ASRS Database Report Set

Pilot / Controller Communications

Report Set Description	A sampling of reports which highlight issues involving communications between pilots and controllers.
Update Number	.37
Date of Update	June 5, 2024
Number of Records in Report Set	.50
Records within this Report Set have been screened to assure their relevance to the topic.	

National Aeronautics and Space Administration

Ames Research Center Moffett Field, CA 94035-1000



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

BHoory

Becky L. Hooey, Director NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

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

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

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

Report Synopses

ACN: 2003314 (1 of 50)

Synopsis

A Tower Ground Control trainee and their instructor reported the instructor did not notice the trainee assign conflicting taxi routes to two aircraft resulting in one of the aircraft taking evasive action.

ACN: 2003270 (2 of 50)

Synopsis

Light Transport flight crew reported upon landing at AHN there were ground personnel and equipment in the grass safety area adjacent to the runway, operating in close proximity to landing aircraft, near the touchdown zone. No NOTAM was issued, the equipment was unmarked, and ATC did not alert the landing aircraft of the hazard.

ACN: 2002361 (3 of 50)

Synopsis

Air carrier flight crew reported an NMAC during departure climb when another aircraft apparently departed their cleared altitude prematurely.

ACN: 2001577 (4 of 50)

Synopsis

Air carrier pilot crew reported a EGWPS terrain warning created by ATC. The pilots took evasive action and returned for a normal landing.

ACN: 2001061 (5 of 50)

Synopsis

Air carrier flight crew reported abruptly stopping to avoid a jet that had just landed and was exiting on the wrong taxiway, which caused a conflict as the flight crew just began to cross the runway after receiving clearance from ATC.

ACN: 1999417 (6 of 50)

Synopsis

CE-560XLS flight crew reported descending below minimum altitude on approach. The flight crew followed ATC instructions and climbed back above minimum altitude and continued the approach to land uneventfully.

ACN: 1996166 (7 of 50)

Synopsis

Air Carrier flight crew reported there is no signage for the hold short line for Runway 31 on Taxiway H at BNA airport.

ACN: 1996154 (8 of 50)

Synopsis

B737-700 flight crew reported a track deviation occurred on departure from MDW as a result of a wake turbulence encounter from the preceding aircraft.

ACN: 1995544 (9 of 50)

Synopsis

Light Transport aircraft flight crew reported ATC told them they had to maintain 240 knots even though they were flying below NYC Class B Airspace.

ACN: 1994221 (10 of 50)

Synopsis

Air carrier flight crew reported being unable to comply with a late clearance from ATC due to being on the high speed exit after landing, and exited the runway in close proximity to another aircraft.

ACN: 1988358 (11 of 50)

Synopsis

B737-700 Flight Crew reported moderate turbulence during the final approach resulting in a go around in which ATC assigned an unsuitable heading due to weather and terrain restrictions. Captain invoked Captain's authority to maintain heading and altitude clearance and also requested clearance to the alternate airport.

ACN: 1987530 (12 of 50)

Synopsis

A TRACON Controller reported a corporate jet on departure did not fly the SID as published and flew below the Minimum Vectoring Altitude.

ACN: 1987387 (13 of 50)

Synopsis

Falcon 2000 Flight Crew reported an altitude deviation due to a communication breakdown regarding an ATC revised descent clearance. The flight crew read back an erroneous descent clearance which was corrected by ATC.

ACN: 1985949 (14 of 50)

Synopsis

A320 flight crew reported a critical ground conflict while taxiing to the gate. ATC cleared the flight crew to cross but there was another aircraft that was taking off on the runway prior to the intersection.

ACN: 1984404 (15 of 50)

Synopsis

Air carrier Captain and another air carrier First Officer reported a critical ground conflict between the two aircraft during a taxi in night conditions. The former aircraft's Captain was able to abruptly stop the aircraft after noticing the other aircraft.

ACN: 1981530 (16 of 50)

Synopsis

ORD Controllers reported an air carrier aircraft initiated a wrong turn resulting in controllers taking expedited measures to maintain separation with two other departing aircraft. Controller stated that this is an extremely unsafe situation that has become a chronic problem.

ACN: 1981001 (17 of 50)

Synopsis

Helicopter pilot and single engine aircraft pilot reported a NMAC between the two aircraft when the single engine aircraft overtook the helicopter on short final during a visual approach.

ACN: 1980154 (18 of 50)

Synopsis

Air carrier flight crew reported descending below glide path on approach to CHS after the altimeter was mis-set by 0.1 inches.

ACN: 1979141 (19 of 50)

Synopsis

Air carrier flight crew reported a passenger's electronic device experienced a thermal runaway during cruise. The flight crew requested and was provided priority handling to a diversion airport where the flight landed safely.

ACN: 1978509 (20 of 50)

Synopsis

B777-200 flight crew reported a ground vehicle was moving fast towards the aircraft on the taxiway as the flight crew was taxiing for takeoff. ATC provided no notification but the flight crew was aware of the vehicle. The vehicle braked before crossing the aircraft's path.

ACN: 1977785 (21 of 50)

Synopsis

Air carrier flight crew reported a critical ground conflict while taxiing to the runway with another aircraft taxiing on a crossing taxiway. The First Officer abruptly applied brakes avoiding a collision and ATC later informed the pilots they were in the middle of shift change during the incident.

ACN: 1977439 (22 of 50)

Synopsis

Air carrier flight crew reported a communication breakdown between flight crew and ATC which resulted in a critical ground conflict.

ACN: 1977434 (23 of 50)

Synopsis

Air carrier flight crew reported a CFIT event during approach after descending from the assigned altitude. The flight crew climbed to the assigned altitude and the flight continued without issues.

ACN: 1977107 (24 of 50)

Synopsis

Air Carrier B737-800 flight crew reported a NMAC when military helicopter deviated from ATC coordinated flight path into the air carrier's approach path, without TCAS warning. Air carrier Captain performed an evasive go around to maintain visual separation, then landed.

ACN: 1974847 (25 of 50)

Synopsis

EMB-175 flight crew reported a communications breakdown between flight crew, who planned to fly the approach without the procedure turn, and ATC who expected the flight crew to fly the approach with the procedure. ATC ultimately cancelled the approach and assigned the procedure turn which landed safely.

ACN: 1970251 (26 of 50)

Synopsis

Air Carrier Pilot Crew reported during the landing roll-out ATC changed the taxiway they were to use to exit the runway. The problem, as reported by the pilots, the runway was much slicker than advertised and the jet began to slide out of control. The taxiway given by ATC does not have a connection to the runway and once stopped the jet needed a ground tug and snow removal equipment to proceed. The pilots stated, lack of information regarding runway condition and the late taxiway change complicated the situation.

ACN: 1970208 (27 of 50)

Synopsis

B737 flight crew reported after changing to the next Controller they were ask which fix they were flying too. The Controller changed the fix on the STAR and said you are getting too close to high terrain.

ACN: 1969944 (28 of 50)

Synopsis

Air carrier flight crew reported an NMAC after takeoff and during the initial climb. They reported a TA then RA from an aircraft departing from another runway. The pilot's reported following the RA commands.

ACN: 1969688 (29 of 50)

Synopsis

Air carrier flight crew reported ORD Tower assigned them a 180 heading after departure, but were later advised they had been assigned a right turn heading 040.

ACN: 1969524 (30 of 50)

Synopsis

Flight Instructor with student reported NMAC with another aircraft in traffic pattern that was complicated by a congested traffic pattern and busy tower frequency.

ACN: 1967403 (31 of 50)

Synopsis

Air carrier First Officers reported difficulty locating the correct taxiway to the runway at RCA airport. The pilots stated their EFB does not contain complete airport information, and cited poor taxiway lighting, initial confusing marshaller signals and inadequate help from ATC as additional contributing factors.

