

ASRS Database Report Set

Altitude Deviations

Report Set Description.....	A sampling of reports referencing altitude deviations for all types of operations
Update Number.....	30.0
Date of Update	April 28, 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

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Moffett Field, CA 94035-1000



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

ASRS reports are submitted voluntarily. The existence in the ASRS database of reports concerning a specific topic cannot, therefore, be used to infer the prevalence of that problem within the National Airspace System.

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

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

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

Linda J. Connell

Linda J. Connell, Director
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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: 1516550 *(1 of 50)*

Synopsis

B737 pilot reported not realizing a clearance change to their DFW STAR. ATC issued the STAR as a filed clearance not as a revision to their clearance.

ACN: 1516535 *(2 of 50)*

Synopsis

B737 Captain reported on the CHSLY3 STAR into CLT they were unable to stay on path between fixes because the altitude windows were too wide and the distance too short between fixes which required a rapid descent.

ACN: 1515328 *(3 of 50)*

Synopsis

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

ACN: 1515155 *(4 of 50)*

Synopsis

C172 flight instructor reported encountering ice and an altitude deviation during descent with turbulence.

ACN: 1514984 *(5 of 50)*

Synopsis

A BE36 pilot reported that due to a lightning strike the wing tip tank exploded.

ACN: 1514750 *(6 of 50)*

Synopsis

B737 flight crew reported a navigation malfunction which required them to return to the departure airport overweight.

ACN: 1514448 *(7 of 50)*

Synopsis

Air carrier First Officer reported receiving conflicting information from ATC and automation when dealing with a traffic conflict.

ACN: 1514340 *(8 of 50)*

Synopsis

EMB-175 First Officer reported that an altitude excursion, aircraft over speed, and moderate turbulence resulted from a mountain wave encounter at FL350.

ACN: 1513614 *(9 of 50)*

Synopsis

B737-700 flight crew reported overshooting their assigned altitude after troubleshooting sluggish and sloppy control sensations.

ACN: 1513434 *(10 of 50)*

Synopsis

BE-400 flight crew reported they were given a low altitude alert by ATC on arrival into EKM when they apparently misunderstood a descent clearance.

ACN: 1513429 *(11 of 50)*

Synopsis

Cessna Citation Excel flight crew reported a flight control anomaly involving both the pitch and roll trim systems. Aircraft control was regained, but an altitude deviation of several hundred feet occurred.

ACN: 1512648 *(12 of 50)*

Synopsis

Air carrier flight crew reported receiving a low altitude alert from ATC on approach into EGE when they misread an altitude restriction.

ACN: 1512622 *(13 of 50)*

Synopsis

B757-200 First Officer reported difficulties dealing with an airborne conflict on approach to landing.

ACN: 1512591 *(14 of 50)*

Synopsis

A319 First Officer reported an airborne conflict during the climb out after reporting traffic in sight to ATC.

ACN: 1512167 *(15 of 50)*

Synopsis

ZOA Center Controller reported that an aircraft on the SUUTR TWO arrival missed a crossing restriction, creating a direct conflict with another aircraft on the DYAMD THREE arrival.

ACN: 1512163 *(16 of 50)*

Synopsis

ZSE controllers reported issuing a pilot the lowest MIA available, at pilot's request. The pilot later questioned assigned altitude while descending below the MIA, causing a lower altitude alert.

ACN: 1512150 *(17 of 50)*

Synopsis

PC-12 pilot reported an unexpected turn and descent from the autopilot while intercepting the ILS approach.

ACN: 1512148 *(18 of 50)*

Synopsis

Air Taxi First Officer reported that the Captain failed to meet a crossing restriction due to lack of FMS usage.

ACN: 1512142 *(19 of 50)*

Synopsis

Citation pilot reported an altitude deviation due to a loud window leak noise interfering with radio communication and altitude warnings.

ACN: 1512033 *(20 of 50)*

Synopsis

ERJ-170 First Officer reported landing after an unstabilized approach on a steep descent profile and visual approach.

ACN: 1511631 *(21 of 50)*

Synopsis

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

ACN: 1511527 *(22 of 50)*

Synopsis

Single Pilot of a general aviation light aircraft reported a problem with the autopilot during an approach resulting in a low altitude alert from ATC.

ACN: 1511481 *(23 of 50)*

Synopsis

A Cessna Citation Captain reported that he was unable to land due to ILS being out of service. The reporter was unprepared for an RNAV approach.

ACN: 1511365 *(24 of 50)*

Synopsis

A320 Captain reported donning an oxygen mask after experiencing mild fumes during descent. The Captain further expressed concerns about hesitation of Flight Attendants to call-in unfit for duty due to fears of reprimand from management.

ACN: 1511333 *(25 of 50)*

Synopsis

CRJ-900 flight crew reported an altitude deviation after forgetting to set their altimeter below 18000 feet.

ACN: 1511057 *(26 of 50)*

Synopsis

B737 Captain reported encountering moderate to severe turbulence on a trans-Pacific flight.

ACN: 1510799 *(27 of 50)*

Synopsis

HPN Tower Controller and Gulfstream flight crew reported an altitude overshoot and airborne conflict when the flight crew responded to a windshear warning.

ACN: 1510787 *(28 of 50)*

Synopsis

Beechcraft pilot reported deviating from published altitude and being behind the airplane when cleared for the approach.

ACN: 1510576 *(29 of 50)*

Synopsis

Air carrier flight crew reported being too low while flying an RNAV approach because of a rapidly decreasing atmospheric pressure in the area.

ACN: 1510304 *(30 of 50)*

Synopsis

Gulfstream Captain reported being climb restricted to 2000 feet, then receiving a terrain warning. ATC clarified clearance was to 5000 feet, not 2000 feet.

ACN: 1510237 *(31 of 50)*

Synopsis

CRJ700 pilot reported losing the ILS signal on approach due to an aircraft departing from an adjacent runway blocking the signal.

ACN: 1510060 *(32 of 50)*

Synopsis

B737 Captain reported missing a "climb via" clearance on the FINZZ2 SID out of SNA due to a cockpit distraction.

ACN: 1510022 *(33 of 50)*

Synopsis

ZOA Controller and air carrier First Officer reported the aircraft was issued a descent clearance too late to comply with a crossing restriction which caused a conflict with other traffic.

ACN: 1509679 *(34 of 50)*

Synopsis

A Learjet 35 First Officer reported that the autopilot disengaged and the airplane began to pitch up rapidly causing an altitude deviation.

ACN: 1509471 *(35 of 50)*

Synopsis

A319 Captain reported confusion on approach to SFO regarding an altitude assignment after NORCAL TRACON issued an ambiguous clearance.

ACN: 1509252 *(36 of 50)*

Synopsis

A321 Captain reported a Flight Attendant was injured after encountering severe clear air turbulence.

ACN: 1509024 *(37 of 50)*

Synopsis

CRJ-700 pilot reported an altitude overshoot during descent due to a late runway change.

ACN: 1509007 *(38 of 50)*

Synopsis

MD-11 flight crew reported a loss of pressurization at cruise altitude that resulted in a descent to 12,000 feet.

ACN: 1508988 *(39 of 50)*

Synopsis

B767-300 flight crew reported encountering windshear and severe turbulence after takeoff.

ACN: 1508657 *(40 of 50)*

Synopsis

Air carrier crew of a large turbojet reported entering the tops of clouds in an area of convective weather. Aircraft was briefly upset, lost airspeed and altitude, but was eventually recovered.

ACN: 1507741 *(41 of 50)*

Synopsis

CRJ-200 First Officer reported briefly exceeding the assigned altitude during a go-around, and attributed the deviation to lessened situational awareness.

ACN: 1507682 *(42 of 50)*

Synopsis

EMB-145 First Officer reported an altitude overshoot during descent while the Captain was not feeling well.

ACN: 1507547 *(43 of 50)*

Synopsis

SCT TRACON Controller reported an aircraft restricted to 6,000 feet received a TCAS/RA and climbed for a VFR aircraft above it at 6,500 feet.

ACN: 1507417 *(44 of 50)*

Synopsis

Air carrier flight crew reported encountering unexpected severe turbulence in cruise causing an overspeed warning alert.

ACN: 1507077 *(45 of 50)*

Synopsis

B737 Captain reported experiencing a compressor stall in the number one engine. After descending and accomplishing the appropriate checklists, the engine recovered, and the flight continued uneventfully to the destination airport.

ACN: 1506906 *(46 of 50)*

Synopsis

HIO Tower Controller reported issuing Low Altitude Warning to an aircraft on the ILS descended below the glideslope.

ACN: 1506867 *(47 of 50)*

Synopsis

Gulfstream V First Officer reported a cabin pressurization anomaly that prompted an Emergency Descent Maneuver.

ACN: 1506641 *(48 of 50)*

Synopsis

AC50 pilot reported entering a stall and nearly a spin due to icing in IMC conditions.

ACN: 1506296 *(49 of 50)*

Synopsis

A319 flight crew reported an altitude overshoot on descent due to confusion with the charted transition level.

ACN: 1506180 *(50 of 50)*

Synopsis

ERJ-175 flight crew reported executing a go-around after encountering wake turbulence from a B767 on short final at LAX.

Report Narratives

Time / Day

Date : 201802
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DFW.Airport
State Reference : Tx
Altitude.MSL.Single Value : 20000

Environment

Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZFW
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 : Descent
Route In Use.STAR : VKTRY2
Airspace.Class A : ZFW

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1516550
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control

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

Assessments

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

Narrative: 1

We filed and were cleared via the VKTRY2 arrival leaving ZZZ. On descent to DFW we were cleared to descend via the JOVEM4. Not realizing that was a clearance revision we started down flying the VKTRY2. There was no revised clearance or route change transmission, just descend via the JOVEM4. The waypoints are the same for the 2 different arrivals with different crossing altitudes. As the pilot monitoring I should have checked the route page to confirm that was the arrival in the box. An alert from ATC that JOVEM4 was a revised clearance would have been nice. We did not realize we were given a revised clearance/reroute.

If the arrivals had different waypoint names, that would help alert crews because we would not see those points on our legs page indicating we have a different arrival. DFW had been in a north flow all day and we should have filed for that. ATC alerted us we were 4000 ft low approaching LETNN. We were on the VKTRY 2 vertical path.

Synopsis

B737 pilot reported not realizing a clearance change to their DFW STAR. ATC issued the STAR as a filed clearance not as a revision to their clearance.

Time / Day

Date : 201802
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : IMC
Light : Night

Aircraft

Reference : X
ATC / Advisory.TRACON : CLT
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 : Descent
Route In Use.STAR : CHSLY3
Airspace.Class E : CLT

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1516535
Human Factors : Situational Awareness

Person : 2

Reference : 2
Function.Air Traffic Control : Departure
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1515727

Events

Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Assigned CHSLY3 RNAV Star into CLT, FO was PF, I was PM. Cruising at FL380 ATL Center gave us a pilots discretion descent to FL340. FO had checked ATIS and noted that Runway 23 was in use. He also mentioned at that time that since Runway 23 is on the ATIS we would most likely get that runway from our direction. So FMC was planned with Runway 23 during cruise. FO checked all arrival fixes and altitudes in FMC and also made BLUEJ a hard altitude of FL270 to get a better geopath going for descent. No other modifications were made. All good planning on his part. ATC later gives us descent to FL290 and descend via the CHSLY3 arrival. During descent, anti-ice was turned on and FO noted that the right engine TAI (Thermal Anti Ice) indication was slow to announce and did after a while without any abnormal indications. I spent a short amount of time thinking about this. Later during descent ATC asked are you ok with descent can you make it? I recalled seeing us cross CHSLY at FL220. This is the upper altitude on that gate. CHSLY is shown as between FL220 & 13000, thinking in my mind that these boxes are preprogrammed to be at the top altitude all the time I responded we can make it. We were on the path. Shortly after that the aircraft's nose tucked over to cross NODEW between 9000-8000. Aircraft was on path or slightly above it and accelerating rapidly. With boards pulled and attempting to stay on path, it became apparent that we were too fast on the arrival. At about that time the FO asked what should I do? I said start slowing. About that time ATC asked what our speed was. We replied 320 kts. Approach saw our problem and said nicely, I'm going to spin you around and get you back on a heading to intercept localizer for 23. All went well after that.

Shortly after landing we were given a number to call. I spoke with two individuals one was the approach controller working our flight the other was a controller that was working departure but could hear every exchange sitting near the other controller. He seemed to know we were not going to make it. He does a lot of OPD (Optimized Profile Descent) work in CLT and said this is a huge problem with this arrival. The windows are too wide and advised if again landing south use only the lowest altitude shown or you won't make it. He also mentioned that prior to us they had two other aircraft with the same problem - an Airbus and a CRJ. FO is very experienced in the aircraft and it left him saying "what just happened?" This arrival sets you up for trouble and it would be nice to get a heads up on it if it's posted somewhere. We had reviewed the flight plan and NOTAMs. The company page mentions a brief paragraph on OPDs but nothing really of substance to help you out on the arrival. A better review of the STAR would have (alerted me to the steep segment of FL210 (top of SLPOH) to 9000 ft top of NODEW) in 7.4 miles. Steep to say the least.

We're not 100 percent convinced that the VNAV in this older aircraft gives you accurate path information as it seems to quickly change its mind when it goes over one fix to another. I have found out the hard way that this aircraft will not come down and slow

down simultaneously.

