute intersection T.O. or request those numbers ahead of time.
4. Better adherence to CRM.
5. If feeling rushed, slow down!

Narrative: 3

Prior to takeoff from runway 24L we were number 3 for departure and I instructed the first officer to run the before takeoff checklist. We ran the checklist and runway 24L was stated as being in the FMS. I did not look down to verify this because I was taxiing the aircraft. We had issues running the numbers for 24L/E7 because the first officer had the runway confused with 25L and initially ran those numbers. We were rushing to do this and when we were number 1 for departure holding short of the runway when we received the numbers and verified them prior to entering the runway and we were promptly issued a line up and wait clearance. Turning onto the runway we were cleared for takeoff. At about 1500 ft. MSL and checking in with departure we were told by ATC to turn right to a certain heading. We complied with the instructions and were given subsequent headings and then direct a fix. When this happened ATC told us we had drifted left of course and had a possible pilot deviation.

We had briefed runway 24L for departure including the taxi and takeoff, speaking with the first officer after he had told me he is still unfamiliar with LAX and he seemed to have runway 24L and 25L mixed up. We were also late getting to LAX so we were rushing to depart on time. 25L was mistakenly put into the FMS and not caught by either of us. On

the before takeoff checklist this item was missed and I believe it was because we were rushing to run numbers for the intersection departure.

First and foremost we should not have rushed anything. When we were told to expect an intersection departure we should have pulled out of line and run numbers, re-briefed and made sure everything was correct. As the captain I should have realized the first officer was becoming over saturated and slowed down the pace.

Synopsis

SCT Departure Controller and flight crew reported an aircraft departed and turned left instead of right causing an airborne conflict.

Time / Day

Date : 201706

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Weather Elements / Visibility.Visibility : 10

Weather Elements / Visibility.Other

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Make Model Name : Skylane 182/RG Turbo Skylane/RG

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Takeoff

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : Stearman

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class E : ZZZ

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

Experience.Flight Crew.Total : 7050

Experience.Flight Crew.Last 90 Days : 15

Experience.Flight Crew.Type : 242

ASRS Report Number.Accession Number : 1458655

Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Trainee
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 500
Experience.Flight Crew.Last 90 Days : 6
Experience.Flight Crew.Type : 6
ASRS Report Number.Accession Number : 1459564
Human Factors : Situational Awareness

Events

Anomaly.Conflict : Ground Conflict, Critical
Detector.Person : Flight Crew
Miss Distance.Horizontal : 15
Miss Distance.Vertical : 20
When Detected : Taxi
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Conducting an annual pilot check as required by aircraft owner. Doing a series of takeoffs and landings. Pilot had just completed a second landing and taxied back for departure for a "short field" TO Practicing CRM, I was acting as PNF, reading check list. We completed before TO check, including our added "base clear, final clear", pilot made radio call "taking [the] runway" and proceeded to runway. At edge of runway Stearman appeared in windscreen, aborting. We braked heavily and these two actions avoided a collision.

How could two experienced commercial pilots miss the short final aircraft? Two major errors on our part -

1. Failure to have a spatial orientation of aircraft in the pattern. Discussions with other pilots (Stearman pilot made a radio call acknowledging the near miss, made another circuit of pattern and departed airport and we did not have discussion with them) indicates Stearman pilot made pattern position reports that neither of us registered. Radios appeared to be operating correctly.

2. Failure to see Stearman on short final, with bright yellow wings and bright blue body. Two possibilities [occur] to me, either we did not look in the correct place or the Stearman's position was blocked by the roof of Cessna. Future actions to avoid repeat:

- Before entering runway stop well back at 30 to 90 degrees to runway so as to ensure an unobstructed view along both sides of glide path.
- Make radio call of intentions to enter runway and wait before moving to give any pilot on final time to respond.
- Look at all possible glide paths from base in close, to furthest possible and high on final.

