

ASRS Database Report Set

Inflight Weather Encounters

Report Set Description.....	A sampling of reports from both air carrier flight crews and GA pilots referencing encounters with severe or unforecast weather.
Update Number.....	34.0
Date of Update	December 31, 2018
Number of Records in Report Set.....	50
Number of New Records in Report Set	50
Type of Records in Report Set.....	For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, CA 94035-1000



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

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

Becky L. Hooey, Director
NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

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

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

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

Report Synopses

ACN: 1590094 *(1 of 50)*

Synopsis

B767 flight crew reported returning to departure airport after experiencing multiple system anomalies following a severe wake turbulence encounter climbing through FL250.

ACN: 1589549 *(2 of 50)*

Synopsis

B737-800 Captain reported fumes in the cockpit and forward during climb, clearing in cruise, and returning on descent.

ACN: 1589528 *(3 of 50)*

Synopsis

C402 pilot reported propeller anti-ice system failed after entering icing conditions.

ACN: 1589122 *(4 of 50)*

Synopsis

B767 First Officer and Relief Pilot reported executing a go-around at EWR when the autopilot failed to track the vertical path accurately.

ACN: 1588755 *(5 of 50)*

Synopsis

B737 Captain reported experiencing a lightning strike after which there was an aircraft vibration of an unknown source.

ACN: 1588704 *(6 of 50)*

Synopsis

King Air flight crew received two low altitude alerts from ATC resulting in a missed approach.

ACN: 1588622 *(7 of 50)*

Synopsis

CRJ-900 First Officer reported their aircraft did not capture the localizer course and conflicted with traffic on the parallel runway.

ACN: 1588336 *(8 of 50)*

Synopsis

B777-200 flight crew reported encountering several and un-forecasted clear air turbulence incidents during cruise.

ACN: 1588329 *(9 of 50)*

Synopsis

Air Carrier flight crew reported communications difficulty with foreign ATC due to language barrier.

ACN: 1588327 *(10 of 50)*

Synopsis

Aircraft are not equipped with worldwide ACARS nor SAT Phones and were unable to reach company/dispatch.

ACN: 1588323 *(11 of 50)*

Synopsis

EMB-190 First Officer reported a flap overspeed during a go-around at LGA following a circling approach at night.

ACN: 1588304 *(12 of 50)*

Synopsis

B747-400 First Officer reported lateral and altitude deviations due to moderate to severe turbulence.

ACN: 1588144 *(13 of 50)*

Synopsis

LR60 Captain reported overshooting cleared altitude in climb to FL340 after encountering wake turbulence from a wide body transport aircraft.

ACN: 1588096 *(14 of 50)*

Synopsis

PA28 instructor on a training flight with student reported having control difficulties possibly related to frost build-up on the wings.

ACN: 1588003 *(15 of 50)*

Synopsis

A321 Captain reported heading and altitude deviations while hand flying an approach, and an ANTI SKID/Brake issue after lowering landing gear.

ACN: 1587674 *(16 of 50)*

Synopsis

EMB-175 Captain reported being struck by lightning on approach to SLC.

ACN: 1587651 *(17 of 50)*

Synopsis

B767-300 flight crew reported a tail strike during landing.

ACN: 1587246 *(18 of 50)*

Synopsis

Air carrier flight crew reported a runway excursion occurred following loss of directional control while landing in a strong crosswind.

ACN: 1587192 *(19 of 50)*

Synopsis

A319 Captain reported First Officer flying into turbulence resulting in an injured Flight Attendant. First Officer was unaware of option to deviate clear of cloud

ACN: 1586812 *(20 of 50)*

Synopsis

C750 Captain reported severe weather resulted in several missed approaches and a diversion.

ACN: 1586695 *(21 of 50)*

Synopsis

EMB175 First Officer reported the Captain continued an approach and landed even though the weather was below approach minimums.

ACN: 1586550 *(22 of 50)*

Synopsis

TRACON Controller reported an unsafe operation along with pressure induced by a relieving controller.

ACN: 1586442 *(23 of 50)*

Synopsis

Air Carrier Captain reported company restrictions to approaches at BRO airport offer no options when weather is present.

ACN: 1586109 *(24 of 50)*

Synopsis

767 Captain reported a flight control problem while on approach that required calculating a crosswind component for landing. The flight deck crew was unable to find the crosswind chart and suggested one be readily available.

ACN: 1586018 *(25 of 50)*

Synopsis

A320 flight crew reported unexpected severe turbulence, resulting in passenger injuries.

ACN: 1585899 *(26 of 50)*

Synopsis

Piper Arrow pilot reported a low altitude alert after losing VNAV on approach and descending below the Minimum Descent Altitude.

ACN: 1585805 *(27 of 50)*

Synopsis

PA-28 pilot reported loss of inflight control due to entering IMC, turbulence and a heading indicator malfunction.

ACN: 1585634 *(28 of 50)*

Synopsis

737 Captain reported the flight crew was encountering multiple navigation equipment failures at the same time ATC directed a late runway change.

ACN: 1585612 *(29 of 50)*

Synopsis

B737 flight crew reported overshooting the cleared altitude during descent due to a failure to recognize a change in automation.

ACN: 1585593 *(30 of 50)*

Synopsis

B737 NG Captain reported a Flight Attendant was injured during an encounter with turbulence, possibly wake-related, on descent into LAS.

ACN: 1585567 *(31 of 50)*

Synopsis

Small aircraft pilot reported a low fuel condition, higher forecast crosswinds and the intentional landing in-between the taxiway and runway.

ACN: 1585470 *(32 of 50)*

Synopsis

737 flight crew reported entering restricted airspace due to severe weather deviation.

ACN: 1585342 *(33 of 50)*

Synopsis

A319 Captain reported learning the next day that Flight Attendants had been injured during an inbound turbulence encounter.

ACN: 1585332 *(34 of 50)*

Synopsis

737-800 Captain reported a Terrain Warning and executing the Escape Maneuver after maneuvering for weather without assistance from ATC.

ACN: 1585077 *(35 of 50)*

Synopsis

B737 Captain reported severe turbulence as well as issues with the medical kit used to administer first aid to passengers injuries.

ACN: 1585049 *(36 of 50)*

Synopsis

CRJ-900 flight crew reported a windshear event on final approach required an escape maneuver, followed by a diversion.

ACN: 1584967 *(37 of 50)*

Synopsis

CRJ-900 Captain reported receiving a Wing Anti-Ice Duct warning before descending out of icing conditions.

ACN: 1584788 *(38 of 50)*

Synopsis

Hot air balloon pilot reported exceeding altitude specified in LOA with ARTCC.

ACN: 1584751 *(39 of 50)*

Synopsis

C206 pilot reported a NMAC while receiving radar services.

ACN: 1584703 *(40 of 50)*

Synopsis

CRJ-200 First Officer reported multiple go-arounds due to unstable approaches.

ACN: 1584569 *(41 of 50)*

Synopsis

B737 Captain reported encountering severe turbulence and hail during arrival into IAD.

ACN: 1584543 *(42 of 50)*

Synopsis

PCT TRACON Controller reported combined sectors and lack of Traffic Management initiatives during a busy period with weather deviations created an unsafe operation.

ACN: 1584500 *(43 of 50)*

Synopsis

Mooney pilot reported becoming disoriented and entering IMC conditions while trying to get IFR clearance.

ACN: 1584499 *(44 of 50)*

Synopsis

Rockwell Commander pilot reported a loss of control after takeoff due to severe turbulence.

ACN: 1584215 *(45 of 50)*

Synopsis

Cessna 177 pilot reported that the battery came loose and burned through the elevator cable.

ACN: 1584211 *(46 of 50)*

Synopsis

M20R pilot reported entering icing conditions without anti-deicing equipment.

ACN: 1584191 *(47 of 50)*

Synopsis

B767 Flight Attendant reported both being unable to hear announcements and the new seating configurations make evacuation difficult.

ACN: 1584038 *(48 of 50)*

Synopsis

B737 Captain reported losing sight of the airport on a Visual Approach and continued on the ILS Approach without clearance.

ACN: 1583958 *(49 of 50)*

Synopsis

Center Controller reported Traffic Management Unit did not take appropriate measures to help during weather deviations and Supervisors did not have the Sectors staffed accordingly.

ACN: 1583875 *(50 of 50)*

Synopsis

A Commander 112 pilot reported a runway excursion while landing in a crosswind.

Report Narratives

Time / Day

Date : 201810
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZNY.ARTCC
State Reference : NY
Altitude.MSL.Single Value : 25500

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZNY
Aircraft Operator : Air Carrier
Make Model Name : B767 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZNY
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Type : 497
ASRS Report Number.Accession Number : 1590094

Person : 2

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

Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 11892
ASRS Report Number.Accession Number : 1590323

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Anomaly.Inflight Event / Encounter : Bird / Animal
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Physical Injury / Incapacitation
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport

Assessments

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

Narrative: 1

During climb out passing approximately 25,000 feet we encountered a brief moment of severe turbulence somewhere between 25,000-26,000 feet. Possibly wake turbulence from another aircraft. The turbulence started and ended after 2-3 seconds. There was no time to command "flight attendants be seated immediately" as the event was over before I could even pick up the cabin interphone. We checked in with the cabin and initially were told one of the flight attendants in the aft galley had sustained a wrist injury. The flight attendants in the mid and aft galleys also indicated a loud bang was heard and that the tail shook violently with the turbulence encounter. We continued the climb to 31,000 feet. At level off we evaluated the EICAS, STAT, F/CTRL and GEAR pages on the MFDs. Nothing abnormal was noted. Additionally, we could not make contact with New York Oceanic on the L HF radio. Upon successful contact with New York Oceanic on the R HF radio we could not receive a successful SELCAL check on either radio. We contacted dispatch via SATCOM and conducted a conference call with [Maintenance] and the [Chief Pilot]. We came to a collaborative decision after describing the incident that in the interest of safety we should air return to [departure airport] to have the aircraft inspected. I called back to have the relief pilot woken up. He returned to the cockpit and before making the final call to turn around we consulted one last time with all three of us on the flight deck. He agreed with all of the above. We received a clearance from New York Oceanic and initiated the return to [departure airport]. We coordinated with Dispatch and New York Oceanic to dump the remaining fuel in our center tank to be under max landing weight. During the descent we experience a partial failure of the L autopilot. We lost pitch mode of the L autopilot and switched to the R autopilot without further issue. On downwind approach at 4000 feet we struck a bird with the radome. Configuration and approach was normal. Touchdown was normal. No other anomalies were felt during the approach and landing.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

B767 flight crew reported returning to departure airport after experiencing multiple system anomalies following a severe wake turbulence encounter climbing through FL250.

Time / Day

Date : 201810

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Mixed

Weather Elements / Visibility : Rain

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Icing

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Climb

Flight Phase : Takeoff

Airspace.Class B : ZZZ

Component

Aircraft Component : Compressor Bleed Valve

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 : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1589549

Human Factors : Workload

Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition

Assessments

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

Narrative: 1

During takeoff detected odor during climbout. It didn't last long in the climb and was not noticeable during cruise flight, during descent into ZZZ passing 26,000 or so we started smelling this odor again, while descending further the smell became stronger. The flight attendants in the forward cabin called to say they were smelling a strong odor / fume up in the forward galley area by the cockpit door. Stated it did not extend into the passenger cabin area. As the odor / fume became stronger in the cockpit. I [notified ATC] and we donned our oxygen masks and ran the QRH.

We were in significant weather deviating around thunderstorms moderate turbulence, and moderate rain with icing.

Note: engine anti-ice was on throughout our descent. Wing anti-ice was on for approx. 5-10 minutes during descent. Odor and fumes seemed confined to the cockpit and forward galley only. Once down around 3-4,000 most of the fume/odor was gone. Successful landing on Runway 4R with winds 080 feet at 26 gusts 34 knots.

Aircraft just came from ZZZ1 after a heavy check. It was ferried before this flight. I suspected a left engine bleed issue or fume due to its presence primarily in the cockpit and its recent heavy check. Smell was similar to paint on an exhaust pipe or a BBQ that gets very hot for the first time. No visible haze or smoke was present but the fume was definitely strong enough to require use of the quick don masks for safety. Some mild eye irritation was noted in the last 30 minutes of flight. The cabin crew reported that the fumes were not affecting them or present in the main cabin.

Would like to extend our sincere thanks to Center, Approach control and tower/ground controllers for their outstanding support during this event. Also the ready support by ZZZ's crash fire rescue team that responded to our [situation]. They were with us until all the passengers were off the aircraft.

I also would like to commend my crew, starting with my First Officer, for his professional performance during this inflight event that was as complicated as it gets, trying to evaluate the source, coordinate with ATC when needed, working with flight attendants and assistance with avoiding severe weather. He was the most important player in this event and his skillset and training was evident all along the way. Kudos for a job well done. Secondly, appreciation for an outstanding job by our flight attendant crew for their exceptional job of preparing our passengers and the cabin for our arrival in this situation. It was a total team effort to get us all to the gate safely.

Synopsis

B737-800 Captain reported fumes in the cockpit and forward during climb, clearing in cruise, and returning on descent.

Time / Day

Date : 201810
Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 9000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Icing
Weather Elements / Visibility : Rain
Weather Elements / Visibility : Cloudy

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Cessna 402/402C/B379 Businessliner/Utiliner
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class E : ZZZ

Component

Aircraft Component : Propeller Ice System
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
ASRS Report Number.Accession Number : 1589528
Human Factors : Troubleshooting
Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew

When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Completed pre-flight and morning run-up all de-ice and anti-ice protection was functioning normally. Prior to departure I turned on prop anti-ice, stall heat, and pitot heat due to icing conditions aloft. On departure encountered heavy to moderate precipitation on departure, and continuous light chop with occasional moderate turbulence reported by [another aircraft] and myself. Upon climbing through 5,500 encountered trace icing. The icing grew in intensity through the climb through to 9,000 MSL, at which I requested a climb to 11,000 MSL. Center said they had the request and to wait for amplitude. During the cruise checklist I discovered the prop anti-ice switch breaker had tripped to the off position then reset it. After the completion of the checklist the switch breaker had deactivated the switch a second time. At this point in continuous light icing with moderate precipitation I [notified] ATC, advising them that I had a prop anti-ice protection failure and then reaffirmed that I was in icing conditions without anti-ice protection. I then requested a descent while activating the boots several times and increasing my available power in the descent [to] account for the degraded performance on the props. I descended to lower altitudes as advised by ATC and requested lowest available altitude do get out of the icing. When ATC assigned 5,300 MSL I left icing conditions into moderate precipitation, at about 5,400 icing stopped. Emergency vehicles were dispatched and standing by as well as followed us in to the gate. I advised all ATC, [Maintenance and Operations Control] about the situation. Post flight all passengers at gate were queried if they were ok and talked with ARFF (Airport Rescue and Fire Fighting) personnel, as well as discuss with [Operations Control and the Chief Pilot] and elected to end duty day due to IMSAFE checklist.

Successful "trip" of the PROP ANTI-ICE switch breaker to protect the electrical system from prop anti-ice failure.

Synopsis

C402 pilot reported propeller anti-ice system failed after entering icing conditions.

