

ASRS Database Report Set

Checklist Incidents

Report Set Description.....A sampling of reports from all aviation arenas
referencing checklist issues (design, procedures,
distraction, etc.).

Update Number36

Date of UpdateMarch 25, 2022

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

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



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

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

Becky L. Hooey, Director
NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

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

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

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

Report Synopses

ACN: 1838870 *(1 of 50)*

Synopsis

Flight Crew reported distractions from a near mid air collision resulted in the landing check list not being performed and a gear up landing.

ACN: 1838807 *(2 of 50)*

Synopsis

Flight Attendant reported a required checklist was missing and was found to be non MELable. This caused a breakdown in crew communications and a delay.

ACN: 1836639 *(3 of 50)*

Synopsis

EMB-175 Captain reported not finding a QRH procedure for an EICAS caution message and confusion over an associated MEL. The crew requested communicating with maintenance but was denied assistance while in flight.

ACN: 1824764 *(4 of 50)*

Synopsis

Air carrier flight crew reported experiencing a Stabilizer Out of Trim problem during climb out. They completed the appropriate QRH checklist and performed an air turn back.

ACN: 1819346 *(5 of 50)*

Synopsis

Flight Crew flying 737 MAX aircraft reported missing the before takeoff checklist and Flight Attendant notification prior to takeoff due to engine warm up time constraints.

ACN: 1817740 *(6 of 50)*

Synopsis

B737 flight crew reported that complications and distractions due to weather led to the lack of proper checklist completion, resulting in the nose wheel steering being unavailable during taxi.

ACN: 1813994 *(7 of 50)*

Synopsis

Air carrier First Officer reported fatigue and procedural deviations led to the landing gear not being lowered per the checklist resulting in an unstabilized approach.

ACN: 1810675 *(8 of 50)*

Synopsis

B737 MAX Captain reported not activating the auto brake system for RTO when completing the before takeoff checklist.

ACN: 1802425 *(9 of 50)*

Synopsis

Air carrier Captain reported not performing the Before Taxi Checklist and subsequently had not set the flaps to the takeoff setting prior to moving the aircraft. Reporter cited distraction from dealing with face mask issues in the cabin area may have contributed to the event.

ACN: 1784065 *(10 of 50)*

Synopsis

Air carrier Captain reported forgetting to do the pre-takeoff checklist due to being distracted by a passenger being boarded without permission and another passenger not complying with face mask policy.

ACN: 1765654 *(11 of 50)*

Synopsis

After returning to departure airport with unreliable airspeed indication, the Captain suggested moving necessary charts to the relevant portion of the QRH for ease in location and use.

ACN: 1757535 *(12 of 50)*

Synopsis

First Officer reported two EICAS messages on final, causing a go around to allow time to run the QRH, landing safely on next approach.

ACN: 1757193 *(13 of 50)*

Synopsis

B737 Captain reported auto pilot not engaging as required and non QRH procedures were used to get autopilot to function correctly.

ACN: 1756780 *(14 of 50)*

Synopsis

B737-700 flight crew could not find checklist for Leading Edge Devices Not Extended.

ACN: 1748126 *(15 of 50)*

Synopsis

Air carrier First Officer reported taxiing out to the runway and finding items were missed during their before taxi flow checklist.

ACN: 1740617 *(16 of 50)*

Synopsis

B737 Captain reported failure to fully comply with QRH procedure following a pitch trim failure.

ACN: 1726670 *(17 of 50)*

Synopsis

A flight crew reported they had to shut down an engine but continued to their destination instead of landing at a closer airport as stated in the QRH.

ACN: 1718903 *(18 of 50)*

Synopsis

B737 Captain reported a distraction during pushback caused them to taxi without flaps, and not complete the before taxi checklist.

ACN: 1717750 *(19 of 50)*

Synopsis

B737 Captain reported a lack of clarity when following the checklist for a shattered cockpit window.

ACN: 1716108 *(20 of 50)*

Synopsis

B737 Check Airman reported the aircraft checklist verbiage needs to be changed to avoid improper action.

ACN: 1702340 *(21 of 50)*

Synopsis

B757 First Officer reported refusing flight due to lack of clarity with MEL and QRH regarding fuel leak checklists.

ACN: 1702302 *(22 of 50)*

Synopsis

B737-700 Captain reported that a slat malfunction occurred for which there was no QRH procedure that resulted in a precautionary landing.

ACN: 1702279 *(23 of 50)*

Synopsis

B737-700 First Officer reported that distraction and time pressure caused the crew to miss a checklist item that resulted in a fuel imbalance and a diversion.

ACN: 1701626 *(24 of 50)*

Synopsis

B777 Captain reported that, along with other crew members, iPad was missing QRH section.

ACN: 1696464 *(25 of 50)*

Synopsis

Bonanza pilot reported that distraction and failure to follow the checklist resulted in a gear-up landing.

ACN: 1696236 *(26 of 50)*

Synopsis

CRJ-900 Captain reported deviating from the before start checklist fuel section resulting in a Low Fuel warning and a diversion.

ACN: 1689443 *(27 of 50)*

Synopsis

ERJ flight crew reported that their failure to accomplish the after takeoff checklist in a timely manner caused a flap over speed.

ACN: 1681406 *(28 of 50)*

Synopsis

A321 Captain reported that the ferry flight checklist was inadequate, causing an unsecured galley cart to impact the forward bulkhead during landing.

ACN: 1681042 *(29 of 50)*

Synopsis

EMB-145 Captain reported being fatigued and pressured by ATC, causing him and the First Officer to misinterpret a QRH procedure following a generator failure.

ACN: 1670289 *(30 of 50)*

Synopsis

CRJ Captain reported a safety issue with Management after being told to prioritize on time departure over proper checklist execution.

ACN: 1652489 *(31 of 50)*

Synopsis

C402 flight crew reported failure to follow QRH with unsafe landing gear indications.

ACN: 1650580 *(32 of 50)*

Synopsis

B757 Captain reported that due to several route changes in flight, flight crew failed to perform the Landing Checklist.

ACN: 1648259 *(33 of 50)*

Synopsis

B737 Captain reported noticing during preflight that the Evacuation Checklist on First Officer's yoke didn't match the QRH Evacuation Checklist.

ACN: 1647605 *(34 of 50)*

Synopsis

B737-800 pilot reported inadequate training on use of new checklist procedures.

ACN: 1645590 *(35 of 50)*

Synopsis

B737NG First Officer reported new checklist procedures increased their workload while conducting a Bleeds Off takeoff from a busy airport.

ACN: 1642922 *(36 of 50)*

Synopsis

Air carrier reporter stated there are QRH errors in the performance table accompanying the B737NG Unreliable Airspeed Non-Normal procedure.

ACN: 1628322 *(37 of 50)*

Synopsis

A Boeing Captain reported the need for additional training on new checklist procedures.

ACN: 1627441 *(38 of 50)*

Synopsis

737-800 First officer reported the new checklist, "Triggers and Flows," created confusion.

ACN: 1626691 *(39 of 50)*

Synopsis

B737 First Officer reported the table of contents page numbers for the non-normal section regarding flight controls may be inaccurate. Trim runaway checklist was difficult to find. Flight ops bulletin is difficult to understand.

ACN: 1621603 *(40 of 50)*

Synopsis

CRJ-200 flight crew reported a high speed rejected takeoff due to a warning message. Following the abort, checklist was forgotten for the warning message and brake overheat.

ACN: 1602134 *(41 of 50)*

Synopsis

A321 Captain reported QRH shortcomings and communication breakdown between flight crew and cabin attendants while troubleshooting uncommanded stabilizer trim malfunction.

ACN: 1601488 *(42 of 50)*

Synopsis

ATR-42 Captain reported a pitch trim issue during climb was resolved with QRH procedure, but crew was concerned about further controllability issues.

ACN: 1600434 *(43 of 50)*

Synopsis

BE99 flight crew reported a gear up landing while training, as a result of inattentive supervision and an incomplete abnormal procedures checklist.

ACN: 1600145 *(44 of 50)*

Synopsis

ERJ-175 Captain reported a discrepancy between the De-ice Checklist and the Before Takeoff Checklist.

ACN: 1596878 *(45 of 50)*

Synopsis

B737-700 Captain reported forgetting to complete the Before Takeoff Checklist prior to taking the runway.

ACN: 1594913 *(46 of 50)*

Synopsis

A319 pilot reported making a mistake with the aircraft's packs because of an unclear checklist.

ACN: 1590825 *(47 of 50)*

Synopsis

CRJ-200 flight crew reported landing without completing the Before Landing checklist, citing a late clearance as contributing.

ACN: 1590424 *(48 of 50)*

Synopsis

Air carrier Captain reported being distracted by checklist items during taxi resulting in a taxiway incursion and contact with a taxiway light.

ACN: 1589650 *(49 of 50)*

Synopsis

Ground personnel reported arrival shipment had a missing HAZMAT checklist.

ACN: 1580643 *(50 of 50)*

Synopsis

ERJ-145 First Officer reported the before takeoff checklist was not completed prior to taxi into position for takeoff.

Report Narratives

ACN: 1838870 (1 of 50)

Time / Day

Date : 202109

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : .75

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Haze / Smoke

Weather Elements / Visibility.Visibility : 7

Light : Daylight

Ceiling.Single Value : 3500

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

Make Model Name : Small Aircraft, Low Wing, 2 Eng, Retractable Gear

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Route In Use : Vectors

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Personal

Flight Phase : Final Approach

Route In Use : None

Airspace.Class E : ZZZ

Component

Aircraft Component : Gear Extend/Retract Mechanism
Aircraft Reference : X
Problem : Improperly Operated

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 17000
Experience.Flight Crew.Last 90 Days : 225
Experience.Flight Crew.Type : 50
ASRS Report Number.Accession Number : 1838870
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 442
Experience.Flight Crew.Last 90 Days : 23
Experience.Flight Crew.Type : 15
ASRS Report Number.Accession Number : 1838899
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Training / Qualification
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Gear Up Landing
Detector.Person : Flight Crew
Miss Distance.Horizontal : 2600
Miss Distance.Vertical : 0
Were Passengers Involved In Event : N
When Detected : In-flight

Result.General : Maintenance Action
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

On Date, I conducted a multi-engine commercial examination in a [small two-engine aircraft]. While conducting a simulated engine failure single-engine ILS approach to Runway XX at ZZZ, ATC, (i.e., ZZZ Approach Control), vectored the applicant onto final. Once laterally established on the approach, ATC switched the applicant over to the common traffic advisory frequency. ATC provided no further traffic advisories or alerts. The applicant then switched to the advisory frequency and announced his position as a five (5) mile final to Runway XX. Aircraft Y then announced downwind for Runway XY. I then told the applicant that in the event of go-around, both engines were available. The applicant continued while I searched for traffic in haze and seven mile visibility. The applicant reported a three (3) mile final. I continued to scan for Aircraft Y. I told the applicant that I had not spotted the traffic and then radioed that we were on a one and one-half (1 and ½) mile final. In response, Aircraft Y stated they had us in sight. I asked them to go-around. Instead, they called they were turning final for Runway XY. When the applicant called one hundred feet (100') above minimums, I spotted Aircraft Y. At that time, I told the applicant the runway was in sight and the applicant removed his foggles. I pointed the traffic to the applicant at one to two o'clock and less than a quarter (1/4) mile and again asked Aircraft Y to execute a go-around, which he then did as he flew over the top of us at the intersection of Runway XX and Runway XY. As the applicant flared to land, the tail struck the pavement. Only then did I realize that the applicant failed to complete the before landing checklist, by extending the gear, which I, in turn, failed to observe.

Narrative: 2

On Date I was taking a multi-engine commercial check ride with Designated Pilot Examiner [DPE] Name. I was the pilot in command for the flight. After flying the maneuvers we set up for the ILS XX into ZZZ. We had a simulated engine failure during the approach. ZZZ approach approved frequency change and gave no traffic advisories. I made a 5 mile final call on the CTAF followed by a 3 mile final call. During a 2 mile final Aircraft Y made a final call for Runway XY. I still had the foggles on and the [DPE] was searching for the traffic. I announced we reached the DA, and at that time name told me to remove the foggles. He was still searching for the traffic and talking to the other aircraft. Aircraft Y announced they would go around and I continued my approach inbound for Runway XX. With all the confusion and concerns of a mid-air collision I failed to complete the before landing check. It wasn't realized that the gear was retracted until the tail struck. Distraction and pressure were two major human factors that contributed to this incident. The other aircraft distracted me from completing the before landing check. In addition, the pressure of flying the approach and completing the maneuver within standards played a role.

Synopsis

Flight Crew reported distractions from a near mid air collision resulted in the landing check list not being performed and a gear up landing.

Time / Day

Date : 202109

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Airspace.Class B : ZZZ

Component : 1

Aircraft Component : Minimum Equipment List (MEL)

Aircraft Reference : X

Problem : Design

Component : 2

Aircraft Component : Checklists

Aircraft Reference : X

Problem : Improperly Operated

Person

Location Of Person.Aircraft : X

Location In Aircraft : General Seating Area

Reporter Organization : Air Carrier

Function.Flight Attendant : Flight Attendant (On Duty)

Qualification.Flight Attendant : Current

ASRS Report Number.Accession Number : 1838807

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Attendant

Communication Breakdown.Party2 : Ground Personnel

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL

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

Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Attendant
Were Passengers Involved In Event : N
Result.General : Maintenance Action

Assessments

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

Narrative: 1

I was made aware by the A [Flight Attendant] that we only had three of our four required emergency checklists for both ditching and land emergency evacuations. As a crew we determined this to be a "no-go" issue, so the A requested one each of the checklists that were missing. We were initially informed that the station didn't have any. Immediately upon being informed of the situation, the Captain became very agitated and began questioning the A as to why we needed the checklists. After an explanation was attempted, the Captain, again in a very agitated manner, proceeded to get on his cell and call the Chief Pilot. As a crew, we checked the manual to confirm that we were correct in our understanding that we had to have four on board and confirmed this to be accurate, to the best of our interpretation. Someone also called for an Inflight Supervisor to come to the gate, but I am not exactly certain which of the crew made that call. A Supervisor did arrive and informed us that they were looking for one, but she had been informed that we were ok using our [tablets] in the event they couldn't find one. At no point up to this time did I feel like anyone considered this more than an annoyance and an unnecessary interruption to their abilities to board the plane for an on time departure. I was even threatened with termination of my job after I said I would not fly if we didn't have the proper equipment. We as Flight Crew are already on high alert where safety and security was concerned, we all felt like no one else cared about anything else but the flight being delayed. I have never felt less supported or more pressured by a Captain in my time of flying. When all was said and done, they found additional copies in the training room, which was what we had recommended about 20 minutes prior.

Synopsis

Flight Attendant reported a required checklist was missing and was found to be non MELable. This caused a breakdown in crew communications and a delay.