Narrative: 2

Following a full stop taxi back landing and preparing for another takeoff, I did not hear transmission of location from another aircraft in pattern. After doing a clearing turn prior to takeoff I did not observe the aircraft on final. I made a call announcing my approach to the runway for takeoff. As I approached the runway, a Stearman made a missed approach avoiding me.

I need to strive to increase and maintain audio and visual situational awareness of other aircraft location in the pattern and airfield environment.

I should have the radios verified as working properly to avoid intermittent reception.

I need to assure a full 360 turn when checking for traffic prior to takeoff to assure high wing situation does not hinder full view of aircraft approaching the runway before crossing hold line.

Synopsis

C182 instructor pilot and student reported taxiing onto the runway creating a conflict with a landing aircraft.

Time / Day

Date : 201706

Place

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1456507

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Distraction

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Attendant

Events

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

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : Pre-flight

Result.Flight Crew : Became Reoriented

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Procedure

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

Narrative: 1

We are constantly being interrupted during checklists, pilot to pilot briefings, while talking to clearance delivery etc. According to many of the new flight attendants they are being taught in the flight attendant training center to ask the captain for each and every thing that they may need or want. On many occasions the flight attendants board, conduct a safety check and then sit in first class and proceed to give me a verbal request for the several cabin items that they may want. On occasion, I have asked the Lead flight attendant gently and nicely if she could please request her extra ice cubes, cold cups, head sets, toilet paper and cocktail napkins via the jetway phone as we are busy with a maintenance issue, weight restriction issue, weather, routing issue etc. On each occasion I was met with great resistance. I was told that they are unfamiliar with the jetway phone or any other method of requesting said items. Usually boarding has not yet started and the flight attendants may use the jetway phone and/or speak to an agent as I do. Many times I just simply walk up to the top of the jetway and make this request with the agents. Usually this is for the missing agriculture forms or the necessary custom forms for international flights. I am aware of this need after my flight attendant briefing when I try to confirm that these forms are on board. These requests may seem simple at first glance. However, this starts a new stream of interruptions as the flight attendants will continue to come to the flight deck and alert us to the status of the many requests. They will either report the delivery of said items and/or ask about the status of others.

The other part of this new status quo that may not be readily apparent is the inherent problem with the request. For example: How many cold cups do you need? What kind of headsets? First class or economy? How many? How many napkins? What kind? So now if I decide to just try to accommodate such requests, a plethora of issues arise as quite frankly I do not know what a "cold cup" is exactly. So what may seem as a one minute distraction can lead to many more questions, more phone calls and more follow ups. With our new shorter show times, when exactly can I do my pilot duties? May I say that we pushed late because I was busy calling for cold cups? As we all know, interruptions and distractions lead to mistakes. I have seen many first officers miss many items on the set up. For example: They miss that the window heat that was off when it should have been on for a through flight. They miss the changes on the departure clearance (different SID, routing and/or altitude). Captains are forgetting the fuel sheet when fueling is late because they are distracted. I have had several first officers ask me if we could close the cockpit door for a while so they could be uninterrupted for their setup. This is especially true when in Mexico and we must get our departure clearance via voice.

I see that CRM is now included in the flight attendant manual. Are the flight attendants being taught the ramifications of said distractions and interruptions? Do they know that a simple shout into the flight deck during a checklist or clearance read back may lead to an incident or accident? Have they seen the Tenerife accident video? Or the like?

To summarize, the pilots are distracted by the plethora of interruptions. The interruptions are harsh and preclude the opportunity to stop at an appropriate point. The pilots are being tasked to perform duties outside the realm of pilot duties because of the interruptions, the pilots feel rushed and are making mistakes. This is a general report and not specific to this crew.

Synopsis

A B737 Captain reported pilot preflight distractions, interruptions, and task loads resulting from the company's current Flight Attendant training policy to include the crew in more of the cabin activities, needs, and wants.