ACN: 1966386 (32 of 50)

Synopsis

A Tower Local Controller and TRACON Departure Controller reported the Local Controller issued a vector off course to an aircraft on short final which placed it below the Minimum Vectoring Altitude.

ACN: 1964518 (33 of 50)

Synopsis

B737-700 flight crew reported being issued a line up and wait clearance from the Tower Controller while another air carrier was on short final for the same runway. The flight crew continued across the runway per ATC instructions and the other air carrier executed a go-around.

ACN: 1963705 (34 of 50)

Synopsis

Air carrier flight crew reported ATC Low Altitude Advisory on approach to PHX airport.

ACN: 1962880 (35 of 50)

Synopsis

C525 flight crew reported loss of Cabin Pressure Control during climb. The flight crew requested priority handling and immediately descended. Oxygen masks were deployed and donned. The flight crew was unable to control the cabin pressure and elected to continue at a lower altitude with a depressurized cabin to destination airport.

ACN: 1961816 (36 of 50)

Synopsis

GA pilots reported a NMAC while in the airport traffic pattern and cited communication issues with ATC contributed to the event.

ACN: 1958829 (37 of 50)

Synopsis

A Center Controller and the Controller in Charge reported an aircraft did not respond to an assigned altitude or the Controller missed the readback and aircraft flew into confliction with descending traffic. The Center Controller stated wearing a mask caused the communication difficulties.

ACN: 1958407 (38 of 50)

Synopsis

Hawker flight crew reported receiving multiple step down altitudes from ATC on approach. Without the airport in sight, the flight crew was given a vector and a climb to the minimum vectoring altitude, then conducted another approach to a successful landing.

ACN: 1957805 (39 of 50)

Synopsis

Tower Local Controller reported a departing Air Carrier encountered a NMAC with a VFR survey mission aircraft. The Controller and their trainee failed to issue traffic information to either aircraft and handed them off to adjacent airspace frequencies.

ACN: 1950817 (40 of 50)

Synopsis

Flight crew reported ATC failed to issue the proper approach resulting in receiving erroneous glide slope references, low altitude alert and incorrect crossing altitude.

ACN: 1940351 (41 of 50)

Synopsis

Air Carrier Check Airman and new Captain reported misunderstanding ATC and descending below the assigned altitude. The pilots stated the weather was poor, the descent clearance was late and delay vectors were being used to help with the descent.

ACN: 1938996 (42 of 50)

Synopsis

Flight crew reported they were descending to their ATC assigned altitude when they received a Terrain Warning.

ACN: 1938052 (43 of 50)

Synopsis

Air Carrier flight crew reported receiving an ATC low altitude alert during approach. The flight crew immediately climbed to assigned altitude and continued the approach.

ACN: 1937836 (44 of 50)

Synopsis

B777 flight crew reported departing with a deferred outflow valve. On climb, the cabin altitude began climbing rapidly. The flight crew descended and performed an air turn back to make a precautionary landing at departure airport.

ACN: 1934630 (45 of 50)

Synopsis

Falcon 7X flight crew reported observing B737 over runway hold line resulted in rejected takeoff.

ACN: 1934572 (46 of 50)

Synopsis

B737NG flight crew reported descending below cleared altitude on arrival into LGA following a miscommunication with ATC. A wake turbulence encounter earlier in the descent was cited as contributing.

ACN: 1933983 (47 of 50)

Synopsis

Air carrier flight crew reported when cleared across runway, an aircraft overflew them landing on the wrong runway assigned, resulted in a runway incursion.

ACN: 1930863 (48 of 50)

Synopsis

CRJ-900 flight crew reported they were not given a frequency change and were unable to reach ATC as they approached the airport. While attempting to establish communications the flight crew inadvertently descended below the minimum altitude for the area. Flight crew corrected altitude and established communication with ATC.

ACN: 1928467 (49 of 50)

Synopsis

Air Carrier Pilot crew reported a NMAC while on the ILS Z Rwy 8 to BUR. The pilot crew follow the RA maneuver and after the all clear, reestablished the ILS and landed.

ACN: 1927304 (50 of 50)

Synopsis

Air Carrier flight crew reported they entered a Runway ATC cleared them to taxi across when they noticed another aircraft on short final executing a go-around maneuver.

Report Narratives

ACN: 2003314 (1 of 50)

Time / Day

Date : 202305 Local Time Of Day : 0601-1200

Place

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

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : B737 Undifferentiated or Other Model Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi Route In Use : None

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : Medium Large Transport, Low Wing, 2 Turbojet Eng Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

Person: 1

Location Of Person.Facility: ZZZ.TWR Reporter Organization : Government Function.Air Traffic Control: Ground Function.Air Traffic Control : Instructor Qualification. Air Traffic Control : Fully Certified Experience. Air Traffic Control. Time Certified In Pos 1 (yrs): 14 ASRS Report Number. Accession Number: 2003314 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Training / Qualification Human Factors : Workload Human Factors : Time Pressure Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Facility : ZZZ.Tower Reporter Organization : Government Function.Air Traffic Control : Ground Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 0 ASRS Report Number.Accession Number : 2003315 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Confusion Human Factors : Workload Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Training / Qualification Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Detector.Person : Flight Crew When Detected : Taxi Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Training my CPC-IT on Ground Control (GC) we taxied Aircraft X via [Taxiway] 1-2-3 to [Runway] XXL. At the top of the alley west line there was an Aircraft Y that the CPC-IT taxied left on 4, with no traffic call to give way to Aircraft X. At the time I had my attention on the north side of the airfield. I heard the transmission the CPC-IT made but since I was looking to the north, I did not immediately asses the instruction he gave. When I turned back to face the 2/4 intersection I saw Aircraft Y crossing very closely in front of Aircraft X. Aircraft X stopped to let Aircraft Y pass, and then the pilot commented that Aircraft Y had cut them off, almost clipping their nose. The CPC-IT apologized on frequency admitting fault for the missed traffic call. The two aircraft went on to depart without further incident. The CPC-IT I was working with is doing very well and I probably allowed that to relax my focus to some extent, however, it is not possible to simultaneously scan the north airfield, where multiple runway crossings are taking place, and the south side traffic leaving the alleys. This limitation will result in something getting missed from time to time. Perhaps instituting a regular 3rd Ground Control position could help alleviate this problem.

Narrative: 2

I am a CPC-IT that was training on this outbound ground position. Aircraft X was taxing to Runway XXL at 1 via Taxiway 2 for departure as instructed by me. I gave taxi instructions to Aircraft Y out of the alley to Runway XC a XY via left turn on [Taxiway] 4. I was switching other aircraft to their appropriate Tower frequencies and did not notice and expect Aircraft Y to taxi out that quick and turn left on [Taxiway] 4 from [Runway] XXY. At the same time Aircraft X has reached [Taxiway] 2 and was crossing the 4 taxiway with Aircraft Y going in front of him. Aircraft X pilot keyed up saying that Aircraft Y cut them off on [Taxiway] 4 at 2. Both of those aircraft were on my frequency and I told them that it was my fault and I missed a traffic call. Aircraft X should have been instructed to cross [Taxiway] 4 behind Aircraft Y. Aircraft X did not appear to want to slow down and tried to get in front of the Aircraft Y. As I saw that happening another aircraft was in the middle of their read back to me. I did not think keying up over the read back would have gotten thru to any of these two that were a factor and possibly avoiding a close situation. I would recommend to be more vigilant of this intersection on our airfield and scan more frequently to avoid another close call. Also look ahead and tell those that cross Taxiway 4 to cross behind the traffic before they reach that point on the airfield.

Synopsis

A Tower Ground Control trainee and their instructor reported the instructor did not notice the trainee assign conflicting taxi routes to two aircraft resulting in one of the aircraft taking evasive action.