Time / Day

Date : 202109

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.Center : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZZZ

Component

Aircraft Component : Indicating and Warning - APU

Aircraft Reference : X

Problem : Failed

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1836639

Human Factors : Communication Breakdown

Human Factors : Troubleshooting

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Maintenance

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL

Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Manuals
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

Prior to departure we briefed the multiple MEL/CDL (Configuration Deviation List)/NEFs (Non-Essential for Flight) on file for this aircraft including MEL XX-XX-XX AUXILIARY POWER UNIT. While the Form sticker said BLEED APU LEAK, the APU as a whole was deferred, so we briefed and followed the procedures for MEL XX-XX-XX as opposed to MEL YY-YY-YY (which was not listed). While in cruise at approximately XA50Z the EICAS displayed caution message BLEED APU LEAK while the APU was inoperative, off and the APU BLEED button was pushed OUT. MEL XX-XX-XX makes no mention of BLEED APU LEAK being an expected EICAS message but the QRH procedure did not make sense to me in this situation. My FO (First Officer) and I decided together it would be best to contact Maintenance for further insight, so I transferred the radios and flight controls to the FO and proceeded to contact dispatch via ARINC (Commercial Radio) at around XA53Z. After a normal exchange with ZZZ1 Radio and patching into our Dispatcher I requested to talk to Maintenance and the Dispatcher responded that "Maintenance would not talk to me in flight and to follow the QRH" even after insisting several times. We proceeded to follow the remainder of the QRH and had to descend to FL300 and continue the flight with single bleed. Upon arrival into ZZZ2 I made the appropriate entry into the AML (Aircraft Maintenance Logbook) for a BLEED APU LEAK EICAS caution message. In my opinion this was a complete breakdown in CRM between the flight crew and Dispatch/Maintenance. I accept responsibility if this MEL was incorrect and should have been YY-YY-YY, but if that is the case, it has been incorrect for 10 days worth of flights. When I saw the APU deferred as a whole I considered that an acceptable solution to an APU Bleed leak, however there is no mention in XX-XX-XX of any special procedure for BLEED APU LEAK EICAS message. Furthermore, I do not have the full information in flight as to why the APU was deferred as opposed to the APU BLEED over a week prior to this event. I believe our decision to contact Maintenance for further guidance via ARINC was sound, and if they had simply answered our call for help we could have avoided descending to FL300 with a single bleed/PACK. There are numerous examples of NTSB accident reports where a safer outcome was achieved thanks to the pilots communicating with Maintenance while in flight, and throughout my training with Company I have always been trained to use all resources available. While I do not know whether Dispatch refused to talk to Maintenance or Maintenance refused to talk to me, I strongly recommend this practice of not allowing pilots to contact Maintenance during irregular situations in flight cease immediately.

Synopsis

EMB-175 Captain reported not finding a QRH procedure for an EICAS caution message and confusion over an associated MEL. The crew requested communicating with maintenance but was denied assistance while in flight.

Time / Day

Date : 202107

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 17000

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Climb

Airspace.Class E : ZZZ

Component

Aircraft Component : Horizontal Stabilizer Trim

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1824764

Human Factors : Workload

Human Factors : Distraction

Person : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1824530

Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Weight And Balance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Returned To Departure Airport

Assessments

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

Narrative: 1

I, the CA (Captain), was PM (Pilot Monitoring); the FO (First Officer) was PF (Pilot Flying). During the climb-out phase in level flight in mildly hazy VMC at 17,000 MSL at 290 KIAS with Autopilot B engaged the Master Caution, the "FLT CONT" item on the CA-side SAP ("6-pack"), and the right half only of the "STAB OUT OF TRIM" light illuminated. Press-to-test of the "Stab out of trim" light showed both bulbs operable. After establishing that FO was actively remaining the PF, I performed "Stabilizer Out of Trim" QRH procedure with the result that the autopilot electric trim and both pilot yokes trim switches were inoperative in both directions. I notified ATC that we had a mechanical problem that would eventually result in [requesting priority] and landing at a nearby airport, probably ZZZ, but for now we were content to remain at 17,000 slowly outbound from ZZZ while we worked the problem. Knowing we were also over landing weight, nicely under control, and still had a lot of checklists to run, I had no desire to rush into diving towards some final approach fix before we were ready to land. I performed the "Stabilizer Trim Inoperative" QRH procedure with the result that manual hand-cranked trimming was possible in either direction, albeit against unusually high resistance and with a "cogging" feel as if pushing against a powered but stalled electric motor. This was true even when the aircraft was in-trim. One pilot could move the trim using one arm, but two pilots using one arm each worked much better for anything more than a couple turns of the trim wheel. We found that one pilot could both hand-fly and crank the trim, but tended to make unwanted aileron inputs while doing so. So it was doable in a pinch but not smooth. The forces required to turn the trim wheel did not appreciably reduce as we later slowed & configured. In the course of reading & discussing or doing the "deferred items" section of the "Stabilizer Trim Inoperative" QRH I started to activate the GPWS Flap inhibit switch. The FO stopped me saying we were above the 250 KIAS speed limit at that time. That sounded familiar to me, but no such limitation is stated at that point in the QRH. Nevertheless, we chose to delay activating the GPWS flap inhibit until we had slowed to first configuration speed around 220KIAS. Discussed with [the] FO whether ZZZ was the best divert option and which runway to use. ZZZ & longer Runway XXL was the unanimous choice. By that time we were a few miles south of [the] VOR on a south-southwesterly course for ZZZZZ, roughly 100nm from ZZZ. I then performed the "Non-routine Landing" QRH procedure, alerting ATC for a return to ZZZ XXL with ARFF (Airport Rescue Firefighting) standing by. Coordinated with ATC for return via direct arrival for ILS XXL. Asked Company explicitly to alert ZZZ Approach & Tower of the intended non-standard

XXL landing. Notified Dispatch via ACARS report. Briefed FAs via intercom, and passengers via PA on the situation, my expectations, and their roles. We selected the non-standard landing Runway XXL based on that runway being much longer than the more typical landing Runway XXR. That was a minor miscue, because I/we had not considered the effect of the large displaced threshold. Which I now consider insignificant. For landings eastbound the difference is 2500 feet and would be significant. Lesson learned: the big runway length number on the 10-9 page can be significantly misleading; take the time to dig into the 10-9A details page. The fact that was our takeoff runway and within Jepp FDPPro I'd used the green highlighter to extend the highlighting all the way to the takeoff threshold didn't help. What had been useful to help direct my taxi to the correct threshold for takeoff became mildly misleading when evaluating which runway to land on. Which was not a side effect I noticed at the time or had considered previously. Still working as PM I performed normal divert preparations and top-of-descent procedures: Reconfigured FMS & ACARS for ZZZ arrival, obtained ATIS, set up radios and performed approach brief, landing assessment, etc. Notified ZZZ Ops of our return by direct radio call to obtain a gate assignment. We discussed that we'd be a little above the normal max landing weight, but the already requested priority covers for that administrative requirement, and the runway available was nearly double what the QRH procedure's performance chart said was required. Performed descent checklist and before landing checklists and flows as normal. Throughout the evolution the FO kept us neatly in control, tight on the FD despite sometimes having to hand-crank the trim himself, caught a few radio calls I missed, and demonstrated overall high situational awareness and excellent systems knowledge. This is especially impressive for someone fairly new to the airplane who is just back from 6 months of furlough. During descent below 10,000 ft approaching downwind we changed control to CA as PF w FO as PM. We sighted the field while on base. During the turn-on to final I was using visual lookout primary, backed up by the LNAV purple line and the ILS. There was a moment of confusion as the ILS and LNAV came together before I was aligned with what I had thought was the landing runway. Having landed on XXR dozens (hundreds?) of times over the decades, that habit was unhelpful for a few seconds before we got fully established pointing at the correct runway. We then realized that Runway XXR is concrete and very easy to see in mildly hazy conditions while Runway XXL is asphalt and much harder to see. In fact XXL was invisible until we got closer in following the LNAV & LOC. My general habit on any landing involving parallel runways is to verbalize seeing all the relevant runways by name and explicitly saying which one I'm aligning / aligned with. E.g. "I see XXL and XXR. I'm aligning with XXL." For whatever reason that verbalization didn't occur; with sorta predictable results. Intercepted final outside intermediate fix in level flight at 3,000 ft. Configured to flaps 15 early and slowed gradually to Vapp of approximately 160KIAS before glideslope intercept at final approach fix. FO kept the airplane nicely in trim on my requests. Made a flaps 15 slightly overweight (approx. 148K#) approach and landing to a smooth touchdown on ZZZ Runway XXL just shy of the 2000ft marker. Upon stopping made a PA to reassure the passengers & remind them the safety vehicles would be seen around the airplane. ATC gave us an alternate frequency to contact ARFF on. Which surprised both of us a bit. Once we were communicating with ARFF I requested they inspect us for hot brakes or damaged tires. ARFF found normal brake temps and no tire damage. At ARFF's request I released them at that point and we taxied normally to [the] gate. Following shutdown the FO attempted to manually crank the trim to the usual post-shutdown 5 units from the 8-9 units we'd used at touchdown. At zero airspeed the trim was still "cogging" and almost as difficult to move as it had been in flight. So we left the trim at the landing setting for Maintenance's edification. Which point we discussed with the Chief Pilot who met the flight and again later with the maintenance folks who also met the flight. I made appropriate aircraft maintenance log book entries for the stab trim failure and for the overweight landing. Spoke with Dispatch by phone before leaving aircraft per FOM. The next morning I filed the required report. In all I think this

event worked out pretty close to textbook, minus the small glitches identified above. The main electric trim failing was the causal factor. Everything else is just details. 1. Subsequent research on the ground shows that activating the GPWS Flap Inhibit switch is called for in 11 different QRH procedures, and in the Flaps 15 landing procedure. Only the "One Engine Inoperative" QRH procedure and the "Flaps 15 Landing" procedures mention that limit; the other 10 QRH procedures do not. I do not know whether those differences are deliberate or an oversight. Suggest someone on the 737 fleet team look into this. If the difference is deliberate there probably ought to some verbiage available in QRH or [procedures] to explain the rationale so others don't mistakenly apply a remembered restriction where it's not intended. 2. We were both surprised to see that only half of the "Stab out of trim" annunciator illuminated. Which left us wondering at first if we had a warning system malfunction or a trim malfunction. I surmise now that the right bulb is connected to FCC (Flight Control Computer) B and the left is connected to FCC A. And that had the Captain been PF, we'd have seen the left half illuminate instead. However it works, the details of left & right are not documented in [manual] where the annunciator is described. At a minimum there should be a statement like "Only half of the annunciator may illuminate. That is still a valid indication of an out-of-trim condition." 3. Overall, from the "Stab out of trim" annunciator illuminating to touchdown was about 30 minutes. From reviewing the ACARS logs I know it was at least 28 minutes and less than 35. As the CA / PM / QRH operator I was working quickly and diligently almost the entire time to accomplish all the non-routine and normal procedures in full without hurrying. Had we turned back even a couple minutes earlier the airplane would have been approaching the airport before we were fully caught up and mentally transitioned from handling an [urgent inflight situation] to performing a normal low-stress, albeit flaps 15, landing. Given the reality that following all the procedures fully takes nearly 30 minutes, I believe we do a disservice to pilots in the sim, rushing around the traffic pattern with an engine out. That encourages hurrying, doing QRH steps without really thinking them and their implications through, etc. We fight how we train, and we're training to hurry. I question the wisdom of that. Further I question the wisdom of planned arrival fuels that only allow for approximately 30 minutes to flameout at traffic pattern altitudes. The so-called FAR "45 minute reserve" is 45 minutes at cruise, not 45 minutes at traffic pattern altitude with e.g. flaps stuck partly extended. I now conclude that performing a major QRH evolution discovered in the arrival traffic pattern while down near Company planned arrival fuels would necessitate skipping a lot of steps or giving them at best a lick and a promise. I believe it is unwise to plan arrival fuels that tightly. Yes, we commonly have additional hold and / or Dispatch fuels. But each of those may legitimately be burned in delays encountered before the [urgent situation] appears. This saves Company a lot of money on the many flights that don't turn out worst-case. But it really sucks to be the pilot who draws that short straw, and is faced with either doing a rushed job of handling the [situation] or running out of fuel. That's planning, in extremis, to fail. An industry-leading FAR 121 carrier should not be planning to fail. In extremis or otherwise.

Narrative: 2

At a level off of 17,000 ft we noticed stab out of trim light. I was the PF so it was my aircraft. The Captain ran the stab out of trim QRH checklist which lead to the QRH stab trim inoperative checklist. We did not regain electric trim. Manual trim was what we were left with. Then the non-routine QRH checklist was performed. The manual trim wheel was difficult to work for both us even when the plane was near an in trim condition. Speed was slowed to about 270kts from about 290kts then. [ATC was advised] and we planned and set up for an arrival back to ZZZ. I flew the aircraft and worked the manual trim while the CA performed checklists, set up for the arrival and approach, and the briefings. Manual trim did not become much easier until on approach when aircraft was slowed to approach speed, however even then it was difficult. The CA took the aircraft and I became the PM.

The landing was nice and smooth. Once on the ground using the manual trim wheel to reset the stab trim to 5 units was still very difficult.

Synopsis

Air carrier flight crew reported experiencing a Stabilizer Out of Trim problem during climb out. They completed the appropriate QRH checklist and performed an air turn back.

Time / Day

Date : 202106

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Ground : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 MAX 8

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Taxi

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 195

Experience.Flight Crew.Type : 10500

ASRS Report Number.Accession Number : 1819346

Human Factors : Workload

Human Factors : Time Pressure

Human Factors : Distraction

Human Factors : Situational Awareness

Person : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 210

Experience.Flight Crew.Type : 9500
ASRS Report Number.Accession Number : 1819354
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Distraction
Human Factors : Situational Awareness

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

This was both pilots' second flight on the MAX Aircraft since its return. We briefed a single engine taxi, in order to save gas, due to carrying an alternate in ZZZ1. We determined to start the engine once we determined what the lineup was for takeoff. As we turned the corner, approaching taxiway, we saw that we were #4, and due to the long start of the MAX, we began to start the #1 engine. This turned out to still be almost too late to start the engine and ensure 3 minutes of stabilization at idle prior to takeoff. The engine was started by the time we turned onto taxiway, but both of us were very closely monitoring the time and taxiing slow as we were now #2 for takeoff. After stabilization, we remembered that we had also talked earlier in the trip about trying to remember to do the new VNAV programming procedures in order to build habit patterns. Having a minute to go before our three-minute stabilization time, we decided to program the computer for the practice. This was one more distraction added to that of watching the engine time. About the time we finished, we were cleared for takeoff with 30 seconds to go before three minutes. We saw that we were going to be good on the time, so acknowledged the clearance, turned on the lights, took the runway and took off. Only on climbout, after having cleaned up, did we realize that we had failed to run the Before Takeoff Checklist. We immediately checked in with the Flight Attendants, who confirmed the fact that we had not notified them of the takeoff clearance as required by our flows and the checklist. Due to the length of taxi, however, they were all seated with everything stowed, and nothing unfortunate occurred. The rest of the flight went uneventfully. Distractions piled up, due to being in a somewhat unfamiliar aircraft and trying to accomplish new programming procedures for climbout. While everything was being done to try to be procedurally correct in accordance with what the Company wants done, being out of normal habit patterns caused us to miss a checklist. I would suggest that regarding the MAX, until we are all much more familiar with the timing required to start the engines with motoring and still get the three minutes, that we minimize the times that we single engine taxi, doing so only when there will be an excessive amount of ground time anticipated. Beyond that, if we do accomplish a single engine taxi, and we approach the runway without the time required, rather than focus on slowing down to get the time, simply tell Tower we need a minute to allow for the three minute and accept the delay. Further, the timing for the VNAV programming needs to be codified. It can only be accomplished after the numbers are received from ATIS which is when everything is happening quickly to get us off the

gate. It might be worth adding a "VNAV Climbout programmed" step to the Before Push or Before Taxi Checklist, to prevent distractions later on.