Time / Day

Date : 201810
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : EWR.Airport
State Reference : NJ
Altitude.AGL.Single Value : 1700

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Rain

Aircraft

Reference : X
ATC / Advisory.Tower : EWR
Aircraft Operator : Air Carrier
Make Model Name : B767 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 04R
Flight Phase : Final Approach
Airspace.Class B : EWR

Component

Aircraft Component : Autoflight System
Aircraft Reference : X
Problem : Malfunctioning

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 1470
ASRS Report Number.Accession Number : 1589122

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Relief Pilot
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 199
Experience.Flight Crew.Type : 3272
ASRS Report Number.Accession Number : 1589135

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

EWR had low ceilings and shifting winds. The 4R was out of service, and RNAV approaches were advertised on the ATIS. We prepared and briefed the RNAV (RNP) Z 4R, as the minima were lowest, to better ensure seeing the runway at or before minimums. The autoflight and VNAV functions worked normally until passing the FAF. Upon passing the FAF, and as the winds aloft were shifting towards a headwind, VNAV PTH remained displayed, however the aircraft did not descend, despite touchdown zone altitude being set in the altitude window, per procedure. Indeed, all 3 of us noted that the Captain PFD showed us as being below the vertical path, whereas mine showed being above. The vertical path deviation indicators rapidly diverged and the aircraft remained at 1700 FT as we progressed toward the runway. This was obviously unacceptable, exceeding tolerances, and as such we elected to conduct a missed approach and informed ATC. We subsequently briefed and flew the ILS 4R GS out of service, using LOC and VNAV. This approach was uneventful.

Narrative: 2

I was in the jumpseat for the RNAV RNP Z 4R. Per the QRH briefing, we briefed if aircraft deviates outside of limits on the vertical path of +75 FT on prog page 2, it is an automatic disqualification for the approach criteria and necessitates a go-around. On the approach, the autopilot deviated from the vertical path by +75 FT and caused us to go-around per the briefing in the QRH.

Synopsis

B767 First Officer and Relief Pilot reported executing a go-around at EWR when the autopilot failed to track the vertical path accurately.

Time / Day

Date : 201810
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : IMC
Weather Elements / Visibility.Visibility : 4
Light : Daylight
Ceiling.Single Value : 1500

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B737-700
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class E : ZZZ

Component

Aircraft Reference : X

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1588755
Human Factors : Confusion
Human Factors : Distraction
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Procedural : Weight And Balance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew

When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Diverted
Result.Flight Crew : Landed As Precaution

Assessments

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

Narrative: 1

This report is submitted for your information, NOT due to any Safety errors or omissions. Lightning strike occurred on climb departing ZZZ. Took off from [the] Runway after a brief delay on runway to evaluate weather radar returns north of the field. 40 NM display indicated no convective weather; solid green with 50% coverage of small yellow patches. Shortly after flaps were retracted and landing gear handle was moved to OFF, lightning struck the nose of the aircraft. There was a very loud and sharp bang. Both Pilots were flash blinded for about ten seconds. There was significant noise, vibration in the floor of the cockpit, and the landing gear appeared to be extended. We had three green and three red landing gear lights on forward instrument panel, and three green landing gear lights on the overhead panel. I pushed the Master Caution Recall; all clear. We did not see any circuit breakers tripped.

There were no other abnormalities; all avionics and navigation appeared normal. The aircraft was pressurizing normally. We continued climb. When the landing gear handle was moved to DOWN the three red lights extinguished and there was no sound nor feeling of landing gear motion. We concluded the landing gear was down safely. We both believed we had structural damage to the aircraft to cause such vibration, although the radome looked normal from the cockpit. Both Flight Attendants in the forward jump seats felt the noise and vibration levels were not normal. Coordinated with Dispatch to divert out of an abundance of caution. ZZZ1 was the nearest suitable airport because of current weather over ZZZ and ZZZ2.

We flew a low approach from the ILS and ZZZ1 Tower stated everything appeared normal on the aircraft. Elected to hold to reduce landing weight, but still landed slightly overweight because of weather approaching ZZZ1. ZZZ1 Fire Department checked the aircraft after landing. Uneventful taxi to the gate. cursory post flight inspection showed burn marks on nose and forward fuselage but no structural damage. Frequent PAs kept all Passengers at ease. Of 136 customers only two chose not to fly to ZZZ3 (an elderly couple, wife in a wheelchair); I talked with them and they assured me it was not due to stress but it had been a long day for them already and they "just preferred" to go to a hotel and travel to ZZZ3 the next day.

Synopsis

B737 Captain reported experiencing a lightning strike after which there was an aircraft vibration of an unknown source.

Time / Day

Date : 201810

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 1200

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Windshear

Weather Elements / Visibility : Rain

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility.Visibility : 4

Ceiling.Single Value : 600

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Make Model Name : King Air C90 E90

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Ferry

Flight Phase : Final Approach

Route In Use : Vectors

Airspace.Class B : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1200

Experience.Flight Crew.Last 90 Days : 75

Experience.Flight Crew.Type : 200

ASRS Report Number.Accession Number : 1588704

Human Factors : Workload

Human Factors : Situational Awareness

Human Factors : Distraction

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Air Traffic Control
Miss Distance.Vertical : 800
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

We took off in low IFR with the intent to reposition the aircraft to ZZZ. Enroute we were informed by ATC that the best course around a thunderstorm would be 200 miles north of our course. As we did not have enough fuel for that option the PIC decided to deviate and shoot an approach at ZZZ1. We were at 14,000 feet and only about 18 miles from the airport, in a rush to get set for the approach we descended through the altitude assigned by ATC to intercept the localizer. After 2 advisories of a low altitude alert by the controller we proceeded to go missed. Our climbout instructions were to maintain runway heading and climb to 3,000 feet. After the autopilot was kicked off the PIC became disoriented and we began a turn that developed into a 45 degree bank before it was corrected by the SIC. We then received vectors back to [departure airport] and successfully shot the ILS approach.

Synopsis

King Air flight crew received two low altitude alerts from ATC resulting in a missed approach.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : MSP.Airport
State Reference : MN

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : M98
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 900 (CRJ900)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 12R
Flight Phase : Initial Approach
Route In Use : Vectors
Airspace.Class B : MSP

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 : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1588622
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew

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

Assessments

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

Narrative: 1

I was the pilot flying this morning. We were flying the RNAV arrival on Autopilot engaged for Runway 12R. The winds were significantly strong (approximately 30-40 knots) from the east. ATC instructed us to turn to a northerly heading at which I did (base). I was flying approximately 180-190 knots as I was trying to slow down. At this time I asked the Captain to sync my approach. After he did we transitioned FMS CDI to ILS. After we did so, ATC instructed us to turn to a northeasterly heading and intercept the localizer. I turned the airplane on the assigned heading and pressed the NAV button on the Autopilot Panel to arm the LOC course. Due to the fast ground speed the aircraft it did not capture the LOC needle in time and it overshot the LOC course. At this point I turned the heading bug back to the south in order to re-intercept the Localizer Course for Runway 12R. At the same time this was happening we got a Traffic TA from TCAS of an aircraft to our left flying in for the ILS12L. I immediately dis-engaged the autopilot and added power and bank to get back away and towards the ILS 12R Localizer and away from the traffic to our left. I instructed the Captain to give me the remaining flaps and gear as required prior to the Final Approach Fix. I hand flew the rest of the approach to a safe landing on runway 12R.

Air Traffic Control failed to slow us down in time for proper spacing to intercept the Final Approach Course and LOC Course. I should have properly briefed a possible Automation inability to intercept the FAF with such strong crosswind on a base turn of an approach vector. The Autopilot was not able to make enough of a turn to intercept the LOC course due to the aircraft speed. I should slow down and use good judgment to properly prepare for a windy day and using automation. I should conduct a better brief of the winds on the approach segment of the flight. Once I heard the traffic being called I should have considered a go-around but I was mostly fixated on correcting course instead. In the future a go-around should have been called by me or the Captain.

Synopsis

CRJ-900 First Officer reported their aircraft did not capture the localizer course and conflicted with traffic on the parallel runway.

Time / Day

Date : 201810

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : RJJJ.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 31000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Aircraft

Reference : X

ATC / Advisory.Center : RJJJ

Aircraft Operator : Air Carrier

Make Model Name : B777-200

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Cruise

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Crew Rest Area

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 : 1588336

Human Factors : Other / Unknown

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1588596

Human Factors : Troubleshooting

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Crew Rest Area
Reporter Organization : Air Carrier
Function.Flight Crew : Check Pilot
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1588343
Human Factors : Other / Unknown

Person : 4

Reference : 4
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1588342
Human Factors : Troubleshooting

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

Crew flying at the time encountered severe turbulence at FL310. Aircraft gained 340 feet and had a speed reduction of around 20 knots. I was in the supernumerary compartment at the time. This was all info give to me by the crew who were flying at the time.

Narrative: 2

Two back to back severe turbulence encounters at FL310. While at cruise just on top of a high cloud layer, we experienced severe turbulence in two back to back encounters. Aircraft felt like it hit a wall of wind shear and was thrown up 340 feet. Very violent. Somehow, autopilot stayed engaged. Airspeed went down just to the foot. Aircraft immediately started to correct back down to altitude regaining airspeed. Shortly thereafter

a second encounter almost as severe as the first occurred. Aircraft handled it in the same way. Mach .82 at 685,000 pounds gross weight. Never have I felt anything quite like this. As Pilot Monitoring, I immediately reported this to Tokyo Control knowing [company aircraft] was right behind us. They offset, but unfortunately still encountered the same severe turbulence. Many aircraft on the frequency were concerned about their flight path and Tokyo Control somehow was confused so I began to repeatedly report the LAT/LONG position of outrage encounter so they could avoid. Not impressed with Tokyo Control. Reported GOC [to Dispatch] also. Both encounters caused a very brief instant stick shaker of only momentary activation. We were ready to take action but aircraft recovered very nicely with autopilot remaining on.

There were no warnings. We were clear of any convective activity, well above returns below. I also had the EFVS on in cruise, something I learned going to South America at night over the Amazon during a moonless night as being useful. Severe Turb warnings GOC [Dispatch] had dutifully provided were no where near this location. We could not avoid this.

Narrative: 3

[Report narrative contained no additional information.]

Narrative: 4

Cruise flight at FL310, we encountered severe turbulence on two occasions just east of the coast of Japan. The first encounter last for approximately 5-10 seconds with an airspeed loss in excess of 20 knots with an updraft causing an increase in altitude of approximately 350 feet. The second severe turbulence encounter occurred approximately 20 miles later with similar results. No airspeed limits were exceeded. However; at the onset of each severe turbulence encounter we experienced a momentary stick shaker which lasted for approximately one second. Each stick shaker action occurred during the initial onset of the severe turbulence. The approximate weight of the aircraft at the time of the encounter was 685,000 pounds.

This event was caused by the aircraft entering an area of un-forecasted and unknown turbulence. Not sure of a solution based on the lack of advance knowledge of the area of severe turbulence.

Synopsis

B777-200 flight crew reported encountering several and un-forecasted clear air turbulence incidents during cruise.

Time / Day

Date : 201810

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : RJJJ.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 31000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Aircraft

Reference : X

ATC / Advisory.Center : RJJJ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Cruise

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1588329

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Crew Rest Area

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1588330

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1588341
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

At approx XX:16Z company sent us a SIGMET message outlining an area of forecast severe turbulence. Area was plotted and lay north and west of our route of flight, moving northeast, which would parallel initially, then diverge from our intended route. At approx XX:43Z, while on course between SYOYU and KAGIS we were cleared DCT AVBET. We were in stabilized cruise at FL310 and approx .82Mach. At approx XY:25Z another company aircraft (Aircraft Y) tried to warn RJJJ control of an encounter with severe turbulence, and to not allow following aircraft to enter that area. Due to severely limited English capability, the controller could not understand the company aircraft's request. We also tried to ascertain the location of the severe turbulence encounter but RJJJ control was unable to understand our request for the same severe language barrier issues. Finally, after 2 to 3 minutes trying, we elected to turn right, away from the area of forecast severe turbulence and away from an aircraft we assumed to be [Aircraft Y] depicted on TCAS. We requested 20 NM right of track then turned about 30 degrees right. We then asked for 30 NM right deviation. At approx XY28Z we encountered severe turbulence which caused us to climb 550 feet in about 2 seconds, and experience both stick shaker and airframe buffet. We immediately notified RJJJ control of the encounter and altitude deviation. At the time, we were in what appeared to be clear air with no radar returns at our altitude. [Aircraft Y] confirmed their encounter also showed nothing at flight level using EFVS and no radar returns at their flight level. Autopilot and auto throttles remained engaged throughout the encounter. PF (Pilot Flying) used vertical speed to return the aircraft to FL310. Nothing beyond moderate turbulence was encountered for the remainder of the flight. Remainder of the flight, descent, approach and landing were uneventful.

Inadvertent encounter with one area of severe turbulence. The inability of RJJJ control to understand the problem and suggest alternate routing contributed to the encounter.

Turbulence, often moderate, is routinely encountered along this route of flight. Perhaps reviewing routing options and choosing one that avoids this area would be beneficial.

Narrative: 2

[Report narrative contained no additional information.]

Narrative: 3

At XX:11Z we received from [Operations Control] two sigmets indicating forecast areas of severe turbulence and stated that they shouldn't affect us. I plotted the latitude and longitude of the specified points that defined the forecast area of severe turbulence for the applicable listed Sigmet time and confirmed that the area was north of our route of flight.

At about XX:43Z we were between points SAWAT and SDATI when we were given direct AVBET. This put us slightly north of our flight planned route, but still not near the forecast severe turbulence. We informed [Operations Control] that we were given direct to AVBET as they had requested of us. We were in light to occasional moderate turbulence for much of the flight up to this point.

Approximately 4-5 minutes prior to the severe turbulence encounter we had at approximately XY:28Z, [Aircraft Y, a company aircraft], relayed to Tokyo center that they had a severe turbulence event and they asked Tokyo to pass along the information to us. There was obviously a language barrier, as the Japanese controller asked [Aircraft Y] to say again. The pilot then very clearly and slowly told the Japanese controller not to let any aircraft fly over the location where they just encountered severe turbulence, however the controller did not understand that the pilot was trying to get him to relay his position to us so we could avoid the same turbulence. During this time, we took it upon ourselves to request 20 miles right of course (opposite direction of the plotted forecast turbulence) and away from another aircraft in front of us at about the 11 o'clock position and approximately 40 miles that we suspected was [Aircraft Y]. We attempted to ask Tokyo where the severe turbulence was, but again due to a language barrier, the controller asked us how far right of course we wanted. We asked him where the severe turbulence was to which he responded by asking us if we had severe turbulence. We said no, and just asked to extend our deviation to 30 miles right of course.

Shortly after this, our aircraft entered severe turbulence and got stick shaker and stall buffet as the aircraft climbed by approximately 550 feet and slowed to about 293 knots as the foot increased due the accelerated stall. We were flying Mach .82 (~304 knots) for the moderate turbulence we were getting intermittently, it was night time and there were no radar returns at our altitude and only a few green and yellow hashed returns showing. I added power and the autopilot stayed connected and leveled off at about 31,550. I then selected Vertical Speed and started a descent back to 31,000 where I selected VNAV. The other pilot notified Tokyo center of the severe turbulence and that we had climbed to 31,500 feet and had a loss of 10-15 knots in airspeed. We notified [Operations Control] and wrote in up in the [Maintenance Logs].

Weather and lack of communication skills from Tokyo air traffic controller to understand the piper from the other aircraft ahead of us and a failure to notify us of his position and how we can avoid his flight path.

The only way that I know that this could have been prevented would be with more accurate weather forecasts or better English speaking skills from the Tokyo air traffic controller and training about the importance of quickly providing details/location of an important pIREP and provide radar vectors when time is of the essence.

Synopsis

Air Carrier flight crew reported communications difficulty with foreign ATC due to language barrier.