Time / Day

Date : 201706
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 800

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
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
Flight Phase : Initial Climb
Airspace.Class C : ZZZ

Component

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1454820
Human Factors : Distraction
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Returned To Departure Airport

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Primary Problem : Aircraft

Narrative: 1

During a return to field maneuver following engine compressor stalls during takeoff, the landing gear was not extended until approximately 800 AGL on the approach. On the first leg of a scheduled 3 leg day, we performed a high speed rejected takeoff due to suspected main tire failure at approximately 105 knots. We felt a light "thud", and a minor initial yaw moment similar to what one would expect with increased friction from a deflated right main tire. After we returned to the gate, maintenance notified us that all tires and fuse plugs were intact, and the only discrepancy noted was the lavatory service panel door was open (right side of aircraft). Maintenance re-secured the panel, did not note any damage or other discrepancies, and returned the aircraft to service.

On the subsequent takeoff, we experienced a similar light "thud" at a slightly higher, but similar airspeed. I, the captain as Pilot Monitoring, elected to continue the takeoff with the assumption that the lavatory service panel door opened again and/or slammed shut. As we accelerated through rotation and liftoff, however, there were several more of these thuds, and I noted what felt like associated yawing moments each time it happened. I realized at this point we likely had a compressor stall, further evidenced by the left engine's APR (Automatic Power Reserve) activating, and the ITT (Interstage Turbine Temperature) on the right engine climbing into the red. We continued with a two engine profile, as the compressor surges/stalls stopped after approximately 5-6 times. I briefed the First Officer to be ready for the right engine to fail at any moment, and our plan of attack to proceed (fly the correct profile and pitch for V2 until acceleration altitude). We told tower we needed to return to the field for landing, and took a heading to set up for a downwind leg. Once we reduced thrust per the normal climb profile, the right engine's ITT returned to normal indications and no damage was suspected. Therefore, we elected to not shut it down, but would still return to the field out of an abundance of caution. We completed all appropriate checklists, briefed our plan (an ILS to the longest runway transitioning to a visual approach at approximately 8 miles out, and briefed the flight attendants and passengers.

As we slowed for the approach and began to get configured, I became fixated on watching the right engine's behavior as thrust was increased to overcome drag. The First Officer flew the bugged reference speeds for the given initial configuration (Flaps 20) on the downwind and base legs. We intercepted the localizer normally, approximately 2500 ft above the local terrain. As we were level and prior to the glideslope becoming "alive", the First Officer called for gear down and flaps 30, and I became concerned that our attitude and angle of attack were becoming a bit steep for level flight. My thoughts were that if the right engine failed at this point, we would be in a nose high attitude with little visual reference and relatively close to the ground. I then told the FO to fly a little faster, closer to our normal approach speed prior to the final approach fix, and delay her configuration changes until the glideslope indicated a dot and a half low, where we normally go gear down and flaps 30, then flaps 45 as we intercept the glideslope.

Due to me focusing on radio calls to tower, coordinating emergency response at the tower

handoff point, watching the engine instruments, and now coaching the First Officer's Flight Path Management, I did not select the gear down when the FO called for it. I do recall pushing the flight attendant chime button and selecting flaps 30, but failed to actually extend the gear handle. The FO called for Flaps 45 upon glideslope intercept, I set them, and we continued inbound. At approximately 800 AGL, the gear horn began to sound, and I realized the gear was not down and locked, because the gear handle was never lowered to the extended position. I immediately lowered the landing gear and received three green lights within seconds. We were in visual conditions and otherwise stable, so I commanded the First Officer to continue the approach and landing.