Narrative: 2

Second flight in the MAX 8, since its return to service. We taxied out single engine and saw the lineup was minimal for takeoff on [Runway] XXL. Began engine start, after exiting the ramp. Because of the slow engine start with the MAX, we were closely watching the timing to ensure we got three minutes after engine start. Engine was started as we turned onto taxiway, and the aircraft in front of us was cleared for takeoff. We taxied slowly, as it looked like we would make our engine warmup time with a slow taxi. We decided to load the new VNAV Takeoff Programming Procedures. Got that loaded, just as our engine time was completed and Tower cleared us for takeoff. We rolled onto the runway and had an uneventful takeoff and climbout. Because we were distracted, we failed to accomplish the Before Takeoff Checklist or ding the flight attendants. Loading of VNAV takeoff programming should be accomplished earlier than approaching the end of the runway. I'm not sure where the best time is to load the VNAV takeoff procedure, since we are very busy after we get our numbers. This would minimize distractions at a critical point in the taxi out. MAX engine start is slow. If it looked like we needed more time for engine warm up, we should not hesitate to let Tower know we need more time.

Synopsis

Flight Crew flying 737 MAX aircraft reported missing the before takeoff checklist and Flight Attendant notification prior to takeoff due to engine warm up time constraints.

Time / Day

Date : 202106

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : IMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Component

Aircraft Component : Nosewheel Steering

Aircraft Reference : X

Problem : Improperly Operated

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1817740

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Last 90 Days : 90
Experience.Flight Crew.Type : 90
ASRS Report Number.Accession Number : 1818059
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Ground Personnel

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : Taxi
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Returned To Gate
Result.Flight Crew : Regained Aircraft Control

Assessments

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

Narrative: 1

Pushing off gate/listening to Ground. There was a lot going on with weather approaching the field, certain departure gates shut off and others open. Push crew cleared off/weren't using headsets due to [weather hazards]. We were clearly distracted with what was going on with Ground as it was a question of starting one or both engines and whether we were delayed or departing immediately. We thought we were ready for taxi and with the frequency very busy; I called when there was a break. As the Captain powered up #2, it became immediately apparent that there was no nose wheel steering. Captain stopped the aircraft immediately and set parking brake. We were both at a loss that we had skipped the whole Before Taxi Flow/Checklist. We took a minute to discuss how we got there and knowing we had been distracted, "reset" ourselves and continued with the Before Taxi Flow and Checklist. [Suggest] Self awareness during high workload that things can unknowingly be skipped.

Narrative: 2

Pushed back and disconnected from tug. Only started one engine for departure delays due to weather at the field. As I cleared off the tug, we heard over the Ground frequency that all departure gates were closed for weather. The FO (First Officer) and I discussed our plan to taxi off ramp and wait for weather to pass. After that, I must have believed that he did the after-start flow and we did the Before Taxi Checklist. However, I was wrong. We cleared left and right and I started to move the aircraft, but immediately I knew the aircraft was not configured properly for taxi. I stopped the aircraft and started the after-push procedures again. The distraction of the weather delays got me out of my normal routine, as well as the FO's. Neither one of us trapped the errors until too late. We ended up with a return-to-gate event. While we start engines routinely and do Before Taxi Checklists several times a day, we can get distracted by outside factors. I should have delayed the discussion about weather or anything else until after the start flow and Before Taxi Checklist was complete.

Synopsis

B737 flight crew reported that complications and distractions due to weather led to the lack of proper checklist completion, resulting in the nose wheel steering being unavailable during taxi.

Time / Day

Date : 202106

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class D : ZZZ

Component

Aircraft Component : Landing Gear

Aircraft Reference : X

Problem : Improperly Operated

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1813994

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Regained Aircraft Control

Assessments

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

Narrative: 1

During the final segment of the approach phase on short final, we hear gear up at 960 feet RA. Captain told Pilot Monitoring to put the gear down and decided to continue to land. We decided it was safer to land rather than to do the balked landing. I believe the cause of the event was fatigue and complacency. I felt a little tired and did not scan and confirm Captain checklist items that were called for. It was night time with turbulence and at a critical phase of flight where several things were happening at the same time. I need to be more aware of confirming actual checklist items at critical phases of flight and scanning everything looks good when the Captain is focused on flying the aircraft into ZZZ.

Synopsis

Air carrier First Officer reported fatigue and procedural deviations led to the landing gear not being lowered per the checklist resulting in an unstabilized approach.

Time / Day

Date : 202105

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

Aircraft Operator : Air Carrier

Make Model Name : B737 MAX Series Undifferentiated

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Component

Aircraft Component : Normal Brake System

Aircraft Reference : X

Problem : Improperly Operated

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1810675

Human Factors : Training / Qualification

Human Factors : Time Pressure

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Were Passengers Involved In Event : N

Result.General : None Reported / Taken

Assessments

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

Narrative: 1

I was doing the Captain preflight duties as specified by the Aircraft Operating Manual (AOM). This was the first time in an actual MAX aircraft (not counting the MAX return to service training in the SIM) since the aircraft were grounded 2+ years ago. As I was completing the preflight duties, I neglected to set the autobrakes to RTO. I believe the cause of this was, the autobrake selector in the MAX is in a different position than the NexGen aircraft, specifically in the center console rather than next to the landing gear selector lever. Also, the flight paperwork was placed in such a position as to cover the autobrake selector knob. When we accomplished the Before Start Checklist, of course one of the items is "AUTOBRAKE" with a response of "RTO". I responded with the appropriate call of "RTO" purely by rote memory without actually looking at the autobrake selector. I recall looking towards the landing gear lever where I expected to see the autobrake selector and for some reason was convinced I saw it and it was set properly to RTO. We taxied out and departed uneventfully. It was only upon accomplishing the clean-up items after flap retraction that we noticed the autobrake selector was in the off position. The rest of the flight continued uneventfully.

Synopsis

B737 MAX Captain reported not activating the auto brake system for RTO when completing the before takeoff checklist.

Time / Day

Date : 202104

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 96

Experience.Flight Crew.Type : 4900

ASRS Report Number.Accession Number : 1802425

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

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

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

Detector.Person : Flight Crew

When Detected : Taxi

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Environment - Non Weather Related

Narrative: 1

Pushed back from Gate X, 10 minutes late, after a Supervisor was called to the aircraft, after boarding was complete, to assist with passengers traveling with a four-year-old child. The child would not keep his/her seat belt fastened and kept removing his/her face covering. The parents had become belligerent with the flight attendants. We received a runway change just prior to pushback that would have us departing on Runway XXR verses YYL. The takeoff data for XXR included the requirement to burn off additional fuel prior to takeoff. We loaded the new takeoff data and reran the Before Push Checklist. Then we began our pushback from the gate. Knowing it would be a very short taxi to the runway, we started both engines. During the First Officer's After Start flow, I believe I interrupted his thought process by starting to voice my idea that we could taxi a short distance via [intersection] to Taxiway 1 and wait the little bit of time to burn off the additional taxi fuel. After completing the After Start flow, the First Officer did not make the "Standing by Flaps" call. Instead, we talked for a few more seconds about moving the aircraft to a spot away from the ramp so that we could burn off the additional taxi fuel. The First Officer requested taxi clearance to Taxiway [Alphabet] and notified Ground Control that we would need to hold there, to burn off fuel prior to departing. We taxied forward onto [intersection] and made the left turn onto Taxiway 1 and brought the aircraft to a stop. Once the parking brake was set, we both realized that we had not performed the Before Taxi Checklist and subsequently had not set the flaps to the Takeoff setting prior to moving the aircraft. We then set the flaps to the Takeoff setting and ran the Before Taxi Checklist. After a couple of minutes, we had burned the proper amount of fuel for the taxi and we made an uneventful departure. It was immediately clear to me that I gave too much thought to the things that had happened prior to pushback and in doing that, caused me not to focus on the required duties after pushback. I also should have allowed the First Officer to focus entirely on the after-start process before diverting his thoughts to something else.

Synopsis

Air carrier Captain reported not performing the Before Taxi Checklist and subsequently had not set the flaps to the takeoff setting prior to moving the aircraft. Reporter cited distraction from dealing with face mask issues in the cabin area may have contributed to the event.

Time / Day

Date : 202101

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Night

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

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1784065

Events

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

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

Were Passengers Involved In Event : Y

When Detected.Other

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

At the gate we had a passenger board without permission from gate agent, then we had a non-compliant passenger not wearing a mask. That was mitigated when gate agent came and explained to the elderly passenger that masks must be worn. On taxi out Captain and First Officer were discussing mitigation strategies if that event were to re-occurrence on taxi and failed to run pre-takeoff checklist. Cause - Distraction by pre-flight events with gate agent and non-compliance of the passenger. Remain focused on task at hand. Not replay scenarios until the debrief phase of flight.

Synopsis

Air carrier Captain reported forgetting to do the pre-takeoff checklist due to being distracted by a passenger being boarded without permission and another passenger not complying with face mask policy.

Time / Day

Date : 202010

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B767-300 and 300 ER

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Ferry / Re-Positioning

Nav In Use : FMS Or FMC

Flight Phase : Takeoff / Launch

Route In Use : Vectors

Airspace.Class B : ZZZ

Component

Aircraft Component : Airspeed Indicator

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 Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1765654

Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : FLC Overrode Automation
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

After takeoff EICAS message IAS DISAGREE and other associated messages. Erroneous airspeed indications. Blocked Captains pitot tube. Manually flew the aircraft. Returned to ZZZ after completing checklist.

While conducting the checklist, the checklist says to refer to Flight with Unreliable Airspeed table in the performance inflight chapter. During this emergency, I was flying the airplane manually and was not able to assist the First Officer much with the checklist. If the table in the performance inflight chapter could be incorporated into the emergency checklist, this would reduce much of the stress of the situation and allow for a safer operation in an emergency situation.

Synopsis

After returning to departure airport with unreliable airspeed indication, the Captain suggested moving necessary charts to the relevant portion of the QRH for ease in location and use.

Time / Day

Date : 202008

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZZ.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC

Light : Dusk

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B747-400

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight / Delivery

Flight Phase : Initial Approach

Route In Use : Vectors

Component

Aircraft Component : Landing Gear Indicating System

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 : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1757535

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation / Discrepancy - Procedural : Maintenance

Anomaly.Deviation / Discrepancy - Procedural : FAR

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Maintenance Action
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : FLC Overrode Automation
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

ZZZ: Departed from runway XXL. On the approach into ZZZ1 RNP X RWY XX, PF (Pilot Flying) called for gear down, flaps 20. Immediately PM (Pilot Monitoring) extended the gear lever there was a warning horn and right body gear disagreed alert followed by an EICAS message "Equipment Cooling", the second time message showed up during the flight. At 1,000 feet both pilots called for "Go Around". PF requested for vector from ATC for an immediate landing ILS runway XX. PM worked the QRH read the gear disagreed checklist. Equipment Cooling non-normal checklist was completed earlier during cruise. The message went away both times. Please note there are lots of write ups on A/C X. (LE Flaps, Outflow Valve, Thrust Reverser, W&B Indication System, Cockpit Smoke Vision, Equipment Cooling, ATC failure & Landing Gear Config warning.). These were all the numerous write ups on the aircraft from our flight and previous flights.

I suggested the Aircraft should be AOG with immediate effect and the above listed malfunctions should be rectified prior to the aircraft being released for operations. This is a classic example of chains of error, that should be broken before leading to an incident or accident. Thank you.

Synopsis

First Officer reported two EICAS messages on final, causing a go around to allow time to run the QRH, landing safely on next approach.

Time / Day

Date : 202008

Local Time Of Day : 0601-1200

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory. TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size. Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Climb

Route In Use : Vectors

Airspace. Class B : ZZZ

Component

Aircraft Component : Autopilot

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 Flying

Function. Flight Crew : Captain

Qualification. Flight Crew : Air Transport Pilot (ATP)

Qualification. Flight Crew : Instrument

Qualification. Flight Crew : Multiengine

ASRS Report Number. Accession Number : 1757193

Human Factors : Time Pressure

Events

Anomaly. Aircraft Equipment Problem : Less Severe

Anomaly. Deviation / Discrepancy - Procedural : Maintenance

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

Detector. Person : Flight Crew

When Detected : In-flight

Result. General : Flight Cancelled / Delayed

Result. Flight Crew : Regained Aircraft Control

Result. Flight Crew : FLC Overrode Automation

Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

Departing ZZZ, neither autopilot would engage during climb out. The first officer checked circuit breakers, reset the glareshield autopilot disconnect bar, and we tested each yoke disconnect button but neither autopilot would still engage. No QRH procedure could be found. We reported the autopilot issue to ATC and requested to stop our climb at an altitude below RVSM. Next we called ZZZ Maintenance and their suggestion to reset the stab trim autopilot cutout switches successfully restored autopilot function, and flight continued normally at normal cruise altitude.

This was the first flight of the day for both pilots and the first flight in several days for the aircraft. Preflight distractions included a previously unseen route error that kept wanting to reload from the CPDLC auto load and update. During pushback, a ground crew wing walker wanted us to abort our number 2 engine start because she felt the tug driver had cleared us to start sooner than she wanted the engines started. After pushback ATC informed us we only had 3 minutes to taxi to make our departure slot time.

Suggest adding "Stab Trim Cutout Switches" to the Before Start Checklist, and/or including a QRH Procedure for "Neither Autopilot Will Engage."

Synopsis

B737 Captain reported auto pilot not engaging as required and non QRH procedures were used to get autopilot to function correctly.

Time / Day

Date : 202008

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1000

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-700

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 : Landing

Airspace.Class B : ZZZ

Component

Aircraft Component : Flap/Slat 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 Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 100

ASRS Report Number.Accession Number : 1756780

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days : 250
Experience.Flight Crew.Type : 2804
ASRS Report Number.Accession Number : 1756959
Human Factors : Troubleshooting

Events

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

Assessments

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

Narrative: 1

On approach to ZZZ XXL, First Officer called for Landing Checklist. We noticed no illuminated green "leading edge flaps extended". We did go-around and got vectors in the area at 3,000 feet while working the problem. I could not find a QRH (Quick Reference Handbook) checklist for the omission of that light. The FO (First Officer) and I exchanged controls. He was also unable to find a QRH checklist for this problem. While being vectored we extended the flaps and could visually see by looking out our windows that the leading edge flaps were indeed extending normally, and that it was an indication problem. The following lights were not illuminating at all. Leading Edge Flap Transit, Leading Edge Flap Extend, and the overhead Leading Edge devices indication lights. After triple checking no checklists would cover our problem, and after we verified the leading edge devices were fully extended, we made a normal flaps 30 uneventful landing. After landing the PSEU (Proximity Switch Electronics Unit) light illuminated.