Time / Day

Date : 201810

Environment

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Turbulence

Light : Night

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B767-300 and 300 ER

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Cruise

Component

Aircraft Component : ACARS

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

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1588327

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Dispatch

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Weather

Primary Problem : Ambiguous

Narrative: 1

Was unable to communicate with Company/Dispatch to receive ETOPS weather update, tried all HF frequencies for ZZZ Radio. Unable to make contact. ACARS doesn't work internationally and aircraft did not have a SATCOM installed. We considered an air turn back to [departure airport], but due to the thunderstorms on the return route, we decided continuing the most prudent action as we knew [alternate airport] was VFR. At no point was safety compromised.

ACARS needs to be worldwide operable, [and also] add a SATCOM to the aircraft.

Synopsis

Aircraft are not equipped with worldwide ACARS nor SAT Phones and were unable to reach company/dispatch.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LGA.Airport
State Reference : NY
Altitude.AGL.Single Value : 300

Aircraft

Reference : X
ATC / Advisory.Tower : LGA
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 190/195 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Initial Approach
Airspace.Class B : NYC

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1588323
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Workload
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

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

Assessments

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

Narrative: 1

I was the pilot flying to LGA. We [were] expecting the Expressway Visual to Runway 31. It would be my first time doing this approach to this runway. Due to the winds of 02017G25 and the limited runway length, I briefed to land with flaps full. I highlighted in the brief this would be my first visual approach without glideslope guidance and second time landing flaps full as I've only been with the airline for seven months.

Approximately 150 miles out we received word that LGA was now landing via the ILS to runway 4. Then approximately 50 miles out we were told that following the ILS to 04 we would be circling to 31. I briefed this approach and stated it was my first time circling to land in a large aircraft.

I circled near minimums and made my final turn to 31. The Pilot Monitoring (PM) was backing me up on my glideslope but we had nothing but visual estimations to base that on. We realized the PAPI lights were not on and the PM had to make 2 calls to get Tower to turn them on as the Tower thought the PAPIs were already on. By this time we both realized the aircraft was above a normal glideslope. I began descending as fast as possible while still staying stable.

At approximately 300 feet I made the decision to go around based on my perception that we would not be able to remain stable and make a safe landing. I called for the go around and waited for the PM to call "Nav" per our company Standard Operating Procedure (SOP). The PM was not sure he called it and I never heard "Nav", but I was task saturated as it was my first go around at the airline. After 2 to 3 seconds I called for flaps 4 and looked to see if "Nav" was engaged. As I did so, I allowed the flaps to over speed by approximately 3 kts. The PM attempted to warn me of the over speed just as it happened.

The rest of the go around and subsequent approach and landing went per SOPs. After landing, we informed Maintenance and they performed an inspection with no damage noted.

This event occurred primarily due to my inexperience with a challenging arrival. Compounding factors included rapidly changing, challenging conditions at the landing airport, the Tower not having the PAPI lights on, task saturation, and a possible momentary breakdown of SOPs/crew communication.

I am not sure why LGA tower was executing an approach to a runway and then circle to land placing the aircraft from a nice headwind condition to near maximum crosswinds and did not have the PAPIs on. Our company should continue to train on go around procedures in the simulator.

Synopsis

EMB-190 First Officer reported a flap overspeed during a go-around at LGA following a circling approach at night.

Time / Day

Date : 201810

Place

Altitude.MSL.Single Value : 33000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Turbulence

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B747-400

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Cruise

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

ASRS Report Number.Accession Number : 1588304

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Maintenance Action

Result.Flight Crew : Returned To Clearance

Assessments

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

At FL330 we encountered heavy moderate to severe turbulence with strong up drafts and down drafts for about two to three minutes. This caused the autothrottles to disconnect, as well as the pitch and lateral modes [of the autopilot].

The aircraft pitched up and before it went into the amber region the shaker activated for a

split second. I disconnected the autopilot to bring the aircraft slowly to wings level, lowered the deck angle, and got it out of the amber band.

During this time I reached for the CON Ignition to avoid a high altitude flame out.

After lowering the nose and wings level I asked the other FO (First Officer) (who had just got on the left seat from giving the CA (Captain) a break) to recycle the FD's and A/T. After this, I re-engaged LNAV, VNAV and autopilot.

After dealing with all of this we talked to ATC to advise of the altitude and lateral deviations due to the turbulence. We were in IMC conditions but our radar was not showing any sign of buildups, storms, or weather in front of us. I recovered the aircraft to the best of my abilities along with the other FO and informed the CA of what had happened. Upon landing a logbook entry was made and Maintenance was made aware of the event.

Synopsis

B747-400 First Officer reported lateral and altitude deviations due to moderate to severe turbulence.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZAB.ARTCC

State Reference : NM

Altitude.MSL.Single Value : 34000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZAB

Aircraft Operator : Air Taxi

Make Model Name : Learjet 60

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ferry

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class A : ZAB

Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZAB

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Cruise

Airspace.Class A : ZAB

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Check Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 10100

Experience.Flight Crew.Last 90 Days : 80

Experience.Flight Crew.Type : 250
ASRS Report Number.Accession Number : 1588144
Analyst Callback : Attempted

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were cleared to FL340 and my copilot was Pilot Flying (PF). We started encountering turbulence and my copilot disconnected the autopilot for a smoother ride (A/P very sensitive to turbulence). Turbulence was occasional moderate. 1000 ft call was made and acknowledged by both crew at FL330. We received from ATC traffic advisory at FL350. We had the traffic on our TCAS (TCAS II). We saw the traffic at 2-3 o'clock and passing behind us on our right wing. The traffic was not a factor. No TA or RA on TCAS. My First Officer (F/O) started reducing pitch and pulling the throttle back to [Max Cruise Thrust] MCR to level off at 340 and I saw a large ascent (updraft). My F/O corrected by pitching down using the electric elevator trim (low speed mode when pitching down), avoiding pulling negatives Gs on the airframe. Using the electric trim was not quick enough and the aircraft kept climbing to 300 to 500 ft above FL340 to the point forward pressure input directly on the yoke and the aircraft finally settled down to FL340. The recovery from the event was smooth with no impact (Gs) on anyone on board. In the meantime ATC called to tell us that we were deviating from assigned altitude. Shortly after, ATC cleared us to FL400 where the ride was much smoother. Updraft or wake turbulence from the crossing traffic at FL350. The encounter happened when the traffic was behind us.

Synopsis

LR60 Captain reported overshooting cleared altitude in climb to FL340 after encountering wake turbulence from a wide body transport aircraft.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 1600

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Dawn
Ceiling.Single Value : 12000

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : FBO
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase.Other
Route In Use : None
Airspace.Class D : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 300
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 100
ASRS Report Number.Accession Number : 1588096
Human Factors : Situational Awareness

Events

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

On downwind abeam the PAPI the aircraft began banking to the right. My student was at the controls, and I asked why she was banking. She said it wasn't her. I immediately took controls and began to try to bank the aircraft to the left. The controls were unresponsive. I increased left aileron and the plane banked to the left about 5-10 degrees. I tried to correct back right and the aircraft began banking left and right about 4-5 times. On base and final the aircraft responded normally. This event occurred on the second lap in the pattern. The previous lap was normal. There was no visible frost on the wings in flight. Originally, I did not think frost was the problem, but upon further reflection I believe that was the issue. I believe that frost built up on taxi and on the first lap in the pattern that was not visible from the cockpit due to the sun's glare on the wings. When we shut down I noticed a decent amount of frost that had built up on the wing on our taxi back.

Synopsis

PA28 instructor on a training flight with student reported having control difficulties possibly related to frost build-up on the wings.

Time / Day

Date : 201810
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : PHX.Airport
State Reference : AZ
Altitude.MSL.Single Value : 10000

Environment

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

Aircraft

Reference : X
ATC / Advisory.TRACON : P50
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 : Descent
Route In Use.STAR : EAGUL6
Airspace.Class B : PHX

Component

Aircraft Component : Normal Brake 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 : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 9000
ASRS Report Number.Accession Number : 1588003
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Staffing
Contributing Factors / Situations : Weather
Primary Problem : Ambiguous

Narrative: 1

[Aircraft X] - ZZZ to PHX. Flight delayed 2 hours due to A/C being parked at maintenance. The Maintenance person who brought the A/C to the gate said they were short staffed and didn't have any qualified brake riders to bring the plane to the gate. Once the A/C arrived at the gate we updated the weather enroute to PHX. I contacted dispatch to request a re-route to approach PHX from the Northeast vice from the Southeast due to a line of weather building from the south and southeast of PHX. For the flight: Captain/ PF (Pilot Flying) and FO/PM (First Officer / Pilot Monitoring). Departure was uneventful. Enroute the ride quality deteriorated during the last half of the flight. We were assigned EAGUL 6 arrival with RWY 8 transition. As we were descending via the STAR to OBASE 210 at 7,000 feet (7,000 feet set in the FCU) and ATC requested we delete the speed assignments until QUENY (210 at 10,000 feet). Just after passing GEENO there was a line of weather quickly building directly crossing the arrival corridor. I told the FO, I'm using heading select to deviate slightly right to avoid a cell. ATC asked us if we were slight right on the arrival, the FO quickly responded to ATC that we took a slight deviation right for WX and we were returning to centerline. I steered back on course and set the FMS to managed heading. It was then I noted we had descended below the altitude restriction at QUENY because the aircraft dropped out of managed descent. I reset 10,000 in the FCU and climbed back to 10,000. Simultaneously, the FO immediately told ATC of the altitude deviation and of our prompt corrective action. ATC advised us of traffic approaching from the south, to keep visual separation, switch to final approach and have a good evening. The FO talked me back into the green and the rest of the arrival and arrival was safely completed.

On final approach, when we put the gear down, the Normal brake system failed and the Auto brakes kicked off. The FO stated it wasn't an immediate action item and quickly accomplished the ECAM items. Because we were in an A321 we still had alternate brakes and NWS. I thought the safest course of action and I made the decision to continue and land on RWY 8. We had 11,489 feet on a dry runway with alternate brakes and normal NWS.

1. I am a brand new Captain on the A321 with about 50 hours in the airplane. I am still adjusting to the aircraft. I've only flown into PHX maybe twice (ever). With the delay, it would have been nice if Dispatch would have been more engaged in helping get the flight out and help us keep an eye on the weather.

2. The Maintenance 2 hour delay for not having anyone to bring the aircraft over from the

[parking area] was a contributing factor for entire crew. We all wanted to get the flight out on time and we felt the effects of that pressure to get things underway despite the delay.

3. In retrospect, I should have been more directive about our weather deviation. Tell the FO to ask ATC for a right of course deviation or make an ATC request/inquiry earlier about the arrival weather & possible deviations. At night and into an unfamiliar airport, asking for ATC help would have made the deviation decision easier.

4. Once I made the decision to deviate, we should have requested or told ATC that we were making the turn to north and how far off track we needed.

5. I realize that when selecting "heading select" that the aircraft is longer in managed descent but vertical speed. The responsibility for meeting altitude restrictions then falls on the PF to "manually" meet those altitude restraints on the arrival. Being new on the aircraft I am still building my situational awareness and in that moment my scan broke down. Once realizing my error, fessing up and making timely corrections was a good response and the FO did an outstanding job in talking me back into the green.

Couple of things:

Having the undo maintenance delay contributed to setting the tone for the flight. Waiting around unnecessarily for Maintenance to deliver the aircraft was just an unwanted perturbation. It would have been nice to have Dispatch more involved in helping us with the weather planning. Having the iPad tools to access the weather radar helped tremendously for keeping the SA (Situational Awareness) on the building weather from the south.

Plan ahead as much as practical and use all the tools available to assess the weather situation. Request deviation early for ATC if able. If as in our case, we tried to avoid at the last minute what we perceived rapidly building cells. Be direct with the PM and ATC about what we are doing to avoid the weather once the decision is made.

I've reviewed and discussed with my FO and other pilots with extensive AIRBUS experience on how to improve my scan and what to expect when using selected heading on an arrival. Close altitude monitoring and properly using the FMC altitude window to protect from descending below arrival (or other) constraints.

Synopsis

A321 Captain reported heading and altitude deviations while hand flying an approach, and an ANTI SKID/Brake issue after lowering landing gear.

Time / Day

Date : 201810
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : S56.TRACON
State Reference : UT

Environment

Weather Elements / Visibility : Thunderstorm
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : S56
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 170/175 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use.Localizer/Glideslope/ILS : Runway 35
Flight Phase : Initial Approach
Airspace.Class E : S56

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1587674

Events

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

While on approach into SLC we asked for deviations left to avoid a buildup that looked to top 16,000 feet. After we were clear of that buildup we were IMC and ATC gave us a vector for LDA 35 approach. While ATC was communicating to us, Com 1 had a little static so we switched to Com 2 which had the same amount of static so we switched back to Com 1. A few seconds later we heard a loud bang and the First Officer (FO) saw a flash. The aircraft handled good and there was nothing indicating a malfunction so we determined it must be a lightning strike. We continued for a final vector for the LDA 35. The FO as pilot monitoring advised ATC, sent Dispatch a free text, made a passenger announcement and notified the Flight Attendants. We continued to land and taxi to the gate with no further incident. I entered two discrepancies in the maintenance logbook, one for the lightning strike and one for the missing static wick on the left elevator. The weather conditions at the time of the lightning strike were light rain, very light chop, and IMC. We landed in VMC.

Synopsis

EMB-175 Captain reported being struck by lightning on approach to SLC.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 5

Light : Night

Ceiling.Single Value : 5000

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B767-300 and 300 ER

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Parked

Route In Use.Other

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1587651

Human Factors : Situational Awareness

Human Factors : Distraction

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Relief Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 6000
Experience.Flight Crew.Last 90 Days : 30
Experience.Flight Crew.Type : 3500
ASRS Report Number.Accession Number : 1586919

Events

Anomaly.Deviation - Procedural : Weight And Balance
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Ground Strike - Aircraft
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : Aircraft In Service At Gate

Assessments

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

Narrative: 1

I was operating as the Pilot Flying and experienced a tail strike. After an approximately 24 hour layover, the flight continued. I was the Captain. We arrived at the aircraft and accomplished the preflight. The Loader brought the load plan and explained that cans had to be removed and repositioned due to an error, which I assume is what caused the delay. We blocked 16 minutes late. We had discussed that due to the heavy weight airplane and the gusty winds that we should perform a max thrust takeoff. We also received an ARTR from our Dispatcher due to an increase in payload informing us of our required taxi burn to be under our max takeoff weight. We pushed and had about a 44 minute taxi due to traffic congestion so the fuel burn was not an issue.

As we approached the end of the runway, there were some reports from landing traffic of 10 knot gains on final. I considered re-running the takeoff data for wind shear but it did not seem warranted. The takeoff was normal with the exception that I inadvertently selected VNAV instead of THRUST after pushing the power up. The First Officer immediately called it out and VNAV was deselected and THRUST was selected. The takeoff and climbout proceeded normally with the exception that there was moderate turbulence through about 10,000 feet. We planned and briefed the ILS approach. The weather was clear and the winds were light. On descent I discussed the need to be below 23.5 on the fuel in order to not exceed max landing weight of 326. We reached that level on the descent, so I was not concerned.