Suggest better planning of arrivals during cruise to include the actual gate heights of what is realistically possible. Phone call with OPD guy was enlightening as he says this is a huge ongoing issue in CLT and that north and south flows should have different more realistic altitudes with them. One gate for all directional flows fall short and create problems for all. Our inability to get down has an effect on his departures. In the future I will modify all window gates to the lowest limit vs the upper limit that the box assumes is best.

Narrative: 2

I was working the departures combined at CLT when east arrival pointed out Aircraft X high and fast on the short side OPD(CHSLY) into CLT. Aircraft X crossed NODEW at 12.600 doing 320kts. The speed was pilot reported. This is extremely dangerous because CLT was departing KRITR/JOTTA/NALEY departures off of runway 18L. In order for this system to work we need reliable altitudes and speeds all the time.

Hold ZTL accountable. Add LOA language to force ZTL to put these aircraft in a manageable position to make the short side OPD descents.

We were sold on these procedures by being told they would be on the top end of the altitude profile on the long side, and the bottom on the short side. This just isn't happening. ZTL is saying "they are in the window what do you want from us?"

We want what we were promised. Nothing more, nothing less. Hopefully someone starts listening and takes our advice, considering this is what we do, and where we do it.

Synopsis

B737 Captain reported on the CHSLY3 STAR into CLT they were unable to stay on path between fixes because the altitude windows were too wide and the distance too short between fixes which required a rapid descent.

Time / Day

Date : 201801
Local Time Of Day : 0601-1200

Place

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

Environment

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

Aircraft : 1

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

Aircraft : 2

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

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1515328
Human Factors : Communication Breakdown
Human Factors : Situational Awareness

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

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1515330
Human Factors : Situational Awareness

Events

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

Assessments

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

Narrative: 1

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

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

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

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

Narrative: 2

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

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

Synopsis

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

Time / Day

Date : 201801

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Thunderstorm

Weather Elements / Visibility : Icing

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility.Visibility : 0

Light : Daylight

Ceiling.Single Value : 3000

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Training

Flight Phase : Descent

Route In Use : Vectors

Airspace.Class E : 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 : Flight Instructor

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 1460

Experience.Flight Crew.Last 90 Days : 120

Experience.Flight Crew.Type : 200

ASRS Report Number.Accession Number : 1515155

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 : Regained Aircraft Control

Assessments

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

Narrative: 1

After picking up ice we made the decision to descend. As we descended we passed through moderate turbulence. As this happened I was working on regaining control of the airplane wings level. This caused us to sink an extra 300 feet from 3,000. I promptly recovered by adding power and climbing.

Synopsis

C172 flight instructor reported encountering ice and an altitude deviation during descent with turbulence.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 12000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Rain
Weather Elements / Visibility : Turbulence
Light : Daylight
Ceiling.Single Value : 3500

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Personal
Make Model Name : Bonanza 36
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class E : ZZZ

Component

Aircraft Component : Fuel Tank
Aircraft Reference : X
Problem : Failed

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 : Private
Experience.Flight Crew.Total : 2798
Experience.Flight Crew.Last 90 Days : 40
Experience.Flight Crew.Type : 2319
ASRS Report Number.Accession Number : 1514984
Human Factors : Situational Awareness
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Landed in Emergency Condition
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

I was enroute at 12000 feet IFR. The flight was in visual conditions for the first approximately 3.5 hours. There was a broken line of scattered showers running from southwest to northeast about 100 NM from my destination. I checked the XM weather in the plane for lighting associated with the system, and saw no strikes from about 100 miles out.

Approaching the system I was given the usual arrival change to my flight plan and was cleared for deviations for weather by Center. I discussed the path through the scattered storms and determined that the controller's opinion of the best path around cells was the same as my radar showed, which I confirmed to him.

Approaching the cloud bank, I went into IMC and encountered turbulence. I was flying on instruments with the autopilot set, when I heard a loud bang and felt an impact on the left side of the plane and saw that the wingtip tank had exploded and a fragment was visible, wrapped around the airstream and facing the cabin, inside out. I determined that the airplane was upright but had lost altitude.

The controller called me to tell me my altitude was low, which I knew, by about 400 feet because of the turbulence and damage. I did not want to make abrupt altitude or heading changes due to concerns about controllability and possible further damage to the airframe in the turbulence. I informed the controller that I had suffered an apparent lightning strike and that the left tip tank had exploded. The controller asked and I confirmed that the airplane was producing good power and had plenty of fuel in other tanks, and that the tank that was damaged had already been used and was empty except for residual fuel.

In further radio calls I confirmed that the airplane was "aerodynamically a little weird" but otherwise controllable. The drag from the left side was causing the ship to fly in a slight right bank, which I later found could be corrected with right rudder, and had lost about 20 kts of airspeed.

During these subsequent conversations the controller confirmed the state of emergency and asked for fuel (2.5 hrs.) and SOB. He offered landing at a nearby un-towered airport and I declined due to my desire to remain in as steady a flight condition as possible until I felt confident the plane was safe, plus I did not want to be looking for an unfamiliar airport

in IMC with a damaged aircraft. We agreed that I would be behind the storm system and most likely in clear air in 15 minutes or so. I did request and received a lower altitude because the OAT was just at zero and I was in a cloud.

I received further vectors when the flight was handed off to TRACON, resulting in an almost straight flight path to [the airport] once another storm system had passed that airport. One controller advised me that [another airport] had gone VFR and was near my location. By that time I was confident that the plane had no structural damage and was quite controllable. I told the controller that I was sure I could not "un-declare" an emergency but that I no longer felt at all that the plane was in jeopardy and just wanted to get it to its home base where it could be repaired by my usual maintenance shop, which had originally installed the tip tanks and fully knew that system.

I arrived at [my destination] a few moments and discussed the issue with the firefighters who had rolled to the ramp in wait, and turned the plane so that the tower controller could see the damage. After confirming that I was safe and in good health, the firefighters left and I received a clearance to taxi to my hangar.

I'm not sure if I know how this could be avoided in the future. I have approached and flown through many weather scenarios that were like this or worse with nothing more than a rough ride and a wet airplane. The key to my thought was assuring myself that lightning was not present, but I think I should have checked for lightning again when I was closer, although the bolt that hit me might well have been the only one there was. I am researching adding static wicks to the airplane to see if these will reduce the likelihood of the airframe attracting lightning, and if I determine that they are affective I intend to install them.

Synopsis

A BE36 pilot reported that due to a lightning strike the wing tip tank exploded.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Light : Night

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

Flight Phase : Climb

Airspace.Class B : ZZZ

Component

Aircraft Component : Navigational Equipment and Processing

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 42

ASRS Report Number.Accession Number : 1514750

Human Factors : Workload

Human Factors : Troubleshooting

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot 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 : 1515783
Human Factors : Workload
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Diverted
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Departing on the SID the first altitude restriction is 10,000 ft at ZZZZ. The Captain was Pilot Flying and prior to ZZZZ at about 1 NM VNAV failed along with multiple messages on the MCDU. The Captain instructed me to refer to the QRH and while doing that we climbed through our altitude restriction. At 11,000 ft I told Departure that we were experiencing NAV issues and were unable to use VNAV. The Captain transferred controls to me and I was flying the aircraft while the Captain was trying to solve our NAV issues. Working with Departure Control, we were given vectors to fly while the Captain spoke to Dispatch. They decided to [advise ATC], return back to ZZZ and conduct an overweight landing. The Captain made a smooth landing and safely taxied to the gate without incident.

Narrative: 2

We departed and climbing out passing approximately 8000 ft. I attempted to engage VNAV. LNAV and autopilot were engaged. VNAV would not engage, we then received a VNAV Disconnect and a VNAV Invalid. I called for the QRH, and we began troubleshooting. We then received a NOT IN DATABASE Alert. LNAV and VNAV were now inoperable. Shortly thereafter, the autopilot disengaged, and we received a Stab Out Of Trim Alert. I could tell that my FO was way into the RED zone, as he was brand new. I knew I had to slow things down to allow him to get back into the picture, because I knew I needed him to maintain a safe environment. I had ATC give us headings, and I transferred the controls to him. I called Dispatch and we agreed to return back. We were about 10,000 pounds heavy, so we planned on burning off the fuel. The weather was [clear] and I knew we could land safely even if the FMC and navigation were non-operable. I informed the FAs and the Passengers that we would be returning back to because of NAV issues. Dispatch

sent us an ACARS telling us Maintenance said it was ok to land heavy. We decided to [advise ATC] now that we would be landing heavy, just in case the landing didn't go well. We then set up for an approach, and had an uneventful landing and taxi to the gate.

Synopsis

B737 flight crew reported a navigation malfunction which required them to return to the departure airport overweight.

Time / Day

Date : 201801
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : SJC.Airport
State Reference : CA
Altitude.MSL.Single Value : 5300

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : NCT
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 170/175 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Approach
Route In Use : Direct
Route In Use.STAR : RAZRR4

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Airspace.Class E : NCT

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 : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1514448
Human Factors : Workload

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were [a] flight from to SJC when we responded to an RA. During descent on the RAZRR 4 RNAV arrival we were passing through about 9000 ft we were given a turn to the south (perhaps about a 220 heading). We were given clearance to descent to 8000 ft. Then we were given direct to KLIDE and an altitude of 6000 ft. Shortly after, ATC called out traffic at 11 o'clock and 5 miles. We were unable to visually locate traffic although we had an indication on TCAS for that traffic. After informing ATC we did not have traffic in sight we were given a right turn to heading 020 and 5000 ft. Shortly after that ATC began calling out additional traffic at 12 o'clock and instructing us to level off at our current altitude of 5300 ft, while at the same time we heard the TCAS system call "traffic". I kept my hand on the control and searched for traffic. Immediately the controller instructed us to climb while simultaneously the RA began instructing us to descend. We responded to and followed the RA and immediately afterwards we visually acquired the traffic. The CA advised ATC we were responding to an RA and descending. We were below the traffic as they passed overhead and at about a 12 o'clock position a few hundred feet above us. Once clear of conflict around 4000 feet we were given a heading to intercept final for Runway 30L and the flight was completed without any further incident.

Synopsis

Air carrier First Officer reported receiving conflicting information from ATC and automation when dealing with a traffic conflict.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 35000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility : Windshear

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Cruise

Airspace.Class A : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1514340

Events

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 : Requested ATC Assistance / Clarification

Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

At FL350, we started to experience light chop and the Captain turned the seat belt sign on. Shortly after, we experienced mountain wave action with moderate turbulence. The Captain immediately started to reduce the thrust to compensate for the raising airspeed as we tried to maintain altitude. I made a Public Address (PA), for passengers and Flight Attendants to take their seats and fasten their seat belts. As the Captain tried to maintain altitude, the airspeed was rapidly rising. He told me that we were unable to maintain altitude and to advise ATC. I advise ATC we were unable to maintain altitude due to an updraft and needed higher and requested a block of FL350-FL360. ATC cleared us for the block. As the Captain was recovering, the high-speed oral warning went off, but never received the associated master warning for high speed. As we continued the recovery process, I advised ATC we needed lower to FL330 for moderate turbulence. ATC cleared us to FL330 and passing through FL335, we entered smooth air. We reported to ATC that we experienced moderate turbulence with mountain wave action of plus or minus 500 feet and plus or minus 30 knots. After we reached FL330, the Captain checked with the Flight Attendants to see if they and the passengers were okay, they were.

Synopsis

EMB-175 First Officer reported that an altitude excursion, aircraft over speed, and moderate turbulence resulted from a mountain wave encounter at FL350.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 10000

Environment

Light : Daylight

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 B : ZZZ

Component : 1

Aircraft Component : Aileron Control System

Aircraft Reference : X

Component : 2

Aircraft Component : Rudder Feel System

Aircraft Reference : X

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 199

ASRS Report Number.Accession Number : 1513614

Human Factors : Distraction

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1514730
Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Overshoot
Detector.Person : Flight Crew
When Detected : In-flight
Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

Climbing out on the Departure, the FO (First Officer) was flying. The aircraft flight controls felt sluggish; aircraft did not seem to respond to roll control inputs normally. I asked the Captain if he would take control and see what he thought; Captain took control of aircraft and agreed with me.

He decided to hand fly it for a bit. We leveled at 10,000 ft, and he called for Climb Check, aircraft started to accelerate at 10,000 ft while I started reading Climb Check. ATC said to maintain 10,000 ft; I looked and noticed the altitude read 10,300 ft. We got back to 10,000 ft.

It seemed that as power was added, the aircraft started a slight climb, but we were distracted by the checklist and did not notice it right away.

Narrative: 2

During climbout, FO (First Officer) was initially PF (Pilot Flying). He said the roll control felt a little sloppy. I took the aircraft and continued hand flying the RNAV departure at 210 KIAS in LNAV, VNAV and autothrottles. The roll control did feel different. It seemed like it took bigger input to get a normal roll response. While level at 10,000 ft in a left hand turn at ZZZZZ and maintaining 250 KIAS, roll control seemed normal. ATC deleted 250 knot restriction. FO confirmed and deleted restriction and aircraft started accelerating. I called for climb check. During climb check and accelerating through 280 KIAS, I started feeling slight vibration in rudder pedals. ATC said, "Maintain 10,000 ft." I inadvertently climbed to 10,300 ft. I corrected back to 10,000 ft.