Narrative: 2

As the Pilot Flying (PF) I called for flaps 30 and the Before Landing Checklist on the visual approach to XXL into ZZZ. The Captain (Pilot Monitoring) ran the checklist and we discovered that the Leading Edge Flap Extend green light was not illuminated. We executed a go-around to give ourselves more time to assess the situation. At 3,000 feet and after ATC gave us vectors, the Captain proceeded to find the appropriate checklist in the QRH. He could not find any checklist for LE FLAPS EXT green light not illuminated. He then asked if I could look and I transferred aircraft control to the Captain. I looked and didn't find any checklist addressing our exact condition. At that time, I did a push to test on the LE FLAPS EXT (Green light), LE FLAPS TRANSIT (Amber light) and LE devices annunciator panel and all tested good. The Captain called for Flaps 1 and we verified visually by looking out the window that the LE Flaps did in fact deploy and the flap position indicator showed flaps 1, but LE FLAPS EXT (Green light), LE FLAPS TRANSIT (Amber light) and LE devices annunciator panel did not illuminate. I looked through the QRH again to see if we had missed anything and the closest checklist we could think was the LE FLAPS TRANSIT (Amber Light) but that light was not illuminated, so we elected to not use that checklist. Also searched the non-normal performance data to see if there was an option to select for our condition and there was not. After discussing together and visually confirming the LE flaps deployed, and no roll or yaw was felt in the controls and it correctly showed on the flaps position indicator, we elected to land normally with flaps 30. After landing during roll out, the PSEU illuminated. Maybe a QRH addressing this particular

condition. In looking back, I believe that we could have used our commuting pilot in the cabin to visually check the inboard LE Flaps and Trailing Edge flaps were deployed. Also contacted Dispatch and got Maintenance to get another perspective on the indications we were seeing in the cockpit.

Synopsis

B737-700 flight crew could not find checklist for Leading Edge Devices Not Extended.

Time / Day

Date : 202006

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 21

Experience.Flight Crew.Type : 1452

ASRS Report Number.Accession Number : 1748126

Human Factors : Distraction

Human Factors : Training / Qualification

Events

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

Detector.Person : Flight Crew

When Detected : Taxi

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

After pushback and engine start, my before taxi was interrupted when I noticed the squawk was not inputted. I left the flow to enter the PDC and retrieve the code. I had some difficulty with the box, and it took longer than expected. Once the code was retrieved and entered, my concentration was interrupted by ground movement off our right wing that I was monitoring. Then Ground asked us if we were ready to taxi and I said yes. Once taxiing, we saw that the flaps were up. We stopped short of the runway and accomplished the flow checklist and looked for other errors we could have missed. I was definitely rusty having not flown much in the previous 30-90 days. So, finish a flow, accomplish the checklist, and slow down when things are busy.

Synopsis

Air carrier First Officer reported taxiing out to the runway and finding items were missed during their before taxi flow checklist.

Time / Day

Date : 202004

Local Time Of Day : 1201-1800

Place

Altitude.MSL.Single Value : 1000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Takeoff / Launch

Route In Use : Vectors

Airspace.Class B : ZZZ

Component

Aircraft Component : Horizontal Stabilizer Trim

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 97

Experience.Flight Crew.Type : 12000

ASRS Report Number.Accession Number : 1740617

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

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

Assessments

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

Narrative: 1

Departed ZZZ Runway XX, Flaps 5. Reaching 1,000 ft., I called for flaps 1 and subsequently attempted activation of the Electric Trim switch. Left yoke stab trim did not function. Asked First Officer to try his yoke trim switch. Neither trim switches functioned. Ran QRH procedure for Stabilizer Trim Inoperative. ATC was notified of flight control problem and [priority handling requested]. A large amount of questions were asked during the initial run of the QRH. The QRH gives a condition: Both of these occur:

Loss of electric trim through autopilot.
Loss of electric trim through the control switches.

As we got vectored off the departure procedure and distracted by ATC questions pertaining to the nature of our [situation], I didn't fully hear the initial reading of the condition calling for both of the above. As I had a heavy yoke from the takeoff configuration, I choose not to negative G unload the aircraft and turn on the autopilot. By not turning on the autopilot, I wasn't able to fully comply with the QRH conditions. QRH was continued and Stab Trim Cutout switches were selected to cutout. With the Cutout switches in cutout, the autopilot was not available.

During our debrief and review of the QRH procedures it was discovered that the QRH called for loss of both items, loss of autopilot and flight control switches.

Synopsis

B737 Captain reported failure to fully comply with QRH procedure following a pitch trim failure.

Time / Day

Date : 202002

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZME.ARTCC

State Reference : TN

Altitude.MSL.Single Value : 17500

Environment

Flight Conditions : VMC

Light : Dusk

Aircraft

Reference : X

ATC / Advisory.Center : ZTL

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Climb

Route In Use : Direct

Airspace.Class A : ZTL

Airspace.Class E : ZTL

Component

Aircraft Component : Engine

Aircraft Reference : X

Problem : Failed

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1726670

Human Factors : Workload

Human Factors : Distraction

Human Factors : Situational Awareness

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 : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1726668
Human Factors : Time Pressure
Human Factors : Troubleshooting

Events

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

Assessments

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

Narrative: 1

Upon climb out, we experienced a series of events which led to a left engine failure. The First Officer and I decided that while we were running checklists, briefing the Flight Attendant and passengers, and talking to Dispatch and ATC, that we would head toward our intended destination and be set up on final approach by the time we were finished. At the end of the QRH procedures, it says to land at the nearest suitable airport, which at the time of the event would have been a closer airport. However my thought was that by the time we would've held, completed all of our tasks and descended, we would've already been just as close to our destination anyway, which has better services for our situation. I decided that it would not adversely affect the safety of flight and elected to continue to our destination.

The main cause of this event was that I did not read the words "land at the nearest suitable airport" carefully enough and fully comprehend what it was saying. At the time, our destination was the nearest suitable airport in my mind, and once I had decided that, I had tunnel vision focus and did not consider alternatives.

Moving forward, I will be aware of my tendency to set up this tunnel vision so that I'm easily able to come out of it and consider alternatives to my plan if needed. I will not say that it was an unsafe decision to continue to destination, in fact I feel as though my decision was well-founded. However, the fact still remains that it was indeed technically contrary to the language used in the QRH.

Narrative: 2

Climbing out of 17,500 ft. for 19,000 ft. we got a master warning left oil pressure. The Captain immediately monitored the instruments and transferred the controls to me. The QRH instructed him to reduce power to idle in the affected engine. As he was pulling thrust to idle in that engine we had n2 vib n1 vib and audible vibration sound that could be felt through the cabin accompanied by the smell of burning. Around this time ITT began to spike as well. We [advised ATC] at 18000 ft. about 180 miles from our destination (to the best of my knowledge). We secured the engine via the QRH and decided to continue due to the fact that we had several checklists to run, notification to the passengers and Flight Attendant, and to the company and would be at our destination in about the time that process would take. The left engine was secure so we both agreed to ask ATC direct our destination. A suitable airport was below us at the time of the incident, however, in our mind was not the best place for landing due to the criteria listed above.

On the ground, Maintenance said an oil pump was disconnected to the assembly box that caused the engine to degress the way it did.

Synopsis

A flight crew reported they had to shut down an engine but continued to their destination instead of landing at a closer airport as stated in the QRH.

Time / Day

Date : 202001

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : DEN.Airport

State Reference : CO

Altitude.AGL.Single Value : 0

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.Ramp : DEN

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Airspace.Class B : DEN

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 123

Experience.Flight Crew.Type : 11500

ASRS Report Number.Accession Number : 1718903

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

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.Deviation / Discrepancy - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : Taxi
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

It was the third leg out of four on the last day of a four-day trip. The First Officer and I had worked well together throughout. Preflight was normal. We pushed on-time for our flight. During the push we noticed that our takeoff speeds had deleted off the CDU and there was a message stating "OAT Disagree." We set the brake, cleared off the Push Crew, and the First Officer told Ramp we'd be delayed a couple minutes. Ramp said to call back when ready to taxi. Both engines were running at this point. Since that speed's deleted situation rarely happens, we discussed it briefly. The First Officer then updated the Takeoff Data and resubmitted it via ACARS. Within seconds we received updated Takeoff Data which we reentered into the FMC. We then reaccomplished the Before Push checklist. The First Officer told ramp we were ready to taxi and they told us to taxi which we did.

Both of us had forgotten the Before Taxi Flows and Checklist due to the distraction. While taxiing out, I did a throttle burst which caused the configuration horn and light to activate. It was then we realized we'd forgotten our Before Taxi Flows, Checklist and flaps. We set the flaps to 1 and continued taxi. Prior to takeoff with the aircraft stopped, we completed our Before Taxi Flows and Checklist followed by the Before Takeoff Checklist along with several more throttle bursts. Takeoff and the rest of the flight was uneventful.

This was the first time in XX years here I've taxied without flaps. I'm disappointed in myself for allowing it. It was a textbook distraction error straight out of the simulator. There was plenty I could've done better to manage and prevent the situation. First and foremost, I needed to recognize the distraction for what it was and insured we completed our Before Taxi Flows and checklist and then dealt with the takeoff data issue. Then I should've used the Departure Plan Checklist after taxi instead of re-accomplishing the Before Push Checklist after the new data was entered. Lastly, when the configuration horn and light sounded we never referred to the Non-Normal [checklist]. Fortunately I'm in the habit of doing throttle bursts before they're required when notifying the Flight Attendants of takeoff. So the error was caught well before we reached the runway. But it never should have happened in the first place. And clearly our communication as a Crew was lacking since neither of us caught the situation prior to taxi.

Synopsis

B737 Captain reported a distraction during pushback caused them to taxi without flaps, and not complete the before taxi checklist.

Time / Day

Date : 202001

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 25000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : 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

Nav In Use : FMS Or FMC

Flight Phase : Climb

Airspace.Class A : ZZZ

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 : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 10736

Experience.Flight Crew.Last 90 Days : 140

ASRS Report Number.Accession Number : 1717750

Human Factors : Troubleshooting

Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

On climbout from ZZZ at about 25,000 feet the FO (First Officer) front window completely shattered. Our actions as a crew was an immediate level off and communicated with ATC. Reading the checklist came to a point of putting on shoulder harnesses, at this point I requested a turn for ZZZ. We worked together to get the airplane turned around with a new routing. The FO worked with ATC and I went back to the checklist for its completion. The last item on the checklist asked if the glass was inner or outer. In our case it was outer. Final line on checklist reads continue as normal and take off shoulder harnesses. So this is where I recognize the error, as dire as " put on shoulder harnesses," this was not the time to turn around.

We once again discussed our situation with one another with a completed checklist and cautiously went with the checklist, that this is ok to continue to ZZZ1. Our fuel situation was fine as we proceeded to ZZZ1 fairly quickly. We were left separated in situations and busy unnecessarily. This is my disappointment.

Synopsis

B737 Captain reported a lack of clarity when following the checklist for a shattered cockpit window.

Time / Day

Date : 202001

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Takeoff / Launch

Route In Use : Direct

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Check Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1716108

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Other / Unknown

Human Factors : Confusion

Events

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Manuals

Contributing Factors / Situations : Procedure

Primary Problem : Ambiguous

Narrative: 1

When the PF (Pilot Flying) called "Set Flaps Up Maneuvering Speed" the PM (Pilot Monitoring) reached for the flap handle initially then went to the MCP.

The "Set Flaps Up" part of the call seems to cause this improper action during high workload. "Set Flaps Up" should be removed from the call. The call could be changed to "Set Clean Maneuvering Speed" or something similar.

Synopsis

B737 Check Airman reported the aircraft checklist verbiage needs to be changed to avoid improper action.

Time / Day

Date : 201911

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B757 Undifferentiated or Other Model

Operating Under FAR Part : Part 121

Flight Phase : Parked

Component

Aircraft Component : Indicating and Warning - Fuel System

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 Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 10463

Experience.Flight Crew.Last 90 Days : 132

Experience.Flight Crew.Type : 4418

ASRS Report Number.Accession Number : 1702340

Human Factors : Other / Unknown

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Detector.Person : Flight Crew

When Detected : Aircraft In Service At Gate

Result.General : Release Refused / Aircraft Not Accepted

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Manuals

Primary Problem : Manuals

Narrative: 1

During preflight set up for subject flight, we noted that the inbound defect, "Fuel Quantity Indicating System Blank," Left and Totalizer indicators blank, no associated EICAS messages, had not been cleared. In addition to the blank left fuel quantity indicator and blank totalizer, we noted a FUEL QTY IND status message. Maintenance Personnel entered the flight deck around that time to check the fuel quantity indicating status. They also confirmed they were working on the indicator defect, but might have to defer it due to time constraints. Subsequently, over several minutes and a few visits to the flight deck, Maintenance Personnel confirmed MEL 28XXX would be placed on the aircraft, as well as reporting the tank stick values. The Captain and I reviewed the MEL and its potential impact to our flight.

The MEL OPS PLACARD is straight forward for fuel confirmation, preflight, fuel tracking and confirmation during normal operations. I became uncomfortable, however, when comparing procedure solutions for abnormal fuel scenarios. My concerns were as follows:

MEL note: 'FUEL CONFIG' EICAS ADVISORY MESSAGE OR WARNING LIGHT FOR LATERAL IMBALANCE MAY BE INHIBITED. This completely removes the FUEL CONFIG QRH as a checklist option.

MEL Item H: MONITOR FUEL USAGE FOR ANY UNUSUAL DECREASE IN FUEL QUANTITY AND/OR FUEL IMBALANCE. Then MEL item I. FOR OPERATIONS WITH CENTER TANK FUEL -- Item 1 regarding predicted fuel when center tanks are empty is straight forward. Item 2 regards procedures for center tank fuel exhaustion before the predicted point and that a fuel leak should be suspected. Item (A) provides six cues, any of which can be evidence of a fuel leak. They include fuel quantity decreasing abnormally, excessive fuel flow, fuel balance rate over 2,000 lbs/hr, abnormal aileron trim, visual spray from spar and up to and including engine failure. If a leak occurs on the side with the blank indicator, the cues are reduced to abnormal aileron, apparent at around 1,600 lb imbalance, fuel spray observation, or an engine failure. Of note, Maintenance reported that the tank stick values indicated a 500 lb difference. My assessment was that the discovery of a leak in a worst-case scenario by the methods above adds considerable time and unnecessary risk to addressing the emergency. Starting off with an already 500 lb imbalance added more uncertainty and concern on my part.

Confirming a leak, the MEL then refers to the FM / NON-NORMALS / FUEL / LOW FUEL as follows on procedures. Referencing the 757 QRH for a Fuel Leak, the caution at step 4 can't be fully assessed since the totalizer reading is unavailable. There were no clear solutions on how to address this, or the selections in item 10 regarding the possible messages available or not available, in order to move to the next items in the checklist.

Other concerns regarding fuel related abnormal checklists. The Abnormal Fuel Transfer checklist conditions are "Fuel quantity decreasing from the left and/or right wing tank(s) with fuel remaining in the center tank." There could be a significant delay in addressing this scenario if the leak were on the side with the blank fuel quantity.