Time / Day

Date : 202305 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : AHN.Airport State Reference : GA Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC Weather Elements / Visibility.Visibility : 10 Light : Daylight Ceiling.Single Value : 7000

Aircraft

Reference : X ATC / Advisory.Ground : AHN ATC / Advisory.Tower : AHN Aircraft Operator : Air Carrier Make Model Name : Light Transport, Low Wing, 2 Turbojet Eng Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 91 Flight Plan : IFR Mission : Ferry / Re-Positioning Flight Phase : Landing Route In Use : Visual Approach Airspace.Class D : AHN

Person: 1

Location Of Person.Aircraft: X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function. Air Traffic Control: Local Function.Flight Crew : Captain Function Flight Crew : Pilot Not Flying Qualification Flight Crew : Flight Instructor Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Total: 5500 Experience.Flight Crew.Last 90 Days: 150 Experience. Flight Crew. Type: 4000 ASRS Report Number. Accession Number: 2003270 Human Factors : Situational Awareness Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Air Traffic Control : Local Function.Flight Crew : Pilot Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification Flight Crew : Flight Instructor Qualification.Flight Crew : Air Transport Pilot (ATP) Experience. Flight Crew. Total: 9000 Experience.Flight Crew.Last 90 Days: 100 Experience. Flight Crew. Type: 4500 ASRS Report Number Accession Number: 2003289 Human Factors : Situational Awareness Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Less Severe Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Ground Event / Encounter : Other / Unknown Detector.Person : Flight Crew Miss Distance.Horizontal : 25 Miss Distance.Vertical : 0 When Detected : In-flight Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

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

Narrative: 1

We were cleared for the visual Runway 09. Upon crossing the threshold, I noticed a 6wheeled green gator on the LH side of the runway, just outside the runway lights heading downwind alongside the runway. He was approximately 1000-1500 ft. down the runway from the threshold but within the touchdown zone safety area. Our left wing cleared him by approximately 25-30 ft. at about 135-140 kts. right after touchdown. After shutdown at the FBO, I checked the NOTAMs again and no NOTAMs existed for men or equipment working alongside the active runway. I queried the Ground Controller and asked if there had been a NOTAM issued and stated "NO." Then indicated to me that they were people with the airport spraying for weeds controlled by the airport authority. There isn't much we could do since the equipment was green and blended into the green grass. By the time either of us noticed the person and equipment, we were far too late into the landing to initiate the go-around and clear the equipment by any better margin. We should have been at least alerted to their presence and they need to have flags to improve visibility.

Narrative: 2

I was landing on Runway 9 at AHN. Upon touchdown, I noticed a person riding a tractor on the left edge of the runway in the grass and in the safety area approximately 1500 ft. from the approach end. We landed and taxied to parking normally. We queried the Ground Controller and asked if there was a NOTAM for this activity, and it was stated that people had been working all day and no NOTAM was issued. ATC never informed us that there were people or equipment in the safety area. We calculated that our wingtip missed the tractor by approximately 25-30 ft.

Synopsis

Light Transport flight crew reported upon landing at AHN there were ground personnel and equipment in the grass safety area adjacent to the runway, operating in close proximity to landing aircraft, near the touchdown zone. No NOTAM was issued, the equipment was unmarked, and ATC did not alert the landing aircraft of the hazard.

ACN: 2002361 (3 of 50)

Time / Day

Date : 202305 Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US

Aircraft: 1

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

Aircraft: 2

Reference : Y ATC / Advisory.TRACON : ZZZ Make Model Name : Commercial Fixed Wing Flight Plan : IFR Airspace.Class B : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 2002361 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number.Accession Number : 2002360 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : NMAC Detector.Automation : Aircraft RA Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

We were climbing out on the ZZZZZ departure, tower handed us off to departure. When we checked on with departure, we were given traffic advisory, company traffic at 2 o'clock level at 9,000 feet. We acknowledge and said traffic in sight. We got "traffic" on the TCAS, so I begin to decrease my climb rate to less than 1,000 feet per minute. At 7,900 feet we got "TCAS RA DESCEND", I complied with the "TCAS RA DESCEND" and through 7,800 feet we got clear of conflict. I looked out and saw an aircraft passing right to left, less than 500 feet at our altitude. We questioned ATC, to make sure we heard that they were supposed to have been level at 9,000 feet, and he said they we're supposed to be level at 9,000, and then he said I guess they started down early. Didn't quite know what that meant, but this was definitely a near miss. ATC should pay closer attention when you've got converging traffic in a situation like this, which could result in a serious accident or incident. The other aircraft definitely was not at their assigned altitude, and ATC should have gotten some warning that they were descending. This was a real event, and shouldn't be taken lightly. I know we are human and make mistakes, but there have to be some safeguards.

Narrative: 2

[Report narrative contained no additional information]

Synopsis

Air carrier flight crew reported an NMAC during departure climb when another aircraft apparently departed their cleared altitude prematurely.

ACN: 2001577 (4 of 50)

Time / Day

Date : 202305 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : MMFR.ARTCC State Reference : FO Altitude.MSL.Single Value : 7700

Environment

Flight Conditions : IMC Weather Elements / Visibility : Rain

Aircraft

Reference : X ATC / Advisory.Center : MMFR 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 : GPS Nav In Use : FMS Or FMC Nav In Use.Localizer/Glideslope/ILS : ILS Z 29 Flight Phase : Initial Approach Flight Phase : Final Approach Route In Use : Direct Route In Use.STAR : LIVRI 1D

Person: 1

Location Of Person. Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function Flight Crew : Pilot Not Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Total: 1167 Experience.Flight Crew.Last 90 Days: 161 Experience. Flight Crew. Type : 1167 ASRS Report Number. Accession Number: 2001577 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Distraction

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

Person: 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) Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Experience.Flight Crew.Total: 371 Experience. Flight Crew. Last 90 Days: 106 Experience.Flight Crew.Type: 371 ASRS Report Number. Accession Number: 2001578 Human Factors : Workload Human Factors : Troubleshooting Human Factors : Time Pressure Human Factors : Situational Awareness Human Factors : Confusion Human Factors : Communication Breakdown Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Automation : Aircraft Terrain Warning Detector.Person : Flight Crew When Detected : In-flight Result.Flight Crew : FLC complied w / Automation / Advisory Result.Flight Crew : Took Evasive Action Result.Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Executed Go Around / Missed Approach Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Weather bases were at approximately 7k to 8k, vis about 4 miles in rain and haze. We had been flying the LIVRI 1D to Runway 29, with a couple shortcuts and ATC directed altitudes, after an initial descend via. We discussed the terrain and had terrain on Navigation Display (ND), and were both trying to use the min vector chart and terrain depictions on the approach and STAR plates to back-up the controller. We had been given 11k at around GL824, and then at GL825 were given direct PLADE and a descent to 10k. While descent to PLADE we were given a 9k descent and "cleared for the approach". while discussing setting the FAF altitude (managed descent), we were then given direct to

GL981 (FAF) and a descent to 7700. I queried the controller if we were still cleared for the approach and was told "yes". At this point we began to configure, and while I was engaged in this, the First Officer (FO) stated that he felt ATC was setting us up for a GPWS event due to the terrain at GL980. I looked back at the chart, and the ND, and our position and agreed with him. Before I could query ATC on the wisdom of a 7700 descent, EGPWS announced "Terrain, Terrain". FO immediately executed the escape maneuver. ATC immediately tried to re-clear us for the approach, but we elected to transition to a go-around due to the fact that although we were now underneath the weather, the aircraft was in go around phase and we had insufficient time to clean up the box, reinstall the approach and safely execute it, and the visibility precluded an immediate transition to a visual approach. We were vectored around for an uneventful ILS to Runway 29.