Our VREF was 147 [knots] giving us an approach speed of 152 [knots]. We were asked to maintain 165 knots to a 4 mile final, which I did and slowed to approach speed by approximately 1,500 feet. I rechecked the speeds on final and the VREF was 146 [knots] so I adjusted the approach speed to 151 [knots]. I disconnected the autopilot at approximately 800 feet and the approach continued to be stable until what appeared to be a normal flare and touchdown. I disconnected the auto brakes, which had been set to 4, at approximately 100 knots and exited the runway and taxied to parking. We informed the gateway that we did not want to go to the terminal and would be staying on the airplane

for the approximately two hour layover. The mechanic came and took the logbook and after about 30 minutes, the [Relief Pilot] went to do the walk around. When he returned, he stated that the tail had been scraped. The First Officer and I then put vests on and went out to inspect the tail. The [Relief Pilot] informed the mechanic and because he had possession of the logbook, he entered the irregularity at that time. The mechanic returned after about 30 minutes and performed the deferral procedure and the aircraft was cleared. I had contacted our Dispatcher in the interim to request that the cans be weighed, remembering the irregularities that had occurred with loading in [departure airport]. I was informed after some checking that the cans had already been broken down so that they could not be weighed. I did retain both weight and balance forms from the two legs. Additionally, we did not receive an EICAS message on takeoff or after landing relating to any irregularities.

Narrative: 2

After landing, during the walk around inspection, I observed that the tailskid was scraped. I notified the mechanic and the Captain. I was the [Relief Pilot]. The Captain was flying. We operated normally, the flight was relatively unremarkable. The only thing that sticks out in my memory was that I had a minor perception that the sink rate inside of 50 feet, at the flare, might have been a bit more than usual. I recall thinking that the Captain seemed to have caught it and "greased it on". I also recall having a momentary thought that we might float or bounce slightly, but that we didn't. The aircraft settled gently down onto the runway. At no point did the landing seem unsafe or scary. The 'perceptions' I mention about the sink rate, the Captain's reaction to it, and the touchdown are minor observations that did not evoke strong emotions real-time, but rather coalesced after seeing the scraped paint on the tailskid pad.

Obviously in hindsight, that is what a tail strike looks and feels like from the [Relief Pilot] seat and I'll adjust my sight-picture. Of note, it was a max-weight landing, and there had been some loading issues prior to departure. It's my understanding that the Captain's report contain much of the details regarding the loading anomalies and the rest of the flight, so I will not repeat all of them here. Elaboration on "FATIGUE" as a contributor. I only marked YES on this particular question because any time the sky goes from light to dark, the melatonin and melanopsin mechanisms are affected, and the human body is unlikely to 'willfully' overcome these biological forces of nature. We all agreed that it was a long flight, a long day, and we were feeling the impacts of a 'long day', and having been up since 6 am. Even though it wasn't particularly long, the effect of the daylight shifting to night time has a subtle, and sometimes overt, effect on the body and brain. Therefore, FATIGUE was a factor by definition. How much of a factor? On the margin, probably small. Maybe negligible in this case, maybe not. But in my personal opinion, fatigue is rarely not a factor.

Synopsis

B767-300 flight crew reported a tail strike during landing.

Time / Day

Date : 201810

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Weather Elements / Visibility : Windshear

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

Flight Phase : Landing

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1587246

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1587247

Human Factors : Situational Awareness

Events

Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Object
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Regained Aircraft Control
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On approach, we experienced a 40-knot transition in airspeed just under 1,000 feet and I elected to go around. Approach speed was set for +20 knots per [procedure] and flaps 25. The entire low-level segment was turbulent. The Tower at that time was calling winds 310/30 gust 38 for the approach. Once we were configured for the downwind, I had the third pilot check the runway alignment at our alternate. The runway there had worse alignment for crosswinds than [our destination]. On downwind we had approximately 14.0 on fuel. We elected to attempt another approach as we did not think we had enough fuel to get out of this weather pattern. This approach, the winds were about the same but we did not encounter the plus 20 minus 20 airspeed change. I continued the approach and at approximately 200 feet, I had the Progress page 2 up and it showed a 27-knot crosswind. Before that, it had been between 27 and 32 knots. Landed the aircraft slightly left of centerline, speedbrakes were normal and all engines in reverse.

Touchdown was fine, as we started approaching 90 to 100-knots the aircraft suddenly began veering to the right. Had full aileron in and left rudder maximum. Asked the First Officer to help with the ailerons and rudder while applying left brake. Felt like the nose gear just skidded, transitioned to tiller but did not seem to make any difference and we departed the runway. Just after touchdown, the Tower announced winds to another aircraft as 320/30 gust 45 and then said "winds are all over the place". We came to a stop in the grass between taxiways. The fire department had responded and we shut the airplane down while they approached and we were communicating with them on the radio. No injuries on aircraft. We elected not to emergency evacuate the aircraft.

A scissor lift was brought out to the airplane for us to exit the aircraft. The wind was extremely strong, the operator was concerned that the lift may fall over. Once on the ground, the wind was variable and I would estimate well over 40 knots with higher gusts and appeared to be that strong the entire time we waited to exit. Maintenance did a preliminary exam of aircraft and nothing appeared to be damaged. We were told we took out one runway light. I believe we had experienced a high wind gust that pushed us nose right.

[I] suggest not only cloud and ceiling be considered for suitable alternates but [also] high gusty winds. Need alternate out of the same weather pattern.

Narrative: 2

During final at 1,000 feet, I called the expected wind fluctuations of plus or minus 20 knots. I believe we were still coupled with the autopilot until about 200 feet, when [the Captain] finally disconnected. No wind shear alerts. About 500 feet, I asked for a wind check. Tower said the "wind is all over the place." It appeared the aircraft was stable as the wind had settled down, but I could still see [the Captain] wrestling the control inputs. We touched down normally, a little on the upwind side of centerline, but in control. I remember looking inside on touchdown to verify "spoilers up - reversers normal."

As we began to decelerate, we started drifting (sliding) to the right and I noticed [the Captain] struggling to hold the ailerons. I instinctively reached up and helped him keep ailerons into the wind. We continued to drift right and I heard him say "yeah, help me" or something like that, and I joined him on the rudder to find full left deflection and brake. About the time, I realized we were sliding off the runway (I could only guess at the airspeed).

As we transitioned from pavement to grass, I suspected we took out a runway light, and started looking at gauges to see if we had any engine damage or other EICAS messages. They were all ok, stable at idle. I was trying to get a word in edgewise, but the Tower guy kept babbling on about something with an [air carrier] flight behind us. I finally said we were off the runway, in the grass, and if he could have the trucks come out.

After the initial shock, composing ourselves, I remember staring at the gauges trying to decipher the information, everything looked normal. That's good. We started the APU, shut down engines and appraise the situation. About that time, [Maintenance] showed up and I contacted them on a discreet frequency, let them know we were in the process of shutting down and asked if they could verify our planes condition. I then contacted [company] and advised our location on the airport, aircraft condition and that we would need assistance. Took about 30 minutes to coordinate, and we deplaned via scissor truck. When being lowered from L1 door on the truck, we felt the full force of the gusty winds [and] it felt more than 40 knots.

The fact that we derive alternates based on cloud conditions and visibility, not wind, is frustrating. On downwind after our first go around, we had many questions with little time to formulate answers. As a crew, we decided to give [destination] another try, though we would like to have had fuel for other options. [Our alternate] would not have been far enough to be out of the winds.

Synopsis

Air carrier flight crew reported a runway excursion occurred following loss of directional control while landing in a strong crosswind.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 13100

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Turbulence

Aircraft

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 1450
ASRS Report Number.Accession Number : 1587192
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Physical Injury / Incapacitation

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

Descending into ZZZ we were getting vectored off the arrival for an approach. The First Officer (FO) flew through a small buildup that seemed fairly benign. Unfortunately there was enough vertical development to create an automatic moderate turbulence report. I didn't want to dictate how the FO flew the arrival, but thought we should have deviated a few hundred yards around this little cloud. While I expected a little turbulence, I certainly didn't think it would be that strong. On debrief, the FO seemed unaware that we didn't have to fly directly into the cloud and could have maneuvered a little.

Synopsis

A319 Captain reported First Officer flying into turbulence resulting in an injured Flight Attendant. First Officer was unaware of option to deviate clear of cloud

Time / Day

Date : 201810
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 1500

Environment

Weather Elements / Visibility : Turbulence
Weather Elements / Visibility.Visibility : 10
Ceiling.Single Value : 7500

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ1
Aircraft Operator : Air Taxi
Make Model Name : Citation X (C750)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Landing
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class B : ZZZ1

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Flight Engineer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 10000
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 5000
ASRS Report Number.Accession Number : 1586812
Human Factors : Physiological - Other
Human Factors : Distraction

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Diverted
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Red CAS message and aural annunciation of "wind shear" required us to go-around. When we practice this maneuver in the simulator, it is associated with a convective microburst at a lower altitude and survival requires an urgent climb.

In this case, there was no convective activity, but moderate continuous chop and gusting winds, both getting worse as we made our approach. I made an immediate PIREP of our lost 20 knots and our go-around. ATC replied "fly the published miss." By this time - only seconds had passed - we were well above (at about 2500 feet) the published missed approach altitude of 2000 feet. Noticing our failure to follow his simple instructions, tower gave us a heading, altitude, and a frequency for approach control to re-sequence us for another approach.

The second approach, a visual backed up by the ILS, also resulted in a missed approach, because the winds were gusting above our crosswind limitation. Once again, we climbed above the published missed approach altitude. There was no TRAFFIC conflict reported to us.

The turbulence on approach was continuous moderate. Everything was shaking so violently that i could not easily read my approach plate, much less the instruments. Even taking hold of the frequency selector knob and changing to the correct numbers was a struggle. I was getting nauseated and my head - even my eyes - hurt.

Initially, I meant to chastise my copilot after his first altitude violation. But, I decided not to because this was the correct response in more serious conditions. Judging from his second excessive climb on missed approach, I realized that he did need a reminder from me, which I failed to provide.

We subsequently bungled an approach at ZZZ1. Tower issued updated wind report every few minutes. We were close to our crosswind limitation, so every report required another calculation of crosswind. This simple task was complicated by turbulence. On four mile final approach, winds exceeded our limits and we announced our intention to go-around. Tower instructed us to "fly the published miss". By then, we had climbed to about 2000

feet, not the required 1500 feet, and were still heading 240, not the required 260. Tower handed us back to approach. We made an uneventful approach and landing at ZZZZ.

Synopsis

C750 Captain reported severe weather resulted in several missed approaches and a diversion.

Time / Day

Date : 201810
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : IMC
Light : Night

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 : Landing

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1586695
Human Factors : Time Pressure
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC Override Automation

Assessments

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

Narrative: 1

When we got to ZZZ, we shot the RNAV Approach since there was not an ILS and went missed approach twice before diverting to ZZZ1 for fuel. When we arrived at ZZZ1, we waited approximately 2 hours for the weather to improve. We were dispatched under exemption 3585 to try to get to ZZZ. The Captain and I discussed how we would go to ZZZ2 if we couldn't get into ZZZ. When we departed ZZZ1 the weather in ZZZ was reporting 600 overcast and 3 miles visibility. When we arrived it was 2 1/2 miles visibility with 600 overcast. The weather in ZZZ2 was the same. I felt comfortable knowing that we could get into ZZZ2 on an ILS if a diversion was necessary. On the descent we talked about how on the radar we saw a cell right over the approach end of the runway. We discussed how we would do one attempt and then divert to do an ILS approach into ZZZ2. At ZZZ we shot the RNAV Approach. At minimums we could not see the approach lights or the runway and I stated, "Missed approach" for the third time today at ZZZ. The Captain hit the TOGA button on the thrust levers but continued the approach using the TRS button to override the automation and then turned off the automation to land once he saw runway. While the Captain was overriding the thrust levers, the Yellow Master Caution went off for the thrust levers not being in TOGA. After shutdown in ZZZ, the Captain tried to tell me that our altimeters didn't match. I explained that our company "has a proactive go around policy. When we don't see the runway at minimums, we must go missed. I called missed and you continued." This report is accurate to the best of my recollection.

Synopsis

EMB175 First Officer reported the Captain continued an approach and landed even though the weather was below approach minimums.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

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

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Light Sport Aircraft
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Flight Phase : Descent

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : Embraer Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Final Approach
Route In Use.Other

Aircraft : 3

Reference : Z
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Corporate
Make Model Name : Cessna Citation Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Phase : Final Approach
Route In Use.Other

Person

Reference : 1
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1586550
Human Factors : Communication Breakdown
Human Factors : Distraction

Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Time Pressure
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

This is a new type of safety issue for me, but I felt compelled to report it to have more eyes review the information. I had Aircraft X, a VFR, call up for flight following from within my area. The pilot had a strong accent, and that along with what I suspect was the quality of his radio made it very hard for me to understand his transmissions. I also had some distraction from within the TRACON itself, which I will describe in a moment. It probably took me over 10 transmissions to get Aircraft X pilot's intentions, and successfully get him processed for flight following. He had also requested an IFR clearance, but after I informed him his requested altitude of 020 was likely to cause issues with MVA's and the subsequent Center sector, he elected to maintain VFR with flight following. There were multiple SIGMETs from all over Texas, and the weather at ZZZ was IFR, information I gave the pilot. I had Aircraft Y being vectored for an RNAV Runway XX Approach at ZZZ, followed by Aircraft Z, on the same approach from the west via the IAF of ZZZZZ. The following Aircraft Z seemed likely to catch Aircraft Y, so I began speed instructions for both aircraft. I was certain that Aircraft X was likely to encounter weather difficulty, possibly becoming an emergency. I instructed him to remain clear of ZZZ Class Delta, but due to TRACON distractions, I missed the read back. A controller plugged in behind me and started observing, in preparation to relieve my position. I told him I had an issue to work out with these two aircraft on final, and preferred him to wait a moment for me to handle it. He did. It took a considerable amount of work for me to end up sequencing the two aircraft, and I was having some issues getting them on the speed restrictions I was intending. I also had coordination to do with ZZZ1 Approach for a point out on Aircraft Y, and subsequently for the following Aircraft Z as well. [Relieving Controller] began to get pushy about doing the relief briefing, so when I thought I had everything reasonably handled I pushed the button and began the briefing. As I was doing the briefing, which was going to take a while considering the information I felt compelled to give him concerning the VFR aircraft in weather difficulty, and the two RNAV aircraft requiring close

attention, I realized the speed I had issued appeared to not be enough to maintain required separation later on final. I stopped the briefing, and reissued new speed restrictions to both aircraft. As I was doing this, [the relieving controller] got impatient with the amount of time it was taking to complete the briefing and started becoming borderline belligerent with me because of it. He insulted my controlling, and cursed many times at me. His comments said things like, "Are we going to get this briefing done, I've been here for six or seven [Expletive] minutes", "You only have four [Expletive] aircraft", and "Don't touch my [Expletive] headset". He made other comments as well, some of which I didn't catch because I was still attempting to listen to, work, and adjust my seemingly imminent loss of separation on final. During this argument with him, I unplugged him, and asked him to leave and find the supervisor. I also missed a key read back and made a mistake, I found later when listening to the tapes. I missed the read back of Aircraft X when I instructed him to remain outside of ZZZ Delta, and I forgot to reissue a speed restriction to Aircraft Y when clearing him for the approach. That speed restriction was something I needed with the following Aircraft Z still faster, and Aircraft Y subsequently turned onto final and slowed down considerably. I am confident that had I not been constantly insulted and distracted in the TRACON, I would have not made this mistake. I saw the separation would not be maintained on final, and cancelled the approach clearance of the Aircraft Z, vectored him across final, and then gave him a hard turn back to get him on the approach. He was in IMC conditions. At no time did I lose separation. I'm not really sure what to expect of this report, and I have informed my ATM of everything that happened. I am certain the issue will be addressed. What does concern me, however, is that management seemed to be more concerned with the verbal abuse of me, and less concerned with the safety situation it caused for me while trying to run my sector. I am not worried about the personal confrontation so much, as the fact that it was causing an unsafe situation on my sector. I really do not have any idea what to suggest for this one. I honestly feel this is well above my position pay grade.