The FUEL SYS PRESS checklist references the FUEL CONFIG light. Per the MEL, this message may not be available, adding more time to realize the situation through the cues in the MEL fuel imbalance discussion and less time to properly address the emergency. FUEL X FEED - FWD/AFT. Same as above. LOW FUEL. One of the notes indicates this message could be caused by a leak. Reference discussion above regarding concerns of the scenario without the fuel quantity and totalizer indications.

My Captain agreed with my assessment and contacted the [Chief Pilot] for guidance. On

the fuel leak checklist, the [Chief Pilot] said he saw my points and generally agreed with my assessment regarding the MEL fuel leak and unclear QRH application in the event of a fuel abnormal situation. The [Chief Pilot] thought the totalizer value could be deduced by fuel tracking in an operations normal condition, up to the time of an abnormal situation. He also said, words to the effect, that the MEL / QRH should be clearer, even re-written, saying, obviously, that it would take basically, more time than we had. I assessed that the time to ascertain a leak from a tank on the blank fuel indicator, left in this case, would take too long and reduce the amount of time and options to land safely. Also, we could not fully complete the other noted checklists, as written, with an acceptable level of confidence and in a timely manner, adding an undue threat to the operation.

Though there was general agreement with my assessment on the fuel leak checklist by my Captain and the FODM; the FODM said the MEL was legal and the captain said he would accept the new MRD when maintenance completed their actions. I removed myself from the flight as I thought the limitations in the MEL and QRH were a threat to safely completing an abnormal fuel scenario.

Synopsis

B757 First Officer reported refusing flight due to lack of clarity with MEL and QRH regarding fuel leak checklists.

Time / Day

Date : 201911

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 4

Altitude.MSL.Single Value : 2000

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

Airspace.Class B : ZZZ

Component

Aircraft Component : Flap/Slat Indication

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 308

ASRS Report Number.Accession Number : 1702302

Human Factors : Troubleshooting

Human Factors : Confusion

Events

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

Assessments

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

Narrative: 1

This [report] is submitted in recognition of a scenario which is not addressed in the QRH - No LE device indicating lights upon landing configuration. This is not a one-off event since it occurred to another crew and aircraft last week. Situations were identical but crew analysis and actions were very different. No-flap landing for one and normal flap 30 landing for the other. Both flights landed uneventfully. Seems some QRH guidance here would be useful in future occurrences. An [incident report] also submitted to Company Flight Operations.

On [flight], an instance of no LE device indication on approach caused Crew confusion because it's not addressed in the QRH. On initial approach into ZZZ, aircraft was configured for landing (gear down, flaps 30). All things appeared normal mechanically; however, we noticed no green LE FLAPS EXT light. Also no LE device annunciation panel lights. They were blank. No roll tendency was evident, press to test indicated operable LE device lights, circuit breakers in, and TE flap gauge indicated normally. Upon configuring everything appeared and felt normal. The only thing not normal was the absence of LE device lights.

Conducted normal go-around to investigate and realized that this situation is not addressed in QRH. There is no discussion or guidance. Conducted a phone patch to Maintenance for enlightenment and Technician indicated that it was more than likely due to a PSEU/ FSEU fault which cannot be resolved during flight.

Since this scenario is not addressed in the QRH, we had some discussion of no-flap or flap 15 landing but only because we were trying to make our situation "fit" one of the QRH scenarios. Fortunately we had a jumpseat pilot in the cabin who could verify LE device and flap position for us. So those non-normal landing configurations were eventually ruled out because our situation did not warrant the increased risk. Using [resource management] by taking into account what we could feel and see, verification of LE and flap position with jumpseat pilot, and discussion with Maintenance, our issue appeared to be an indication problem, not an actual flight control problem. A normal configuration and landing into ZZZ ensued. PSEU light illuminated on landing. (This was due to the lack of info from the FSEU). ZZZ Contract Maintenance investigated and found the FSEU was at fault.

Synopsis

B737-700 Captain reported that a slat malfunction occurred for which there was no QRH procedure that resulted in a precautionary landing.

Time / Day

Date : 201911

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : Mixed

Weather Elements / Visibility.Visibility : 5

Light : Night

Ceiling.Single Value : 1500

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Cruise

Flight Phase : Parked

Airspace.Class A : ZZZ

Component

Aircraft Component : Fuel Crossfeed

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 468

Experience.Flight Crew.Type : 3000

ASRS Report Number.Accession Number : 1702279

Human Factors : Distraction

Human Factors : Time Pressure
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL
Anomaly.Deviation / Discrepancy - Procedural : Weight And Balance
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Diverted

Assessments

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

Narrative: 1

Heavy traffic on way to airport caused Van Driver to drop us off at airport approximately 20 minutes late. We rushed to get to the gate and push as close to on time as possible. I accomplished flight duties while hearing from Captain that we had an MEL 28-X-XX. Right Center Tank fuel boost pump inoperative. I read the dispatch report as did the Captain. After push, and before takeoff, failed to recognize crossfeed valve in closed position (supposed to be open). Took off and at climbout Captain recognized that we had over 1000 pound imbalance from main tanks. We leveled off, referenced the QRH and accomplished applicable checklist. We shut off left center tank boost pump. Balanced mains and turned left center tank boost pump back on. Fuel initially fed from center tank but stopped feeding and started to feed from right main tank causing another slight imbalance. We failed to open up the crossfeed per the MEL which caused this to happen. At the time I was coordinating and programming for a diversion. Landed in ZZZ as a divert. Captain recognized the error after talking to Maintenance via telephone call.

Synopsis

B737-700 First Officer reported that distraction and time pressure caused the crew to miss a checklist item that resulted in a fuel imbalance and a diversion.

Time / Day

Date : 201911

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : B777 Undifferentiated or Other Model
Crew Size.Number Of Crew : 3
Operating Under FAR Part : Part 121
Flight Plan : IFR
Nav In Use : FMS Or FMC
Flight Phase : Cruise

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 5716
Experience.Flight Crew.Last 90 Days : 132
Experience.Flight Crew.Type : 193
ASRS Report Number.Accession Number : 1701626

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR

Assessments

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

Narrative: 1

While in cruise, during a conversation with my FO (First Officer) about some non-normal procedures, I realized the QRH was not loaded on my iPad Content Locker. My FO confirmed his was missing also, as did the second FO. My Content Locker was recently updated to a different app. It may have been left out then. I had not received any notice that it was no longer required, or that it was being discontinued. I just recently completed transition training on the fleet, and the curriculum was based on its availability for use on non-normals. There was no hard copy on the flight deck of the aircraft I was assigned for the flight.

Synopsis

B777 Captain reported that, along with other crew members, iPad was missing QRH section.

Time / Day

Date : 201910

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

Make Model Name : Bonanza 36

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class G : ZZZ

Component

Aircraft Component : Gear Lever/Selector

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 3300

Experience.Flight Crew.Last 90 Days : 22

Experience.Flight Crew.Type : 600

ASRS Report Number.Accession Number : 1696464

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

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

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Gear Up Landing
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

We were on a night training flight for night currency. The pilot flying was planning to update her night currency. I was acting as PIC/CFI/PNF in the right seat.

We met at the airport approximately XA:45 pacific time. After preflighting the aircraft we started engines at approximately XB:20. Some engine roughness was noted at startup but was resolved after leaning and runup checklist was completed.

Additional time was lost waiting for a transient aircraft who was lost on the airport trying to find his way to a gate for exit. I informed the Pilot flying to hold position until the transient airplane was clear of all runways. We offered assistance via radio to the transient pilot whom we directed to the ramp.

We made a normal takeoff on Runway XXL, retracted the landing gear, and entered a normal left traffic pattern. On downwind we extended the landing gear and continued to a normal landing with full stop.

We then taxied back for another takeoff and entered the downwind leg. Upon reducing power for the approach we noticed some engine roughness which I attributed to "pushing the prop" because of our relatively high airspeed and being full rich at minimal power. The pilot flying thought it was an engine malfunction so I attempted to adjust the mixture to no satisfaction to the pilot flying. I directed the Pilot Flying to go to full flaps for landing as we were turning final and speed seemed high. We continued the approach to landing and failed to do a "GUMP" check for landing gear due to our distraction resulting from the engine issue.

We did not get a gear warning alarm even though the MP was at 11 inches. Had that alarm sounded, we would have, if time and altitude allowed, been able to extend the landing gear or otherwise execute a go-around.

This is a case of two senior pilots trusting each other to "Take care of business." The distraction with the engine caused me to forget the pre-landing checklist which I assumed the PF was managing but was really my responsibility as CFI/PIC.

The result was a gear-up landing which resulted as a very smooth landing with minimal damage to the aircraft and no injuries to personnel.

Synopsis

Bonanza pilot reported that distraction and failure to follow the checklist resulted in a gear-up landing.

Time / Day

Date : 201910

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Regional Jet 900 (CRJ900)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Flight Phase : Parked

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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1696236

Human Factors : Situational Awareness

Human Factors : Fatigue

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

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

Anomaly.Inflight Event / Encounter : Fuel Issue

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Landed in Emergency Condition

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

During boarding in ZZZ. The First Officer and I were running the before start checklist. When we got to the fuel. We noted that the aircraft was in fact being fueled. And agreed that we would come back to the fuel. At departure time we still did not have the bag sheet and began to inquire as to where that was. In that time we got distracted and did not come back to the fuel. We did notice that fueling was complete because the auto cross flow inhibit status message was gone. In the time looking for the bag sheet I did not check the fuel load against the release. I took for granted that the fueller had the right load. I have since learned that he was giving the wrong fuel load. I let myself get distracted with trying to get out on time. And did not come back to confirming the fuel. I sent Dispatch a message as to our late door closure due to the late bag sheet. Which must have added to my distraction. About 100 miles from ZZZ1 we got the low fuel caution We [advised ATC] and requested direct to ZZZ2 landing Runway XXR. A gradual decent was started at flight idle in an effort to minimize throttle and make the necessary altitude crossings on the approach to Runway XXR. We landed without further incident and taxied to the gate.

I let myself get distracted with getting the flight out on time. I should have restarted the checklist after the fuel was done instead of planning on coming back to it. Which I did not do. I did not sleep that well the night before. So I was possibly more tired than I thought I was. I assumed that the fueller had the correct fuel load Which he did not. I know I looked at the fuel, but I clearly did not notice that it was incorrect. Why it did not register with me to check against the release I am unsure. Or if I simply saw a number that looked right. But I should have not let myself get distracted with the other factors and focused on completing the checklist properly. And should have admittedly myself that I may have been more tired than I thought and taken a moment to double check everything. It is something that I will never forget. And never let happen again.

Synopsis

CRJ-900 Captain reported deviating from the before start checklist fuel section resulting in a Low Fuel warning and a diversion.

Time / Day

Date : 201910

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : GRB.Airport

State Reference : WI

Environment

Flight Conditions : VMC

Light : Dawn

Aircraft

Reference : X

ATC / Advisory.TRACON : GRB

Aircraft Operator : Air Carrier

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Initial Climb

Airspace.Class C : GRB

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Check Pilot

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1689443

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Time Pressure

Human Factors : Distraction

Human Factors : Workload

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1689577
Human Factors : Confusion
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Speed : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Overcame Equipment Problem

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 in the Captain seat serving as a Line Check Airman with a new hire on their second trip. I was in the "Pilot Monitoring" role. The IOE candidate was the Pilot Flying in the First Officer seat and hand flying the entire departure. It was an early morning departure. ATC assigned us to take-off runway heading up to 3,000 ft. for departure. I prompted the Pilot Flying to set "heading, low-bank" after ATC assigned our take-off. We rolled down the runway and took off. One threat to this departure was using speed mode to take off with a very quick level-off. During our initial climb out as I called "FRA," (Flap Retraction Altitude) ATC assigned a right turn heading 060 followed by asking if we had traffic of a Cessna Caravan in sight. We were interrupted immediately after the First Officer called out "Speed 200" during the after takeoff flow call outs. I bugged the turn and scanned the sky for the traffic, which I called "in sight."

We were rapidly approaching our assigned 3,000 ft. so ATC assigned a higher altitude. I put the new altitude into the FMS and the Pilot Flying verified. Because this altitude change happened during the level off at 3,000 ft., the airplane reverted to "Pitch" vertical guidance and the new First Officer was confused by this change and threat. I waited for him to request another mode, and then prompted him so we could get set for a proper climb. I realized that my after takeoff flow had been interrupted, so I prompted the First Officer to call out the remaining items, "Set Climb, After Takeoff" Check, while completing my after take-off flow. I had my checklist in my hand as a reminder to run the flow, when

ATC changed us to the Center frequency.

I checked in with the new frequency and ATC assigned us a turn direct to a waypoint, and inquired if we would like a higher assigned altitude from the seven thousand which we were filed. Due to the fact that the flight was 40 minutes long I requested 13,000 ft. so we could pick up our cruise speed and ATC assigned it while stating that they had a reroute. They also asked if I was ready to copy my clearance. I told them to standby while gathering my pen and flight plan in preparation for the reroute, then copied the new clearance. After we finished, I was thinking about the fact that the IOE candidate did not put in the new flight plan nor update the new top of climb altitude. He asked for the autopilot and we turned it on. With all of these distractions, I had not run the "After Take-off" Checklist until we were passing through 10,000 ft. By the time I got to the Flaps 0 check and response, I realized that the flaps were still set to 9 degrees and we missed it during the cleanup flow. We went 270 kts. for about 30 seconds with the flaps at 9, effectively over speeding them for under a minute. We continued the flight, but I advised Maintenance Control of the over speed when we reached our destination. I should have been more vigilant of workload management working with a new hire. Always complete after takeoff checklist before 10,000 ft. even if it means delaying discussing route or altitude changes with ATC. Always verify "FLAPS" in the "Flaps speed sterile" call at 10,000 ft.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

ERJ flight crew reported that their failure to accomplish the after takeoff checklist in a timely manner caused a flap over speed.

Time / Day

Date : 201909

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : OGG.Airport

State Reference : HI

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

ATC / Advisory.Tower : OGG

Aircraft Operator : Air Carrier

Make Model Name : A321

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Ferry / Re-Positioning

Nav In Use : FMS Or FMC

Flight Phase : Landing

Component

Aircraft Component : Galley Furnishing

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1681406

Human Factors : Communication Breakdown

Human Factors : Training / Qualification

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Other

Events

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

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

Detector.Person : Flight Crew

Were Passengers Involved In Event : N

When Detected : In-flight

Result.General : Maintenance Action

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Chart Or Publication

Contributing Factors / Situations : Manuals

Primary Problem : Manuals

Narrative: 1

The First Officer and I were assigned to operate a ferry flight with no flight attendants or other passengers aboard. We completed our Pilot Flying/Pilot Monitoring duties and completed the Before Start Checklist as normal with the following exceptions:

- 1) The cockpit door was kept open.
- 2) Cabin Ready Report was not received as it was not applicable.
- 3) Only the 1L and 1R Doors were armed.

With respect to keeping the cockpit door open during a ferry flight, both the First Officer and I discussed whether we should keep the door open or closed. A decision was made to keep the door open, as this was the typical practice that was used in past ferry flights at both [Company], as well as both of my previous FAR Part 121 Airlines. In addition, I felt that because we had no flight attendants on board, we lacked the "eyes and ears" in the back cabin, so leaving the cockpit door open would allow us to quickly assess the condition of the cabin in the event of an emergency (such as smoke and/or fire in the cabin).