Narrative: 2

On the LIVRI 1D, around GL824 Aircraft X was told to descend to 11,000. Around GL825, Aircraft X was given direct to PLADE and to descend to 10,000. No brown peaks/terrain were depicted on the arrival chart between those points. About halfway in between those points, we were instructed to descend to 9,000 for PLADE and subsequently cleared the approach. Enroute to PLADE, Approach gave Aircraft X direct to GL981 on the ILS Z Runway 29 and to descend to 7700. As the flight went direct to GL981, the pilot flying (PF)/First Officer (FO) noticed the terrain on the approach chart and stated that it appeared to be close to terrain and that their instructions were putting us into a GPWS event. Shortly after that, the Captain who was engaged in a configuration change, concurred, the audible Terrain went off, and the PF complied with the Escape. The Approach Controller gave follow on instructions and tried to re clear Aircraft X for the approach, however, there was insufficient time to allow the crew to complete all required checklists and re-engage the FMGC. The Captain asked for vectors around to attempt another approach, via APRIM, ensuring that there would be no shortcuts. The crew finished all checklists, completed the approach with no further events.

Synopsis

Air carrier pilot crew reported a EGWPS terrain warning created by ATC. The pilots took evasive action and returned for a normal landing.

ACN: 2001061 (5 of 50)

Time / Day

Date : 202305 Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Flight Phase : Landing

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Total : 6350 Experience.Flight Crew.Last 90 Days : 96 Experience.Flight Crew.Type : 507 ASRS Report Number.Accession Number : 2001061 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person : 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Total : 5844 Experience.Flight Crew.Last 90 Days : 206 Experience.Flight Crew.Type : 206 ASRS Report Number.Accession Number : 2002200 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Ground Incursion : Runway Detector.Person : Flight Crew When Detected : Taxi Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

After landing [Runway] XXR, held short [Runway] XXL on high speed Taxiway 1. Cleared by Tower to expedite crossing [Runway] XXL and contact Ground once clear. Approximately 50 ft. past hold-short and accelerating, Aircraft Y appears approaching quickly from the left on [Runway] XXL. Aggressive stop by us. Aircraft Y kept right on rolling up to left turnoff. ATC declared, "Aircraft Y was supposed to turn off on [Taxiway] 2." Uneventful taxi continued to [Gate] XX.

Narrative: 2

Upon landing [Runway] XXR in ZZZ, we vacated on [Taxiway] 1 and held short of Runway XXL on [Taxiway] 1 as instructed by ATC. We waited for our clearance to cross the runway. We then received a clearance to cross [Runway] XXL without delay since traffic was holding in position to depart. As we commenced crossing the runway, we noticed previously landed traffic, Aircraft Y, was still on the runway slowing to exit and had not cleared. This caused a conflict as we commenced to cross the runway. Realizing this, we brought the aircraft to a stop as Aircraft Y exited in front of us. This definitely caused some startle since ATC, to our knowledge, had not advised us of traffic exiting before us, only traffic holding in position. The Tower then realized we stopped and told us that the Aircraft Y was supposed to exit on Taxiway 2 instead of [Taxiway] 3 and told us to continue on

[Taxiway] 1. I then re-read the clearance and asked for ATC clarification if Aircraft Y would give way to us as we crossed the runway over to Taxiway 4 and onwards to [Taxiway] 5. The controller re-iterated the fact that the Aircraft Y was supposed to exit on [Taxiway] 2 and that they missed the turnoff and that they should give way as we crossed. Due to the close proximity of the taxiways, errors from Aircraft Y and ATC caused a conflict.

Synopsis

Air carrier flight crew reported abruptly stopping to avoid a jet that had just landed and was exiting on the wrong taxiway, which caused a conflict as the flight crew just began to cross the runway after receiving clearance from ATC.

ACN: 1999417 (6 of 50)

Time / Day

Date : 202305 Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport State Reference : US Altitude.MSL.Single Value : 8600

Environment

Flight Conditions : VMC Light : Night

Aircraft

Reference : X Aircraft Operator : Fractional Make Model Name : Citation Excel (C560XL) Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 91 Flight Plan : IFR Mission : Ferry / Re-Positioning Flight Phase : Initial Approach Route In Use : Vectors

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Fractional 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 : 1999417 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Human-Machine Interface Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : Flight Crew

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : 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 : 1999420 Human Factors : Situational Awareness Human Factors : Confusion Human Factors : Communication Breakdown Human Factors : Human-Machine Interface Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Altitude : Overshoot Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Automation : Aircraft Other Automation Detector.Person : Flight Crew Detector.Person : Air Traffic Control Were Passengers Involved In Event : N When Detected : In-flight 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 Contributing Factors / Situations : Procedure Primary Problem : Human Factors

Narrative: 1

Descending into ZZZ 9,000 ft. was assigned. Before reaching 9,000 ft. we requested ZZZZZ on the VISUAL Runway XX backed up with RNAV X Runway XX. There was discussion with ATC what type of approach we were requesting. We made it clear we wanted the visual starting at ZZZZZ. We were given direct ZZZZZ for the visual. We dialed in 8,600 ft. to cross ZZZZZ. After flying at 8,600 ft. we were told by ATC he had a low altitude alert climb to 9,000 ft. I initiated a climb. Shortly thereafter we saw the field. Notified ATC and cancelled IFR. Flight landed without incident. As a crew we were focused on a mountain airport and the correct procedures. We reviewed feasibility and all the Company pages enroute. The arrival and approach briefs were thorough. We were ready for the approach in all respects. Our error came in both of us hearing ZZZZZ and VISUAL and believing we were cleared. We thought we were. That is why we agreed 8,600 ft. SET 8,600 ft. SEEN was correct and we went down. We were wanting to be at approach plate altitudes early as well as configured early. I think that is why our collective mindset was hearing cleared for the visual whereas ATC has the tapes that prove we were mistaken. I haven't made this particular mistake since flying cargo a million years ago. I will be more cognizant of setting the altitude alert in the future.

Narrative: 2

Upon descent into ZZZ we were cleared to 9,000 ft. and direct to ZZZ1, around 11,000 ft. we requested direct to ZZZZZ for the RNAV X XX. The controller questioned if we were still wanting the visual approach explaining that he'd have to reassign us higher which is where the first point of confusion began. We confirmed that we wanted the visual approach but

fly the RNAV per company recommendation, terrain avoidance, as well as to gain a better visual sight of the runway as the ZZZ track and our altitude wasn't giving us the best chance to see the runway. Upon getting clearance to ZZZZZ we proceeded down to 8,600 ft. in confusion thinking that we had a visual approach clearance and wanting to get lower and be configure earlier with the steeper approach, high altitude, and tail wind. Upon leveling at 8,600 ft. we gained visual of Runway XX, at the same moment ZZZ Center informed us of the low altitude alert as their bottom IFR altitude was 9,000 ft. We immediately cancelled IFR and proceeded to commence the Company XX visual. The entire time we were in visual conditions and ensured the we were not in any threat from terrain or traffic.

Synopsis

CE-560XLS flight crew reported descending below minimum altitude on approach. The flight crew followed ATC instructions and climbed back above minimum altitude and continued the approach to land uneventfully.