Rudder pedal vibration continued through 16,000 ft. The rest of the climb and cruise were unremarkable. We discussed Elevator Tab Vibration QRH Checklist. The conditions we experienced were not the same. During descent, slight rudder pedal vibration occurred between FL250 and FL200. After configuring during final approach, roll control again felt like it took slightly more input than normal to get normal roll response. After landing, we contacted Maintenance, called Dispatch for conference call with Maintenance Control,

made two separate logbook entries: one for roll difference and one for rudder vibration. We contacted Chief Pilot on Call to make him aware of the situation.

Synopsis

B737-700 flight crew reported overshooting their assigned altitude after troubleshooting sluggish and sloppy control sensations.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : EKM.Airport

State Reference : IN

Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : SBN

Aircraft Operator : Air Taxi

Make Model Name : Beechjet 400

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Ferry

Flight Phase : Initial Approach

Airspace.Class E : SBN

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1513434

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1513715

Human Factors : Communication Breakdown

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

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Flight was a reposition to EKM. While proceeding direct from ASHEN to EKM, we were issued a descent by Fort Wayne Approach to 2000. I distinctly remember the 2000 as I was planning my descent while keeping all the anti-ice equipment on and had to use speed brakes during the descent in order to keep the N2 at the required minimum of 70% for the wing anti-ice. We were handed off to South Bend Approach and were told to turn right to a heading of 320 (no altitude issued). Our next set of instructions were to turn left to 300 degrees, maintain 2,500 MSL until established, and cleared ILS 27. When we received those directions we were already at 2,300 MSL descending to 2,000 MSL. ATC issued us a low altitude warning and we mentioned we were cleared to 2,000. ATC said negative, we were cleared to 2,500. I requested a review of the tapes while I corrected the altitude to 2,500. The remainder of the approach was uneventful.

I suspect there was misinterpretation of our cleared altitude in the hand off between Fort Wayne Approach and South Bend Approach. Although 2,500 is the minimum altitude for that leg, we were in VMC below the clouds. I did not double check the assigned altitude at 2,000 MSL as I have encountered approach facilities that would assign altitudes lower than on the approach plate as long as we were above the MVA. The situation could have been prevented had we mentioned we were cleared to 2,000 MSL when we read back the heading to 320.

Narrative: 2

On letdown into South Bend airspace arriving empty into EKM, we were given and read back a descent from 8000 feet to 2000 feet. Both pilots were clear and certain about this. South Bend approach gave us a vector to intercept the final approach course and to maintain 2500 feet until established. At that time we were passing through 2300 feet to level 2000 feet. I immediately told ATC we were given 2000 feet. Controller came back saying, no we were given 2500 feet. [Captain] jumped in and told the controller we were given and read back 2000 feet while initiating a climb back to 2500. We landed normally.

On departure, South Bend told us he had listened to the tapes and we had been told and read back 2500. Well, okay. Makes me think we were given the descent out of 8000 feet

by the previous Controller. Ft Wayne or Terre Haute, not certain which.

What would I do to prevent this in the future? No idea. We were just flying along as normal. The radio transmissions were clear. We heard the same thing. If we both are gaga, then maybe it is time for the booby hatch.

Synopsis

BE-400 flight crew reported they were given a low altitude alert by ATC on arrival into EKM when they apparently misunderstood a descent clearance.

Time / Day

Date : 201801

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 25000

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Make Model Name : Citation Excel (C560XL)

Crew Size.Number Of Crew : 2

Flight Plan : IFR

Flight Phase : Cruise

Airspace.Class A : ZZZ

Component : 1

Aircraft Component : Aileron Trim System

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Elevator Trim System

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1513429

Human Factors : Distraction

Human Factors : Confusion

Human Factors : Workload

Human Factors : Troubleshooting

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1513432
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Workload
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While at cruise at FL250, we received a ROLL TRIM annunciation. We accomplished the memory action item by disconnecting the autopilot. [The pilot flying] was anticipating a roll movement, but the airplane also pitched down hard and started descending. I told the copilot to pull back, to which he replied "I am!" And indicated that there was a lot of force pitching the plane forward. We were able to arrest the descent [but] lost between 400-500 feet before returning to altitude. Afterward, [the pilot flying] commented that he felt like he was fighting against the autopilot when he was hand flying, but I verified that the autopilot had been disconnected.

Narrative: 2

During cruise [we] received a Roll Trim annunciator on the PFD. Initially, I pressed TCS (Touch Control Steering) to trim out control pressures but found aircraft to be trimmed heavily nose down. I had to apply an inordinate amount of back pressure and manual/electric trim to relieve the control pressures and bring the nose up. In the process lost between 300-400 feet of altitude from assigned altitude of, I believe, 25,000 feet. ATC did not mention the deviation to us.

Synopsis

Cessna Citation Excel flight crew reported a flight control anomaly involving both the pitch and roll trim systems. Aircraft control was regained, but an altitude deviation of several hundred feet occurred.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : EGE.Airport

State Reference : CO

Altitude.MSL.Single Value : 13000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZDV

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use.Localizer/Glideslope/ILS : Runway 25

Flight Phase : Initial Approach

Airspace.Class E : ZDV

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)

Experience.Flight Crew.Type : 3456

ASRS Report Number.Accession Number : 1512648

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)

Experience.Flight Crew.Type : 3993

ASRS Report Number.Accession Number : 1512656

Human Factors : Situational Awareness

Events

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

Assessments

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

Narrative: 1

In setting up for the LOC FMS 25 into EGE, I misread the crossing altitude at VOAXA of 13800 ft as 13000 ft from the 11-9A page. I had entered in the FMS to cross VOAXA at 170 kts/13000. The approach was flown in LNAV/VNAV with the autopilot on and prior to VOAXA, ATC issued a low altitude alert. There were no other electronic or visual warnings in the cockpit that warned of an unsafe flight condition. The flight was in VMC and we continued the approach to a normal landing. In briefing the approach the mistake was not identified by either of us since it was already in the FMS as 13000 ft and can look like 13800 ft if you look too quick.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported receiving a low altitude alert from ATC on approach into EGE when they misread an altitude restriction.

Time / Day

Date : 201801

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

Altitude.MSL.Single Value : 5000

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZZZZ

Aircraft Operator : Air Carrier

Make Model Name : B757-200

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Initial Approach

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)

ASRS Report Number.Accession Number : 1512622

Human Factors : Situational Awareness

Human Factors : Workload

Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : Airborne Conflict

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Returned To Clearance

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

As the First Officer, I was the pilot flying. Around 15-20 miles at 6,000 feet, we were at approximately 200 knots, Flaps 5 and had just intercepted the localizer to XXR (cleared for the approach) and with the approach tile armed to intercept the glideslope. We were then told to reduce to minimum approach and to NOT descend below 5,000 feet. We configured to Flaps 20, dropped the landing gear, and bugged Flaps 20 minimum maneuver speed. On the TCAS, about 3 miles in front we could see another aircraft 2,000 feet below (the aircraft was so low, we weren't sure if he was crossing or actually on the approach). We leveled at 5,000 and continued slowing, but the controller wasn't comfortable with the distance and asked us either to "turn right 30" or to "turn right to 330." We never got a chance to clarify, as things started happening rapidly.

We discussed briefly the best way to discontinue the approach, and I hit the TOGA switch, as we needed the aircraft out of the approach mode. The aircraft appeared to begin climbing even though 5,000 feet was set in the altitude window. Rather than wait and see if the trend continued, I disconnected the Auto Throttles and Autopilot and manually started the turn. As I asked the Captain for clarification on the heading, and while attempting to avoid overshooting it, I noticed the airspeed dropping below Flaps 20 minimum maneuver. We had been attempting to slow down this whole time, and the throttles were at idle with the gear down. Although I initiated the correct throttle input immediately, it took several seconds to spool up and the speed went below Flaps 20 minimum maneuver before climbing back up, almost prompting me to begin descending to avoid losing any additional speed.

I asked for gear up, and right at that moment the controller told us to turn to a heading of 240, descend to 3,000 and resume the approach. We had both assumed that we'd been vectored off the approach in order to be sent around for a new one, and so we were caught by surprise when he wanted us back on the ILS. In our haste, we never selected FLCH after inputting 3,000 which added to some confusion as I was trying to look "through" the flight director. We got configured yet again and tried to re-automate. Once on the Localizer and Glideslope, we noticed there was still only a 2.5-3 mile distance to the aircraft in front of us. We weren't sure if this was a different aircraft or the same one, but we discussed going around and were prepared for the possibility.

We were fully stable by 1,500 feet and weren't gaining on the aircraft in front, but the distance was still uncomfortable. At this point, the Tower controller asked us if we could accept the visual to XXL. With the short separation, and not wanting to deal with the same controller during a Go Around again, I told the Captain that I would prefer the visual to XXL rather than continuing to XXR. He agreed, and we made an uneventful visual approach to XXL and did a thorough debrief in the chocks.

The big takeaway for us was remembering how to handle a discontinued approach AS WELL AS how best to handle being put BACK on that same approach. We were really put in a difficult position by the controller, but the fact that you cannot easily go out of approach mode in the 757 makes it very challenging at times. Also, how often do the controllers vector 757s off of the approach due to minimum separation with slower aircraft? It could be a reoccurring theme.

Synopsis

B757-200 First Officer reported difficulties dealing with an airborne conflict on approach to landing.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZFW.ARTCC

State Reference : TX

Altitude.MSL.Single Value : 11500

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZFW

Aircraft Operator : Air Carrier

Make Model Name : A319

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Climb

Route In Use.SID : DARTZ SEVEN

Airspace.Class E : ZFW

Aircraft : 2

Reference : Y

Make Model Name : DC-3/Dakota/Skytrain

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Phase : Cruise

Airspace.Class E : ZFW

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 12880

ASRS Report Number.Accession Number : 1512591

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

On the DARTZ7 departure around 11,500 ft MSL, ZFW Center called out traffic (DC-3) at our 10 O'clock. After acquiring the traffic, we called visual. As we continued our southbound climb, we noticed the traffic start a turn into us. We received a TCAS Traffic & Resolution Advisory to descend. We complied and I communicated this to ATC. The DC-3 passed above and behind us.

When ATC made the call on traffic to us, we were able to acquire it visually. I'm not sure why ATC stopped giving us advisories unless the radar sweep was slow and he was not able to see the traffic turn into us. The TCAS (great tool) provided us backup to what we both could already see was about to happen if we did not intervene our flightpath. Later via a phone conversation with the Captain, the ATC supervisor said the Controller thought we were responsible for separation because we called traffic in sight.

If in doubt, communicate early with ATC about your intentions or clarify your concerns about who is responsible for separation. When all else fails, rely on your training (back to the basics)...TCAS TA/RA procedures, traffic avoidance, etc. Also, this is a good reminder for us all in the cockpit of how important visual lookout is in all environments and the techniques we have (automation/autopilot) that allow us to maintain situational awareness while we look for potential threats.

Synopsis

A319 First Officer reported an airborne conflict during the climb out after reporting traffic in sight to ATC.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZOA.ARTCC

State Reference : CA

Altitude.MSL.Single Value : 33000

Environment

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZOA

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.STAR : SUUTR TWO

Airspace.Class A : ZOA

Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZOA

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 : Descent

Route In Use.STAR : DYAMD THREE

Airspace.Class A : ZOA

Person

Reference : 1

Location Of Person.Facility : ZOA.ATRCC

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 : 1512167

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Aircraft X was a SMF arrival descending on a STAR and a facility automated coordination with an adjacent sector (15), and entering my sector (34). Aircraft Y was a SFO arrival descending on the STAR as well. The two STARs are procedurally separated (SMF arrivals descend below SFO arrivals) which allows for the automated information transfer from sector to sector of the SMF arrivals coming from S15. Aircraft Y was at FL300 descending on the DYAMD arrival at the time and Aircraft X was out of FL330 descending on the SUUTR arrival, was supposed to be below FL210 when the two arrivals cross path. The S15 controller called and mentioned Aircraft X had missed his altitude crossing restrictions and was being stopped above Aircraft Y. Aircraft X was stopped at FL320, Aircraft Y was advised to increase the rate of descent to allow Aircraft X to keep descending, as well as vectored away from Aircraft Y's arrival path. Aircraft X was handed off and switched to NCT descending to FL200 and on assigned heading instead of the arrival routing to avoid other potential traffic climbing out of approach control. The situation was alleviated because the S15 controller caught the Aircraft X's late descent profile, but had he switched the flight to NCT approach, Aircraft X would have caused a potential disaster especially since the automated transfer procedure has them transferring frequencies to a different approach control sector from the SFO arrivals.

Advise the pilots of better understanding the importance of meeting altitude/speed restrictions on STARs, and what happens when they do not comply with these restrictions. Maybe a better descent altitude profile on the STAR instead of a "dive" because the altitude restrictions on the SUUTR arrival from this direction display aircraft staying high and then doing a quick descent to meet the altitude restrictions (example: staying at FL360 until the last minute and then diving down to meet a restriction to cross a fix below FL210).