With respect to only arming the two forward doors, this was per the recommendation and direction given to me by our A321 Fleet Captain on my previous Ferry Flight. Upon landing with auto brakes set to Medium, during deceleration and at approximately 80 knots a violent and loud bang was heard directly behind us. At the 70 kt. Call the First Officer was startled by the presence of a galley cart that was tipped over sideways and blocking the cockpit door, with liquid pouring out of it and onto the floor.

We taxied to the gate, shut the aircraft down and completed the parking checklist, and then I got out of my seat and physically lifted the galley cart back up on its wheels so that I could move it out of the way and exit the cockpit and disarm the 1L and 1R doors. Upon further examination, it was discovered that the galley cart that hit the forward Flight Attendant jumpseat and forward lavatory door came from the rear of the aircraft. This galley cart did not have its wheel brakes set, nor was the compartment it was stowed in locked and secured with the metal safety latches. In addition, there was a second galley cart that was not secured properly, with the brakes off, and it rolled partially into the right rear Lavatory. Additionally, there were three galley bins that slid out from stowage and were on the floor, with an additional galley bin which was dislodged from its compartment and nearly falling out. All four aforementioned galley bin's stowage compartments were left in the unlocked and non-secure position.

I feel it is very important for me to emphasize how dangerous this event was and the possible disaster that could have very easily happened if the galley cart which rolled down the aisle entered the flight deck during deceleration. The galley cart which rolled from the rear of the airplane was likely traveling at a speed of approximately 60 MPH (estimated by

taking approximately. Touchdown Speed and the speed point at which the impact of the cart was made). There was substantial damage to the metal frame of the galley cart which was caused by the impact, which is a good indication of the amount of force present at impact. Luckily, the galley cart swerved at the last second and made impact with the forward Flight Attendant jumpseat and lavatory door, bringing it to a stop prior to entering the flight deck. However, if the galley cart had not swerved and instead came through the flight deck doorway, it would have made contact with one or both crew members, likely causing severe injury or death. In addition, the galley cart would have caused massive damage to the flight deck, and most likely would have driven the thrust levers forward, possibly in the TOGA mode. It is not unreasonable to assume that a major accident could have resulted if the galley cart made its way into the cockpit, which is a very scary and sobering thought.

To date, there are no ferry flight specific checklists or procedures training for pilots who operate ferry flights, which is what I determine contributed to allowing this incident to occur. The lack of ferry-specific training and checklists, in my opinion, has to be addressed immediately.

At the very least, specific checklists and procedures need to be developed for ferry flights which include the following items:

- 1) Guidance on whether to keep the flight deck door open or closed.
- 2) Guidance on which slides to arm.
- 3) Procedures for inspecting the cabin after all doors are closed and armed, which would include physically searching the cabin to ensure there are no unauthorized persons on board the aircraft and no suspicious packages or items present in the cabin.
- 4) Procedures for ensuring that all Galleys are properly secured, to include verification of all galley carts having their brakes set and all safety latches properly secured.

Synopsis

A321 Captain reported that the ferry flight checklist was inadequate, causing an unsecured galley cart to impact the forward bulkhead during landing.

Time / Day

Date : 201909

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : EWR.Airport

State Reference : NY

Altitude.MSL.Single Value : 2000

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : N90

Aircraft Operator : Air Carrier

Make Model Name : EMB ERJ 145 ER/LR

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Climb

Airspace.Class B : EWR

Component

Aircraft Component : DC Generator

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1681042

Human Factors : Fatigue

Human Factors : Human-Machine Interface

Human Factors : Workload

Human Factors : Troubleshooting

Human Factors : Time Pressure

Events

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

Assessments

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

Narrative: 1

The flight was on day one of four, last leg of three for the day. On a very quiet night in EWR, the First Officer and I had endured a Flap Slow Speed reset with Maintenance after departing the gate, a reroute along with the requisite ACARS communications, and a runway change from [Runway] 22R/W to [Runway] 4L that included all of the airplanes but ours. After Ground had announced the runway switch, I asked the First Officer to start the APU and then shut down Engine #1 for the long taxi to [Runway] 4L from Taxiway Whiskey short of Sierra, our present location.

Some three minutes later, I was horrified to be then switched to Tower and appraised of the fact that I was "number one for takeoff- you'd better hurry up". I asked the First Officer to re-start the #1 engine, announced on the radio that we would require two minutes, and we started the takeoff roll with more than three minutes since the start. We climbed on the Newark Four Departure, and then we were given a right turn to a heading of 240 degrees and a level-off altitude of 2,000 ft. from Tower, with which we complied. The First Officer did a fine job of respecting the 250 knot speed limit as I ran the Climb Check flow and checklist.

We were given another heading and 10,000 ft. for the climb, and I looked over the MFD Systems pages after the First Officer and I agreed that there was an intermittent clicking sound not unlike that of a fuel pump that is selected but not powered. The number 1 Generator was showing a production of 0 Amps, while the number 3 Generator, just beside it, was showing 170 or so. There was no EICAS indication message associated with it. I surmised that the clicking sound must have been the bus tie connectors responding to a loss of a generator, and consulted the Quick Reference Handbook. I also messaged Dispatch to tell Maintenance of our predicament. Gens 2 and 4 were showing 45 and 75 Amps, respectively, and so I did not feel a need to start the APU.

In the QRH, I did not find a Non-Annunciated procedure for our problem, but I looked into the Annunciated section and found something under 5-XX-XX (I believe). I messaged Dispatch to see if they recommended that I run this procedure, and upon their recommendation, I did. What follows was my significant mistake: I followed the procedure, and it queries the operator as to whether the airplane has lost ALL of the generators, which we had clearly not experienced. I then followed the associated line, which tells the operator to recycle the affected "GEN" button on the upper panel, which I should have done. I misread the procedure, which has a large "END" in a box just below the instruction to recycle the "GEN" button. I thought it odd to have a procedure with so little substance in the QRH, and so I even commented to the First Officer about it, and showed him the instructions with my index finger. He agreed that it was odd but also agreed with my read

of the instructions.

A bit later, as we monitored the GENs, I found that the number 1 GEN was registering 10, 25, and sometimes 30 Amps, and in the descent it was showing 15 Amps, with GEN #3 showing 170 Amps, GEN #2 70 Amps, and GEN #4 105 Amps. We landed without incident, and I wrote up the symptoms and called Dispatch, who connected me with Maintenance. It was only then I discovered my mistake, that being that I should have recycled the number 1 GEN button. When this was done, Maintenance was satisfied that the fault had cleared, and I was advised to mark my entry as Entered In Error. This I did, and we headed to the hotel for the night after having run the Shutdown and Termination Checklists.

Suggestions: It is difficult to ponder both crew members reading the QRH procedure incorrectly. Clearly, after such a harried departure, and a long day of commuting, I was tired. I do think that a contributing factor to my mistake was the QRH line and arrow not having enough separation between the downward "kink" in the instructions line and the associated "arrow." A greater distance or a bolder line might have moved my attention to the correct action, which would have most likely corrected the fault in question.

Synopsis

EMB-145 Captain reported being fatigued and pressured by ATC, causing him and the First Officer to misinterpret a QRH procedure following a generator failure.

Time / Day

Date : 201903

Place

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Regional Jet CL65, Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Component

Aircraft Component : FMS/FMC

Aircraft Reference : X

Problem : Failed

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1670289

Human Factors : Other / Unknown

Human Factors : Time Pressure

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Other

Communication Breakdown.Party2 : Ground Personnel

Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Detector.Person : Flight Crew

When Detected : Aircraft In Service At Gate

Result.General : None Reported / Taken

Assessments

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

Narrative: 1

This event involved the Chief Pilot of [Company]. Because of this I am just now submitting this report even though the event occurred several months ago. I had a flight where both the FMS and the ACARs were on MEL. These were not the type of MEL where part of the equipment is usable either. Both items were completely non-functional. This resulted in a much higher workload and a much longer preflight preparation period. Unfortunately we were coming from a previous flight and did not have the luxury of simply arriving at the aircraft early to complete the items on time. Instead, we arrived at the aircraft and began completing our preflight preparation quickly but thoroughly. I felt that it was particularly important to take our time and be thorough because this was an unusual situation which really throws off our rhythm and raises the likelihood of errors. In the end we were not able to complete everything prior to our departure time and incurred a delay. I sent a delay report explaining the reason for the delay. Several days later I received a call from [Chief Pilot] asking me why the flight was delayed. I explained the whole scenario and he stated that in the future I needed to close the door and release the parking brake and then finish the preflight preparation after that. I asked him "So you're telling me that you want me to do the checklist items out of order?" and he replied with "No, you just need to close the door and get a time." I was not comfortable arguing with the Chief Pilot so I did not press the issue further but I greatly disagree with his stance on this.

The FAA's says that checklists are to be accomplished completely and in order. There is a very good reason for this, as it keeps flights standard and helps crew members ensure that all items are completed and nothing is missed. When you start going out of order and skipping items in order to rush to get an on time departure you greatly increase the chances of making mistakes. On our checklist, closing the doors and releasing the parking brake are both on the start checklist to the line. [Chief Pilot]'s requirement to skip ahead to these items means that you are accomplishing part of the start checklist to the line with many items on the before start and start checklist to the line incomplete. On the before start checklist, the MEL text would not be reviewed, the FMS/ACARS would not be checked and set, the navs/comms/transponder would not be set, takeoff data would not be set, the departure briefing would not be complete, the logbook and documents would not be checked, and the flight release would not be signed (as far as I am aware, we are not supposed to sign the release until all of these other items are complete). The weight and balance on the start checklist to the line would also not be complete. This checklist non-compliance would result in lowered safety. As the Chief Pilot, [Chief Pilot] has a particularly high responsibility to promote safety. When one of the highest pilot supervisors is requiring crew members to directly violate FAA procedures by completing checklists incorrectly, I view it as an EXTREMELY large red flag as to the status of the safety culture at [Company]. I would expect this sort of behavior from a non-pilot, such as a ramp manager or scheduling coordinator, but not from a pilot. As a pilot [Chief Pilot] should know better and he should be setting a better example. We should not have a Chief Pilot who would so wantonly disregard safety and pressure a pilot to do unsafe actions. A company procedure should not be violated like this simply to achieve an on-time departure. I would have loved for this flight to have departed on-time but an on-time departure is never worth degrading safety. While having good on-time statistics may look good for [Company], an aircraft accident that occurs trying to achieve these statistics would look MUCH worse than the positives gained from on-time performance.

[Chief Pilot] should be removed from any and all management positions and he should be

replaced with a pilot who actually is interested in safety. It should be reiterated to management that checklists are to be completed thoroughly and in the proper order, regardless of on-time performance. I would like my identity to remain anonymous so as to prevent retaliation from management.

Synopsis

CRJ Captain reported a safety issue with Management after being told to prioritize on time departure over proper checklist execution.

Time / Day

Date : 201906

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Cessna 402/402C/B379 Businessliner/Utiliner

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class D : ZZZ

Component

Aircraft Component : Landing Gear Indicating System

Aircraft Reference : X

Problem : Malfunctioning

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 Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1652489

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Human Factors : Troubleshooting

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 : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1652490
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Troubleshooting
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed in Emergency Condition

Assessments

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

Narrative: 1

On approach into ZZZ runway XX the right main gear light did not illuminate after gear down was selected. A go around was initiated and I recycled the gear. Second time the gear came down the right main light still did not illuminate. I pressed the push to test button and no light was noticed. We informed tower we were sorting things out and would circle to the north of the airport and let them know when we were ready to come in. We followed the QRH to change the light bulb for the right main, however when testing it after, we noticed the left main was not illuminating. We decided to change the left light bulb however the First Officer pulled the gear cube out before I could pull the circuit breaker again. Reset the gear cube and only the right main would illuminate. We tried pulling the gear cube out again to replace the lights however the gear cube would not come out. We tried multiple times to get the gear cube out to no success. At this point we contacted [Operations Control] to discuss the next steps. It was decided to blow the gear down and follow the appropriate checklists for unconfirmed gear down (left main and nose). [Coordinated] with Tower and emergency equipment was rolled as a precaution. We landed safely with no further incident on runway XY. The passengers were shuttled from the aircraft to the terminal with their baggage while the aircraft was towed to our hangar. Not following QRH when a checklist had to be repeated i.e. second time changing light bulb did not pull CB (Circuit Breaker) before pulling gear cube out.

Narrative: 2

We were on approach into ZZZ. I pulled the gear switch down and we had positive indications for the nose and left main but negative indication for the right main. We initiated a go-around and the Captain began troubleshooting with the QRH. After determining that the bulb to the right main indicator needed to be changed, we pulled the circuit breaker and pulled the bulb quadrant for the landing gear indicators. After changing the bulb for the right main indicator, we put the bulb quadrant back in the panel. We did a push to test after resetting the circuit breaker and we got a positive indication for the nose and right main, but a negative indication for the left main. I pulled the bulb quadrant out to replace the bulb on the left main indicator. I think I must have thought that the circuit breaker was pulled again, but it was not. Upon push to test, we now only had a positive indication for the right main only. After consulting with [Operations Control], we initiated the emergency blow-down procedure and proceeded to land. The captain communicated everything with ATC. Upon a successful landing, we came to a complete stop on the runway and shutdown. We evacuated the airplane and gate and airport personnel came to collect the baggage and passengers. We then towed the airplane off the runway and parked it in front of the hanger.

Synopsis

C402 flight crew reported failure to follow QRH with unsafe landing gear indications.

Time / Day

Date : 201905

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Thunderstorm

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B757-200

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Landing

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 2643

Experience.Flight Crew.Last 90 Days : 196

Experience.Flight Crew.Type : 788

ASRS Report Number.Accession Number : 1650580

Human Factors : Situational Awareness

Human Factors : Fatigue

Human Factors : Confusion

Human Factors : Distraction

Events

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

Anomaly.Inflight Event / Encounter : Fuel Issue

Detector.Person : Flight Crew

When Detected : Taxi

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Weather

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Staffing

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Due to weather enroute and airport congestion, we were less than 15 minutes from CCO (Critical Crew Off time) on originating flight. Late to ZZZ1, fatiguing without [Relief Pilot]. On departure, fuel critical. Waited 45 minutes for final weights. Only resolved after 2 calls to Dispatch. Even with one engine shutdown (one stayed running for taxi) we were in jeopardy of returning to the gate for fuel or missing CCO. Now already over 8:00 block with no [Relief Pilot]. Slightly higher fuel burn than on [Forecast]. Re-routed for thunderstorms over ZZZ. Routed down [the] coast then back west. ATC was great getting planes around the storms to west of ZZZ. Other flights diverting, our bingo was 10.0 with ZZZ2 [as] our divert. ZZZ now VFR, we had field in sight, fuel now less than 10.0. Slam dunk into XXR, runway changed due to other lower fuel aircraft getting priority. Did not realize we did not do the Landing Checklist until touchdown. Obviously gear and flaps were in the proper position.

Synopsis

B757 Captain reported that due to several route changes in flight, flight crew failed to perform the Landing Checklist.