ACN: 1996166 (7 of 50)

Time / Day

Date : 202304 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : BNA.Airport State Reference : TN Altitude.AGL.Single Value : 0

Environment

Light : Daylight

Aircraft

Reference : X ATC / Advisory.Tower : BNA Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

Person: 1

Location Of Person.Aircraft: X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function Flight Crew : Pilot Flying Qualification. Flight Crew : Multiengine Qualification Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Last 90 Days: 220 Experience.Flight Crew.Type: 7099 ASRS Report Number Accession Number : 1996166 Human Factors : Confusion Human Factors : Situational Awareness Human Factors : Troubleshooting Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days : 120 Experience.Flight Crew.Type : 5600 ASRS Report Number.Accession Number : 1996156 Human Factors : Troubleshooting Human Factors : Situational Awareness Human Factors : Communication Breakdown Human Factors : Confusion Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : FAR Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Ground Incursion : Runway Detector.Person : Air Traffic Control Were Passengers Involved In Event : N When Detected : Taxi Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Airport Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings Contributing Factors / Situations : Chart Or Publication Contributing Factors / Situations : Software and Automation Contributing Factors / Situations : Incorrect / Not Installed / Unavailable Part Contributing Factors / Situations : Procedure Contributing Factors / Situations : Human Factors Primary Problem : Ambiguous

Narrative: 1

On taxi out from D1 in BNA, we were told to follow (other carrier) on L to H to [Runway] 2R. We turned on to H to 2R and Ground said hold short of [Runway] 31 threshold. The 10-9 of Jepps does not show a hold line for 31 landing traffic, but the AMM does as soon as you make turn on to H for 2R. By the time we figured it out, we had just passed the hold line and there is no signage that says 31 threshold on H taxiway. By the time we were going to stop he said continue on to 2R. We check the current ATIS at the time and it said only 2R for takeoff and 2C for landings and 2L was closed. So, we continued on and departed 2R for ZZZ.

Narrative: 2

We were cleared by Ground to taxi behind (other carrier) aircraft to [Runway] 2R. We were not issued any hold short instructions. Upon crossing the portion of H that passes Runway 31, Approach Ground told us to hold short of it. At the time of the instruction we were already crossing this area. Additionally, there was no sign on the airport depicting this area and it was not on the 10-9 airport diagram. After issuing the instruction, Ground told us to continue taxi down H.

Synopsis

Air Carrier flight crew reported there is no signage for the hold short line for Runway 31 on Taxiway H at BNA airport.

ACN: 1996154 (8 of 50)

Time / Day

Date : 202304 Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : MDW.Airport State Reference : IL Altitude.AGL.Single Value : 400

Environment

Light : Night

Aircraft: 1

Reference : X ATC / Advisory.Tower : MDW 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 : Initial Climb Airspace.Class C : MDW

Aircraft: 2

Reference : Y ATC / Advisory.Tower : MDW Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Flight Phase : Initial Climb Airspace.Class C : MDW

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Multiengine Experience.Flight Crew.Last 90 Days : 230 Experience.Flight Crew.Type : 14500 ASRS Report Number.Accession Number : 1996154 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC Analyst Callback : Completed

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days: 130 Experience.Flight Crew.Type: 130 ASRS Report Number. Accession Number: 1996149 Human Factors : Workload Human Factors : Situational Awareness Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Track / Heading : All Types Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : Wake Vortex Encounter Detector.Person : Flight Crew Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Returned To Clearance Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Cleared for takeoff from Runway 4R. Tower cleared previous aircraft to take off approximately one minute prior to clearing us to take off. Shortly after takeoff, we experienced some wake turbulence from the aircraft in front of us. I elected to keep the wings level and delayed our turn until the wake turbulence dissipated. Initially, I started the turn using a bank angle of about 15 to 20 degrees in the event we encountered any additional wake turbulence. Departure asked us to tighten up the turn to heading of 230 degree. Departure cleared us to 4,000 ft. and asked up to expedite the climb. Departure then called out traffic, which I visually acquired off my left (about my 9 o'clock position). We received a TA (no RA) Alert while in the turn to a heading of 240 degrees. I had the traffic in sight and saw that the traffic was not a factor due to us climbing and increasing separation laterally. After switching frequency, we were told to call Chicago Approach when on the ground. After landing, I called Chicago Approach and they stated that we did not complete our turn within the required four miles. I explained our situation to Chicago Approach and why we had delayed our turn. Perhaps ATC could provide a little more spacing/timing between takeoffs. I should have mentioned why our turn was delayed to Chicago Approach prior to switching to the next frequency.

Callback: 1

Reporter stated more spacing between takeoffs would be appreciated.

Narrative: 2

We were cleared for takeoff on Runway 4R in MDW in between an aircraft that had departed less than a minute prior and another aircraft on final approach. Spacing was sufficient to be legal, but the timing was tight, as is so often the case in MDW. Our clearance was left turn 250, maintain 3,000 ft. Shortly after rotating, probably 400 ft. or 500 ft. AGL, we experienced a "bump" and the tell-tale "wing-dip" of wake turbulence from the aircraft ahead of us. The Captain, who was Pilot Flying (PF), opted to stay wings level for a moment to stabilize the aircraft, then gently rolled into a slightly shallower than normal turn to our cleared heading to prevent an undesired aircraft state, should the wake turbulence worsen. During this time, Tower handed us off to Departure and I checked in with our altitude and heading clearances. Once it smoothed out and we had reasonable assurance it was safe to do so, the Captain began to tighten the turn from about 20 degrees to the standard 30. As he was doing that, ATC asked us to verify that we were on a 250 heading. I replied that we were still in the turn to 250, which we were. He asked us to tighten up the turn and continue it to 230 because we were getting close to "O'Hare's stuff". I replied with the new heading, saying we'd tighten it up, which had already done. Somewhere around then, we leveled at 3,000 ft., and ATC gave us a climb to 4,000 ft. As we were dialing that in, he called back and mentioned traffic to our left and asked us to expedite our climb and assigned us 13,000 ft. We did so, and did not receive an RA from the other aircraft. As we were climbing, he turned us slightly back to the right, heading 240, then eventually on course. No further mention of the event was made by that Controller and he handed us off to Center. Several minutes after checking in with the next Controller, he informed us of a possible Pilot Deviation and gave us a phone number. The rest of the flight proceeded uneventfully. This one's difficult, because closely spaced operations are common here, and I, myself, have departed MDW multiple times with no issues. ATC has no way of knowing what the weight/flap settings are of any aircraft that's taking off ahead of any other, and of course, we as Pilots have no way of knowing that either. I would suggest increasing space between aircraft, but I know that would have significant consequences in surface congestion, which may lead to unforeseen safety issues too. For myself, I will figure out some way to increase my awareness of where the 4 NM limit is from MDW. This too is tricky, because we had the 3.8 NM ring for the engineout procedure depicted on the Navigational Display (ND), and as we were busy cleaning up the aircraft, climbing, responding to wake turbulence, turning, switching frequencies, communicating, leveling off, and looking for traffic, I honestly couldn't say that I ever even noticed that green ring on the ND moving past us. I think probably the most important thing that I should have done better, and will in the future, is to say something promptly to ATC, when we experience wake, especially when it affects our compliance with their clearance. Maybe if I had said something right away, they could have coordinated to allow us into ORD's airspace for a moment, and this whole thing would not have been an issue at all.

Synopsis

B737-700 flight crew reported a track deviation occurred on departure from MDW as a result of a wake turbulence encounter from the preceding aircraft.

ACN: 1995544 (9 of 50)

Time / Day

Date : 202304 Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : N90.TRACON State Reference : NY Altitude.MSL.Single Value : 2000

Aircraft

Reference : X ATC / Advisory.TRACON : N90 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 Airspace.Class B : NYC

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Taxi Function.Flight Crew : Captain Function.Flight Crew : Pilot Not Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number.Accession Number : 1995544 Human Factors : Communication Breakdown Human Factors : Confusion Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Taxi Function.Flight Crew : Captain Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1995542 Human Factors : Communication Breakdown Human Factors : Confusion Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Speed : All Types Anomaly.Deviation / Discrepancy - Procedural : FAR Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Detector.Person : Flight Crew Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Requested ATC Assistance / Clarification Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

While descending in NY airspace, we were instructed to maintain 240 kts and head to VINGS Intersection for the approach to Runway 06. I read back the instructions before I realized we were going below the Class B. We were cleared to 2,000 feet, the floor in that area is 3,000 feet. The PF (Pilot Flying) realized this as well and began slowing to 200 knots. The Controller inquired about our speed and reiterated that he gave us 240 knots. I replied that we were unable due to the 200 knot FAR requirement. He replied that his instructions "supersede" those of the regulations and to do 240 knots. I didn't reply, as the PF and I were in surprised discussion and in agreement with the 200 knot requirement. We maintained 200 knots until we re-entered the B, then picked the speed back up to comply with the original instruction. The remainder of the flight was uneventful and TCAS-free despite the Controller's assertion that another aircraft was about to hit us due to our brief and annoying speed reduction. Pilots need a published clarification about this "NY exception" to a long-standing FAR. If it's inconvenient, then get rid of it in the FARs. When I finish this report I will be looking at the NY area SIDs, STARs, and NOTAMs for anything IN WRITING about this special rule. Either most pilots or some NY controllers need retraining. One of us is wrong.