Synopsis

TRACON Controller reported an unsafe operation along with pressure induced by a relieving controller.

Time / Day

Date : 201810
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : BRO.Airport
State Reference : TX
Altitude.MSL.Single Value : 15000

Environment

Flight Conditions : Marginal
Light : Dusk

Aircraft

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

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
ASRS Report Number.Accession Number : 1586442
Human Factors : Communication Breakdown
Human Factors : Training / Qualification
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Other

Events

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

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Procedure

Primary Problem : Company Policy

Narrative: 1

Descent through 15,000 flight crew knew that RWY 31 would be in use. This is the first time arriving to BRO in RWY 31 configuration. Restricted airspace (Mexico) is nearby. Crew briefed many strategies to mitigate the airspace issue and expected visual approach. We briefed specifically where and when we will configure and to what extent we will configure when. Aircraft descending through 7,000. We expected the visual approach. They expected us to fly the LOC B/C approach to 31. Of course we cannot do B/C approaches so there was a bit of a scramble to determine an acceptable approach. Aircrew and ATC decided on the VOR only Alpha approach circle to 31. Direct clearance was given to CHICO - of note, not an IAF. Final approach altitude inbound was 900 until after the FAF then it dropped down to 540.

Aircraft was not fully configured prior to CHICO which is neither an IAF nor FAF and aircraft not fully configured 100 prior to the final approach altitude of 900 (which we cannot fly). The 1,000 ft gear horn went off and we configured 7nm from the field at that time. We continued the approach - in hind sight we should have discontinued the approach and either re-fly the approach no lower than 1,022 AGL or flown the ILS 13 circle 31.

[Contributing factors]

- 1) First real circling approach ever
- 2) Recall of the lowest allowable altitude on circling approach did not happen
- 3) The location of CHICO and the final approach altitude of 900 (which we cannot fly) require a significant change to the configuration game plan. Configuration was emphatically addressed in the brief but the new VOR-A approach and just finding the CHICO intersection in the FMS (it's in the ARC initial) made connecting the dots difficult.

Well- there was a beautiful LOC B/C approach in use at the time which [another aircraft] was using right behind us. We decided to not allow shooting B/C approaches. The published altitude minimums on nearly every portion of the VOR-A we cannot fly - I have discussed all of this with our flight ops supervisor and have been debriefed (counseled) with him. He agrees this was a very difficult position to be in with 1,600 ft overcast CIG.

Synopsis

Air Carrier Captain reported company restrictions to approaches at BRO airport offer no options when weather is present.

Time / Day

Date : 201810
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2700

Environment

Weather Elements / Visibility : Windshear

Aircraft

Reference : X
Aircraft Operator : Air Carrier
Make Model Name : B767-300 and 300 ER
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Initial Approach
Airspace.Class C : ZZZ

Component

Aircraft Component : Rudder Feel 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 : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1586109
Human Factors : Troubleshooting
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : Fuel Issue
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : FLC complied w / Automation / Advisory

Result.Flight Crew : Overcame Equipment Problem

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Executed Go Around / Missed Approach

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Chart Or Publication

Primary Problem : Aircraft

Narrative: 1

Just prior to intercepting the glideslope, I noted a RUDDER RATIO advisory message. My first impression was to continue the approach and landing normally. We did not have much extra fuel and it was not a master caution/warning. However, as we intercepted the glideslope and began our descent to the runway, I noted the ailerons were showing 3 degrees of trim, which seemed excessive for the amount of wind we were showing at our altitude. I disconnected the autopilot and found the rudder less effective than usual. I also recalled there was some crosswind limit with rudder ratio, but could not recall the amount and with winds at the airport, believed it to be prudent to go around, run the checklist, and ensure we were operating the aircraft safely within limitations. I stated RUDDER RATIO EICAS, let's go around and work this problem. We executed the go around, advised ATC, and followed their missed approach instructions. After the autopilot was engaged, the Pilot Monitoring (PM) did the RUDDER RATIO QRH, which states crosswind limit is 15 knots since the left hydraulic system pressure was normal on our aircraft. He got a wind update from ATC and looked for a crosswind component chart to confirm precisely how much crosswind there was. I believed it to be 10-12 knots worth, but really wanted to confirm that with the chart. He could not find the chart even though we both came up with several search options. ATC was no help; they only wanted to know what max winds we could land with and did not seem to understand a crosswind limit. The First Officer (FO) believed the crosswind component to be 12-14. If we were going to land in ZZZ, I needed to make the decision quickly. The amount of fuel remaining was soon going to be such that our options would be severely limited and I didn't want to get in that situation with a 15 knot crosswind landing limit with winds in the region. We both agreed we could safely land in ZZZ and set up again for the ILS with flaps 25. As we intercepted the glideslope, we encountered an increasing airspeed windshear, despite the thrust levers being at idle. I was unable to note the final speed of the aircraft, but did see that it went past 180. We passed through the shear layer and I was able to stabilize the aircraft to continue the approach. The remainder of the approach, landing and rollout were normal. Having the crosswind component chart integrated to reference as a part of the checklist with the crosswind limitation would have been extremely helpful. Both of us remembered seeing a crosswind component chart somewhere, but a search with these keywords returns many documents, and is not the correct title of the chart, so we would not have quickly found the proper page. This is unsatisfactory when dealing with a situation and attempting to get all necessary information. It also would have been helpful to have had contingency fuel added to our flight plan due to the winds and the potential for windshear in the vicinity. I had been as fuel conscious as possible knowing the forecast conditions at our destination. I had delayed starting the APU, so we had most of our APU burn fuel/pre-fuel remaining after engine start. We also climbed 2,000 feet higher than flight planned because it gave us .4 more fuel and added no extra time to our flight. I usually only fly the flight plan, however I felt it necessary to give us a bit more of a pad. It turned out it was good thing I

had chosen to do these things because this gave us the fuel necessary to work the system failure and not immediately divert.

Synopsis

767 Captain reported a flight control problem while on approach that required calculating a crosswind component for landing. The flight deck crew was unable to find the crosswind chart and suggested one be readily available.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZAU.ARTCC

State Reference : IL

Altitude.MSL.Single Value : 21000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Aircraft

Reference : X

ATC / Advisory.Center : ZAU

Aircraft Operator : Air Carrier

Make Model Name : A320

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZAU

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 6112

Experience.Flight Crew.Last 90 Days : 160

Experience.Flight Crew.Type : 595

ASRS Report Number.Accession Number : 1586018

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Dispatch

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : 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 : 14800
Experience.Flight Crew.Last 90 Days : 270
Experience.Flight Crew.Type : 1731
ASRS Report Number.Accession Number : 1586029
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Dispatch

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Anomaly.Deviation - Speed : All Types
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.General : Physical Injury / Incapacitation

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

We were operating Aircraft X to ZZZ. We were in cruise at 21,000 in clear air, with smooth flight conditions and no restrictions to visibility. The seatbelt sign was off. With no indications or reports of turbulence at our altitude, we suddenly encountered Moderate to Severe turbulence. The aircraft oversped by 3-5 knots and the autopilot disconnected. I was the pilot flying and immediately took control of the aircraft. The turbulence action plan was immediately initiated. The Captain turned on the fasten seatbelt sign and immediately made a PA for the flight attendants to be seated immediately. We then requested a descent to 18,000 and the ride improved as we passed through 20,000. The Captain then had the flight attendants check in where we were notified of two possible passenger injuries. One was to a woman in the Lav who hit her head on the door but stated that she was fine. A male passenger reported hitting his knee on a galley cart. He requested ice and said he was fine. The Captain initiated contact with dispatch and Medlink and requested that paramedics meet the airplane upon arrival in ZZZ. The rest of the flight was uneventful. On taxi in, the lead Flight Attendant called to inform us that another male passenger was complaining of back pain. We arrived at the gate, shut down, and the paramedics were there to offer assistance to the injured passengers.

Narrative: 2

Level at 21,000, CNOTA intersection. Ride went from smooth to moderate/severe turbulence in 5 seconds or less. Used Turbulence [report] commands. When Purser checked in with me, she had reports from two passengers that had been mildly injured (one in lavatory bumped head, one standing in aisle hurt knee). Approaching top of descent into ZZZ another passenger reported a hurt back, this passenger would go to the hospital for evaluation. While the first two passengers did not request medical attention, my FO (First Officer) and I agreed that with two injuries we would go ahead and have medical assistance meet the aircraft. Filed a PIREP through ACARS, notified Dispatch who

correctly suggested MedLink as backup. With nothing more than mild injuries, we continued to ZZZ.

Further info: There was turbulence forecast 5000 feet above us, and ATC did report that we would not like the ride higher but nothing worse than light at our altitude. Our dispatcher mentioned it in the release, and filed us lower to stay out of it. I even commented when accepting the release that I had been thinking the same thing. We were completely not expecting what happened. Purser informed us later that the aft flight attendants had just gotten the cart to the front of coach to start their service. Quite frankly, we're lucky more weren't injured. My 5 seconds or less estimate above for turbulence onset is likely long with time dilation in the heat of the moment. In my 25 years I've never seen turbulence hit so hard, so fast, with nothing forecast or reported in the vicinity. There wasn't time to get the seat belt sign on - and indeed I forgot it until I heard our Purser make a PA for the passengers to fasten their seat belts. I'm usually the one that would rather call MedLink proactively. This time, I did not due to my perception that nobody was really injured. I was clearly wrong here.

Finally - I'll admit that I've rolled my eyes a bit at the Turbulence [report]. I still think we are a little over-sensitive to light turbulence; this trains the passengers that the seat belt sign doesn't signal that it's not safe to move around. However - the Turbulence [report] was perfect for this event. Perfect. The commands were excellent, and I was glad to have the guide, the training, and the shared language for what needed to happen in the flight deck and the cabin. I'll go ahead and say it: I was wrong.

Synopsis

A320 flight crew reported unexpected severe turbulence, resulting in passenger injuries.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 600

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Fog

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility : Rain

Weather Elements / Visibility.Visibility : 5

Light : Dusk

Ceiling.Single Value : 900

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : PA-28R Cherokee Arrow All Series

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Personal

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Final Approach

Route In Use : Vectors

Route In Use.STAR : RNAV

Airspace.Class D : ZZZ

Component

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Problem : Failed

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Air Traffic Control : Local

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Engineer
Experience.Flight Crew.Total : 10300
Experience.Flight Crew.Last 90 Days : 40
Experience.Flight Crew.Type : 120
ASRS Report Number.Accession Number : 1585899
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

On RNAV 35 at 1400 feet I lost VNAV on approach. I continued down to next step down altitude which was 600 feet. At 600 feet, as I was searching for the runway I continued to 480 feet. I received a low altitude alert from Tower. Because I didn't have the required flight visibility I immediately started to go around. The go around and divert all went normal. Next time when my approach equipment degrades my approach I will go around and re set up for new approach.

Synopsis

Piper Arrow pilot reported a low altitude alert after losing VNAV on approach and descending below the Minimum Descent Altitude.

Time / Day

Date : 201810

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : FPR.Airport

State Reference : FL

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Turbulence

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZMA

Aircraft Operator : Personal

Make Model Name : PA-28R Cherokee Arrow All Series

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Cruise

Route In Use : None

Airspace.Class E : ZMA

Component

Aircraft Component : Attitude Indicator(Gyro/Horizon/ADI)

Aircraft Reference : X

Problem : Malfunctioning

Problem : Failed

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Student

Qualification.Flight Crew : Private

ASRS Report Number.Accession Number : 1585805

Human Factors : Situational Awareness

Human Factors : Confusion

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : VFR In IMC
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Detector.Automation : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Was flying straight and level at 6,000 feet. layer of clouds 1 mile ahead asked ATC for deviation off course. ATC approved 15 degree left or right of course before I could deviate was in clouds was straight and level for a few minutes then due to turbulence aircraft was banking to left was trying to get back to straight and level but then started losing altitude when that happened I notified ATC "unable to maintain altitude and was calling out my flight level."

Once I got positive control of the airplane again informed ATC and then ATC asked me if I want to return to VRB or FPR so I asked for a return to my home base FPR. Miami Center then decided to [advise] for me at FPR and gave me non Gyro vectors. Once my Heading indicator seemed to be working fine I resumed my own navigation and asked for a low approach over 10R so that the Tower could check my landing gear for any damage. Once I was given an all clear from ATC I made right traffic for 10R and landed safely.

Synopsis

PA-28 pilot reported loss of inflight control due to entering IMC, turbulence and a heading indicator malfunction.

Time / Day

Date : 201810
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : IMC
Weather Elements / Visibility.Visibility : 1
Light : Daylight
Ceiling.Single Value : 1000

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Carrier
Make Model Name : B737-800
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach

Component

Aircraft Component : Flight Dynamics Navigation and Safety
Aircraft Reference : X
Problem : Failed
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 : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 343
Experience.Flight Crew.Type : 13000
ASRS Report Number.Accession Number : 1585634
Human Factors : Distraction
Human Factors : Time Pressure
Human Factors : Workload

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

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

This report is being submitted as an opportunity for general learning from a challenging event. On arrival into ZZZ, ATIS called for landing Runway XXL. Weather was 1000 FT overcast and one mile visibility with rain. Winds 180/13 Gust 24. Heavy rain showers were throughout the terminal area. Upon contacting Approach Control, they advised to expect Runway XYZ. The frequency was extremely busy. We set up for an ILS to XYZ. Approach cleared us direct to the initial fix for the RNAV Y XYZ. We requested the ILS and they advised unable due to traffic conflict with ZZZ1 airport. We were cleared for the approach. We attempted to load and brief the approach. We crossed ZZZZ but had not completed our briefings or a thorough check of the points. We were very rushed. I advised ATC that we were not ready for the approach and needed a vector off the approach to be re-sequenced. They asked how long we needed, we advised three minutes, and they vectored us off and back in appropriately. We were then set and ready for the approach. Once established on the approach and descending, the First Officers flight director failed with the "FD" flag in view; the B autopilot clicked off. Two flight directors are required to fly this type of approach. I assumed control of the aircraft and we advised ATC that we needed to go around to work a navigation system failure issue. We went to VORTAC and held. Attempts to reset were unsuccessful. With the First Officer (F/O)'s flight director failed, the only approach we could fly would be a Captain flown ILS. On the RECALL check-in preparation for the ILS, we had a Master Caution for both Speed Trim Fail and Mach Trim Fail. We accomplished the QRH Checklists for these. Fuel was now at the point that we needed to fly the ILS without delay, or divert. Due to the traffic issue with ZZZ1, our failed systems, the weather, and our fuel state, I notified ATC to insure successful arrival at our destination. ATC vectored us expeditiously to final once we notified ATC, we flew the ILS Approach and landed uneventfully. The only "error" on the crew's part was expecting the ILS in those weather conditions, and loading that approach. Had we loaded the RNAV we could have avoided the delay vectors, but would still have had the equipment failure.

Synopsis

737 Captain reported the flight crew was encountering multiple navigation equipment failures at the same time ATC directed a late runway change.

Time / Day

Date : 201810
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : MDW.Airport
State Reference : IL
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC
Light : Night

Aircraft

Reference : X
ATC / Advisory.TRACON : C90
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Route In Use.SID : GPS
Airspace.Class E : C90

Component

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

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Last 90 Days : 402
ASRS Report Number.Accession Number : 1585612
Human Factors : Situational Awareness
Human Factors : Human-Machine Interface
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 420
Experience.Flight Crew.Type : 9000
ASRS Report Number.Accession Number : 1585647
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

It was the last flight of two-day to MDW. Cleared 3000 FT at SAILZ, cleared 22L, Y. First Officer set lower altitude. I acknowledged. I looked down at ATIS for a second, looked up to find aircraft descending below 3000 FT before we hit SAILZ. LNAV was engaged but VNAV was not. I called out error. Pilot Flying disconnected autopilot and corrected flight path back to 3000 FT. We landed uneventfully.