Synopsis

ZOA Center Controller reported that an aircraft on the SUUTR TWO arrival missed a crossing restriction, creating a direct conflict with another aircraft on the DYAMD THREE arrival.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZSE.ARTCC

State Reference : WA

Altitude.MSL.Single Value : 6300

Aircraft

Reference : X

ATC / Advisory.Center : ZSE

Aircraft Operator : Air Taxi

Make Model Name : PC-12

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Descent

Person : 1

Reference : 1

Location Of Person.Facility : ZSE.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1512163

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2

Location Of Person.Facility : ZSE.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1512158

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Airspace Violation : All Types

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

[Aircraft] requesting lowest available altitude. Cleared to MIA of 6600 msl. Aircraft read back 6600. Aircraft then asks if the altitude was 6300 or 6600. Clarified to aircraft that the clearance was to 6600. Aircraft descends below MIA to 6300 mode-c reported before correcting to 6600. The moment the altitude was questioned, a Low altitude alert should have been issued for safety.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

ZSE controllers reported issuing a pilot the lowest MIA available, at pilot's request. The pilot later questioned assigned altitude while descending below the MIA, causing a lower altitude alert.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MRY.Airport
State Reference : CA
Altitude.MSL.Single Value : 2600

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Fog
Light : Night

Aircraft

Reference : X
ATC / Advisory.TRACON : NCT
Aircraft Operator : Corporate
Make Model Name : PC-12
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Nav In Use : GPS
Nav In Use.Localizer/Glideslope/ILS : ILS RWY 10R
Flight Phase : Final Approach
Route In Use : Vectors
Airspace.Class C : MRY

Component

Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
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 : 6800
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 2000
ASRS Report Number.Accession Number : 1512150

Human Factors : Human-Machine Interface
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : FLC Override Automation
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

On a part 91 IFR flight to KMRY, I was over WIGGL intersection and cleared for the RNAV GPS Y Runway 28L. Airport was VFR until my arrival at WIGGL and then went to scattered layer. I loaded the approach and was proceeding, when the controller advised me that tower just told him the field went IFR. He was going to vector me around for the 10R ILS. He then gave me a heading to fly for the ILS 10R approach. I loaded that approach in the GPS and flew his headings until he gave me a 200 heading to intercept the ILS 10R at or above 2600 at ZEBED.

Upon reaching ZEBED, the airplane started a 30-degree bank turn away from the inbound course of 098 and started a 1200 FPM descent. I quickly looked at my chart just to confirm what the airplane was doing was wrong and at same time, the autopilot disconnected. In a hurry to confirm that the autopilot was off I also hit the Yaw Damper disconnect. This put the airplane in an uncoordinated turn while I was trying to turn back to the correct course. I did not like what I was seeing on the PFD so I reverted to my back up instruments to get the airplane back on course and altitude. I glanced back at the MFD and noticed that ZEBED was now missing but the Glideslope intercept MINCK was still showing up so I turned the aircraft to that fix and at the same time set up for a hand flown raw data ILS. During this time frame, I lost the altitude required on the approach and was advised by the controller to climb to 3000 Immediately. I climbed back up and flew to intercept the ILS and hand flew the rest of the procedure with no issues.

Corrective actions to not have this happen again: I should have asked the controller for a little wider turn to intercept final. I think that short of approach and almost a 100-degree turn and the short distance to ZEBED was not enough time to get lined up and be down to 1700 feet after ZEBED for the intercept at MINCK. Of course, in the future I am not even going to mess around with trying to save the short approach and just go missed and come back around and try again.

Synopsis

PC-12 pilot reported an unexpected turn and descent from the autopilot while intercepting the ILS approach.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : SUA.Airport

State Reference : FL

Altitude.MSL.Single Value : 24000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZMA

Aircraft Operator : Air Taxi

Make Model Name : Light Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use : Direct

Airspace.Class A : ZMA

Component

Aircraft Component : FMS/FMC

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

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 : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Engineer

Experience.Flight Crew.Total : 28000

Experience.Flight Crew.Last 90 Days : 125

Experience.Flight Crew.Type : 500

ASRS Report Number.Accession Number : 1512148

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

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

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

In descent for SUA. I was PM (Pilot Monitoring) I'm a first officer. I was off ATC radio to copy arrival ATIS and to call FBO to notify of arrival and request services. While I was off ATC, we received further descent with a crossing restriction. When I came back to ATC, captain briefed me on changes, specifically the descent clearance with the crossing restriction. Normally, we use the FMS and create a waypoint for the crossing whenever the clearance is, for example, "cross 50 miles north of ZZZZZ at and maintain flight level 240." This was one of those clearances. However, the captain didn't create the waypoint in order to allow the FMS to provide the required descent profile. Reason unknown

Within a minute of me getting back in the loop, analyzing what was happening, calculating in my head the required descent, ATC asked if we would make the crossing restriction. Captain answered ATC "Affirmative." But, I looked at the situation and concluded there was no way we'd make it. We hit the crossing point about 2000 ft high. This is a frequent issue. One pilot flying and complying with ATC clearances, while the other pilot is 'out of the loop' copying ATIS and taking care of company tasks. I don't have a solution, because at the point where we're within radio range of doing this stuff, we're also at the point where we get busy flying the aircraft. I try to time it, so I take care of things during less-busy times. But, we never know what ATC will ask of us at what point.

Perhaps it would help if ATC would give us an "expect ..." or, perhaps technology could help by allowing us to receive ATIS digitally (print out), and also communicate with FBO the same way. Another factor is our dependence on the FMS to fly the aircraft. Younger pilots, like this captain, have trouble mentally calculating required descent profiles. It's not taught; it's not needed with the GPS-driven FMS systems.

Synopsis

Air Taxi First Officer reported that the Captain failed to meet a crossing restriction due to lack of FMS usage.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : PIT.Airport
State Reference : PA
Altitude.MSL.Single Value : 3500

Environment

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

Aircraft

Reference : X
ATC / Advisory.TRACON : PIT
Make Model Name : Citation Excel (C560XL)
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Climb
Route In Use : Vectors
Airspace.Class B : PIT

Component

Aircraft Component : Cockpit Window
Aircraft Reference : X
Problem : Improperly Operated

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 32000
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 275
ASRS Report Number.Accession Number : 1512142
Human Factors : Distraction
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Returned To Clearance

Assessments

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

Narrative: 1

We were assigned heading 280, climb to 3000 feet. On takeoff roll, a loud air noise developed in the cockpit, making it difficult to hear any conversation or radio call. I attempted to press down on the left side window latch, and the noise got worse. We cleaned up the aircraft, and attempted to call departure. It was impossible to hear anything on the radio from the noise level. The altitude warning was not audible from the noise level. I reached over and pulled the window lock upwards to the open position. The noise suddenly stopped as the window latch seated into the air leak. I heard the first call from departure asking what our altitude was. We were climbing through 3500 feet. I immediately leveled off, and said we were descending back to 3000 feet. The controller cleared us to 14000 feet, asking us what our assigned altitude on departure was. I said it was 3000 feet, and we missed our level off because of a distraction in the cockpit.

Synopsis

Citation pilot reported an altitude deviation due to a loud window leak noise interfering with radio communication and altitude warnings.

Time / Day

Date : 201801
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC
Light : Night

Aircraft

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 550
ASRS Report Number.Accession Number : 1512033
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew

When Detected : In-flight
Result.Flight Crew : Returned To Clearance

Assessments

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

Narrative: 1

CA's (Captain's) leg, uneventful takeoff and cruise segment. As we got closer to the airport, I noticed we were still left quite high in our descent. The CA asked for direct to the FAF as we descended under FL200. I made a comment that "it would be close," on this one, which should've been my personal indication to be even more aware and ready to say something in the event of an unstable approach. As we kept screaming along at 250KTS, approach control cleared us for the visual approach to the airport at almost a 90 degree intercept to the FAF. In order to get the altitude under control, the CA used FLCH which put us at an almost 4,000 ft/min descent rate through 4,000 ft. At this point, I was beginning to get a bit uncomfortable, but failed to say anything. As our descent rate was arrested at the FAF intercept altitude, we started configuring. I was a bit busy "inside," ensuring that flap speed limitations were not broken, when I realized that we had descended below the MSA as the CA disengaged the autopilot to smoothen the transition at the 90 degree intercept angle. At this point, I noticed we were below the glide slope and saw 4 red on the PAPI, with a radar altimeter reading lower than it should have been. The CA then leveled the aircraft and stayed at that altitude until the glide slope was intercepted. At this point a normal final approach to landing occurred without incident within the touchdown zone.

Improper descent planning by both ATC and the flight crew in the flight deck, caused this incident. This was an error that caused unnecessarily high workload for us in the flight deck close to the ground and late in the day. I personally should've spoken up and called for a go-around with the first indication that we were below the glide slope. There was definitely a sense of "get-there-itis," as it was day 4 of the trip and the last leg as well. As a first officer, I failed in my responsibility to support my CA by suggesting a better outcome. I'm glad that the incident did not cause something more major to happen. In the future, I will be sure to speak up when I feel uncomfortable.

Synopsis

ERJ-170 First Officer reported landing after an unstabilized approach on a steep descent profile and visual approach.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : N90.TRACON

State Reference : NY

Altitude.MSL.Single Value : 7500

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : N90

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Airspace.Class C : N90

Component

Aircraft Reference : X

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1511631

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Distraction

Human Factors : Human-Machine Interface

Events

Anomaly.ATC Issue : All Types

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

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Ground Incursion : Runway

Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : FLC Overrode Automation
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

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

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

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

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

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

I immediately advised Tower we were exiting [the runway] at B3. Based upon the Captain advising Tower of the Threat Level 1, we required Police to meet the aircraft (as I was determining where the Captain had turned the aircraft on the airport surface since it was other than Taxiway E at the end of Runway [we landed on]). Ground cleared us via any route we selected to the gate. Captain taxied aircraft promptly to the Gate via B3, C and S as I completed the After Landing Flow then contacted operations to advise them we were on the ground and required Police to meet the aircraft at the Gate for a Threat Level 1 Passenger.

Synopsis

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

Time / Day

Date : 201801
Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : SAC.Tower
State Reference : CA
Altitude.MSL.Single Value : 500

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Fog
Weather Elements / Visibility.Visibility : 2
Light : Daylight
Ceiling.Single Value : 400

Aircraft

Reference : X
ATC / Advisory.Tower : SAC
Aircraft Operator : Personal
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Retractable Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Nav In Use : GPS
Flight Phase : Final Approach
Route In Use.Other
Airspace.Class D : SAC

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 : 2050
Experience.Flight Crew.Last 90 Days : 25
Experience.Flight Crew.Type : 300
ASRS Report Number.Accession Number : 1511527
Human Factors : Distraction
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Flight Crew

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Flight Crew : Returned To Clearance

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

I inadvertently descended below approach segment altitudes while on the RNAV GPS RWY2 approach into SAC. The ceilings were at minimum when I started the approach. I was going to the airport to have an intermittently malfunctioning auto pilot repaired. The auto pilot malfunctioned as I started the approach and I failed to notice that the Garmin 430W indicated LNAV instead of LPV and there was no glide slope. While dealing with the malfunctioning auto pilot I descended below the published segment altitudes and received low altitude alerts from the controllers. I climbed and then continued the approach and successfully landed. The problem was that the malfunctioning auto pilot distracted me and I didn't notice the LNAV indication before beginning the approach. I wasn't properly prepared for an approach without the glide slope or auto pilot.

I learned that when something unexpected happens on an approach, go missed approach and sort things out away from the airport. I would not have continued an LNAV approach down to minimums with no glide slope and a malfunctioning autopilot if I hadn't been distracted and had realized that it was going to be a LNAV approach instead of a LPV approach. Fortunately, the approach ended well.

Synopsis

Single Pilot of a general aviation light aircraft reported a problem with the autopilot during an approach resulting in a low altitude alert from ATC.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Altitude.MSL.Single Value : 7000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Icing

Weather Elements / Visibility : Fog

Weather Elements / Visibility : Rain

Weather Elements / Visibility : Snow

Weather Elements / Visibility.Visibility : 1

Light : Daylight

Ceiling.Single Value : 400

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Citationjet (C525/C526) - CJ I / II / III / IV

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Ferry

Route In Use.Other

Airspace.Class D : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Engineer

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1511481

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

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 : Weather

Primary Problem : Weather

Narrative: 1

Cleared for the RNAV approach to in lieu of ILS which was Out of Service (OTS). At MAP and MDA there was no runway environment and aircraft icing up with all deicing operative. Executed published miss and in climb out continued through 5500 up to 7000 to be above clouds and icing. Advised approach of altitude and reason for being there. Requested clearance to alternate ZZZ1.

This was poorly handled by myself:

Should have prepared for the RNAV vs ILS which I failed to see it had been notamed OTS.

Should have had deice on earlier and perhaps used spoilers to have more thrust for heat.

Should have been more familiar with missed approach procedures using the FMS.

Should have been more skeptical of ASOS which was indicating above minimums but with variable ceiling.

Synopsis

A Cessna Citation Captain reported that he was unable to land due to ILS being out of service. The reporter was unprepared for an RNAV approach.

Time / Day

Date : 201801

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : AUS.Airport

State Reference : TX

Altitude.MSL.Single Value : 24000

Environment

Flight Conditions : VMC

Light : Dusk

Aircraft

Reference : X

ATC / Advisory.Center : ZHU

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

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Descent

Route In Use : Vectors

Airspace.Class A : ZHU

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 : 1511365

Human Factors : Physiological - Other

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness

Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor

Anomaly.Deviation - Altitude : Undershoot

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

During the arrival phase into KAUS, ATC issued a crossing altitude clearance of 55 West of LAIKS at FL240. This was given too late and too close to the fix to make. I increased the rate of descent to 3500-4000 feet per minute in an attempt to make the clearance. When it was obvious that we would never make the crossing, we immediately notified ATC that it was going to be impossible to make the crossing, but we were doing the best we could. Shortly afterwards, I started to notice a musty smell coming from the environmental system (smell of dirty socks). This was a very mild fume event, but obvious that it was happening. I then started noticing a bitter metallic taste in my mouth and throat and told the First officer that I was quite sure we were getting the fume event that has occurred in many Airbus Aircraft. I donned my oxygen mask and advised the first officer to do the same. Since we were already on the arrival phase into our destination airport and since it was a mild event, I chose not to exercise Pilot's Emergency Authority.