Because of the unknown nature of our engine problems, I made the command decision that landing from a later than standard gear extension, was safer than executing a go-around procedure at high thrust settings. We were fully stable the entire approach, and touched down normally without further incident. Additionally, the landing was overweight and I confirmed our touchdown rate was less than 360 fpm. For me personally, I have not had a scenario with uncertain outcomes or procedures to follow in quite some time. Throughout the event, I found myself thinking about what I would do "if", and I think it began to cloud the basic roles of monitoring. Therefore I missed the very obvious task of extending the gear when the First Officer called for it. I also feel that normally, the Pilot Flying would notice if the Pilot Monitoring did not actually select the gear down, but high levels of focus by both of us, along with adrenaline, contributed to some "tunnel vision". While we followed the CRM model fairly well, bought ourself time by extending downwind, etc, I think the stress of the day from two separate challenging events (high speed rejected takeoff, and unknown engine problems), deteriorated my mental performance to a point where I became too focused on watching the FO perform, as well as the engine behavior. In the future, I may need to buy even more time (if possible) to allow our minds to settle down and fly our normal, abnormal or emergency profile as applicable. One should never have to rely on automation to remind you to extend the gear, but I am glad it was available and working for us that day.

Synopsis

CRJ-700 Captain reported returning to the departure airport after a compressor stall, but delaying the landing gear extension until 800 feet above the ground.

Time / Day

Date : 201706

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ELP.Airport

State Reference : TX

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ELP

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Initial Approach

Airspace.Class C : ELP

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1454754

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1454755

Human Factors : Situational Awareness

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

Events

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

Assessments

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

Narrative: 1

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

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

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

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

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

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

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

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

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

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

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

I hope and pray that nobody ever has to go through what I have gone through this morning on approach into El Paso, TX. We are not Cowboys of the sky we are professional aviators and are set to high standards and have standardization for a reason, either pilot can call for a go around. And if an approach does not seem right then it most likely is not

right. And unstable approach deserves a go around period. Especially one with pull up terrain warnings and wrong airports and runways in front of the pilots windshield. We preach callouts for a reason to follow them and to be safe so we can live to fly safely another day with many blue skies and soft landings, so we can be role models to the generation in future of aviation safety.

Narrative: 2

This narrative starts while being vectored for a visual approach to Runway 4 at El Paso. We were cleared to 9,000 heading 270 about 7 miles north of ELP. We were cleared for visual approach to Runway 4. We continued descent toward 6,000 and heading westbound. Once clear of the mountain ridge to the west of ELP I began further descent when we had a momentary terrain warning, I could immediately determine that terrain clearance was not a problem as we were in the clear and visually cleared all terrain prior to descending, I stopped the descent and the warning ceased.

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

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

Synopsis

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

Time / Day

Date : 201705

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : OAK.Airport

State Reference : CA

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : NCT

Aircraft Operator : Personal

Make Model Name : Bombardier Learjet Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Personal

Nav In Use : GPS

Flight Phase : Initial Climb

Route In Use : Vectors

Route In Use.SID : SKYLINE 6

Airspace.Class B : SFO

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Engineer

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 24000

Experience.Flight Crew.Last 90 Days : 234

Experience.Flight Crew.Type : 3500

ASRS Report Number.Accession Number : 1448430

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 514
Experience.Flight Crew.Last 90 Days : 75
Experience.Flight Crew.Type : 151
ASRS Report Number.Accession Number : 1448445
Human Factors : Fatigue

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Departed OAK on an IFR flight plan which included the Skyline Six departure procedure. My First Officer was a low time pilot with 500 hrs total time and 125 hrs in the Learjet. He read the departure procedure to me which was fly heading 278 to 3,000 then left heading 200 to intercept the 135 radial from PYE. He failed to read the departure route description which was to climb on heading 278 vectors to PYE 135, cross 4 DME northwest of OAK at or below 2,000 and above 1,400. I did not verify the routing on my iPad and assumed what he told me was correct. After turning to 200 at 3,000 feet, ATC shortly thereafter vectored me back to heading 270. We were then vectored and assigned higher altitudes. We were assigned FL190 and then ATC said we needed to copy a phone number for NORCAL. In the process of copying the phone number we flew through FL190 by about 1,500 feet.