Time / Day

Date : 201905

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 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 : Safety Instrumentation & Information

Aircraft Reference : X

Problem : Design

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1648259

Human Factors : Confusion

Analyst Callback : Completed

Events

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

Detector.Person : Flight Crew

When Detected : Pre-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Chart Or Publication

Contributing Factors / Situations : Human Factors

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

Narrative: 1

General safety concern. Evacuation Checklist on First Officer's yoke didn't match the QRH Evacuation Checklist. I have been briefing FO's for the past several years that in event of evacuation, they can use the checklist on the yoke clipboard or the back of the QRH, as I remember that at some point in my career I read that somewhere (I cannot find that now in any publication). My FO confirmed that some other Captain's brief the same thing. He also pointed out that his clipboard evacuation checklist did not match the QRH checklist (the one on my clipboard did match the QRH). Have I been wrong all these years, or are we allowed to use the checklist on the yoke clipboard for evacuation? If we are allowed to use it, then at least this particular aircraft's FO yoke clipboard evacuation checklist needs to be updated. Make sure all yoke clipboards on all aircraft have the Evacuation Checklist that matches the QRH's.

Callback: 1

Reporter indicated that there was no feedback yet as to how many other aircraft have been found to have incorrect yoke-mounted evacuation checklists.

Synopsis

B737 Captain reported noticing during preflight that the Evacuation Checklist on First Officer's yoke didn't match the QRH Evacuation Checklist.

Time / Day

Date : 201905

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1647605

Human Factors : Situational Awareness

Human Factors : Confusion

Human Factors : Training / Qualification

Events

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

Detector.Person : Flight Crew

When Detected : Pre-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Procedure

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Manuals

Contributing Factors / Situations : Human Factors

Primary Problem : Company Policy

Narrative: 1

The new [procedural checklist] method for the 737 fleet is very poorly conceived, designed, trained, and executed. The training on using this procedural method is totally inadequate; not enough stand-alone training is done to train for this radically different approach to proper checklist accomplishment. [Our company] has limited training for the new procedures but, instead, offers limited 'supplemental' (read: unpaid) materials that poorly demonstrate the procedures and techniques. Over all, the new [checklist procedures] are disjointed, incomplete, poorly conceived and designed, and even more poorly organized, and are, bottom line, unsafe. They should be discontinued immediately and totally redesigned or scrapped altogether.

Scrap these poorly conceived, poorly designed, and extremely poorly implemented jokes of procedures and return to the "tried and true," time-proven procedures that have worked for my entire career at [this company].

Synopsis

B737-800 pilot reported inadequate training on use of new checklist procedures.

Time / Day

Date : 201905

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Light : Daylight

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

Nav In Use : FMS Or FMC

Flight Phase : Takeoff / Launch

Airspace.Class C : 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 : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1645590

Human Factors : Time Pressure

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Workload

Events

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

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

Detector.Person : Flight Crew

When Detected : Taxi

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

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

Narrative: 1

This was my first time performing a Bleeds OFF takeoff using the new checklist. I had previously bookmarked the electronic version of the checklist, so I had it ready to go. However, this meant I was unable to have the SID up on my iPad during departure, as I normally would. Also, the placement of the iPad in the cockpit meant more heads down, away from monitoring low to the ground during a critical phase of flight. During a Bleeds OFF takeoff as pilot monitoring I am busy! We typically do a flaps 25 takeoff when departing this airport Bleeds OFF. I am reconfiguring the bleed system while contacting Departure Control and bringing up flaps on schedule. Meanwhile, I am expected to monitor the flight to ensure we are flying the correct lateral mode and making crossing restrictions and look out for the plethora of VFR traffic buzzing around just off the coast. Having that checklist printed out makes our jobs significantly easier and makes the whole procedure much safer.

Synopsis

B737NG First Officer reported new checklist procedures increased their workload while conducting a Bleeds Off takeoff from a busy airport.

Time / Day

Date : 201905

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : B737-700
Operating Under FAR Part : Part 121

Person

Reference : 1
Location Of Person : Company
Reporter Organization : Air Carrier
Function.Ground Personnel : Other / Unknown
ASRS Report Number.Accession Number : 1642922

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

B737NG QRH Errors. Threat: aircrew will use incorrect QRH procedures resulting in possible loss of airframe. Background: while looking up QRH unreliable airspeed power and pitch settings, I noted the performance table for the 737-700 CFM56 holding flaps up unreliable airspeed (table x.x) was incorrect as the lighter gross weights had higher airspeeds and N1s than the heavier gross weights. I submitted a [report] Flight Ops publication feedback form on it. The response was quick, but noted the correction had been put out via bulletin on (date from seven months ago) that the table was incorrect and it had also noted the speedbrake "Do Not Arm" procedure was in error. I remembered reading the bulletin, but honestly thought it was letting me know the QRH was going to be updated. It has now been six plus months, and the QRH still contains inaccurate information. I have spoken to a half dozen pilots, including a Chief Pilot and a separate Check Airman; none knew the QRH was still incorrect nor recalled the bulletin. Recommend that if the QRH cannot be updated due to processes, finding a different way to remind aircrew the QRH is in error. A note to review the bulletin (or even the correct table and procedures) could be added to the front page of the weather packets or dispatcher note regarding the bulletin could be added to all releases.

Synopsis

Air carrier reporter stated there are QRH errors in the performance table accompanying the B737NG Unreliable Airspeed Non-Normal procedure.

Time / Day

Date : 201903

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Boeing Company 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 : Checklists

Aircraft Reference : X

Problem : Design

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1628322

Human Factors : Training / Qualification

Events

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

Detector.Person : Flight Crew

When Detected : Pre-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Manuals

Primary Problem : Manuals

Narrative: 1

New B737 normal checklist have not been well trained to the aircrew. Confusing and cause problems with standardization. Pilots need specific training. The checklist were placed in our mailboxes with minimal training provided. Suggest 2 day training period at the flight academy with qualified check airman. Gradual implementation where either procedure is allowed. Then after, all are trained we only use the new procedures. New procedures should be re-written for clarity.

Synopsis

A Boeing Captain reported the need for additional training on new checklist procedures.

Time / Day

Date : 201903

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Parked

Component

Aircraft Component : Checklists

Aircraft Reference : X

Problem : Design

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1627441

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Troubleshooting

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Other

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation / Discrepancy - Procedural : Other / Unknown

Detector.Person : Flight Crew

When Detected : Pre-flight

Result.General : None Reported / Taken

Assessments

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

Narrative: 1

This leg was the first leg of a four-day sequence which was, for both the CA (Captain) and I, the first experience with the procedural changes from challenge and response checklist to "triggers and flows." Both of us had reviewed the new checklist as well as accomplished the 'training' provided by the company. Regardless of that preparation, we found the transition to be substantially more difficult. Upon recognizing this issue, we identified our new checklist/flows as a threat, not only to our operation but to our CRM. Throughout this four-day sequence (which I flew with two different CAs) our new procedures were a focal point, and it often created confusion and obstacles to effective CRM. The triggers in many cases are at weird times. The 'flows' are cumbersome and have some portions that are very sporadic.....and don't 'flow'. The 'silent' portions include some very critical information which breaks down cockpit communication and CRM. The so called 'training' we received....a 12 minute video....on a procedural change...that doesn't seem like it was put together by pilots. In my opinion, it was very eye opening to see how much those changes in our checklist created confusion and impacted CRM. This needs to be look at again closely. The checklist needs to be changed to make more logical sense (from a pilot perspective) on the triggers, and the flows need to be more intuitive to include making some of the silent items, not silent to facilitate CRM. Training needs to be accomplished in a simulator.

Synopsis

737-800 First officer reported the new checklist, "Triggers and Flows," created confusion.

Time / Day

Date : 201903

Place

Altitude.MSL.Single Value : 35000

Aircraft

Reference : X

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 : Cruise

Component

Aircraft Component : Checklists

Aircraft Reference : X

Problem : Design

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Private

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 6790

Experience.Flight Crew.Last 90 Days : 216

ASRS Report Number.Accession Number : 1626691

Human Factors : Training / Qualification

Human Factors : Troubleshooting

Human Factors : Confusion

Human Factors : Time Pressure

Events

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Chart Or Publication
Primary Problem : Chart Or Publication

Narrative: 1

With the 737 Max's grounded in the world today can the flight controls non normal section table of contents page numbers be messed up. 3 highly experienced 737 pilots took 10 minutes in cruise to find the trim runaway checklist in flight. Bulletin X is so subtle that only after reading it several times and having this issue myself did I realize the gravity of its words. With 99 percent of line pilots using paper checklists this is simply unacceptable. All [Union] and company representatives contacted tonight about this agreed this is totally wrong. A note that the hyperlinks are correct in the iPad QRC does not cut it with all other ways of access inaccurate. If this airplane were to go down because of this technology issue it would look good on the front page of [newspaper]. If you want the iPad to be the sole source of non-normal guidance take the paper checklist out of the aircraft. Otherwise fix the paper timely.

Synopsis

B737 First Officer reported the table of contents page numbers for the non-normal section regarding flight controls may be inaccurate. Trim runaway checklist was difficult to find. Flight ops bulletin is difficult to understand.

Time / Day

Date : 201902

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : DEN.Airport

State Reference : CO

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.Tower : DEN

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase.Other

Airspace.Class B : DEN

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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1621603

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Distraction

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1621605
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected.Other
Result.Flight Crew : Rejected Takeoff

Assessments

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

Narrative: 1

During the takeoff roll, a "Config Spoilers" warning message appeared at around 140 knots indicated airspeed. A high speed rejected takeoff was performed near V1. V1 was 144 knots indicated airspeed and it is not recalled whether the V1 call was made yet or not. In the aftermath of the rejected takeoff, Air Traffic Control, Maintenance, and company were contacted, however calling for QRH (Quick Reference Handbook) items for config spoiler warning message and brake overheat was forgotten.

Warning message appeared at high speed and near V1. It is possible that the abort wasn't accomplished until a speed between V1 and Vr. In the aftermath of the abort, QRH items were forgotten.

Change the preflight brief to include specific actions for which an aborted takeoff will be performed, include the likelihood of a decision to "continue" if the anomaly occurs after V1 to try and mitigate the initial reaction being to simply abort even when it is dubious whether one is at V1 or not.

Narrative: 2

During the takeoff roll, a "Config Spoilers" warning message appeared at around 140KIAS. An aborted takeoff was performed. V1 was 144KIAS. After the procedure was performed we exited the runway and contacted ATC, Maintenance and company. However, calling for and performing QRH (Quick Reference Handbook) procedures for config spoilers and brake overheat messages were forgotten.

In the time immediately after the abort attention was so focused on communicating with ATC, Maintenance and company that calling for a performing the QRH procedures were overlooked.

Expand and include in the preflight briefing more detail on required procedures that need to be performed immediately after an aborted takeoff.

Synopsis

CRJ-200 flight crew reported a high speed rejected takeoff due to a warning message. Following the abort, checklist was forgotten for the warning message and brake overheat.

Time / Day

Date : 201812

Local Time Of Day : 1201-1800

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A321

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Component

Aircraft Component : Elevator Trim System

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1602134

Human Factors : Communication Breakdown

Human Factors : Troubleshooting

Human Factors : Workload

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Attendant

Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Manuals

Primary Problem : Aircraft

Narrative: 1

The First Officer did an outstanding job flying the aircraft, setting up the MCDU for the approach, and communicating with ATC during the arrival until I was ready to take back control. He properly made this his first priority and avoided distraction, thereby allowing me to focus on managing the emergency. He was the first to suggest holding on to the pitch trim wheel and, later, [advising ATC]. The First Officer should be specifically and highly commended.

No one I talked to during or after this event had ever heard of an uncommanded stabilizer trim malfunction on an Airbus fly-by-wire aircraft before. This event should be documented and a de-identified summary should be published to [Company] pilots so that others can learn from this event.

The pagination of the System Reset Tables in COM Book 2 was confusing and delayed my ability to determine that there were no applicable resets for several minutes. It has been mentioned by Flight Operations Management that there is the intent to eventually provide tail number-specific QRHs in the cockpit and thereby return towards Airbus manufacturer philosophy regarding Abnormal/Emergency Procedure and ECAM handling. This must be properly implemented, and it carries risks because the manufacturer-provided QRHs are not compatible with our current procedures, manual set, or ECAM handling philosophy, so these items would require appropriate modifications. But properly implemented, returning to tail number-specific QRHs would solve the issue I encountered, and many others.

The Safety Department should determine whether or not a brace command was issued by flight attendants, without flight crew awareness, and contrary to what I believed were my very clear instructions. For example: did this not occur, did it occur due to a miscommunication between myself and the Lead FA, did it occur due to a miscommunication between the Lead FA and the other FAs, or did a FA deliberately disregard my instructions? If this occurred due to a miscommunication, I would like to be made aware of it so we can learn what went wrong and how to communicate better in the future. If this occurred due to a deliberate decision by a FA to disregard my instructions (but then not inform us they had done this), the FA should be debriefed in a non-punitive manner to determine the reason for that FA's decision and then to ensure that they understand: that it was not appropriate for this particular situation, what were the risks associated with doing this, and what were the risks associated with not telling the pilots they had done this.

Synopsis

A321 Captain reported QRH shortcomings and communication breakdown between flight crew and cabin attendants while troubleshooting uncommanded stabilizer trim malfunction.

Time / Day

Date : 201812

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : ATR 42

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Climb

Component

Aircraft Component : Horizontal Stabilizer Trim

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)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1601488

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Maintenance Action

Result.Flight Crew : Overcame Equipment Problem

Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

During climb, had a pitch trim Asymmetry [message], followed QRH. En-route crew discussed possible issues with control of aircraft with pitch trim being stuck in a nose up trim. [Advised ATC] and landed in ZZZ normal. Notified Maintenance.

Possible changes to QRH for Pitch Trim failure should include notes about uncontrollably issues and possible needing to divert to another airport.

Synopsis

ATR-42 Captain reported a pitch trim issue during climb was resolved with QRH procedure, but crew was concerned about further controllability issues.

Time / Day

Date : 201812

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Airliner 99

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class D : ZZZ

Component : 1

Aircraft Component : Indicating and Warning - Landing Gear

Aircraft Reference : X

Problem : Improperly Operated

Component : 2

Aircraft Component : Landing Gear

Aircraft Reference : X

Problem : Improperly Operated

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 Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1600434

Human Factors : Situational Awareness

Human Factors : Distraction

Human Factors : Training / Qualification
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 Flying
Function.Flight Crew : Trainee
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1600435
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Gear Up Landing
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

I was PIC supervising a Trainee on an FAR 135 Cargo only flight. Trainee was manipulating the controls. Nearing our destination airport (about 10 to 15 miles out) my Trainee reported the airport in-sight to approach control anticipating being cleared for a visual approach via the right downwind for runway XX. When the visual approach clearance did not come, I suggested we cancel our IFR flight plan and start our descent because we were still at cruise altitude and needed to descend over 6000 feet to enter the pattern. Approach control acknowledged our IFR cancellation and instructed us to enter the right downwind for runway XX and contact the tower.