Narrative: 2

We were at 3,000 feet, about 10 miles from VINGS for the ILS 6, inside the Class B airspace at the 3,000 feet floor, instructed by NY Approach to maintain 240 knots, which we did. We then were instructed to descend to 2,000 feet and maintain 240 knots. Once we descended below the floor of the Class B airspace, we slowed to 200 knots as required by FAR. Soon thereafter, the Controller asked our speed, and we told him 200. He said he instructed us to maintain 240, and we responded that we were required to be 200 or less below the Class B. He then said "If I give you an airspeed, that's supersedes the rule." We did not respond, and shortly thereafter entered a lower shelf of the Class B and accelerated to the requested 240 KIAS. The rest of the flight was uneventful. We need clarification on this, as it happens on a regular basis going through NY airspace into TEB. It is my understanding that the Controller cannot issue a direction in contradiction to a FAR.

Either we as pilots, or the NY Approach controllers need to be retrained on the proper rules and procedure.

Synopsis

Light Transport aircraft flight crew reported ATC told them they had to maintain 240 knots even though they were flying below NYC Class B Airspace.

Date : 202304 Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : MCO.Airport State Reference : FL Altitude.AGL.Single Value : 0

Environment

Light : Night

Aircraft: 1

Reference : X ATC / Advisory.Tower : MCO Aircraft Operator : Air Carrier Make Model Name : Large Transport Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Landing

Aircraft: 2

Reference : Y ATC / Advisory.Tower : MCO Aircraft Operator : Air Carrier Make Model Name : Large Transport Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Landing

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days : 150 Experience.Flight Crew.Type : 3000 ASRS Report Number.Accession Number : 1994221 Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification Flight Crew : Air Transport Pilot (ATP) Experience, Flight Crew, Last 90 Days: 61 Experience.Flight Crew.Type: 149 ASRS Report Number. Accession Number: 1994228 Human Factors : Time Pressure Human Factors : Situational Awareness Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Detector.Person : Flight Crew When Detected : Taxi

Assessments

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

Narrative: 1

Landing Runway 35L, I saw Aircraft Y on the taxiway adjacent to the runway, as Taxiway H3 was approaching. It appeared stationary; I can't say with a 100% confidence, but his taxi light was not on. In either case, as I was committing to exit the runway at the high speed Taxiway H3, Ground gave us instruction to take the next Taxiway H2. We were unable to comply, since the clearance was too late. I [saw] Aircraft Y moving slowly and my exit speed was too high to slam on the brakes. I continued my exit by making the right turn on Taxiway Hotel from H3, since that was the safest course of action at that time. I don't know if Aircraft Y was moving slowly or at all, but it appeared to me that he was not. Better planning between Tower and Ground Control would have helped in communicating the exit point. In the future, in the absence of a clearance, I will assume he is moving and take the next high speed.

Narrative: 2

While landing Runway 35L at MCO, following a bird strike in the middle of my windscreen at 800 ft. on the roll-out, we planned our exit for Taxiway H3, approximately two-thirds of the way down the runway, on the high speed exit. As we exited, Aircraft Y on parallel on H, after landing ahead of us same runway, had not received a taxi clearance and their landing light was off, were stopped on H facing northbound. As we crossed the runway edge line on H3, Tower Controller called and asked us to roll to H2 much further down the runway. We had not slowed to a speed that would have permitted a safe turn back on to

the runway and continued to H2 as the request from ATC was too late into our exit. We continued taxi to park. We could have slowed down with minimal braking and exit closer to the far end of the runway, However, usually this would be an annoyance to the Local Controller, due to aircraft in trail behind us landing having to go-around if we were still on the runway.

Synopsis

Air carrier flight crew reported being unable to comply with a late clearance from ATC due to being on the high speed exit after landing, and exited the runway in close proximity to another aircraft.

ACN: 1988358 (11 of 50)

Time / Day

Date : 202304 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US Altitude.MSL.Single Value : 11000

Environment

Light : Daylight

Aircraft

Reference : X Aircraft Operator : Air Carrier Make Model Name : B737-700 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Initial Approach

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1988358 Human Factors : Workload Human Factors : Time Pressure Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days : 39 Experience.Flight Crew.Type : 39 ASRS Report Number.Accession Number : 1988372 Human Factors : Workload Human Factors : Time Pressure Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Track / Heading : All Types Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : Fuel Issue Anomaly.Inflight Event / Encounter : Weather / Turbulence Anomaly.Inflight Event / Encounter : Unstabilized Approach Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Flight Crew Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Took Evasive Action Result.Flight Crew : Executed Go Around / Missed Approach Result.Flight Crew : Diverted

Assessments

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

Narrative: 1

We were descending into ZZZ on a flight from ZZZ1. We knew there would be moderate turbulence in the area and experienced at least occasional moderate on our descent below 16,000 ft. There were clouds in the area that indicated moderate turbulence and passed through a portion of them on our descent at about 16,000 ft. This turbulence was greaterthan-moderate. Maybe not quite severe, but as you'll see we did not want to go back through them again. We were given a visual approach to Runway XXL and experienced moderate turbulence on the approach. In the flare the main wheels barely touched down, and we got a gust that picked us back up. After realizing the landing could not be made safely, we accomplished a normal go-around. On the go around we were given a climb to 11,000 ft. and a heading of 170. We complied with these instructions. Then as we were still cleaning up the airplane, ATC gave us a left turn to a heading of 070. Turbulence at the time was moderate and just bordering on, but not guite, severe. We told ATC that we wanted to maintain our heading and climb as the vector would have put us directly in the nearly severe turbulence in the clouds we flew through descending into ZZZ. The conditions were VMC on the west side of those clouds and we monitored clearance from the terrain. ATC gave us another easterly heading which, again, would have taken us through possibly severe turbulence; and we asked to maintain heading and climb above the turbulence so we could evaluate fuel and whether another approach could be made. Maintaining terrain clearance and using Captain's emergency authority, I elected to maintain heading and we told ATC we could not comply with the turn and requested a climb. ATC gave further instructions which we complied with that didn't require a heading

into the turbulence, but no further climb was given. I assessed our fuel and made a decision at that time to divert to our alternate of ZZZ2. We requested the diversion. We were given a heading and altitude toward ZZZ2 and proceeded and landed. En route we were given a number to call for a "possible deviation." We acknowledged the number and landed without incident at ZZZ2. I probably should have declared an emergency for fuel. In hindsight ATC was probably vectoring us back for another approach. We were still evaluating whether that was possible. But ATC, I think, misunderstood our request to stay out of potentially severe turbulence. Better communication between us and ATC might have helped the situation. ATC's intent to keep us in their airspace while try to vector us back and our intent to avoid severe turbulence (while maintaining terrain clearance) and evaluate whether a return was possible conflicted.