Narrative: 2

We were cleared direct SAILZ at 3000 feet, cleared RNAV Y 22L, descending from 6000 feet to 3000 feet. I thought I had executed the new cruise altitude of 3000 feet and we had been cleared the approach and were in LNAV and VNAV path as we went into the WEATHER (clouds no rain or thunderstorm). I had set 1500 feet in the window as a lower altitude. VNAV had disconnected without us noticing it and the Captain caught the descent as we passed below 3000 feet. I immediately disconnected all automation and smoothly

corrected back up to 3000 feet as we had gone several hundred feet below assigned altitude. We spoke with the Approach Controller and he said there was no traffic in the area and "no problem". We re-engaged all automation prior to SAILZ and continued the approach and landed uneventfully.

Be extra vigilant when it is late at night, weather, running late, etc. Good communication with the automation is paramount and I failed to notice the change in automation that we had gone out of VNAV. The PM caught the altitude miss and we corrected but it should have been caught sooner. I had failed to "verify", a very important step to remember when fatigue is starting to set in.

Synopsis

B737 flight crew reported overshooting the cleared altitude during descent due to a failure to recognize a change in automation.

Time / Day

Date : 201810

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : LAS.Airport

State Reference : NV

Relative Position.Angle.Radial : 360

Relative Position.Distance.Nautical Miles : 10

Altitude.MSL.Single Value : 24000

Environment

Light : Night

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : L30

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 : Descent

Airspace.Class B : LAS

Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 130

Experience.Flight Crew.Type : 9400

ASRS Report Number.Accession Number : 1585593

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Wake Vortex Encounter

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Physical Injury / Incapacitation

Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Primary Problem : Environment - Non Weather Related

Narrative: 1

On our descent into LAS, out [of] FL240 we encountered a short pocket of moderate chop, maybe light turbulence. It didn't last more than a second, maybe two. Before we started down, I asked for ride reports into LAS. ATC replied "no adverse reports on the descent." We just left the thunderstorms in the LA area, and even though LAS had high clouds, you could see clear all the way into the airport. The turbulence came out of nowhere; it might have been someone's wake. The C Flight Attendant called, and told us that the B Flight Attendant got injured, she was sitting in the cabin, and she was going to stay there for arrival. The C Flight Attendant was going to take her position (on the jump seat). She didn't require medical attention. Because that injury prevented her from performing her duties, I decided to call the EMT's so they could make sure that she was ok. Truly, the only thing that could've prevented this was having the Flight Attendants sit throughout the whole flight. But there were no reports of turbulence on the descent. The flight through the desert was smooth. They sat through the departure part of the flight, and got up when it got smooth. There was not a single piece of information to have them sitting down.

Synopsis

B737 NG Captain reported a Flight Attendant was injured during an encounter with turbulence, possibly wake-related, on descent into LAS.

Time / Day

Date : 201810

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : U08.Airport

State Reference : NV

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : Piper Single Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Landing

Route In Use : None

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 2759

Experience.Flight Crew.Last 90 Days : 123

Experience.Flight Crew.Type : 17

ASRS Report Number.Accession Number : 1585567

Human Factors : Time Pressure

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Ground Excursion : Taxiway

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Other / Unknown

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Fuel Issue

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

I checked the weather and received VFR flight following from Nellis Control. I remained east of the Nellis restricted areas throughout the flight. I was in the terminal phase of the flight when the winds began to pick up and were not as forecasted. There was a significant crosswind at ([my destination]) so I chose to divert to (U08). U08 does not have an ATIS and I was guessing the wind from the windsock and a departing helicopter that reported the wind as north at 25 knots. After overflying the field a few times I began to run low on fuel. The crosswind turned into a direct crosswind at 35 knots (exceeding aircraft limitations) and I began to run low on fuel. I made the decision to land diagonally across the taxiway, across the smooth gravel that is between the taxiway and the runway and ultimately onto Runway 31 at an angle. My GPS indicated that my groundspeed on the approach was approximately 17 knots and I rolled smoothly across the gravel to the runway. There was no damage to any of the runway environment or the aircraft. My ground roll was approximately 150 feet. In order to execute the landing safely I had to overfly a few structures that were not lined up with the runway...This may have startled residents of the town. I had already cancelled and switched from Nellis Control and my datalink weather and ATIS reports of all of the surrounding airports indicated significant crosswinds as well. I made the decision to not switch back to Nellis to declare an emergency because there would be no services they could provide to me at that point. There is a vast distance between airports with fuel on the east side of the Nellis Complex. In the future I will proceed down the west side where there are more options and airports with fuel.

Synopsis

Small aircraft pilot reported a low fuel condition, higher forecast crosswinds and the intentional landing in-between the taxiway and runway.

Time / Day

Date : 201810

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 9000

Environment

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Turbulence

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use : Vectors

Airspace.Class E : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Air Traffic Control : Enroute

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1585470

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Person : 2

Reference : 3

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Air Traffic Control : Approach
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
Experience.Flight Crew.Last 90 Days : 397
ASRS Report Number.Accession Number : 1585624
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.Deviation - Procedural : FAR
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Air Traffic Control
Detector.Person : Flight Crew
When Detected.Other
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Exited Penetrated Airspace
Result.Flight Crew : Diverted
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We were on descent into ZZZ when Dispatch ACARS messaged us an alternate airport with no other explanation. This got us questioning why. As we got closer to the airport, we could see that the weather returns showed a massive thunderstorm approaching ZZZ. We were trying to coordinate a route around the weather as well as manage our fuel and expectations of route delays if we were to go to alternate. As we were getting vectored, it became clear that we were not going to get to the airport with enough fuel to be able to make it to alternate if needed. There was no alternate on the Release to begin the flight and not a lot of extra fuel.

After we asked to divert to alternate, ATC kept giving us vectors either directly into the weather or away from our alternate. ATC kept issuing us vectors directly into very strong weather. When we told ATC that we could not accept those vectors, they said we have to because of a Warning Area. We told them we had to go into the Warning Area as we had no choice at that point due to fuel.

As we were trying to get around weather, we made the decision to land at ZZZ1 as that was the closest airport that had good enough weather to get into. We did not think that we

would ever make it to our alternate as that was back through the weather and was also experiencing thunderstorms.

Narrative: 2

Extensive thunderstorms over the [area] prevented us from accepting vectors to avoid Warning Area. I informed ATC I was using my emergency authority to continue into the Warning Area to avoid extreme weather.

Synopsis

737 flight crew reported entering restricted airspace due to severe weather deviation.

Time / Day

Date : 201810

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZZ.ARTCC

State Reference : FO

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility : Rain

Aircraft

Reference : X

ATC / Advisory.Center : ZZZZ

Aircraft Operator : Air Carrier

Make Model Name : A319

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Descent

Route In Use : Direct

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Cabin Activity : Service

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 : 20000

ASRS Report Number.Accession Number : 1585342

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Attendant

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Physical Injury / Incapacitation

Assessments

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

Narrative: 1

100 miles north of [destination], descending through solid cirrus and deviating around small, imbedded RW/TRW (Rain Shower and Thunderstorm) cells. Zero forward visibility. Using weather radar. Seatbelt sign on. Occasional light turbulence. In the cabin, FA B (Flight Attendant) and FA C are standing in the rear galley. A paramedic and a nurse are assisting an ill passenger in seat 19b. Paramedics are waiting at destination. No ATC [notification was made].

We see a small, individual cell ahead on radar: about 4 miles wide with light green rain indication and small amber center. We receive deviation clearance to the left from Control. We change course and continue descent. Visibility zero. When abeam of the cell on our right side, we flew through some imbedded cumulus and a short burst of rain. We received a quick, sudden jolt of moderate turbulence.

I called back to the cabin via intercom to check with the cabin crew. I apologized about the event with no warning from us. I was assured that everything was okay although FA C sounded a bit unhappy about the event.

We landed and arrived at the gate at [destination] with paramedics waiting to examine the ill passenger. A lot of confusion at the gate after the passengers deplaned with an army of cleaners coming aboard to "turn" the aircraft. I saw FA A was moving aft to speak to FAs C and B while the cleaners and ground supervisors were on the airplane between us. The paramedics had left the jetway with the ill passenger. It was going to be difficult to wade through the cleaners to speak to my crew who were scheduled to fly the aircraft back to [origin]. Not having heard from them while at the gate, [First Officer] and I assumed our cabin crew were okay. We exited the aircraft to start our overnight.

24 hours later, [First Officer] and I arrived at the aircraft for the northbound flight to [origin]. FA C and FA B were present and met us. It was then when we heard that they had sustained injury during the previous day while standing in the rear galley from the moderate turbulence jolt event. Both crew members complained of back and shoulder strain. In addition, FA C had sustained a small cut on her hand while grabbing a hand hold to steady herself.

The event occurred because I failed to warn the cabin crew of possible moderate turbulence during descent. So, the crew was completing normal duties when the unexpected turbulence occurred. As is well known, turbulence effects are magnified when in the aft section of aircraft and also there was no warning of small bumps before the big jolt took place.

I need to communicate better with my cabin crew during flight to warn them about turbulence ahead and also at the gate after such an event (by intercom, if necessary), to make sure that they are okay. I am not happy about my lack of knowledge about my cabin

crew condition as I left the aircraft. One of my roles is to make sure they are okay and to assist them if they are not okay.

Synopsis

A319 Captain reported learning the next day that Flight Attendants had been injured during an inbound turbulence encounter.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Thunderstorm

Aircraft

Reference : X

ATC / Advisory.Center : ZZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Initial Approach

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Air Traffic Control : Approach

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 230

ASRS Report Number.Accession Number : 1585332

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Air Traffic Control : Approach

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 : 2
ASRS Report Number.Accession Number : 1585341
Human Factors : Time Pressure
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On star [arrival] for [Runway] XXR RNAV Approach, red storm cells between ZZZZZ and ZZZZZ1. While descending on VNAV PATH cleared by ATC to deviate, [we were] below 4,000 feet [and] got PULL UP red warning on Captain terrain display and PULL UP audio. First Officer had weather radar on his side, he executed Escape Maneuver. At 5,000 feet and HDG 140 with approach, flew to Initial Approach Fix ZZZZZ2 to complete RNAV XXR approach. Normal landing.

[We] did not stay on STAR and RNAV course line and deviated around weather in area of terrain.

[I suggest to] fly a course deviation away from runway and approach course to the northeast and then south away from weather to the south Initial Approach Fix, where no weather was depicted. Also, ask ATC if another aircraft had flown through storm cells painted on Weather radar and if ride report available.

Communication was difficult; the controller not always reporting back a clearance confirmation or question on weather, so [it was] safer to go the long route rather than depend on controller for help.

Narrative: 2

While flying the STAR to RWY XXR, we were cleared the approach approaching ZZZZZ. Approaching ZZZZZ1 it became clear we were going to have trouble with the weather over and East of ZZZZZ2 as there were several large RED cells. We asked and were cleared to

deviate for that weather... but were not given any direction or advice. At a point approximately half way from ZZZZZ1 to ZZZZZ2, we turned direct to ZZZZZ3. It was better for the weather to go direct to ZZZZZ3 and intercept the final there, so we said we were going direct ZZZZZ3. While descending in LNAV and VNAV PATH, with Flaps 5, approximately 180 knots, we got a terrain warning "PULL UP". So we executed a Terrain Escape. We climbed to 5,000 [feet] and notified ATC. They told us to maintain 5,000 [feet] and go to ZZZZZ4 for another approach. The next approach and landing were normal

Some factors were older model weather radar, lack of ATC involvement/ warning, we could have executed missed approach sooner for the weather, we should have stayed on procedure track until above MSA.

Slow down and go into holding if needed... more time to analyze the situation and avoid getting between a rock and a hard spot/ weather. Stay on procedure track until above MSA.

Synopsis

737-800 Captain reported a Terrain Warning and executing the Escape Maneuver after maneuvering for weather without assistance from ATC.

Time / Day

Date : 201810
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 36000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Thunderstorm

Aircraft

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

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 : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 1423
ASRS Report Number.Accession Number : 1585077

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Passenger Misconduct
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Speed : All Types
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Regained Aircraft Control
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

Pre-brief. I briefed and directed all flight attendants to remain seated until I called to allow them to begin service. I also reviewed the [turbulence guidance] commands and procedures with all flight attendants together. This occurred in the [gate] jetway prior to boarding the airplane and was driven by the unusual [local] weather.

Pre-departure passenger announcements. I personally greeted the passengers in first class and explained directly the flight attendants would delay their service to them as much as 20-30 minutes. I made a PA announcement to the entire airplane while standing near Row 1 so all passengers could see me. During this welcome announcement I stated, "When I turn on the seatbelt sign, I'm serious! Don't get up. If you wake and see the sign is on, stay seated. This is for your safety and the safety of my flight attendants." This announcement is standard for me, and I vary it only as conditions differ from flight to flight.

Departure. My FO (First Officer) and I tuned the radar on to view activity to the east while holding short RW XXR. We both varied the tilt and range and concluded we didn't see anything significant in our path out to 160 NM. Turbulence was light to occasional moderate throughout the departure, and we noticed most of the buildups were absent from radar and could see nothing of concern throughout the turn to the east.

We were filed 27,000 initially, but ATC advised the smoother rides were higher. We requested 35,000 based on reports and airplane performance. Light and occasional moderate turbulence remained throughout. At level off, we continued to individually assess radar and limited visual cues for storm position, height, and intensity. ATC offered direct ZZZ1, but I declined the offer until we could confirm this routing with dispatch. Based on tilt position and visual cues, it appeared all storm activity was below 35,000 by more than 5,000 feet. However, performance allowed 36,000 so requested and were cleared block 35- to 37,000. We climbed to 36,000. Rather than engage Econ Climb/Cruise, we selected speed 280/.76.

The event. At one point the air began to smooth, but could see there was one line of storms remaining. I made the PA announcement for everyone to remain seated and warned we have another set of bumps to pass. As we approached the weather, it appeared to have "exploded" in front of us and I thought we would be right at the tops. However, within seconds we were completely engulfed and turbulence increased to continuous moderate with occasional severe.

I monitor the flight attendants on the interphone routinely. At this time the FA (Flight Attendant) at 2L called the Purser and advised her a woman got up to the lavatory. She also stated that they yelled at her it wasn't safe and to return to her seat. However, the woman continued to the aft lavatory. While she was in the lavatory, turbulence shot up to continuous severe and I disconnected the autopilot to maintain pitch and power (auto throttles remained armed, but I physically guarded them). Airspeed fluctuated from stickshaker to clacker, and altitude dropped to as low as 34,800 feet. Event seemed to last

two minutes or more.

Once we exited the weather, I confirmed with flight attendants they were good and asked the status of the passenger. They reported they were fine, but the passenger suffered a cut to the forehead. When it was safe for any medical help to leave their seats, Purser requested passengers with medical training to identify themselves. A fire battalion chief and family member fire paramedic responded to the call, treated the woman, and fed information to me that I passed to Medlink. Two male passengers also complained of neck pain. Medlink recommended three Tylenol for each passenger and one Benadryl for the male passenger who vomited.

Note: neither Tylenol nor Benadryl are labeled as such in the medical kit and caused confusion to the flight attendants.