When the First Officer (FO) entered the crossing clearance into the FMS, he accidentally entered the altitude into the LAIKS fix on the arrival. When he corrected his mistake, he re-entered the altitude at the 55 DME fix from LAIKS and then cleared the altitude at LAIKS that he mistakenly entered. With the distraction of the fume event, that we were now dealing with, we both missed the fact that by the FO clearing the mis-entered crossing altitude at the LAIKS intersection, this also cleared the charted altitude for that fix. We didn't notice the issue until just crossing the fix and cross-referencing the STAR chart and discovering that we were approximately 800 feet low. We immediately notified ATC: They gave us a descend to maintain altitude clearance to take us off the crossing altitudes on the charted STAR.

After arriving into KAUS, and now having to wait for an occupied gate, we noticed that the fumes/smell was not as noticeable and seemed to come and go. After parking at the gate, I entered the event in the logbook and notified Maintenance control with the write up. During the deplaning process and prior to contacting maintenance control, I talked to the Flight Attendants (FA) about any abnormal smells that they had noticed. They all informed me that they did faintly smell something musty. When I asked how they were feeling, one FA indicated that she felt a little light headed and somewhat out of sorts. They all complained about a burning sensation in their throats. I advised them to get off the airplane to get some fresh air and to let me know if they need medical attention up to and including emergency medical services and that, I was certain that we experienced a fume event. About 45 minutes to an hour later, all the flight attendants informed me that they would like to get some medical attention, but didn't feel that they needed to go to the emergency room. I recommended that they call their immediate supervisors or managers and get advice on how to proceed. They all did so and ended up calling a nurse/medical professional to discuss their conditions.

After eventually trouble shooting the Aircraft systems and determining that the fume event could not be reproduced, Maintenance Control released the aircraft back into service for our next scheduled flight.

Two very concerning events transpired during this time of assessing all crewmembers condition and fitness for flight. The First Officer and I both felt okay to continue after spending nearly 2 hours on the ramp getting fresh air. When I consulted with the Flight Attendants about their physical conditions and fitness for flight, they all were very hesitant about making a decision about continuing. Although they all were feeling a little better, the concern that they all voiced was "Fear from reprimand from management, or loss of points under their attendance policy if they decided that they were not well enough to continue." I informed them that this was not a decision I could make for them, but if they felt that they needed additional medical attention or were not well enough to fly that they would have to make that decision on their own personal wellbeing. In the end, they did all let me know that they thought they could continue on the next flight. This policy that company has regarding Flight Attendants sick call issues and attendance policy should be reviewed. I see this quite often and in fact on a regular basis, our Flight Attendants working in fear of disciplinary actions if they call sick. I see Flight Attendants working flights who are obviously ill and should not be in the workplace risking other employees' exposure to viruses, let alone the severe outcome that would occur with a pressurization event and flying with a severe cold.

The other concerning issue that occurred during this event was in regards to a discussion I had with a crew scheduler. They had called the First officers phone and asked him to have me call them back when I could. I did notice they had tried to call my phone earlier, but was quite busy at the time working the Flight Attendants medical issues and the Maintenance hurdles with the Aircraft. When I returned the call, the question that was asked was; "We were just following up to see where things were at with the Aircraft was wandering if you would fly the Airplane with the smell?" I really couldn't believe what was just asked of me. I advised them that I had no idea what the status of the Flight Attendants was due to the fact that they asking for medical attention, and at the time wasn't even sure of the progress of the maintenance issue or if the aircraft was going to be legal to fly. Although I would hope that the question was in regards to possible residual smell, but the question quite frankly was shocking and that they would even ask this type of question. I am not sure what was implied by the question, but seemed as though they were asking if I would fly the airplanes with the smell of fumes. The flight did finally depart with no further events after being released by Maintenance control.

During this event and after the fact, it might have been a good idea to notify ATC of our predicament in this case, but because we were already in the approach phase, I felt at the time it may have complicated matters rather than assisting in the busy environment, we were in. I felt we were not in a dire state of emergency at the time. I have the mindset to never hesitate to notify ATC of an emergency if needed, but in this case didn't feel it wasn't immediately necessary.

Synopsis

A320 Captain reported donning on oxygen mask after experiencing mild fumes during descent. The Captain further expressed concerns about hesitation of Flight Attendants to call-in unfit for duty due to fears of reprimand from management.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ATL.Airport

State Reference : GA

Altitude.MSL.Single Value : 14500

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZTL

Aircraft Operator : Air Carrier

Make Model Name : Regional Jet 900 (CRJ900)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Airspace.Class E : ZTL

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1511333

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1512022

Human Factors : Distraction

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

We were at FL180 and were given a clearance to 14000 ft. We forgot to set the altimeter setting and the controller told us we were 500 ft high. We set it and then everything was normal.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

CRJ-900 flight crew reported an altitude deviation after forgetting to set their altimeter below 18000 feet.

Time / Day

Date : 201801

Place

Locale Reference.ATC Facility : KZAK.ARTCC
State Reference : US
Altitude.MSL.Single Value : 25000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : KZAK
Aircraft Operator : Air Carrier
Make Model Name : B737 Next Generation Undifferentiated
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Oceanic
Airspace.Class A : KZAK

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 2384
ASRS Report Number.Accession Number : 1511057

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.General : None Reported / Taken

Assessments

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

Narrative: 1

Due to flight planning from WSI and dispatch we were aware of moderate turbulence on our route. I notified the flight attendants and told them to remain seated until we called. I also briefed them that the seatbelt sign would be on for at least an hour after takeoff. The flight attendants made an announcement to the passengers to use the restroom before we close the door due to turbulence and there would be at least an hour after takeoff before it would be safe to get up.

Shortly after making a position report for ELOYI we received a SELCAL. We were to standby to copy SIGMET. Another aircraft joined the frequency. As the SIGMET was read we entered into moderate turbulence. We tried to enter the 5 lat/long coordinates into the FMC for reference. The turbulence intensity made it physically difficult to type. We experienced intermittent severe turbulence before able to verify the area of the SIGMET. We experienced +/-200 feet, +/-20 knots, 30 degree bank angles and the autopilot kicked off. We tried to contact Radio but were unable to get a break to talk on [the] frequency. We were trying to find out how long the turbulence was going to last. We discussed briefly to offset on the track, [advise ATC] and descend below the flight level of which the SIGMET of severe turbulence was given, FL250. We were aware of our fuel situation and that we would need to return back to Hawaii if we did [descend] to 8000 feet. We were forecast to have 1000 pounds of extra fuel at the critical point.

We were in continuous moderate turbulence with intermittent severe for 10 minutes. The information from Radio about the SIGMET is in very poor format for aircraft that are entering or already in the area of severe turbulence. In our case it was of no use to have coordinates that were in an area around us.

Better information would have been "you are entering the area of severe turbulence from FL250-FL380 for the next 50 miles." No one was hurt but not for any help from ARINC.

Synopsis

B737 Captain reported encountering moderate to severe turbulence on a trans-Pacific flight.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : HPN.Tower
State Reference : NY
Altitude.MSL.Single Value : 2800

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Turbulence
Weather Elements / Visibility : Fog
Weather Elements / Visibility : Rain
Weather Elements / Visibility : Thunderstorm
Weather Elements / Visibility : Windshear
Weather Elements / Visibility.Visibility : .5
Ceiling.Single Value : 100

Aircraft : 1

Reference : X
ATC / Advisory.Tower : HPN
Make Model Name : Gulfstream G280
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Flight Phase : Climb
Route In Use.SID : Westchester 7
Airspace.Class D : HPN

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : N90
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 : Initial Climb
Route In Use : Direct
Route In Use.SID : HPN7
Airspace.Class D : Y

Person : 1

Reference : 1
Location Of Person.Facility : HPN.TOWER
Reporter Organization : Government
Function.Air Traffic Control : Local

Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1510799
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 19789
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 1500
ASRS Report Number.Accession Number : 1511466

Person : 3

Reference : 3
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 5940
Experience.Flight Crew.Last 90 Days : 40
Experience.Flight Crew.Type : 400
ASRS Report Number.Accession Number : 1511500

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Procedure

Contributing Factors / Situations : Weather
Primary Problem : Airspace Structure

Narrative: 1

Aircraft X departed HPN on the Westchester 7 departure. Aircraft X was issued 2000 feet on departure because LGA final is supposedly over our airspace at 3000 feet. HPN airspace extends to 2999 feet so that's their claim that the Aircraft for LGA are above our airspace (like we can even measure that 1 foot exactly is absurd). Anyway on departure Aircraft X started climbing past 2000 feet saying he was responding to windshear on a right turn of 320 degrees where he should have been maintaining 2000 feet but was instead climbing to 3000 feet now directly towards a Aircraft Y going to LGA because well they own that 1 extra foot of airspace even though our normal SID at HPN is 3000 feet on departure. I quickly informed Aircraft X that he was climbing directly at the Aircraft Y at 3000 feet. He responded immediately that he was descending and a potential midair collision was averted.

I do not know how many times I have report this particular problem. This is by far the closest to a midair collision that I have ever seen. I have been complaining about this issue for a long time. Honestly Aircraft X should not have been in a position that he can't respond to windshear and Aircraft should have had a safe clear path to LGA. The pilots deserve safety as due the passengers deserve safety! [A nearby airport] gets their departures stopped due to overflights and since they get to ride on the count of those overflights they get to be a big bad level 9 tower despite getting stopped and twiddling their thumbs. HPN doesn't stop, we run traffic with that questionable 1000 foot buffer. We don't get counts for those overflights because we don't own that 1 foot of airspace! Should an arrival to LGA descend out of 3000 feet or our departure climb above 2000 feet there is a huge potential for loss of life. Even our Prop1 departure is a joke for single engine props keeping our departures on Runway 16 from turning into our arrivals because it doesn't address the twin props that turn just as sharp as single engine props. We should be a part of this Bravo airspace of LGA with redesigned airspace to better safely move traffic. I keep hearing nothing can be done... I keep hearing how we are behind on ELMS and that we can barely get a communication for safety class going, but really instead of these semi useless check a box stuff why can't we sit down and figure some important stuff out and not just give us new equipment that tries to get us to walk away from our position.

Narrative: 2

On Departure we received a Windshear Warning between 500 and 1000 ft on MFD. A gain in 50 knots and vertical speed of 2500 was indicated. Aircraft went through assigned altitude but once control was reestablish aircraft returned to assigned altitude. ATC was advised of the wind shear event.

Narrative: 3

During an Instrument departure (Westchester 7 Departure) off of Runway 16 in KHPN we experienced a low level Windshear event at approximately 700 ft right after Flap retraction. The Windshear warning alerted the crew and the Pilot Flying (PF) immediately added full TOGA Power and pitched up. Due to this evasive maneuver we overshot our assigned altitude (2000 ft) by approximately 600ft and got a Traffic Advisory for an airplane above us at 3000 ft. After both pilots agreed that the windshear event was over the PNF immediately advised ATC that we had a windshear event and that we are taking corrective action to return to our assigned altitude of 2000 ft. We returned to 2000 ft without any further problems. ATC gave us further vectors and subsequent climbs. No further action was taken by ATC.

The ATIS warned of windshear and the crew discussed it during their takeoff briefing.

Synopsis

HPN Tower Controller and Gulfstream flight crew reported an altitude overshoot and airborne conflict when the flight crew responded to a windshear warning.

Time / Day

Date : 201801
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Fog
Weather Elements / Visibility.Visibility : 2
Light : Night
Ceiling.Single Value : 400

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Beechcraft / Beech Aircraft Corp Undifferentiated or Other Model
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Initial Approach
Route In Use : Direct
Airspace.Class D : ZZZ

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 : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 900
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 125
ASRS Report Number.Accession Number : 1510787
Human Factors : Distraction
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

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

Assessments

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

Narrative: 1

Assigned RNAV XX in IMC. Prior to approach clearance, given direct to [fix]. Approach clearance was cross [fix] (IF/IAF) at or above 2,000 feet, cleared RNAV XX. The approach clearance did not contain the "straight-in" exception and required the hold-in-lieu to be flown.

I failed to clarify with the controller if he expected a procedure turn or not. Furthermore, I left the autopilot in Vertical Speed mode, and did not engage Hold mode which allowed the altitude to go below the published minimum for that segment.

I rushed the descent, became distracted and stopped using my approach checklist. This resulted in my deviations. Ultimately, I was behind the airplane. A request for a short delay vector, or the hold-in-lieu would have provided the additional time needed to stabilize everything.