Narrative: 2

ZZZ1 to ZZZ for visual, Runway XXL. For context: 1) I'm on Day 2 out of IOE. I know where information is available to me in the flight deck, but my scan is not innate, yet. As much as I'd like to have better numbers for what the winds were doing at each spot and exactly what our assigned headings and altitudes were, I'm just not there, yet. I'm very much using conscious brainpower to gather and process info. 2) On our way into ZZZ, we were vectored north along the eastern edge of a mountain ridge southeast of the city and clipped the easternmost edge of the clouds over those peaks. There was immediate moderate turbulence (closer to severe than light) just clipping the edge of those clouds. I'll call them the "turbulent clouds." At the time, they looked like a collection of several merged cumulous clouds. We were warned of gains/losses of airspeed 10-15 kts. by PIREPS in front of us and the crosswinds were pretty strong from west-to-east. Just about at touchdown, we got a gust of wind and the Captain executed a "go-around." We climbed out in VMC, on runway heading, roughly following the southbound valley that the interstate follows. We had unlimited visibility along our path to the south and clear awareness of the terrain on both sides. Departure gave us a level off at 11,000 ft., which ended up being right in moderate (nearly severe) turbulence as we were level with the mountain peaks to our west (only a couple miles away), and downwind of the west-to-east winds. I asked for an immediate climb to get out of the turbulence, and the controller issued it with a turn to the east, directly towards the turbulent clouds over the city. I informed the Controller we were unable the turn to the east because of the weather, at which point he stated we were below MVA and needed to turn in order for him to climb us. After a couple of radio exchanges, it was clear we only had to climb 100 ft. on an easterly heading before we could request a turn to the south again, so we attempted that. Ultimately, we ended up on a 170 heading and climbed above the turbulence (though I tried to get further to the right/west because we were brushing right up against the turbulent clouds). Somewhere in the exchanges, Departure did ask for our intentions; and I let them know we wanted to continue south for about 10 more miles. At the time, that was to get around the turbulent clouds and give us time to analyze/discuss our next decisions (try again or divert). Ultimately, the Captain decided we needed to divert because of our fuel state, and that process went smoothly. This was a very compressed timeline with highs winds, terrain, and turbulence, and a challenging mental model to share with the Controller who couldn't see or experience what we could. I was confident then, and now, that the safest actions we needed take at that time were to continue climbing out of the turbulence in the direction where we had great visibility and terrain clearance, while NOT turning directly into the heart of the clouds to our east that we already knew had strong, moderate turbulence on its fringes. Of note, on our return flight from ZZZ2 to ZZZ about two hours later, the clouds over the city appeared as a collection of several standing lenticular clouds, interconnected along the spine of the mountains underneath them. The only options I can think of that would have allowed us to continue with our own terrain clearance and climb in VMC would have been to declare an

emergency or cancel IFR for two minutes then pick it back up. I don't know of an inbetween way to concisely communicate to ATC that we were in a great spot to take responsibility for terrain clearance while on a south ground track that would avoid the turbulent clouds. I think the Controller was trying to vector us back for another approach and/or shortest direction back into an area where we would be above the MVA. If there's a way to relieve the Controller of his/her terrain clearance responsibility without saying "emergency" or "cancel," I don't know what it is. It would have been nice to be able to say something like, "We got terrain clearance, continuing 180, climbing to ____ (assigned), let us know when you can turn us west to go to ZZZ2.

Synopsis

B737-700 Flight Crew reported moderate turbulence during the final approach resulting in a go around in which ATC assigned an unsuitable heading due to weather and terrain restrictions. Captain invoked Captain's authority to maintain heading and altitude clearance and also requested clearance to the alternate airport.

Date : 202303 Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US

Aircraft

Reference : X ATC / Advisory.TRACON : ZZZ Aircraft Operator : Corporate Make Model Name : Small Transport, Low Wing, 2 Turbojet Eng Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 91 Flight Plan : IFR Mission : Personal Flight Phase : Initial Climb Airspace.Class C : ZZZ

Person: 1

Location Of Person.Facility : ZZZ.TRACON Reporter Organization : Government Function.Air Traffic Control : Departure Function.Air Traffic Control : Instructor Qualification.Air Traffic Control : Fully Certified Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 16 ASRS Report Number.Accession Number : 1987530 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Situational Awareness Human Factors : Training / Qualification Human Factors : Trime Pressure Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Person: 2

Location Of Person.Facility : ZZZ.TRACON Reporter Organization : Government Function.Air Traffic Control : Departure Function.Air Traffic Control : Trainee Qualification.Air Traffic Control : Fully Certified ASRS Report Number.Accession Number : 1987535 Human Factors : Training / Qualification Human Factors : Time Pressure Human Factors : Situational Awareness Human Factors : Communication Breakdown Human Factors : Confusion Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Track / Heading : All Types Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Air Traffic Control Result.Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Became Reoriented Result.Air Traffic Control : Issued New Clearance Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

I was the instructor at position X, training a CPC-IT on his first day at the sector. This was our third session of the day, and we had previously discussed the fact that position X has frequent pilot deviations, mostly with the ZZZ1 departure. We discussed the importance of issuing the BRASHER statement, not to get pilots in trouble, but to educate the pilots and ensure the unsafe situation isn't repeated. ZZZ Tower called to request a release from Runway XX for a ZZZ One departure. Off Runway XX, the aircraft should turn northbound to heading XXX once they are through 5000 ft. The aircraft was released and departed shortly thereafter. The aircraft checked in climbing to 10,000 ft. on the ZZZ One and was radar identified. After some time and additional transmissions to other aircraft, we noticed the aircraft was still westbound as if on runway heading. The CPC-IT asked the pilot to verify they were on the ZZZ One departure, to which they responded "affirmative, vectors to ZZZZZ." I understand the intent behind asking if the pilot was on the departure. An expected possible response could've been "Affirmative, in the right turn now," as some pilots don't make this turn right away. Unfortunately, this aircraft continued into higher MVAs and a low altitude alert was never issued. The next departure from Runway XX, also on the ZZZ One, went into a higher MVA, but they were following the departure procedure correctly and made the turn appropriately. In most cases, 'appropriately' still leads to the aircraft getting into a higher MVA before making the turn northbound. I believe it could help to have ZZZ Tower reiterate what the departure procedure is read it line by line if necessary.

Narrative: 2

Aircraft X was released from ZZZ on an IFR flight plan coordinated from Runway XX on the ZZZ 1 departure, which required a turn to heading XXX after crossing 5000 ft. Aircraft continued straight on runway heading, when queried leaving 7400 ft. as to the departure procedure assigned, pilot responded that he was assigned a heading to expect direct ZZZZZ, which is the normal route assigned for Runway XXL. Aircraft climbed and was turned on course upon reaching a higher altitude above the MVA (12000). Due to the issues related to giving or implying a heading below the MVA, I opted to allow the aircraft

to climb above the MVA before issuing a turn on course. I hesitated giving the pilot deviation advisory due to the aircraft still being in a climb underneath the flight levels but was instructed to by my trainer. It is still my belief that such instruction should be delayed until the aircraft is in level flight and on course or already on the ground. Unknown what communication error upon departure allowed the pilot to believe he was supposed to fly runway heading instead of complying with the issued departure procedure.

Synopsis

A TRACON Controller reported a corporate jet on departure did not fly the SID as published and flew below the Minimum Vectoring Altitude.