Several factors contributed to these deviations:

1. It was a long day and by the time we departed OAK we had been up for 12 hours. I discovered that my First Officer did not get any sleep the night before.
2. My First Officer is very inexperienced and has not had much instrument procedure time other than what he received to get his ratings.
3. Captain failed to verify departure procedure with FO.
4. Captain tried to multi-task by flying the airplane and copying a phone number from ATC.
5. Captain failed to use appropriate automation to lighten the work load i.e. Altitude Capture feature of the autopilot.

I feel fatigue, an inexperienced FO, not verifying departure procedure with FO, and not using auto flight features of the Learjet all contributed to these deviations. To correct

some situations, I feel it is necessary to fly a high performance aircraft with a more experienced crew member. Use Crew Resource Management techniques to verify that both crew members are in agreement with procedures and to use aircraft automation to lighten the work load in high workload environments.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Learjet flight crew reported a heading deviation on the SKYLINE 6 Departure from OAK.

Time / Day

Date : 201705
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : BUR.Airport
State Reference : CA
Relative Position.Distance.Nautical Miles : 7
Altitude.AGL.Single Value : 500

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 8000

Aircraft

Reference : X
ATC / Advisory.Tower : LAX
Aircraft Operator : Military
Make Model Name : Military
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Nav In Use : FMS Or FMC
Nav In Use : GPS
Flight Phase : Cruise
Route In Use : Visual Approach
Airspace.Class C : BUR

Component

Aircraft Component : Navigational Equipment and Processing
Aircraft Reference : X
Problem : Improperly Operated

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Military
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Rotorcraft
Experience.Flight Crew.Total : 538
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 331
ASRS Report Number.Accession Number : 1447468
Human Factors : Situational Awareness

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

Events

Anomaly.Airspace Violation : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We had decided the night prior to conduct the VFR Los Angeles low level route, beginning at Queen Mary's and terminating at the western side of Santa Monica pier before transiting west outside LAX Class B Airspace before exiting the area. I utilized one of our pre-mission computers for inputting GPS user waypoints that coincided with the Los Angeles TAC chart. We briefly went over the route and the plan of action the night prior, and the morning of the flight during pre-flight briefing.

I led our operation brief and crew brief the following morning. We conducted all preflight, takeoff, post-takeoff checks without incident enroute to LAX. We contacted SoCal Approach on 125.35, with request at 25 miles south. We were switched over to Long Beach Tower on 119.4, where we again made the request for the specified route. Long Beach (LGB) assigned our aircraft a discrete squawk, and cleared us along the route beginning at Queen Mary's VFR checkpoint. Upon visually identifying Queen Mary, we began the route to our next set of checkpoints, at 90 knots Groundspeed, which were following the Los Angeles River northbound to Dodger Stadium. It was at this time that we recognized we were outside of Long Beach's airspace, and called requesting a frequency change, which was approved. As the non-flying pilot, I was responsible for navigating the route while my junior co-pilot would fly the visual checkpoints. I tuned in LAX tower frequency of 120.95 and made one courtesy call along the route, with no response since I was outside the airspace. We continued northbound, and it was at this point where problems began to arise. I was sitting left seat, and was not able to visually identify Dodger Stadium. I instructed my co-pilot to continue north along I-5 where we were expecting to see the stadium. I let this task saturate me, and lost situational awareness to where we were along the route at this time. Instead of fessing up, orbiting, or calling any available tower frequency along the route, I decided to continue since we were still along