Trainee contacted the tower, reported we were VFR entering the right downwind for runway XX, but also asked if runway XY was available. The tower responded with "Cleared to land Runway XY". This compounded the altitude we needed to descend so I suggested a no flap approach and landing (A training event we were going to complete later in the day). Trainee reduced power and increased propeller R.P.M. to full. This increased drag to

aid in our descent but also increases ambient noise in the cockpit which produces air noise through our voice activated intercom. Another power reduction was made and we eventually captured the glideslope for the ILS approach for runway XY. I estimate we were stabilized on the glideslope at our target airspeed for the remaining 5 miles to the airport. I watched my trainee pickup and read the ZERO FLAP LANDING checklist and stow it. Unfortunately neither of us utilized the BEFORE LANDING checklist and we landed with the gear in the retracted position.

I learned later that a gear warning horn that would have alerted us that the gear was not in the down position was silenced by my trainee when it sounded after the first or second power reduction. A normal procedure for a normal approach and landing but not for a zero flap landing. Touchdown Inattentive supervision disbelief I need more time to think about that. 1. I should have turned off the cabin heat to increase my alertness. 2. I should have refused the Rwy XY landing clearance and continued onto the downwind for Rwy XX 3. I should have turned down the squelch on the intercom to resume normal communications with my trainee. 4. Sunglasses may have helped instead of using my hand to block the rising sun that was in the direction of my trainee.

Narrative: 2

We were approaching ZZZ at 5,000 feet with Approach in a BE-99 C model. Because we were approaching the airport environment at a relatively high altitude, I asked the Captain if he thought I should cancel the IFR clearance or stay with approach. After briefly discussing it, I elected to cancel the IFR and descend. We were instructed to enter a right downwind for runway XX and I immediately asked if runway XY was available. We were cleared to land runway XY. I reduced power initially to approximately 400 torque, and then to flight idle, and was descending at approximately 1,500 - 2000 fpm at 180 - 185 kts while maneuvering to the right to intercept the ILS runway XY. When I reduced power for the descent the gear warning horn sounded and I silenced it by pressing the Gear Warn Silence button.

As we were approaching the ILS I began reducing the airspeed and descent rate with pitch and then applied power to become established on the glideslope. We were conducting a no flap landing so I transitioned to the props full forward and airspeed at blue line (115 kts) configuration. I completed the Zero Flap Landing abnormal procedures checklist and continued the VFR approach to landing, backed up with the ILS. We touched down on runway XY centerline without the landing gear down at approximately 2,500 feet from the threshold and slid on the cargo pod in a slightly curved path to the right coming to rest approximately halfway between the runway centerline and the edge of the runway, adjacent to taxiway X. We moved the condition levers to cutoff, and then accessed each other's physical condition. The Captain communicated with ATC, while I referenced the emergency procedures checklist to secure the aircraft. There were no injuries.

Normally, when I'm using the abnormal procedures checklist on final approach it's because I'm doing a single engine approach and landing. Right after I completed the Zero Flap Landing checklist my mindset was that I wasn't single engine, so I'm done with the checklist. Done with the abnormal procedures checklist on final normally means that I'm configured to land. I focused on aircraft control and missed the 1,000 foot above touchdown call out. Secure the engines to prevent injury or further damage. As the Captain recommended, changing the Zero Flap Landing checklist to include the landing gear, and a note about the gear warn silence button, may be beneficial.

Synopsis

BE99 flight crew reported a gear up landing while training, as a result of inattentive supervision and an incomplete abnormal procedures checklist.

Time / Day

Date : 201812

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.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 : Taxi

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1600145

Human Factors : Situational Awareness

Human Factors : Confusion

Events

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

Detector.Person : Flight Crew

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

We had to de-ice due to some residual ice on winglets, leading edge of the wings, leading edge of the tail and horizontal stabilizers. Proceeded as per SOP with de-ice procedure and appropriate checklists. During taxi to the runway I requested a Runway Performance Change Checklist, since the assigned runway was different from the one discussed in the briefing, and the First Officer reading through the checklist positioned flaps on 2 as per takeoff performances. We realized that was not standard procedure for the post de-ice taxi to set the flaps which shall be positioned at the right configuration during the "before takeoff checklist". I requested a Before Takeoff Checklist immediately with no other issue.

The checklist dedicated to the de-ice procedure requires the crew to verify flaps settings against the takeoff performance data and verify the actual position during the "runway performance change checklist" when the flaps are supposed to be up.

The very confusing De-ice/Anti-ice Checklist could have posed a serious safety issue, affecting the anti-ice fluid, in case of actual freezing precipitation or prolonged taxi on contaminated surfaces.

Revise and update the appropriate checklist which is very confusing

Synopsis

ERJ-175 Captain reported a discrepancy between the De-ice Checklist and the Before Takeoff Checklist.

Time / Day

Date : 201811

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : LAX.Airport

State Reference : CA

Altitude.AGL.Single Value : 0

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.Tower : LAX

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Takeoff / Launch

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Last 90 Days : 390

Experience.Flight Crew.Type : 7826

ASRS Report Number.Accession Number : 1596878

Human Factors : Communication Breakdown

Human Factors : Distraction

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

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

Anomaly.Deviation / Discrepancy - Procedural : Weight And Balance

Anomaly.Inflight Event / Encounter : Fuel Issue

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

Assessments

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

Narrative: 1

I had flown seven out of the last nine days. This was the third leg on the last day of a four-day trip. Before push, the [weight and balance system] said we had a required 297 pound taxi burn to get to below ATOG. We elected to request Runway 25R so to burn the fuel on taxi out. The push took over 10 minutes from gate, due to a Trainee doing his first push. It involved a lot of stopping and starting and aggressive braking of the tug after we had both engines started.

When we were finally ready to taxi, there was congestion. We realized that burning off fuel was no longer a problem; as a matter of fact, we were worried we were going to burn below our min takeoff fuel. We requested [Runway] 24L, and ran the Departure Plan Checklist. We taxied out to take our place in line. We were really watching our fuel burn at that point, as we were within 100 pounds of our min take off fuel. We were holding short behind a (other carrier) aircraft at the end of the runway when Tower cleared an aircraft to take off from the intersection behind us.

I asked what our sequence was, and Tower did not reply. He then cleared (other carrier) to takeoff from in front of us. We were next cleared onto the runway. It was not until I read back "cleared for takeoff" and the First Officer went to push the power up that he realized that the autothrottles were not armed and we had not run the checklist. I told Tower to cancel our clearance so that we could run the checklist. The checklist was completed and we took off. (Fuel was so tight on this one, that when we got to [destination], we had to extend the gear just a bit early to burn down below max landing weight.)

Synopsis

B737-700 Captain reported forgetting to complete the Before Takeoff Checklist prior to taking the runway.

Time / Day

Date : 201811

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A319

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Component

Aircraft Component : Air Conditioning and Pressurization Pack

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1977

Experience.Flight Crew.Type : 1977

ASRS Report Number.Accession Number : 1594913

Human Factors : Training / Qualification

Human Factors : Time Pressure

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Human-Machine Interface

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - 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 : Chart Or Publication
Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Chart Or Publication

Narrative: 1

After starting engine number 2 on taxi, we ran the maintenance check procedure for MEL [for] OPS PLACARD. DEFECT: ENGINE HIGH PRESSURE VALVE INOPERATIVE AND SECURED CLOSED.

The check was normal. However, we had just barely two minutes completed when we were cleared onto the runway for takeoff. So, while completing the check and returning the ENG bleed switch to on and the X Bleed switch back to AUTO, we got an ECAM for Pack 2. I quickly glanced at the procedure again and read that it said to turn Pack 2 off, so I turned off pack 2, and the ECAM went away. Quickly, we ran through ECAM completed and screens normal, completed the before takeoff checklist, and then completed a normal takeoff.

However, after leveling off, we returned to the written procedure check and determined that pack switch should have only been turned off if the PRECOOLER OUTLET TEMPERATURE EXCEEDS 240 DEGREES CELSIUS WITHIN 2 MINUTES AFTER X-BLEED VALVE OPENING. We then returned the pack switch to on without any issues.

As we started our descent we ran the procedure again for low power settings by again turning the engine bleed switch off and X bleed switch to open. The descent and approach and landing were normal.

Overall the procedure was confusing and should have been clarified beforehand.

Synopsis

A319 pilot reported making a mistake with the aircraft's packs because of an unclear checklist.

Time / Day

Date : 201811

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Light : Dusk

Aircraft

Reference : X

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

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1590825

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 : 1590679

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

I was the Pilot Flying (PF) into ZZZ at dusk. The First Officer told me during our pre-departure briefing that he was somewhat new and hadn't flown the [aircraft] since his differences IOE. I took a lot of extra time even before pushback briefing everything I could think of about the differences as well as our flight, especially Runway XY into ZZZ. The event occurred on approach and landing on Runway XY into ZZZ. We were getting vectored for the RNAV GPS XY, and the Approach Controller seemed like he was distracted, as the vectors he was giving us were odd. I sensed this, and decided to start getting configured early, to slow things down and reduce the workload for the final approach segment. The vector he gave us already put us in a position to be behind. I had to query him to give us a turn to final and clear us for the approach. We were given a lower altitude, and cleared for the approach. We were both on the same page in terms of the approach briefing, we went over it meticulously in our briefings. It was my first time flying into ZZZ, and I believe I was hyper-focused on flying the approach. I made the standard callouts, including "Flaps 45, Before Landing Checklist", and this was where I believe something distracted us both. If I had to guess, it would probably be the Tower clearing us to land. I remember calling for the checklist, but I don't think it was ever done. After touchdown, I pulled out the thrust reversers, and I believe a L (or R) THR REV UNSAFE amber message illuminated, and we had no reverse thrust. I armed the thrust reversers and began using them, but by the time I had them out, we were already at about 70 knots. We had plenty of Runway available to stop and were slowed to taxi speed well before taxiway Juliet. We taxied to the gate without incident.

As the Captain, if the checklist was indeed not completed, I should have caught this.

Narrative: 2

My Captain and I were flying to ZZZ. We started briefing our approach and landing early as it is a short flight and a complicated approach with a short runway. Because of this, we made sure to pay extra attention to the briefing. As we got closer to the airport, we asked the approach controller for vectors to the RNAV Runway XY approach. We did this because it is much safer than doing a visual approach. During the vectors to the approach, we started getting configured early to avoid getting task saturated in the event we get vectored too tightly. After being given our intercept angle, we were well set up for our approach. While getting closer and closer to intercepting the final approach course, we were still waiting to be cleared for the approach. My Captain decided to query the controller to see if we were clear for the approach. He then cleared us for the approach while we were very close to the approach course. Then, we were immediately handed off to Tower who cleared us to land. At the same time, we had to make our final configuration changes and complete all of the call-outs associated with our approach. We quickly became task saturated and I missed my cue to arm our thrust reverses. During all of this

task saturation, we must have missed, or did not complete our before landing checklist due to being distracted by a hand-off at an inconvenient time.

The mistake was detected after landing when the pilot flying tried to deploy the thrust reversers. The reversers would not deploy. That is when the pilot flying noticed that the reversers were not armed.

This occurrence was caused by tight vectors and a late approach clearance, as well as a hand-off to Tower during an already task saturated period of flight.

The pilot flying then armed the reversers while continuing to stop using the brakes. The aircraft was able to slow down with plenty of runway remaining. We then exited the runway in a safe manner onto the nearest taxiway.

I do not believe the Controller was expecting us to ask for an RNAV approach. It seemed he had become task saturated as well due to the fact that he had to be asked before telling us we were cleared for the approach. It may help to advise our intentions to fly an approach earlier, as well as being given wider vectors that do not create task saturation.

Synopsis

CRJ-200 flight crew reported landing without completing the Before Landing checklist, citing a late clearance as contributing.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

ATC / Advisory.Ground : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Taxi

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1590424

Human Factors : Situational Awareness

Human Factors : Distraction

Events

Anomaly.Deviation / Discrepancy - Procedural : FAR

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Ground Incursion : Taxiway

Anomaly.Ground Event / Encounter : Object

Detector.Automation : Air Traffic Control

When Detected : Taxi

Result.General : Maintenance Action

Result.Flight Crew : Returned To Gate

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

We were cleared to taxi. My mental picture of the taxi was to the end of Taxiway A and right turn on the runway. I called for below the line after being cleared to takeoff. When we should have turned onto the runway, the checklist item required me to check the engine instruments. When I looked back up we noticed we should have turned. We informed Ground and they said continue on [current taxiway] and turn around on the ramp and taxi back. We asked if the taxi was stressed for our aircraft. While standing by we contacted our Ramp Maintenance to tow us. Ground Control came back and gave us taxi instructions to continue on [current taxiway] that our company aircraft just did the same thing. We proceeded as instructed. After turning around and back on to taxi A, we were told that we took out a taxi light. We then taxi back to gate to have gear inspected. No damage was found. Then continued flight. Both heads down in cockpit while aircraft was taxing.

Synopsis

Air carrier Captain reported being distracted by checklist items during taxi resulting in a taxiway incursion and contact with a taxiway light.

Time / Day

Date : 201810

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Person

Reference : 1

Location Of Person : Company

Reporter Organization : Air Carrier

Function.Ground Personnel : Other / Unknown

ASRS Report Number.Accession Number : 1589650

Events

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

Anomaly.Deviation / Discrepancy - Procedural : Hazardous Material Violation

Detector.Person : Ground Personnel

When Detected : Routine Inspection

Result.General : Maintenance Action

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

Checklist for dry ice missing.

Synopsis

Ground personnel reported arrival shipment had a missing HAZMAT checklist.

Time / Day

Date : 201809

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Thunderstorm

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : 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 : Taxi

Component

Aircraft Component : Gust Lock

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1580643

Human Factors : Situational Awareness

Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Detector.Person : Flight Crew

When Detected : Taxi

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

While on the taxi up to runway XXR at ZZZ, I as the FO (First Officer) conducted the before takeoff briefing. We were waiting behind a number of jets and a single engine turbo prop and the briefing lead to a discussion about the approaching storm front in from the south and moving towards the end of the runway. Observing what the previous departing aircraft were doing and also observing a gust front our extended brief lead to a discussion of wind shear escape and what we as a crew would do to mitigate that threat. No other departing aircraft reported wind shear on their departure and we were then called to line up and wait. Subsequently we were given a heading and cleared for takeoff. As Pilot Flying (PF) I then went to set takeoff thrust and noticed that the gust lock was still engaged and both the captain and I immediately realized we hadn't completed the before takeoff checklist. We hadn't increased thrust or commenced the takeoff roll at all so the Captain requested a short delay on the threshold and we completed the flow and checklist. On completion of the before takeoff checklist we were given another vector and cleared for takeoff. We departed and the remainder of the flight was uneventful. Later, we decided it was worthwhile to complete the [safety report], in order for the event to be properly analyzed by a third party. In our subsequent discussion we felt in mitigating the perceived threat of wind shear we became fixated which became the new threat and error of not ending the brief and moving onto the flow and before takeoff checklist. The result was the undesired aircraft state, lining up on the runway for takeoff with the gust lock still in and not properly configured for takeoff.

Threat: fixation on other threats affecting the flight

Error: failed to complete before takeoff checklist

[Result]: lining up on the runway incorrectly configured

In this specific case, [I would suggest making] a clear ending of the before takeoff brief which would lead into the before takeoff checklist.

Fixation, avoid fixation on tasks or conversations as it can lead to non-identification of other threats or tasks.

Synopsis

ERJ-145 First Officer reported the before takeoff checklist was not completed prior to taxi into position for takeoff.