Synopsis

Beechcraft pilot reported reported deviating from published altitude and being behind the airplane when cleared for the approach.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ALB.Tower

State Reference : NY

Altitude.AGL.Single Value : 500

Environment

Flight Conditions : Mixed

Weather Elements / Visibility : Cloudy

Weather Elements / Visibility : Snow

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ALB

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

Airspace.Class C : ALB

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 408

ASRS Report Number.Accession Number : 1510576

Human Factors : Communication Breakdown

Human Factors : Human-Machine Interface

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1510871
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
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 : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Weather in Albany was forecast to have light snow during the arrival timeframe. We (Captain and F/O) had continued to monitor the local ALB weather via ACARS and WSI throughout the flight. At the XA00 ATIS, the altimeter was 30.08 and the nearby snow was mostly west and north of the airport (WSI radar). At the XB00 Z ATIS, the altimeter was 30.01, and the snow was still staying off the airport in roughly the same areas. Our scheduled arrival was XB50 Z, but we were showing arriving about 15-20 early. We checked in with Albany Approach Control with the XB00 Z weather. I do not know if Approach provided the local altimeter, but I do know that we had 30.01 set, based on ATIS, and we did not change.

We descended below some clouds and could see the airport from more than 10 miles. We had originally planned to fly the ILS 19 and had briefed the approach in case the snow arrived and IMC conditions became a factor. Approach asked us if we wanted the RNAV Z Approach to Runway 19. We said that would be fine. We loaded the FMS with the RNAV Z 19 and briefed the points/altitudes, even though we had VMC. We were cleared to TUKUY (IF) and we flew the approach as published with the autopilot engaged. As we rounded the corner between CUGOP and WISIG, I commented that we were low (could see the PAPI; it showed 1 white/3 red).

At about WISIG, I commented to the other Pilot that the HUD was showing us low and touching down prior to the runway, but that I would not let that happen (we were in IMC mode on the HUD with a -3.00 glideslope angle and the TDZE set in the altitude). I left the

autopilot engaged to see if the automation was going to correct the low situation. I crosschecked the instruments and the lateral and vertical navigation pointers were centered in the middle. As the white PAPI started to change color to red, I disconnected the autopilot and corrected the aircraft flight path back to 2 white/2 red on the PAPI. The vertical guidance (GP) indicator for the RNAV on the instruments then showed us high when the PAPI showed us on the proper glide path.

I do not remember seeing the ILS indication during the event. I feel confident that we both had the ILS Localizer frequency and course set, but I did not look for the glideslope during the event. The landing was uneventful. After arrival at the gate, I asked Ground Control "what was the altimeter indicating", and they said "29.94 and falling rapidly." I estimate this altimeter was provided at XB35 Z.

Narrative: 2

Due to rapidly falling pressure atmospheric conditions the autopilot coupled flown visual approach began flying below the visual glide path when synced up to the RNAV RNP Z Runway 19 Approach. The arrival weather was VMC and ATC asked if we could accept the RNAV Approach for ease of sequencing. After confirming all points/altitudes, both the PF (Pilot Flying) and I verified the FMA illustrated it was in LNAV and VNAV PATH throughout the approach. While on final we discovered that the approach path was flying low in comparison to the PAPI located on the airfield.

The PF elected to turn off the autopilot and correct our position for a more accurate approach path with relation to the PAPI lights. Immediately after turning off the autopilot, we heard the glidepath annunciation very briefly as the PF corrected the situation. We touched down without incident and queried the Controller for the latest altimeter setting. It was at that point we were notified of the rapidly changing conditions. Had the airfield been under IMC conditions, we would have been forced to execute a go-around/missed approach.

Synopsis

Air carrier flight crew reported being too low while flying an RNAV approach because of a rapidly decreasing atmospheric pressure in the area.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Relative Position.Distance.Nautical Miles : 3

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Snow

Weather Elements / Visibility.Visibility : 2

Light : Night

Ceiling.Single Value : 800

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Corporate

Make Model Name : Gulfstream V / G500 / G550

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Takeoff

Route In Use : Vectors

Airspace.Class E : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 7100

Experience.Flight Crew.Last 90 Days : 65

Experience.Flight Crew.Type : 350

ASRS Report Number.Accession Number : 1510304

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On takeoff both myself and the Copilot flying thought we were only cleared to 2000 feet MSL. When switching over to departure we checked in at 2000 feet. About 3 miles into the [climb] flying runway heading we started to get a "pull up" audio and proceeded to climb, checked in again and told the controller what we were doing. Departure mentioned that we were cleared to 5000 not 2000. No other action was taken.

Synopsis

Gulfstream Captain reported being climb restricted to 2000 feet, then receiving a terrain warning. ATC clarified clearance was to 5000 feet, not 2000 feet.

Time / Day

Date : 201801
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ORD.Tower
State Reference : IL
Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC

Aircraft

Reference : X
ATC / Advisory.Tower : ORD
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 700 ER/LR (CRJ700)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use.Localizer/Glideslope/ILS : 28R
Flight Phase : Initial Approach
Airspace.Class B : ORD

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 : 1510237

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Clearance
Anomaly.Ground Event / Encounter : Other / Unknown
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : CFIT / CFIT
Detector.Person : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Airport

Contributing Factors / Situations : Airspace Structure

Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings

Contributing Factors / Situations : Procedure

Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

We were on the ILS at approximately 1000 feet when tower cleared another aircraft to take off from an intersecting offset runway. We had broken out into VMC conditions right about 1000 feet. We had the autopilot coupled and when the other aircraft began it's takeoff roll, it must have obstructed the glideslope because our glideslope indication went down very quickly. The autopilot chased the glideslope with a rapid descent rate which caused an aural warning, "sink rate". I immediately disconnected the autopilot and hand flew the remainder of the approach to land. We regained stability by 850 feet. The Tower controller transmitted to check our altitude because he had gotten an alert as well. We landed the aircraft without incident. The cause of the incident was that we were landing on a non standard runway because of poor braking action on other runways while other aircraft were being launched off of an intersecting offset runway.

I would suggest not allowing these operations to take place simultaneously.

Synopsis

CRJ700 pilot reported losing the ILS signal on approach due to an aircraft departing from an adjacent runway blocking the signal.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : SNA.Airport
State Reference : CA
Altitude.MSL.Single Value : 8800

Environment

Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
Aircraft Operator : Air Carrier
Make Model Name : B737 Next Generation Undifferentiated
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Climb
Route In Use.SID : FINZZ2
Airspace.Class B : LAX

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 7500
ASRS Report Number.Accession Number : 1510060
Human Factors : Distraction
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight

Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

We were flying the FINZZ 2 SID out of SNA. We were given a vector off the SID and told to maintain 8000 and expect direct CAHIL. Shortly thereafter, we were cleared direct to FINZZ and also instructed to climb via the SID. I did not hear the climb via clearance. I was expecting to receive a clearance direct to CAHIL. When we received a clearance to FINZZ I referenced the SID on my EFB. I believe referencing the EFB distracted me just enough to miss the climb via portion of the radio call. Enroute to FINZZ, the FO, who was PM, said we were given a climb via clearance. I asked the FO to confirm our climb clearance with SoCal, which he did. SoCal confirmed we were cleared to climb via the SID, so I immediately began a climb to the FINZZ crossing restriction of at or above 10,000. Complying with the at or above 10,000 restriction at this point would have been tough. SoCal immediately vectored us off the SID for our climb.

The first error I made was missing the climb via clearance. I was expecting to receive a clearance direct to CAHIL. When we received the clearance to FINZZ I distracted myself by referencing the SID on my EFB at an inopportune time. The FO had correctly understood the climb via clearance, but by the time we got the confirmation from SoCal we were coming up on FINZZ. If our Crew communication had been timelier, we could have trapped the error sooner and complied with our clearance. We had reviewed the SID on the ground so I should have simply made the input into the FMC and MCP. Correctly prioritizing tasks would have trapped this error.

Synopsis

B737 Captain reported missing a "climb via" clearance on the FINZZ2 SID out of SNA due to a cockpit distraction.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZOA.ARTCC

State Reference : CA

Altitude.MSL.Single Value : 26800

Environment

Flight Conditions : IMC

Light : Dusk

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZOA

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use.STAR : SUUTR2

Airspace.Class A : ZOA

Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZOA

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use.STAR : DYAMD3

Airspace.Class A : ZOA

Person : 1

Reference : 1

Location Of Person.Facility : ZOA.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) : 27

ASRS Report Number.Accession Number : 1510022

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 : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1510046
Human Factors : Situational Awareness
Human Factors : Time Pressure

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
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
Primary Problem : Procedure

Narrative: 1

Aircraft X was descending via SUTTR into SMF via the AIT procedure following another SWA aircraft into SMF. Aircraft Y was descending VIA DYAMD into SFO. I was by myself working a number of aircraft and was not paying close attention to Aircraft X. I was assuming he would make the crossing restrictions on the SUUTR arrival. The important one is FOOLZ at FL210 or below. One minute from losing possible separation, NCT sector SUNOL called me and said Aircraft X was going to be high for all the restrictions. She mentioned he was too high and too fast. Aircraft X was out of FL268 at this point, so I hung up and immediately stopped Aircraft Y at FL270. Aircraft X crossed FOOLZ at 24700 which is 3700 feet too high. Aircraft Y could legally be down at FL220 at that point. This is very dangerous.

I have written a report on this issue before where the SFO arrival was already down at FL220 and I had to turn him hard to ensure separation. There is 5.1 miles and 1000 ft difference in the crossing restrictions on the SUUTR and DYAMD arrivals. This is way too close. What would have happened if my SFO arrival had been down at FL220 and SWA is in max descent rate trying to make the restriction? In the situation yesterday they easily could be at the exact same place at the same altitude and who knows if TCAS could save it.

The chief pilot for [Aircraft X's airline] called and said he would have a discussion about letting ATC know earlier about missing restrictions. He also mentioned this is happening a

lot and blamed it on the winglets on the B737 saying it is much more difficult to descend quickly when the airspeed is pulled back. I believe also that the previous sector may have issued the descent a little late. Again, CHANGE THE CROSSING RESTRICTIONS TO AT LEAST 10 MILES APART ON THESE TWO ARRIVALS. It is only a matter of time until there is an extremely dangerous conflict with these two procedures that results in loss of life.

Narrative: 2

ATC held us up almost 20 miles past top of descent and then slowed us to Mach .76. Later, he instructed us to "descend via" at which point we were 6000 feet above the path. After a frequency change, we told ATC we were unable to comply with the crossing restrictions due to being held up and slowed. On the next frequency we were given a phone number to call because ATC was upset we were unable to descend via. Frankly, this was 100 percent their fault and it was ludicrous that they wanted to talk to us about it.

Synopsis

ZOA Controller and air carrier First Officer reported the aircraft was issued a descent clearance too late to comply with a crossing restriction which caused a conflict with other traffic.

Time / Day

Date : 201801
Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 39000

Environment

Flight Conditions : IMC
Weather Elements / Visibility.Visibility : 0
Light : Night

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Learjet 35
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class A : ZZZ

Component

Aircraft Component : Altitude Hold/Capture
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 : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 1445
Experience.Flight Crew.Last 90 Days : 120
Experience.Flight Crew.Type : 120
ASRS Report Number.Accession Number : 1509679
Human Factors : Troubleshooting
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Clearance
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
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 : FLC Overrode Automation
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While level at FL390, the altitude hold function on the autopilot disengaged and the airplane began to pitch up rapidly causing an altitude deviation. The crew disengaged the autopilot and began to correct the altitude deviation. While correcting, the airplane descended below and above FL390 up to 500 feet. After determining there was a problem with the autopilot, the crew requested a lower altitude outside of RVSM airspace. The crew was able to stabilize the aircraft at a lower altitude and land the aircraft safely.

Synopsis

A Learjet 35 First Officer reported that the autopilot disengaged and the airplane began to pitch up rapidly causing an altitude deviation.

Time / Day

Date : 201801

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : NCT.TRACON

State Reference : CA

Altitude.MSL.Single Value : 8000

Environment

Flight Conditions : IMC

Aircraft

Reference : X

ATC / Advisory.TRACON : NCT

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 : Initial 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)

Experience.Flight Crew.Type : 782

ASRS Report Number.Accession Number : 1509471

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Clearance

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

I was operating as the PF (Pilot Flying) on this sector and we were flying the DYMOND 3 arrival, approaching the ARCHI intersection. Shortly before arriving at the intersection, NORCAL Approach instructed us to "Fly the ILS 28R after ARCHI." Normally, in visual conditions when flying the FMS Bridge visual, it is common for ATC to instruct us to "Intercept the FMS bridge visual routing only" meaning that we will fly the lateral track, but will not descend until cleared by the Controller. On this particular flight, the Controller told us to fly the ILS 28R after ARCHI. The clearance was vague and ambiguous. At the time, we were close to ARCHI and on the glide slope, so I said to my FO (First Officer) that we would just fly the glide slope, but clarify the clearance. My FO was trying to verify the clearance, but the frequency was congested (for the record, the Controller was issuing identical clearances to multiple airplanes on the arrival with the same phraseology). I started on the glide slope when we both agreed that it might be better to hold off on descending before we obtained a specific approach clearance. At the time, I believe we were at about 7,770 ft at ARCHI on the glide slope, but I immediately leveled off and climbed back to 8,000 ft until we received clarification. We were handed off to the final approach Controller and clarified the clearance and he told us to descend to 4,000 ft and to expect the approach clearance shortly. There was no loss of separation and at no time did the Controller query us on the altitude. We continued to an uneventful and stabilized approach.