the GPS route on the mission displays. We then transited west along Ventura freeway into BUR Class C airspace, both without switching to their assigned tower frequency or aware that we were flying inside their airspace westbound. The next VFR checkpoint along the route was Hollywood Hills, southeast of the I-405 south and Ventura Freeway to the west. We transited along the western side of Hollywood Hills, still without being on Bob Hope tower frequency or aware of the airspace infraction at this point in time. Upon following the I-405 southbound, we were contacted over LAX tower frequency by SMO, requesting military helicopter come in and identify. I immediately responded, and was informed of the airspace violation. Due to my loss of situational awareness, overconfidence in GPS systems, and failure to ensure my flying pilot vocalized and identified visual checkpoints along the route, we were completely in inadvertent disoriented flight at this time. Due to these factors and oversaturation in a congested environment, I allowed our aircraft to deviate from the assigned flight path and jeopardize the safety of the FAA and airspaces in the area. As I spoke with the Santa Monica tower controller, I realized our severe mistake. I noticed our position and guided the pilot to continue transiting west to Santa Monica pier, our final checkpoint, so we could immediately egress the area before causing further infractions. At the same time, I briefly tried to explain our situation to the controller, and was given a phone number to call upon landing, which I received. We flew the helicopter west over the water outside LAX airspace, then proceeded to exit south over the water at 200 AGL.

I believe several human errors occurred both during preflight and mission execution that led to this incident, as listed below:

Human Causal Factors

- Poor preflight planning of the route, specifically what frequencies were going to be input into our radios and systems.
- A lack of sound judgment when not able to identify checkpoints early in the route.
- Loss of situational awareness, leading to oversaturation in a congested environment, ultimately leading to airspace incursion.
- Late corrective actions due to disorientation.
- Overconfidence in GPS systems.

Multiple, if not all, of these contributing factors are founded in poor Crew Resource Management, from preflight planning to execution of the mission.

- Poor communication, specifically that to express lack of visual checkpoint identification and the lack of crew communication to express concern.
- Severe lack of decision making skills to turn around, or contact a previous frequency to get re-established along the proper route leg.
- Overall lack of assertiveness by any of the crewmembers in verbalizing their lack of visual cues and certainty along the route.
- Leadership deficiency by aircraft commander to discontinue, or to be aware of the airspace/frequency switches needed before Bob Hope Burbank's airspace.
- Overall crew situational awareness degraded to be able to think ahead of the aircraft and route in order to keep within the rules of FAA airspace and communication requirements.
- Misperception that tower or control would contact us on frequency or guard frequencies upon seeing aircraft inbound/outbound.

Inactions

- Inaction to positively switch over to Bob Hope Burbank Tower's frequency when arriving for Hollywood Hills checkpoint.

- Inaction to ask Long Beach what frequency to expect next when unsure.
- Inaction to properly check GPS waypoints with chart when visual checkpoints weren't identified.
- Inaction to speak up concern as a crew when disoriented.

Actions

- Admitted fault when Santa Monica called us for aircraft identification over LAX tower frequency.

Overall, multiple lessons learned were obtained from this event. Military aviators are extremely well trained, and there is no excuse for operations in congested airspaces without knowing exactly where the aircraft needs to be and when, who to talk to and when, and what navigational aids need to be monitored at all times. One of my biggest safety takeaways from this event is that I was not completely confident in the route I was taking, and I therefore lost the unspoken trust that exists between the FAA and military pilots during this time. I should have relied on the expertise of the aircraft handlers, and fessed up to when I thought I wasn't seeing a direct visual representation of my GPS waypoints. I could have used any tower frequencies in the area, simply asked the question, or utilized my crew more to back my navigational decisions up. I placed multiple aircraft at risk in not doing so, and I want to make it crystal clear that constant communication between aircraft and handlers is vital to safety, particularly when there is any doubt of aircraft location. There must be a respect of the procedures and airspace restrictions that have been put in place, which are there for the safety of all personnel. In that respect, I must ensure none of those safety measures are broken, as well as remain infinitely flexible in coordination with controller agencies to ensure safety compliance.

One stand-out lesson learned from this incident is 'if there is a question, then there is no question.' This means if there is any grain of doubt in airspace restrictions, clearances, or operations that I speak up and clarify in order to regain situational awareness and confidence to safely transit the route. Another extremely important lesson to be learned is to know your comfort level, which I clearly did not. I was over-reliant on GPS systems on the aircraft, not the printed charts and the handling professionals in the airspace. Using systems as a navigational aid is a great idea, but only as a backup to the printed charts. Part of being a professional pilot is admitting when you're wrong, and making an approach to learning what you did incorrect and growing from it. Post mission analysis is yet another lesson learned, for the increased communication and experiences that can be passed in order for a safer flying environment to be fostered.