It took about an hour from the time I could allow first responders to leave their seats to the time I was fed information to pass to Medlink. After several frequency attempts to contact dispatch through ARINC, Medlink confirmation to continue and offer the medication was finally received. Medical personnel met us at the arrival gate and escorted all three injured passengers off the airplane.

Synopsis

B737 Captain reported severe turbulence as well as issues with the medical kit used to administer first aid to passengers injuries.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Windshear

Weather Elements / Visibility : Turbulence

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

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 : Landing

Flight Phase : Final Approach

Airspace.Class C : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1585049

Human Factors : Workload

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : 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 : 1585051
Human Factors : Workload
Human Factors : Situational Awareness

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Exited Penetrated Airspace
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Diverted
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Encountered windshear inside the final approach fix to land XXR at ZZZ. Upon windshear warning I advanced full power and followed FD escape guidance, the FO/PM (First Officer/ Pilot Monitoring) advised tower we are going missed due to windshear. Once clear of the windshear we cleaned up the aircraft and asked for delay vectors to remain in the area as the weather may be clearing quicker and we had sufficient fuel to hold. In the moments following, we received a call from the FA (Flight Attendant) and were told that she felt ill and there were many passengers that were feeling sick due to the turbulence. During this call, another aircraft had gone missed due to the same windshear. I made the decision to divert to our filed alternate due to the safety and consideration of the passengers and crew on board. We would not put them through the same approach and more than likely receive the same result. Dispatch, ATC, the flight attendants and passengers were informed of the decision to divert. We sent a message to Dispatch asking to have medics standing by as a precaution for the passengers who had felt ill, this was also forwarded by me to ATC. No emergency was declared. Landed ZZZ1 without incident and medical personnel met the aircraft at the jet bridge, walked down the aisle and ensured each passenger was well. All were in good health and happy to disembark.

We were delayed 2.5 hours on the ground out of [our departure field] and rerouted/refiled at 8000 feet. This added time and our original weather window was closing.

I had asked for maximum fuel on board in anticipation of weather and ground delays being an issue. All these elements were taken into consideration and added to our plan to be on

the lookout for sporadic airspeed deviations and review windshear escape maneuvers, go-around procedures, crosswind limitations, diversion/hold procedures and were all briefed.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

CRJ-900 flight crew reported a windshear event on final approach required an escape maneuver, followed by a diversion.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 21000

Environment

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

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
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
Flight Phase : Descent
Airspace.Class A : ZZZ

Component

Aircraft Component : Ice/Rain Protection 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 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 : 1584967

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Diverted
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

On descent into ZZZ at approximately 21,000 while in moderate icing conditions (wing and cowls on), we received a Wing Anti-Ice Duct warning message. We ran the QRH which instructs to leave icing conditions. We contacted [ATC] and said we need a lower altitude to leave icing conditions. [After coordinating with ATC, we] received a descent to 11,000. At approximately 17,000, icing conditions were cleared. We elected to divert due to ZZZ1 entering indefinite holds. We landed without further incident.

Synopsis

CRJ-900 Captain reported receiving a Wing Anti-Ice Duct warning before descending out of icing conditions.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 22200

Environment

Flight Conditions : VMC
Light : Dawn

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Personal
Make Model Name : Balloon
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Climb
Route In Use : Direct
Airspace.Class A : ZZZ

Component

Aircraft Component : Powerplant Fuel System
Aircraft Reference : X
Problem : Design

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 2396
Experience.Flight Crew.Last 90 Days : 8
ASRS Report Number.Accession Number : 1584788
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

I was PIC, sole occupant of an Experimental hot-air balloon making a climb to 21,000 to exceed the minimum requirements for [a competition] altitude task. I was under a waiver from [the FAA] and an LOA (Letter of Agreement) from ZZZ Center. The maximum altitude in the LOA and Waiver was 21,000 feet. High altitude hot-air ballooning is done very rarely so there is no way to practice for a flight like mine. I researched previous record attempts and spoke to others who have flown there but sometimes things happen that you are not expecting. This flight was no exception.

I was in the high teens approaching 20,000 and started to have intermittent partial burner flameouts, I am sure due to oxygen starvation due to thin air and cold temps. The procedure then is to slowly throttle in the auxiliary burner to act as a pilot light and maintain climb. The auxiliary burner is a 'floppy and weak' flame but it works. The problem that arose was mild wind shear at altitude was blowing the auxiliary burner flame away from the mouth of the balloon so I had to add more throttle to keep heat in the balloon and prevent flameouts. This created a tremendous amount more noise in the basket and my climb rate increased. I was unable to hear Center on my radio because of the noise and the fact I had a speaker not a headset. The provisions in the LOA worked as they called my ground crew via cell phone to be kept updated. Flying on the auxiliary burner is not precise especially at high altitudes. My goal was to fly the aircraft first and communicate later. I did have a discreet Squawk Code so Center knew where I was and whether I was climbing or descending. It took a little while to get the balloon under control and start a slow controlled descent. I alerted Center via 3 hits on the Ident button on my transponder per the LOA. Unfortunately I exceeded the max altitude of the LOA (22,200 feet) during this time.

Once back at lower altitudes all systems went back to normal and I reestablished contact with ATC. I landed in the first field available. The landowners were very accommodating and helpful until my ground crew could get to me. I called Indy Center per the LOA as soon as we had cell coverage and went over the flight with them. They seemed to understand what happened and seemed enthusiastic about working a balloon. They said vectoring traffic around me was not difficult as my ground speed was so slow. Possible solutions if going higher I would modify the burner with an oxidizer for the pilot lights to

prevent flameouts, especially over 25K. Add a 360 skirt to the mouth of the balloon to protect the flame from wind shear. Wear a noise attenuating headset with a push to talk button.

Synopsis

Hot air balloon pilot reported exceeding altitude specified in LOA with ARTCC.

Time / Day

Date : 201810
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : EMT.Airport
State Reference : CA
Relative Position.Angle.Radial : 300
Relative Position.Distance.Nautical Miles : 5
Altitude.MSL.Single Value : 4500

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
Aircraft Operator : Personal
Make Model Name : Cessna Stationair/Turbo Stationair 6
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Personal
Flight Phase : Cruise
Airspace.Class E : SCT

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 4500
Experience.Flight Crew.Last 90 Days : 75
Experience.Flight Crew.Type : 3500
ASRS Report Number.Accession Number : 1584751
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew
Miss Distance.Horizontal : 50
Miss Distance.Vertical : 50
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Flying west bound northwest of EMT talking with [SoCal] was told to turn 20 degrees to the right for eastbound airplane. A minute later heard them tell the eastbound plane to descend 500 feet immediately. About 10 seconds later I saw him on my north side of my airplane just under my wing. Haze flying west bound was a factor. I do have ADS-B and saw the initial conflict but was looking out for the plane after I turned 20 degrees to the right. The controller did not have the other plane turn to his right and I would have been out of the conflict if I continued not turning and going straight. I believe the controller was not on top of the situation and also for me not changing altitude.

Synopsis

C206 pilot reported a NMAC while receiving radar services.

Time / Day

Date : 201810

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : CSG.Airport

State Reference : GA

Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : CSG

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class D : CSG

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1584703

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Confusion

Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Anomaly.Inflight Event / Encounter : Fuel Issue

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Flight Cancelled / Delayed

Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

On our arrival into Columbus, due to ATC vectoring, we were a little behind in configuring. I started to configure about 7 miles from the airport, and was fully configured by 1,000 AGL; however, I was still fast. At 500 AGL, I was still somewhat fast although my speed was within the bug and trending good. At about 500 AGL, we encountered a wind gust that caused a loss of about 10 knots. I immediately corrected with power and then at about 400 AGL, we encountered another gust which caused a gain of 15 knots. At this point I was about 15 knots fast and started to correct. Around 100 AGL, after clearing a line of trees at the airport, we encountered yet another gust that caused another gain of about 10 knots. I was substantially fast at this point and promptly reduced to idle power. Crossing the threshold, I was still fast and somewhat high, and the aircraft began to float. We continued floating and never got much below 50 AGL, and I would estimate we were about halfway down the runway when I made the decision to go around. The runway was shortened to only 5,900 feet which contributed to my decision to go around. We were vectored back and the second approach was overall more stable until 500 AGL, where we encountered the same three wind gusts again. I was not as fast or high over the threshold but still began to float substantially. We made another decision to go around. During the third attempt, the Captain and I decided that he should attempt an approach. We briefly discussed our fuel on board and determined that we did have enough fuel for one more attempt before we would need to return to [departure airport], since we did not have any alternate fuel. We also received an ARINC COOL caution during the third approach which we decided to disregard in favor of landing. We did encounter all three gusts again, but the Captain was expecting them and was much more aggressive with corrections and landed successfully. Upon landing, we promptly ran the QRH for ARINC COOL.

The combination of gusty winds and the forest immediately before the runway caused an unusual set of wind gusts that caused an unstable approach. Additionally, the runway was shortened and we did not have much of a cushion on our landing distance required. The caution during the third approach added another layer of complexity and distraction.

I should have decided to go around earlier on the first attempt, since I was substantially fast and high crossing the threshold. On the second approach I should have anticipated the gusts and been more prepared to correct for them.

Synopsis

CRJ-200 First Officer reported multiple go-arounds due to unstable approaches.

Time / Day

Date : 201810

Place

Locale Reference.Airport : IAD.Airport

State Reference : DC

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Windshear

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility : Rain

Weather Elements / Visibility : Thunderstorm

Aircraft

Reference : X

ATC / Advisory.Tower : IAD

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class B : IAD

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

Experience.Flight Crew.Type : 2697

ASRS Report Number.Accession Number : 1584569

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Speed : All Types

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

We had been experiencing continuous light turbulence during our descent on the gibbz2 arrival to Washington Dulles. ATC gave us an initial heads-up that we could expect occasional moderate turbulence. I called the flight attendants and told them to take their jumpseats and that they would have about 5-10 minutes prior to the turbulence beginning. I followed up with a P/A to the passengers and then the turbulence began soon after. We were approximately 1 hour out from IAD. The turbulence never let up, so I called the flight attendants and informed them that it did not appear we would be getting a smooth ride the rest of the way in so they should remain at their jumpseats for the duration of the flight. We sent dispatch a message for the moderate turbulence and they concurred that they had already had several reports of turbulence from other aircraft.

We had the radar on and we were actively using both the auto mode and manual to get the best picture of the weather we were dealing with. For the most part we were looking at heavy rain. We were following another [Company] aircraft on the arrival that was approximately 20 miles in front of us. At 6000 feet we heard a [Company] aircraft state they were experiencing hail. ATC never informed us or any of the other aircraft on the radio where that aircraft was. We were actively trying to figure out where the weather that was causing the hail was. The radar was getting a lot of attenuation due to the heavy rain showers. We saw the heavy rain showers about 10 miles ahead and got a turn from ATC but we still experienced severe turbulence +/- 200 feet and +/- 40kts and we were also in light hail for a short time. We informed ATC and they got us turned onto final approach a short time later.

We checked with the flight attendants to make sure they were ok in the back and they reported no injuries, everyone was ok. After arriving at the gate we informed maintenance of the severe turbulence and the encounter with hail. There appeared to be no damage to the aircraft but I left before the technician had completed all of their inspections. I also spoke with dispatch on the phone to give a verbal report of the encounter with severe turbulence.

Synopsis

B737 Captain reported encountering severe turbulence and hail during arrival into IAD.

Time / Day

Date : 201810

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : PCT.TRACON

State Reference : VA

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Thunderstorm

Aircraft

Reference : X

ATC / Advisory. TRACON : PCT

Aircraft Operator. Other

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Operating Under FAR Part. Other

Flight Plan : IFR

Mission. Other

Flight Phase : Cruise

Flight Phase : Descent

Flight Phase : Climb

Airspace. Class E : PCT

Person

Reference : 1

Location Of Person. Facility : PCT.TRACON

Reporter Organization : Government

Function. Air Traffic Control : Approach

Qualification. Air Traffic Control : Fully Certified

Experience. Air Traffic Control. Time Certified In Pos 1 (yrs) : 25

ASRS Report Number. Accession Number : 1584543

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Distraction

Events

Anomaly. Airspace Violation : All Types

Anomaly. ATC Issue : All Types

Anomaly. Conflict : Airborne Conflict

Anomaly. Deviation - Procedural : Published Material / Policy

Anomaly. Inflight Event / Encounter : Weather / Turbulence

Detector. Person : Air Traffic Control

When Detected : In-flight

Result. General : Flight Cancelled / Delayed

Result. Air Traffic Control : Issued New Clearance

Result. Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Airspace Structure

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Contributing Factors / Situations : Staffing

Contributing Factors / Situations : Weather

Primary Problem : Company Policy

Narrative: 1

Weather was moving through the airspace. Two sectors were combined feeding me at the Finals Sector working staggered finals. The Center was feeding arrival aircraft all over the place that should have been put on a different arrival route. The Sector feeding me was overloaded with deviating aircraft, and this resulted in a wildly out of control and unsafe operation.

We tried to get the final into simultaneous approaches and split of the finals Sector. The feeder's aircraft were coming in from the southeast in an absolutely unsafe feed from the Center which resulted in a possible loss of separation on final between a straight in and an aircraft from the southeast.

Better communication between the supervisor and traffic management was needed. The Traffic Management Unit (TMU) Supervisor dropped the ball and allowed an unsafe situation to occur. TMU should have been paying attention to our operation and put the Center on a different arrival route. Supervisors should have put the Center in holding when this didn't happen.

Synopsis

PCT TRACON Controller reported combined sectors and lack of Traffic Management initiatives during a busy period with weather deviations created an unsafe operation.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : S50.Airport
State Reference : WA
Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 5
Weather Elements / Visibility.Other
Light : Daylight
Ceiling.Single Value : 1500

Aircraft

Reference : X
ATC / Advisory.TRACON : S46
Aircraft Operator : Personal
Make Model Name : M-20 Series Undifferentiated or Other Model
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Initial Climb
Airspace.Class E : S46

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 700
Experience.Flight Crew.Last 90 Days : 16
Experience.Flight Crew.Type : 100
ASRS Report Number.Accession Number : 1584500
Human Factors : Situational Awareness
Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Result.Flight Crew : Became Reoriented

Narrative: 1

I was departing S50 (Auburn, WA) for IFR currency (practicing approaches in IMC). I filed a Round Robin IFR flight plan.

Weather was MVFR at the airport at S50 due to Stratocumulus clouds, Vis > 6mi, Ceilings 1500-2000, tops reported at 3000-5000 ft. There is a valley, but terrain rises to the east.

Once I was ready to depart (aircraft was in run-up) area, I was unable to get an IFR clearance on the ground using my VHF radio and had no cell phone present. (I had contacted SEA Departure on ground in the past.) I did reach SEA clearance delivery on the ground but they were too busy and provided me with alternate frequencies to SEA Departure; those did not work.

I departed VFR, staying [in] the traffic pattern planning to contact Departure.

Upon contact Departure was too busy with IFR traffic to give me my clearance, but said if I can maintain VFR heading south (getting to a different sector) I could contact them and get my clearance. Ceilings were level so I flew south at 1,100 ft MSL remaining east of the Class B Approach area for SEA. Once I was south enough I contacted Approach for my clearance, but they asked if I could provide my own separation up to 2,000 feet (sector MVA), which wasn't possible without breaking clearances.

Ultimately, over Lake Tapps (VPLTP), I found an increase in ceiling (up to about 2,700-3,000 ft MSL) that allowed me to climb to MVA but, as I was climbing, I lost sight of my 'escape' route & airports and I realized that if conditions changed I might not be able to descend back down below the clouds safely.