Synopsis

A319 Captain reported confusion on approach to SFO regarding an altitude assignment after NORCAL TRACON issued an ambiguous clearance.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : KZAK.ARTCC

State Reference : HI

Altitude.MSL.Single Value : 27000

Environment

Flight Conditions : VMC

Ceiling : CLR

Aircraft

Reference : X

ATC / Advisory.Center : KZAK

Aircraft Operator : Air Carrier

Make Model Name : A321

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Route In Use : Oceanic

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 : 1509252

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.General : Physical Injury / Incapacitation

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

At FL270 approximately 200 nm west of FLITY, we encountered severe turbulence in clear air, with no warning. Flight attendants were immediately seated, and the seat belt sign was already on due to intermittent light to moderate chop.

We experienced altitude excursions of over 400 ft above and below cruise altitude, plus and minus 20 KIAS from selected airspeed of 290, and 30 deg of roll right and left. Being unable to contact San Francisco ARINC in a timely manner, we turned right to a 15 nm offset, and started a descent, notifying other traffic on guard frequency of the turbulence, and our intentions. We [advised ATC] when we were finally able to contact San Francisco ARINC, and requested they notify [Company] of our situation. ATC had by then responded to our initial request for lower altitude advising that it was not available. The turbulence stopped around FL230 and it was very smooth at FL220, where we leveled off. Total time in the turbulence was around 10 minutes.

After about 5 minutes we were cleared direct to FLITY with a block altitude of FL220-240. Once back on a clearance with an assigned altitude and free of the turbulence, we proceeded on to [the destination] uneventfully.

No passengers reported injuries. Three Flight Attendants were in the aft galley, where there are only two FA (Flight Attendant) jump seats. Number 3 FA, who could not get to her cabin jump seat, instead sat on the other's laps and held on, reported bruising in her ribs from contact with something during the event. I understand she is filing an Injury on Duty report.

No damage was reported in the cabin, and there were no warnings or ECAM messages other than the altitude deviations mentioned earlier.

My thanks and complements to FO (First Officer) for his input and assistance, and the cabin crew for taking care of some very sick and apprehensive passengers. On deplaning, everyone was in a good mood, although happy to be on the ground.

Synopsis

A321 Captain reported a Flight Attendant was injured after encountering severe clear air turbulence.

Time / Day

Date : 201801

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : I90.TRACON

State Reference : TX

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : I90

Aircraft Operator : Air Carrier

Make Model Name : Regional Jet 700 ER/LR (CRJ700)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use.STAR : DRLLR5

Airspace.Class E : I90

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1509024

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Issued New Clearance

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

On arrival into IAH we checked on with the final approach frequency and stated we were descending through 7,200 on the DRLLR 5 arrival. We had the DRLLR 5 with the 26R ILS loaded into the FMS. The approach controller assigned us on the check in RWY 26L. We immediately switched the FMS to ILS 26L and inserted DOMNO behind our course but we were already level at 6000 ft for the 26R transition. While we were verifying our new Course and altitude on the chart. (Course was unchanged, Altitude should have been 7000 for 26L vs 6000 for 26R) we were assigned to fly heading 190 and descend to 4000 for vectors to the visual for 26L. The late change from 26R to 26L caused us to change final descent altitudes on the arrival and caused us to be at the wrong altitude for our transition. Speed and Course were unchanged and unaffected but altitudes are different depending on the runway assigned. The lack of catching the difference in the arrival briefing caused us not to be aware of the difference ahead of time until the change was actually given and assigned. By the time we caught the difference after making the change we were already level at the lower altitude and ATC was assigning us lower and a turn off the arrival for the visual approach to the runway. A more in depth brief of the difference along the whole arrival so that we are both aware of the changes that could occur with different runways. Verifying altitudes for both or all optional runways along the arrival to confirm any changes that may result of a runway change.

Synopsis

CRJ-700 pilot reported an altitude overshoot during descent due to a late runway change.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 36000

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : MD-11

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Cruise

Airspace.Class A : ZZZ

Component : 1

Aircraft Component : Service/Access Door

Aircraft Reference : X

Problem : Improperly Operated

Component : 2

Aircraft Component : Pressurization 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 : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1509007

Human Factors : Time Pressure

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1509009
Human Factors : Time Pressure

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

While cruising at FL360 enroute we received a Cabin Altitude warning and noted the cabin altitude climbing past 10,000 ft. I was the pilot flying at the time of the warning. The Captain and I donned our oxygen masks and the Captain took control of the aircraft to start a descent. I took control of the radios and advised [Center] that we were descending out of FL360 to 10,000 ft with a cabin pressurization problem. During the descent the cabin pressure slowly decreased below 10,000 ft and eventually stabilized at approximately 1,000 ft as we leveled at 12,000 ft (assigned altitude from ARTCC). We completed the Cabin Altitude and Emergency Descent checklists during the descent and [advised ATC]. The Captain sent an ACARS message to the company and provided ARTCC with a phone number to call to get hazardous cargo information. We continued the flight at 12,000 ft and landed without issue.

After landing, maintenance informed us the CAC (Center Accessory Compartment) door was not fully seated and the door seal was protruding from the door. They believed this to be the cause of the pressurization loss.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

MD-11 flight crew reported a loss of pressurization at cruise altitude that resulted in a descent to 12,000 feet.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZZ.TRACON

State Reference : FO

Altitude.MSL.Single Value : 6000

Environment

Weather Elements / Visibility : Turbulence

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZZ

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 : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Climb

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 23000

ASRS Report Number.Accession Number : 1508988

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 : Relief Pilot

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1509001

Person : 3

Reference : 3

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1508984

Events

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 : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

Storm with high wind and precipitation forecasted to be on airfield at departure time. Efforts for early go during rapidly degrading weather conditions, resulted in an on-time push. At Runway 32, when lined up and waiting, reported wind/gust were in excess of 30 knots with 35 knots gusts, with Tower concurring, we remained in position for 12 minutes where reported crosswind was now under 29 knots max. An aircraft ahead of us, as well as two more that departed on the (too short for us) runway 28 reported to the Tower, no wind shear experienced. The takeoff, under the circumstances, was normal. Moderate chop to light turbulence was encountered from lift off through 6000 feet. I left my high lift devices in place through the procedure, with a 210 knots max in the initial turns.

We were cleared to FL090 for crossing traffic. While proceeding outbound, we were passing 8500 feet in clean configuration at 240 knots. Here we encountered severe turbulence with a massive shear of over 60 knots. Speed went immediately up in excess of 300 knots, red stall margin raised up to the indicated airspeed with PLI (Pitch Limit Indicator) appearing on top of aircraft on ADI (Attitude Indicator). I immediately put throttles manually to max power while keeping wings level and slightly adjusting my pitch with stick shaker activating no less than 3 times at speeds as high as 305 knots with a slightly positive deck angle accompanied by an immeasurable vertical sink rate; we went from at least 8500 feet down to 6000 feet. This was not just a challenge for us, but quite alarming as the 21-mile segment we were on, had a MEA of 7000 feet. My map range was still at 10 miles from takeoff. The terrain display remained green as I looked at it and stayed so during the escape procedure. First Officer's radar display showed heavy precipitation in all quadrants. These events were promptly reported by First Officer to ATC (severe turbulence unable to maintain altitude). Conditions were violent and required complete focus by all 3-cockpit crewmembers.

Once through FL165 we cleared clouds and turbulence. Aircraft wind shear/predictive wind shear warning system did not sound or display. After clearing weather, and assessing that no major malfunctions on aircraft systems, EICAS not showing an over boost of any kind in either engine, and most importantly, no injuries were reported to passengers or crew,

the decision was made to continue. Pre-departure Public Address included warning of rough air and directive of crew to remain seated until advised otherwise.

Narrative: 2

Airspeed sheared to 300 knots and we lost 2500 feet in altitude (that loss of altitude put us around 6500 feet, which was still 2000 feet above the minimum sector altitude on that portion of the departure). First Officer told departure controller that we were unable to maintain our altitude due to severe turbulence. Pilot Flying flew the aircraft by hand through the area to climb us out of the low-level weather using our windshear escape procedure. Terrain displayed green terrain with no conflicts and radar showed heavy rain all over the area.... The aircraft windshear system never reported a windshear to us on departure but we recognized it and flew out of it.

Narrative: 3

I think delaying the departure would have helped, but by not having any reports from the two previous aircraft that departed before us, we felt it was safe to takeoff.

Synopsis

B767-300 flight crew reported encountering windshear and severe turbulence after takeoff.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : FLL.Airport

State Reference : FL

Altitude.MSL.Single Value : 39000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZMA

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZMA

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 420

ASRS Report Number.Accession Number : 1508657

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1508662

Human Factors : Situational Awareness

Human Factors : Training / Qualification

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

Narrative: 1

We were at FL 390, on course, [and] there were rain showers and convective activity in the vicinity of FLL at departure time. We were established on course and nearing the end of the convective area. We were approaching a very broad area of clouds, quite "flat" on top, and not the typical appearance of any convective cell with vertical development. We had asked for a slight deviation from course (approximately 10 degrees left), to "top" the cloud layer at its lowest point.

The HUD indicated that we would just "skim" the top of this area, Radar was on and did not show any cell development using vertical-tilt mapping. I had the Flight Attendants remain in their seats since departure and updated them several times on suspected ride conditions; seat belt sign was on.

We flew through the upper reaches of this broad cloud layer, and experienced immediate severe turbulence, including an MMO (Maximum Mach Operating Speed) exceedance (clacker), accompanied by gains and loss of altitude. Airspeed then started to deteriorate, and the First Officer manually pitched down to prevent a high altitude stall event. Eventually, we recovered, but had lost approximately 800 feet.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Air carrier crew of a large turbojet reported entering the tops of clouds in an area of convective weather. Aircraft was briefly upset, lost airspeed and altitude, but was eventually recovered.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3800

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class B : ZZZ

Component

Aircraft Component : Flight Director

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1507741

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Conflict : Airborne Conflict

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Procedural : Clearance

Detector.Automation : Aircraft TA

Detector.Automation : Aircraft RA

Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

On approach, visual to Runway 27L, we were vectored onto final and cleared for the visual. The aircraft began to capture the localizer course in white needles, so I switched to green needles and selected Approach again. The Approach did not seem to properly capture the localizer in green needles (though it may have). My Flight Director (FD) seemed to be working, but the Captain's was indicating something different from my FD. To avoid going through the localizer course, the Captain told me to hand fly, so I turned off the Autopilot and began to hand fly. As I started to hand fly, I got a "TRAFFIC ALERT" (yellow TA) for the aircraft on final adjacent to us. So as not to get an RA, I stayed left of the localizer and began to slowly rejoin the localizer. At this point, we were roughly 3-5 miles from the Final Approach Fix.

As I began to descend and join the localizer, I got another TA, which turned into an RA, which instructed me to reduce my rate of descent. I complied and the RA went away. I continued my descent while visually monitoring the aircraft on final to my right. I was probably around 2800-3200 just outside of the FAF when I got another RA. I complied with the RA, and the Captain and I briefly discussed what we should do. We decided we should execute a go-around. We notified Tower and executed a go-around. The Go-around instructions were to climb to 3000 and turn left heading 170. I began to comply with this and climbed to approximately 3,800 when my Captain told me to descend back to 3000 (I may have already been above 3000, but heard "climb to 3000" and knew I was executing a go-around so I switched into "GO AROUND" mode mentally and started a climb). During the process of monitoring the aircraft to my right, and complying with the RAs, I lost some Situational Awareness and I did not realize I was pretty much at 3000 feet already. ATC did not say anything to us about our altitude, as we corrected the altitude right away and continued to comply with ATC instructions. We came back around and completed a visual approach to 27L with no problem.

Be aware that Situational Awareness (SA) can be lessened because of the reasons that may cause you to do a go-around. We were both somewhat confused about why we kept getting the RA, and were so focused on complying with the RA and avoiding the traffic that I didn't realize we were exceeding the 3000 feet clearance.

Synopsis

CRJ-200 First Officer reported briefly exceeding the assigned altitude during a go-around, and attributed the deviation to lessened situational awareness.

Time / Day

Date : 201712

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : EMB ERJ 145 ER/LR

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

Airspace.Class B : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

ASRS Report Number.Accession Number : 1507682

Human Factors : Physiological - Other

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Air Traffic Control

Were Passengers Involved In Event : N

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Ambiguous

Narrative: 1

During cruise flight, I noticed the Captain grab the oxygen mask and use it to breath. He then turned the air temperature way down. Afterwards he told me that he was feeling dizzy and light headed like he was going to be ill. He said he was having trouble staying focused. We continued our descent as he said he was feeling better after the oxygen. He said he was still not 100 Percent. I noticed that he was having a little difficulty reading back the instructions but that he was okay and good to continue. The Captain was the Pilot Monitoring and I, First Officer, was the Pilot Flying.

We were given a descent via clearance... I then set 6000 as the bottom hard altitude to follow the Vertical Path Indicator down. Initially we were given the 8L transition, which was the assigned runway via the arrival. We were then given a frequency change to another Controller and what I heard him say was change runway 8R and fly present heading. I heard the Captain read that back. Since I did not hear anything about an altitude, I assumed that we would continue to our last assigned of descent via or 6000. We leveled off at 6000 on present heading and the Controller asked "Say altitude." It was at that point we were made aware of a possible pilot deviation. I asked the Captain if he had heard an assigned altitude and he said he thinks it was 8000. Supposedly, the ATC Controller gave us fly present heading, maintain 8000, and switch runway to 8R. I never heard the 8000 and never changed the altitude selector to 8000. It was left at 6000.