I've also learned how to evaluate operational risk management, in its most basic form to not accept unnecessary risks, or to allow costs to outweigh the benefits. If I wasn't completely experienced and confident in this route, I shouldn't have opted to continue. The benefits for executing this route were airspace training, communication training, and local area familiarity. However, the costs were much higher. Unsafe transit through airspace without 2 way communications could have led to unnecessary wave-offs of civilian traffic, inadvertent same altitude fly-bys, and questionable radar returns leading to maneuvering of traffic due to one misplaced aircraft. Some mechanisms that could have prevented this incident are as follows: calling all air controllers well outside their designated airspace; making pilot calls over operation tower frequencies if not heard the first time, or checking its backup frequency to ensure; not assuming air traffic control will see you with a discrete squawk and reach out to you first when getting near; discontinuing route when unsure of location; checking in with any of the local frequencies to obtain clarity and confidence, ultimately for situational awareness and safety.

Synopsis

A military helicopter pilot reported a flying low altitude VFR flight in the LAX basin which inadvertently entered BUR airspace.

Time / Day

Date : 201704

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 600

Environment

Flight Conditions : IMC

Weather Elements / Visibility.Visibility : 2

Light : Night

Ceiling.Single Value : 200

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 Next Generation Undifferentiated

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Takeoff

Airspace.Class B : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 216

Experience.Flight Crew.Type : 532

ASRS Report Number.Accession Number : 1444941

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Speed : All Types

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Automation : Aircraft Other Automation

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

This was our first day working as a Crew on our final third leg assignment. Our flight was 35 minutes late due to FA connection and thunderstorms were present in ZZZ. The ATIS was changing rapidly and provided 4 updates in less than an hour, pressure dropped from 29.60 to 29.50 in the 30 minutes prior to departure. We taxied to Runway XXC for departure at ZZZ, and were encountering extended taxi time as several aircraft went missed due to low ceilings and ZZZ Tower was issuing 20 miles in trail separation with simultaneous departures off Runway YR and XXC and landing YR. ATC congestion was busy and the Tower was doing a good job reporting the rapidly changing weather conditions with wind and pressure reports.

As we neared our departure sequence the intensity of rainfall and lightning was increasing. No adverse windshear reports were present on the field and no aircraft were reporting any windshear after takeoff. Prior to our clearance to taxi into position on XXC, the Captain requested an updated wind report from Tower. The Tower reported wind direction at 100 and speed of 8 knots. We updated this data in the Performance Computer which directed a new flap setting of 10 degrees. We completed the Departure Plan Checklist and set the flaps accordingly. Additionally the Performance Computer data included windshear, max thrust, and wet good settings. The hold down VR was 126 if I recall correctly based on a 142.2 takeoff weight.

The Captain did a good job of briefing the windshear profile, should we encounter it after takeoff. He reviewed the emergency thrust, and configuration callouts which helped to develop our shared mental model. Tower informed us that the weather had cleared the runway moving east rapidly and to use caution for frequent lightning in the area. ZZZ Tower issued takeoff clearance off XXC and to turn to heading of 090. We initiated the takeoff and complied with the wind shear profile VR takeoff. Shortly after raising the landing gear, I observed a significant decrease in airspeed of 15 knots. I called out wind shear to the Captain and I increased the thrust above max thrust setting.

The Captain began a reduction in pitch to compensate for the degraded airspeed when the EGPWS declared WIND SHEAR decreasing performance warning. The Captain immediately pushed the thrust to emergency thrust and began following the escape guidance. I began calling out airspeed and altitude trends and it took a short time for the aircraft to display positive trends. The windshear event was brief, but had a significant negative performance effect on the aircraft. As the windshear warning extinguished, the Captain directed necessary MCP mode changes to prevent flap over speed during retraction.