Reflecting, the decision to keep going (taking off into the pattern, traveling south, climbing into a 'hole') were all very risky. At the point that I was going to return to S50; I was considering declaring an emergency to get a clearance rather than trying to navigate back down below the clouds and to the airport.

I should have dealt with the clearance on the ground not in the air. When talking to SEA Clearance, I should have been more direct to see if they could help get my clearance, and if not, then don't depart.

Contributing factors:

- Lack of planning for clearance (assuming VHF)
- Forgetting Cell Phone
- Mission mindset (departing expecting to get clearance)
- Confusion with SEA Clearance (for connecting approach on ground vs. air)

Synopsis

Mooney pilot reported becoming disoriented and entering IMC conditions while trying to get IFR clearance.

Time / Day

Date : 201610
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : SRQ.Airport
State Reference : FL
Relative Position.Angle.Radial : 220
Relative Position.Distance.Nautical Miles : 2
Altitude.AGL.Single Value : 1500

Environment

Weather Elements / Visibility : Thunderstorm
Weather Elements / Visibility : Windshear
Weather Elements / Visibility : Turbulence
Weather Elements / Visibility : Rain
Weather Elements / Visibility.Visibility : 5
Light : Daylight
Ceiling.Single Value : 8000

Aircraft

Reference : X
ATC / Advisory.Tower : SRQ
Aircraft Operator : Personal
Make Model Name : Rockwell Aero Commander Single-Engine Undifferentiated or Other Model
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase : Takeoff
Route In Use : Direct
Airspace.Class C : SRQ

Person

Reference : 1
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 1400
Experience.Flight Crew.Last 90 Days : 25
Experience.Flight Crew.Type : 800
ASRS Report Number.Accession Number : 1584499

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

[I] received takeoff clearance runway 20 for at or below 1,100 feet and heading of 180. Shortly after takeoff, I was hit by severe turbulence. The aircraft went right wing low approximatley 80 to 85 degrees and updraft took us to about 1,500 feet. Upon regaining control, I was able to steer.

[Turned to heading] 190 and began descent to 1,100 [feet]. At the time, ATC broadcast wind shear alert.

Synopsis

Rockwell Commander pilot reported a loss of control after takeoff due to severe turbulence.

Time / Day

Date : 201810
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : VMC
Weather Elements / Visibility : Thunderstorm
Weather Elements / Visibility : Turbulence
Weather Elements / Visibility.Visibility : 10
Ceiling.Single Value : 4000

Aircraft

Reference : X
Make Model Name : Cardinal 177/177RG
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Utility
Flight Phase : Cruise
Route In Use : Direct

Component : 1

Aircraft Component : Elevator ControlSystem
Aircraft Reference : X
Problem : Failed

Component : 2

Aircraft Component : DC Battery
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 : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 1171
Experience.Flight Crew.Last 90 Days : 260
Experience.Flight Crew.Type : 375

ASRS Report Number.Accession Number : 1584215
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Diverted
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Regained Aircraft Control
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

As I was returning home from flying [aerial survey] I had no issues or weather to avoid. Once I was about 25 miles East of ZZZ I attempted to go around some thunderstorms and work my way into ZZZ. I experienced some turbulence and decided to turn back to ZZZ1. During this time I realized that I could not pitch the nose forward and my elevator seemed unresponsive to my control inputs. I ended up being able to pull the yoke back and pitch up but not able to do the opposite. I was able to control the aircraft using power settings and trim to divert to ZZZ1 and land safely. As maintenance is being done it has been discovered that the battery was not latched in place and thus fell onto the elevator control wire, burning it in half. The rudder control was close to also being burned through. I believe this could have been a much worse situation. I also believe the company I work for does not do adequate maintenance on their aircraft.

Synopsis

Cessna 177 pilot reported that the battery came loose and burned through the elevator cable.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 12000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Icing
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 12000
RVR.Single Value : 2000

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Personal
Make Model Name : M-20 R Ovation
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class E : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 700
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 200
ASRS Report Number.Accession Number : 1584211
Human Factors : Situational Awareness

Events

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

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

I encountered icing conditions in my Mooney, which was not FIKI (Flight Into Known Icing) equipped. I had obtained a weather briefing via flightplan.com and knew of an icing airmet. I believed that I would be able to stay below the cloud layer until clear of clouds and then climb in VMC to an altitude where the temperatures were cold enough that icing would not occur. The clouds were lower and more pervasive than I realized from my weather briefing and I found myself picking up trace ice at around 10,000 MSL. I informed ATC and with their assistance determined that a climb to 16,000 MSL would likely get me out of icing conditions. I immediately began a climb and was soon in temperatures well below freezing and out of the icing conditions.

I think my flight into icing was caused by my misinterpreting the satellite weather depiction as being the only places where there were clouds or clouds with moisture significant enough to cause icing. That is clearly not the case.

I fault myself for misinterpreting the weather briefing and for not making a no-go decision solely on the basis of the icing airmet. That would have been the prudent thing to do.

I credit myself for immediately informing ATC and seeking their assistance to plan an escape from the icing conditions.

Synopsis

M20R pilot reported entering icing conditions without anti-deicing equipment.

Time / Day

Date : 201810

Place

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B767 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Component : 1

Aircraft Component : Cabin Address System

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Pax Seat

Aircraft Reference : X

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : General Seating Area

Cabin Activity : Safety Related Duties

Reporter Organization : Air Carrier

Function.Flight Attendant : Flight Attendant (On Duty)

Qualification.Flight Attendant : Current

ASRS Report Number.Accession Number : 1584191

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : FAR

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Attendant

When Detected : In-flight

Assessments

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

Narrative: 1

Panel was placed over speakers, therefore unable to hear any announcements made by either the purser forward cabin or cockpit. We hit severe turbulence, never heard the cockpit make the announcement "Flight Attendants take your jumpseat immediately". We were in our jumpseat and no crew member got injured. This plane needs to be checked and panel removed so we can hear every and each announcement. Huge safety issue.

Issue two: The 767 [of this seating arrangement] was slated to be use only on domestic routes yet [the Company] placed a few of them on the international market. Lack of cross-aisle can be a huge problem for crew members and passengers in an emergency. There is no way per FAA mandated evacuating a plane in 90 secs will occur. Let me explain. The seat pods are grouped close together. There is no way passengers can cross from left to right vice versa in business class because there is no passage to get to either side. Most passengers are on the heavy side and they will be unable to jump over these pods to exit a usable door.

Elderly passengers will encounter the same fate. If doors 1L/R are blocked due to fire or obstruction the only usable exits would be the window exits which are secondary and will not allow passengers to exit as readily as a door exit. Window emergency exits are secondary exits. Why did the FAA approve this plane with the new reconfigured seats? The crew rest seats which are located aft left are not acceptable. Let me explained, they are near two lavs or one depending on the plane number.

FA (Flight Attendants) are fatigued due to lack of sleep during our crew break as passengers believe the curtain which surrounds the seats contains a hidden lav. Passengers sit on the armrest awaiting their turn to use the lav. Noise level from working crew members in the galley and passengers standing around talking are creating a unacceptable environment for crews. Emergency equipment is hidden behind the curtain when crew members are on break. In a medical emergency crew members need to retrieve said equipment, minutes count especially during a heart attack. By the time it takes to open the curtain and retrieve equipment who knows what may occur. How did the FAA not see this huge flaw in the design and approval? These 767 planes need to be reassessed.

Synopsis

B767 Flight Attendant reported both being unable to hear announcements and the new seating configurations make evacuation difficult.

Time / Day

Date : 201810
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : SFO.Airport
State Reference : CA
Altitude.MSL.Single Value : 1800

Environment

Flight Conditions : Marginal
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : NCT
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : GPS
Nav In Use : FMS Or FMC
Nav In Use.Localizer/Glideslope/ILS : Runway 28L
Flight Phase : Final Approach
Route In Use : Visual Approach
Route In Use.STAR : SERFR
Airspace.Class B : SFO

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : NCT
Aircraft Operator : Air Carrier
Make Model Name : Airbus Industrie Undifferentiated or Other Model
Operating Under FAR Part : Part 121
Flight Plan : IFR
Flight Phase : Final Approach
Airspace.Class B : SFO

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 20000
Experience.Flight Crew.Last 90 Days : 170
Experience.Flight Crew.Type : 2628
ASRS Report Number.Accession Number : 1584038
Human Factors : Confusion
Human Factors : Situational Awareness

Events

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

Assessments

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

Narrative: 1

NOTAMs: Indicate that ILS 28L SFO [unusable]. ATIS indicated ILS 28R approach to Visual 28L and Visual 28R. NORCAL indicated (but never cleared) we should expect TIPTOE 28L. We inquired about the LOC 28L and were told it was operational again. As a back-up to the visual 28L we initially loaded the RNAV (GPS) 28L. We modified the RNAV 28L fixes outside DUYET (FAF) by adding CHERA after SIDBY (we were on the SERFR3 STAR), removed HEMAN from the RNAV 28L and placing a discontinuity between CHERA and DUYET (FAF). The TIPTOE would have us fly heading 310 and before the discontinuity was added the course indicated 305 on the FMC. Throughout the arrival with NORCAL and before NARWL on the SERFR3 we received and complied with four separate descents, 8,000 feet, 6,000 feet and 5,000 feet and finally 3,000 feet.

We queried NORCAL before EDDYY of our clearance and were cleared to fly heading 330. We believed we heard at least two aircraft cleared for the ILS 28L and queried NORCAL about the ILS 28L status--we were told it was operational again with re-opening the runway. We backed up the approach with the ILS 28L in the radios and FMC and re-briefed the most pertinent info, especially the go-around procedure if "push came to shove" as we had heard other aircraft flying the ILS 28L. NORCAL next asked us if we had "the bridge" and the field in sight, which we did, though truthfully there appeared to be a cloud bank on final. We were cleared visual approach runway 28L.

My initial thought was it must be the cloud bank was not obscuring visibility on final or that it was south of the final approach course if NORCAL is clearing aircraft to fly visual approaches as well. Also an A319/320 was cleared for the visual 28R coming in from the east; they had us in sight and were told to maintain visual separation; we also saw the A-319/320 though never called it as he was slightly behind us and generally we fly faster but more importantly did not want to further congest the radio frequency. At about the same time as we were switched to tower, not sure which freq; NORCAL or Tower, we heard a PIREP for tops at 1,700 ft, bases at 700 ft, later it seems pretty apparent that was down final in the cloud bank, as that is pretty much what we experienced. On the tower we

stated we had lost sight of the airfield and were on the ILS 28L. We were told to standby. Tower made several instructional calls to other aircraft. The last was a query to the A319/320 maintaining visual separation on us just as we entered the cloud bank. The A319/320 said he had lost us upon entering the cloud bank and tower instructed him to go around with altitude and heading instructions.

Here is our quandary, we advised tower we could not see the airfield - and by extension I know the tower could not see us. We informed tower we were on the ILS 28L. I've got another aircraft in very close proximity. Tower has not given us explicit clearance to fly the ILS 28L but is aware. I elected to continue with tower's tacit understanding. I should have pressed the tower for unequivocal clearance. Period. If there was no clearance, given the proximity of other aircraft I should have pressed tower for go-around instructions.

Synopsis

B737 Captain reported losing sight of the airport on a Visual Approach and continued on the ILS Approach without clearance.

Time / Day

Date : 201810

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZHU.ARTCC

State Reference : TX

Altitude.MSL.Single Value : 11000

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Rain

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZHU

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Flight Phase : Descent

Route In Use : Vectors

Airspace.Class A : ZHU

Person

Reference : 1

Location Of Person.Facility : ZHU.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6

ASRS Report Number.Accession Number : 1583958

Human Factors : Workload

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Procedural : Other / Unknown

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.General : Flight Cancelled / Delayed

Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic

Assessments

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

Narrative: 1

A weather front was moving through the area. A strong line of storms were present. In my sector I had aircraft deviating at all altitudes from 45000 feet and below. As the line moved east it was apparent that we would lose the northeast arrival gate. The sector I was working feeds the northeast gate. I was sequencing several arrivals on a point to point route due to the normal STARS routes being blocked by weather. As the line progressed eastward we were going to run out of room for the aircraft to enter the northeast gate at which point they would be forced into the east departure gate. One of the aircraft in the sequence was "min fuel". Other aircraft were on vectors for the weather and descending to the coordinated altitude and the TRACON Controller at the last minute refused to take the hand off on at least 5 or 6 aircraft. The vector/path that these aircraft were on required coordination with a Center and TRACON departure sector. All aircraft had to be turned out away from the TRACON. The TRACON Controller or their coordinator would not answer the line and we could not get anyone for a few minutes to give us any information. Due to the controller shutting us down, I was forced to climb aircraft back to a higher altitude to prevent a loss of separation. No separation was lost between any aircraft however we turned a manageable situation into an unnecessary train wreck. After getting off the sector I was later told by my supervisor that the TRACON did not have any management there and they had combined positions. The TRACON Controller had become overwhelmed with the northeast and southeast feeds and simply refused to take handoffs at that point. The mid shift supervisor had arrived at that point and worked to get the sectors split. There are a few issues here that need to be addressed. Whatever happened at the TRACON with respect to sector management needs to be addressed. Our TMU (Traffic Management Unit) is very slow to respond to issues. Every time we have a weather event it's as if it is the first time they (TMU) have encountered it. Their decision making, or in this case, the lack of it, is illogical, ill-timed, lackadaisical, or behind the curve at every point in time. The controllers working the traffic can see this slow moving train wreck taking place and when we ask what the plan is or route needed the response (in the case of today) was nothing. In this situation tonight, it was very obvious that the line of weather would force a closure of the northeast gate and the arrivals should have been shifted to the southeast gate. Even if the issues with TRACON had not occurred, these arrivals should have been moved to the southeast. This specialty area of which this event occurred, is the most complex and busiest in the facility and is often a dumping ground. We are forced to deal with high volume with weather and no plan to deal with the eventual issues that arise and the response from management and TMU is sickening. Serious problems exist in the TMU/management departments and it is affecting aircraft safety. We have a young controller workforce here as many veterans are retiring. The results may be different in the future if this incompetence is allowed to continue.

Synopsis

Center Controller reported Traffic Management Unit did not take appropriate measures to help during weather deviations and Supervisors did not have the Sectors staffed accordingly.

Time / Day

Date : 201810
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 : Turbulence
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 12000

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Commander 112/A/B/TC
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Personal
Flight Phase : Landing
Route In Use : Visual Approach

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 4300
Experience.Flight Crew.Last 90 Days : 45
Experience.Flight Crew.Type : 3300
ASRS Report Number.Accession Number : 1583875
Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Upon landing in a crosswind and gust of 15 knots from around 310 degree directional control was temporarily compromised right after the touchdown. The maximum left rudder was applied but the direction was not adjusted enough to follow the straight line. The airplane veered to the right. Instead of applying heavy braking, due to a doubt of sufficient braking action, the airplane was directed to the unpaved area between the runway and taxiway. The airplane was slowed and stopped on the taxiway. After a short explanation was given to the tower the airplane was taxied to the fuel pump. Visual inspections gave no indication of any kind of damages to the airplane. After refueling, return flight was made normally. One possible contributor was the rudder trim, which was trimmed to the left during the flight and was not returned to the neutral position. During the landing, the rudder authority was not as good as expected although the crosswind component was within the limit specified in the operation manual. Secondary, the gust in the cross wind might have been exceeded the limit together with the steady component of the wind.

Synopsis

A Commander 112 pilot reported a runway excursion while landing in a crosswind.