The pilot monitoring never said anything about an altitude that I recall. If I had been aware of the 8000 restriction, I would have set 8000 in the altitude alert. I'm not sure if I got mixed up with the 8R and 8000 or if someone stepped on the last part of the transmission and I never heard it. The Captain said afterwards that he remembered the ATC Controller saying 8000 but he never mentioned to me to change my 6000 to 8000 as a level off. The Captain at that particular moment was still a bit out of it from his sudden sickness which may or may not have played a part in a breakdown of monitor cross check.

Synopsis

EMB-145 First Officer reported an altitude overshoot during descent while the Captain was not feeling well.

Time / Day

Date : 201712
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : SCT.TRACON
State Reference : CA
Altitude.MSL.Single Value : 6500

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X
ATC / Advisory. TRACON : SCT
Aircraft Operator : Air Carrier
Make Model Name : EMB ERJ 135 ER/LR
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Initial Climb
Route In Use : Vectors
Airspace.Class B : LAX

Aircraft : 2

Reference : Y
ATC / Advisory. TRACON : SCT
Aircraft Operator : Personal
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase : Cruise

Person

Reference : 1
Location Of Person.Facility : SCT.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Instructor
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 11
ASRS Report Number.Accession Number : 1507547
Human Factors : Confusion
Human Factors : Situational Awareness

Human Factors : Training / Qualification
Human Factors : Human-Machine Interface

Events

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

Assessments

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

Narrative: 1

I was the On Job Training Instructor. The Embraer 135 (E135) was on a heading of 340 level at 6000 feet. A PA-28 was enroute westbound at 6500 feet. My trainee issued traffic to both aircraft. The PA-28 reported the E135 in sight, when the E135 was approximately 1 mile south of the PA-28 we observed E135's mode C was reading 200 feet high. The trainee asked the E135 to verify level at 6000 feet. During this transmission, the E135 indicated climbing through 6300 feet. The E135 advised they were responding to an RA and they climbed through 6500 feet. After the aircraft had passed, I asked the E135 to verify they received a climb RA for the PA-28 above them. The E135 responded affirmative. There was no observed traffic below the E135 in their vicinity.

I advised the trainee that in this situation an immediate traffic alert would have been more appropriate than questioning the pilot. In this case, the TCAS did the opposite of what it should have done. This information should be forwarded to whomever is responsible for looking into TCAS errors.

Synopsis

SCT TRACON Controller reported an aircraft restricted to 6,000 feet received a TCAS/RA and climbed for a VFR aircraft above it at 6,500 feet.

Time / Day

Date : 201712

Place

Altitude.MSL.Single Value : 35000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Turbulence

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Heavy Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Cruise

Route In Use.Other

Airspace.Class A : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1507417

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1507418

Human Factors : Situational Awareness

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

Our cruise altitude was flight level 350. Our speed was .81 mach. We were on an Eastbound track. Flight conditions were IMC, obscured hazy layer, no radar images, and no other reports of turbulence on the track. Severe turbulence was experienced for 2-3 minutes. The autopilot disengaged, speed fluctuated 15-20 knots fast and slow. Our speed went 4-5 knots into red speed tape and we an received aural warning for approximately 3-4 seconds. The stick shaker was intermittently engaging during the event. We had an altitude loss of 250 feet due to the performance of the aircraft. No engine parameters were exceeded. The Captain was pilot flying and I was pilot monitoring. I was calling out airspeeds, altitudes, pitch and roll during the event. After the event contacted [Company] and maintenance. We issued a PIREP on 123.45 common radio and requested climb to FL360 via CPDLC. A logbook entry was entered for severe turbulence.

Severe Turbulence was encountered. There were no signs of severe turbulence prior to event. I do not think this event could have been avoided. We did not have any warnings prior to the severe turbulence encounter. After the Captain and I debriefed the event we both had the immediate same thought.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported encountering unexpected severe turbulence in cruise causing an overspeed warning alert.

Time / Day

Date : 201712

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZKC.ARTCC

State Reference : KS

Altitude.MSL.Single Value : 36500

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZKC

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Ferry

Flight Phase : Cruise

Airspace.Class A : ZKC

Component

Aircraft Component : Turbine Engine

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1507077

Human Factors : Troubleshooting

Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Overcame Equipment Problem

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Air Traffic Control : Provided Assistance

Result.Aircraft : Equipment Problem Dissipated

Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

At FL370 speed reduced for chop. During Power reduction (Auto Throttles on) No. 1 engine began to compressor stall. As per QRH, I disengaged Auto Throttles and pulled engine back to stop the stall. First Officer immediately asked for lower. Speed started to decay, so I began descent prior to receiving a clearance for lower altitude. There was no traffic in the vicinity according to TCAS. Levelled at FL330 and engine continued normal operation. Used "ENGINE LIMIT OR SURGE OR STALL" procedure in QRH. Engine ran normally, so we continued to destination.

Synopsis

B737 Captain reported experiencing a compressor stall in the number one engine. After descending and accomplishing the appropriate checklists, the engine recovered, and the flight continued uneventfully to the destination airport.

Time / Day

Date : 201712

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : HIO.Tower

State Reference : OR

Altitude.AGL.Single Value : 500

Environment

Flight Conditions : IMC

Aircraft

Reference : X

ATC / Advisory.Tower : HIO

Aircraft Operator : Corporate

Make Model Name : PC-12

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Route In Use.Other

Airspace.Class D : HIO

Person

Reference : 1

Location Of Person.Facility : HIO.Tower

Reporter Organization : Government

Function.Air Traffic Control : Local

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1506906

Human Factors : Situational Awareness

Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Automation : Air Traffic Control

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.General : Flight Cancelled / Delayed

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

Result.Flight Crew : Executed Go Around / Missed Approach

Result.Flight Crew : Became Reoriented

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

Assessments

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

Narrative: 1

Aircraft X checked in on the ILS approach. I issued him a landing clearance, requested current flight conditions, and issued the RVR. A couple minutes later on the approach I received a Low Altitude Warning. I immediately issued the Low Altitude Warning and the altimeter. Aircraft X responded with roger. I noticed that Aircraft X continued to descend and upon reaching 600 ft at about 4.5 miles out on the ILS approach, I suggested that he climb and begin the missed approach. The pilot responded in the affirmative but still continued to display on the radar that he was descending and then hit 500 ft at about 4 mile final. I double checked again that he was flying the missed and received an affirmative response. It was then that the pilot again responded that he was going missed approach. I immediately coordinated with Approach that I advised the pilot to fly the missed approach, received instructions from them to use the published missed approach and for Aircraft X to maintain 4000 ft. I issued the instructions and shipped Aircraft X back to Approach.

I have no idea what the pilot was doing or what he was looking at on his equipment to create this situation. I am not sure what I could have done differently. I am pretty sure I saved this dudes life!

Synopsis

HIO Tower Controller reported issuing Low Altitude Warning to an aircraft on the ILS descended below the glideslope.

Time / Day

Date : 201712
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 45000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Corporate
Make Model Name : Gulfstream V / G500 / G550
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class A : ZZZ

Component

Aircraft Component : Pressurization Control System
Aircraft Reference : X
Problem : Malfunctioning

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 Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 15500
Experience.Flight Crew.Last 90 Days : 90
Experience.Flight Crew.Type : 1200
ASRS Report Number.Accession Number : 1506867
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Confusion
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Our flight was normal and uneventful checklists were accomplished and cruising at FL450 we experienced a Cabin Pressure Low CAS message followed by an EDM (Emergency Descent Maneuver). Unaware just what we had we followed checklist procedures and kept the aircraft under control. ATC was notified of our deviation but apparently the mic switch on the right side stuck open because no further transmissions were getting to us. My Captain was monitoring the cabin altitude as well as the conditions in the aircraft and when we realized the pressurization system was controlling and the cabin altitude stabilized to 8700 ft we disengaged the autopilot and leveled out at FL330. The CAS message was out so reengagement of the autopilot was successful. After regaining ATC contact the controller must have heard our report leaving FL450 he asked our intentions and we informed him all systems were regained and to fly direct to a flight plan fix and complete the flight to the destination. After careful research we concluded that [the high arrival airport] elevation which the FMS should have recognized and made corrections to the pressure controller did not and the trip point of 7500 ft which is the low trip was reached and did not reset to the next point up which is 10000 ft. This caused the Automatic Descent Mode to activate. Our recognition and response to this situation was appropriate the passengers were briefed after the flight that an anomaly had occurred and we would investigate it further.

Synopsis

Gulfstream V First Officer reported a cabin pressurization anomaly that prompted an Emergency Descent Maneuver.

Time / Day

Date : 201712

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : MKC.Airport

State Reference : MO

Relative Position.Distance.Nautical Miles : 25

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Icing

Weather Elements / Visibility.Visibility : 6

Light : Night

Ceiling.Single Value : 900

Aircraft

Reference : X

ATC / Advisory.TRACON : MCI

Make Model Name : Aero Commander 500 Series

Crew Size.Number Of Crew : 1

Flight Plan : IFR

Flight Phase : Cruise

Route In Use : Vectors

Airspace.Class E : MCI

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 1800

Experience.Flight Crew.Last 90 Days : 540

Experience.Flight Crew.Type : 200

ASRS Report Number.Accession Number : 1506641

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

Miss Distance.Vertical : 1500

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

I was in cruise flight at 3000 ft. and 25 miles East of MKC following a radar vector from KC approach to the ILS 3. There was moderate to heavy rime icing. I had a high power setting but my airspeed kept bleeding off until it got down to 120 knots. Turning became very sloppy and it started to seem like I was in an uncommanded turn. It felt like there was no rudder response. I called KC approach and asked them if their radar showed that I was making a turn. Before they responded the instruments showed the turn accelerating and I realized that the symptoms of a stall spin scenario. I pushed in on the yoke and pressed opposite rudder to recover from the stall and climb back up to 3000 ft. I lost about 700 ft of altitude before I recovered.

I was using TKS fluid to get rid of the ice, but I had to ration my fluid because, I used it heavily on the initial trip [earlier] that night. There was freezing rain from 4000-6000 ft on that leg. I departed with 12 gallons of TKS fluid out of the 20 gallon limit. The plane that I was initially assigned to that night had a maintenance engine problem that I did not find out about until run up. I had to switch to a different plane. Normally, I take around 17 gallons of TKS, but on this night I chose to go with the minimum quantity for dispatch into known icing conditions. The plane that I switched to also had an electronic attitude indicator. Only a small number of planes in our fleet have them and they are not my preference but seem to work well enough. I find it harder to scan between the instruments with an electric AI because its brightness.

I learned a few good lessons from this flight and am hoping to never have it happen again. For future flights I plan to fly at higher altitudes above the cloud ceiling. Altitude gives you more options and time to deal with a problem in icing. You can always use a slow descent to help increase your airspeed. Another change that I would have made is to ask for the ILS to 19 instead. I had time to observe the slow decrease in my airspeed and I should have requested the quickest approach since the winds were under 10 knots. The next time I have to switch planes right before a flight I am going add enough TKS fluid to make 17 gallons. It is better to be fully prepared for any scenario. Another change that I will make in the future is to always trust my instruments and make a slow emergency descent to gain airspeed if required. Next time something like this happens I plan to [advise ATC] right away.

Synopsis

AC50 pilot reported entering a stall and nearly a spin due to icing in IMC conditions.

Time / Day

Date : 201712

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : A319

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Component

Aircraft Component : Altimeter

Aircraft Reference : X

Problem : Improperly Operated

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1506296

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1506815

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We were descending down to 3000ft. I do not recall whether or not ATC called it FLO30 but the approach chart has a transition level at FL180. This is were we reset to QNH. While holding at 3000 feet ATC informed us that our altimeter readout was 2800 feet and instructed us to switch to 29.92 and return to FLO30 which we did.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

A319 flight crew reported an altitude overshoot on descent due to confusion with the charted transition level.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LAX.Airport

State Reference : CA

Altitude.AGL.Single Value : 100

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : LAX

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 : Final Approach

Airspace.Class B : LAX

Aircraft : 2

Reference : Y

ATC / Advisory.Ground : LAX

Aircraft Operator : Air Carrier

Make Model Name : B767 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Flight Plan : IFR

Flight Phase : Taxi

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1506180

Analyst Callback : Completed

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1506542
Human Factors : Situational Awareness
Human Factors : Workload

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

Visual approach to 25L behind a heavy Boeing 767. PF encountered wake turbulence at just above the threshold and a go-around was initiated. Tower instructed climb to 2000, fly runway heading. At full power, 2000 feet came quickly and we blew through the assigned altitude. I took control of the aircraft and stabilized us back down to 2000 feet.

PF was "rattled" by the wake turbulence and became task saturated during the go around; high power setting and fast climb rate put [the FO] behind the aircraft. Result - we exceed assigned altitude by 600 feet.

Along with the normal approach briefing, include the procedures for a possible go around (steps) in with the missed approach instructions (approach plate MAP brief).

Narrative: 2

On short final 25L into LAX, we encountered wake turbulence and executed a go around. ATC told us to maintain 2000 feet. On the go-around the TOGA button was pushed so when the climb sequence was called, the flaps were delayed and in an effort to not overspeed the flaps I accidentally flew through the altitude. That was when the Captain took over the controls and returned to the assigned altitude. Everything seemed very rushed and a lot was going on. Suggest trying to get the flaps retracted as soon as possible with such a low altitude restriction.

Synopsis

ERJ-175 flight crew reported executing a go-around after encountering wake turbulence from a B767 on short final at LAX.