I alerted the Tower of our windshear event and 20 knot airspeed loss. ZZZ Tower ceased departures after our report. We still had a heading and 3000 FT hold down altitude to comply with while changing to Departure frequency. We did not observe any engine exceedance but our focus at the time was on aircraft recovery. Lighting in the area was very bright and proved to be a significant distraction. We contacted Dispatch via ACARS in cruise and informed them of the windshear encounter and to ask Maintenance if they received any engine exceedance. The rest of the flight was without incident and we contacted Maintenance at destination to discuss if a Maintenance entry was required.

The Captain and I reviewed the event and discussed if there was anything we could have improved during the recovery. Between the two of us this was the first time in our airline career that we had ever encountered a true windshear event after takeoff. I explained the

best practice in dealing with a windshear event is to not ever be in a position to encounter one in the first place. My position was that while we knew of thunderstorms in the airport vicinity, there were no adverse reports of windshear reporting on the airport, or by the multiple aircraft departing ahead of us. There was no information that would lead us to have delayed or discontinued the takeoff as the predictive windshear did not alert either. We believed our practice of updating the takeoff data to reflect the most accurate winds was good practice as was our discussion of the windshear profile plan should it be encountered. I believe our CRM measures proved to be a valuable tool in managing the threat. However, I will conclude with RRM (Risk and Resource Management) perhaps being the most overlooked aspect of this situation. Risk is inherent in what we do, but weather like this in proximity to ZZZ proves to be a high risk environment, and we could have possibly benefited from more information with Dispatch as a resource offering guidance to help manage or aide in the operation as a whole in determining the factors involved when operating multiple flights in a high threat environment.

Synopsis

B737NG First Officer reported experiencing windshear shortly after gear retraction. An EGPWS wind shear warning and an airspeed loss both occur as the Captain recovered using maximum thrust.

Time / Day

Date : 201704

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 23000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Corporate

Make Model Name : Super King Air 350

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Climb

Route In Use : Direct

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 : Flight Instructor

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 9600

Experience.Flight Crew.Last 90 Days : 80

Experience.Flight Crew.Type : 700

ASRS Report Number.Accession Number : 1444463

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

While climbing through approximately FL230 at our best climb speed, ATC requested us to increase climb rate as it would help them out tremendously and also gave us a frequency change. I told the FO to reply that we could not increase our rate of climb as we were already doing the best we could. The FO (who is also a company Captain) told the Controller that we would give him the best we could and acknowledged our frequency change. Before the FO contacted the new Controller I reiterated that we needed to let them know that we could not increase our rate of climb. The FO then stated to me "I'm not going to tell them that. I will tell them that we will give them what we can and let them figure it out." I was taken aback by his statement and attitude. The FO then contacted the new Controller and told them that we were climbing as fast as we could. At this point, having told the new Controller we were climbing as well as we could, I let the issue drop for the sake of not creating a hostile environment on the flight deck. The Controller did not make any further mention of our climb rate.

I was so taken aback by this Captain's attitude that I did not respond as I would have with a new FO and gotten on the radio myself and made clear that we could not comply with the ATC request to increase climb rate. In the future I will not attempt such diplomacy as I tried on this Captain acting as an FO, but will act as I would normally and make sure there is no confusion between ATC and my aircraft.

One very important human factors lesson I have taken away from this issue is the effect that having two Captains on a flight deck can make. Our company routinely uses two Captains and in such cases in the past the other Captains have always deferred to the individual that is designated as the trip Captain. I have also done this when I have been assigned as an FO. I have learned to be vigilant in the future for other's who may not remember that I am the Captain. I will include this reminder of crew roles in all future crew briefings.

Synopsis

BE-350 Captain reported having CRM issues with a Captain-qualified First Officer.