Date : 202302 Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US

Aircraft

Reference : X ATC / Advisory.TRACON : ZZZ Aircraft Operator : Air Carrier Make Model Name : Falcon 2000 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Descent Airspace.Class E : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number.Accession Number : 1987387 Human Factors : Communication Breakdown Human Factors : Workload Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : 1987388 Human Factors : Communication Breakdown Human Factors : Workload Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Altitude : Excursion From Assigned Altitude Anomaly.Deviation - Altitude : Overshoot Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Flight Crew Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

I was pilot flying. We were proceeding on the ZZZZZ arrival into ZZZ. We were in VMC conditions in the vicinity of ZZZ1 talking to ZZZ Control. The arrival states cross ZZZ1 below 13000. ZZZZZ has a hard crossing altitude of 8000. The Controller states we were given instructions to descend to 13000, then direct to ZZZZZ, cross 5 miles East of ZZZZZ at 8000. Direct ZZZZZ takes us off the arrival route. We read back what we thought were our instructions, cross ZZZZZ at 5000 and that was rogered. A short time later we were issued a low altitude alert and climbed to 8000. We then were switched to the next sector and continued our arrival without incident. I remember the frequency being busy, and there were similar call signs. We were both sure we had been cleared to 5000, and since we were in VMC and not "descending via" the arrival, there did not seem to be anything wrong with descending to 5000. Nothing more was said to us. We thought we were cleared direct to ZZZZZ and descend to five thousand ft. We rogered that clearance and were not contradicted. While we were wrong, we could clearly see the terrain and since we were off the STAR routing we saw nothing wrong. If we had heard the Controller more clearly, or if they had corrected our read back, as mentioned, the frequency was busy and evidently we missed the first instruction, to climb to 8000. At the start of this event we heard "Direct to ZZZZZ", out of "Cross 5 miles East of ZZZZZ at 8000," and read back "Cross ZZZZZ at 5000," or words to that effect. I won't try to justify that but evidently that is what happened.

Narrative: 2

Flying ZZZZ arrivals into ZZZ, ZZZ ATC cleared Aircraft X to an altitude of 13000, the aircraft was on arrival outside of ZZZ1. A few moments later the Controller cleared Aircraft X direct to ZZZZZ off the arrival and to cross ZZZZZ, 5 miles before ZZZZZ at 5000 ft. was read back to Controller and confirmed by the other pilot. A few moments later the Controller notified Aircraft X of an altitude alert and was given clearance to climb to 8000 ft, which we did quickly. At no time was the aircraft in danger and the weather conditions were VFR. Nothing else was said and Aircraft X continued to ZZZ. I was a pilot not flying.

Synopsis

Falcon 2000 Flight Crew reported an altitude deviation due to a communication breakdown regarding an ATC revised descent clearance. The flight crew read back an erroneous descent clearance which was corrected by ATC.

ACN: 1985949 (14 of 50)

Time / Day

Date : 202303 Local Time Of Day : 0601-1200

Place

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

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : A320 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Make Model Name : Medium Transport, Low Wing, 2 Turbojet Eng Crew Size.Number Of Crew : 2 Flight Phase : Takeoff / Launch

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1985949 Human Factors : Communication Breakdown Human Factors : Other / Unknown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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) Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1985952 Human Factors : Situational Awareness Human Factors : Communication Breakdown Human Factors : Other / Unknown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Ground Incursion : Runway Detector.Automation : Air Traffic Control Detector.Person : Air Traffic Control Detector.Person : Flight Crew When Detected : Taxi Result.Flight Crew : Took Evasive Action Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Aircraft X, landed [Runway] XXL, exited Taxiway 1, possibly [Taxiway] 2, clear of runway, Tower instructed us to hold short of [Runway] XXR at [Taxiway] 3. As I was making a slow turn at [Taxiway] 3 to hold short of [Runway] XXR, Tower cleared us to cross [Runway] XXR at [Taxiway] 3. FO (First Officer) cleared right, I cleared left visually and verbalized, turned appropriate lights on, and intentionally did not disarm speed brakes to prevent FO from being distracted with after-landing flow. As we crossed the hold bars and I gained a better perspective to our right, of potential traffic on [Runway] XXR, Tower told us to hold position and I nearly simultaneously saw an aircraft approaching, potentially taking off, on [Runway] XXR. We of course immediately stopped. I quickly thought about reversing, but we had one reverser inoperative, and although across the hold bars, we were clear of the actual runway surface. Also, the departing aircraft was a narrow body, so geometrically a collision shouldn't occur. After the departing aircraft became airborne, Tower cleared us to cross again, and we confirmed they had initially cleared us to cross, which they confirmed.

Narrative: 2

Aircraft X. Upon landing on Runway XXL, we exited the runway at Taxiway 1 and were instructed by ATC to hold short [Runway] XXR at [Taxiway] 3. We did. Shortly after, ATC cleared us to cross [Runway] XXR at [Taxiway] 3. Both the Captain and I looked to make sure the runway was clear. On my side, I saw the lights of an aircraft at the end of the runway that appeared to be waiting "" line up and wait. We started moving forward slowly at that time. Then I saw the aircraft appear to be moving, and at the same time, the controller told us to stop. By this time, we were past the hold-short line, but still short of the runway edge line. Too close for comfort, however. The departing aircraft lifted off prior to our intersection. Shortly after, ATC cleared us a second time to cross. I clarified with

them that they cleared us to cross previously and they confirmed "yes." After that, we taxied to the gate uneventfully.

Synopsis

A320 flight crew reported a critical ground conflict while taxiing to the gate. ATC cleared the flight crew to cross but there was another aircraft that was taking off on the runway prior to the intersection.

Date : 202303 Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : EWR.Airport State Reference : NJ Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft: 1

Reference : X ATC / Advisory.Tower : EWR Aircraft Operator : Air Carrier Make Model Name : Large Transport Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

Aircraft: 2

Reference : Y ATC / Advisory.Ground : EWR Aircraft Operator : Air Carrier Make Model Name : Large Transport Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Aur Transport Pilot (ATP) Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Last 90 Days : 104 Experience.Flight Crew.Type : 207 ASRS Report Number.Accession Number : 1984404 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : Y Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : First Officer Function.Flight Crew : Pilot Not Flying Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Multiengine Experience.Flight Crew.Last 90 Days : 205 Experience.Flight Crew.Type : 399 ASRS Report Number.Accession Number : 1984415 Human Factors : Situational Awareness Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Ground Incursion : Taxiway Detector.Person : Flight Crew When Detected : Taxi Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

It was nighttime in EWR and after landing, Tower gave us clearance, something like cross Runway 22R, taxi RH to A, give way to company aircraft left to right. Because it was somewhat lengthy, the First Officer asked Tower to repeat the clearance. This time the clearance did not mention the aircraft to give way to, and since we saw a company aircraft crossing well ahead of us, we believed it was no longer a factor and that was why he omitted it in the second clearance. As we cleared the runway I noticed another company aircraft on the parallel and stopped the aircraft abruptly. Because it was dark, and because we thought there was not another aircraft to give way to, I didn't see it until the last second. I would estimate the clearance was 10 "" 15 ft., at the most.

Narrative: 2

After pushback in the RF alley, we contacted Ground for taxi. Ground cleared us to taxi to Runway 22R at Whiskey via Bravo and Romeo, and told to give way to an aircraft under tow on our right. This was the only instruction or advisory we received from Ground throughout the entire taxi. After becoming established on Bravo, behind the tug, the Captain called for the Before-Takeoff Checklist. Since this checklist requires us to reference paperwork and the FMC, the amount of time I was spending heads down was now increased. Approaching Taxiway Mike, the Captain noticed Aircraft Y on our right that was going to be crossing our path on the taxiway perpendicular to us, with no visible intent to stop. I was still in the process of completing the checklist, but at this point I focused my full attention outside. Understanding that Aircraft X was headed on a conflicting path with our taxi route, the Captain steered our aircraft slightly to the left, to provide extra clearance, and to ensure the two aircraft remained clear of each other. From what I could tell, Aircraft X eventually became aware of the conflict and stopped. During our taxi, we were never made aware by ATC that there was an aircraft crossing into our path, nor were we given instruction to give way to the crossing aircraft. Fortunately, the conflict was noticed early enough for both crews to react and avoid a more serious conflict. Furthermore, since we were on Ground frequency and Aircraft X was talking to Tower, we were not able to hear the clearance being given to Aircraft X. This occurred at night, which made it more challenging to see the other aircraft.

Synopsis

Air carrier Captain and another air carrier First Officer reported a critical ground conflict between the two aircraft during a taxi in night conditions. The former aircraft"™s Captain was able to abruptly stop the aircraft after noticing the other aircraft.

Date : 202303 Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ORD.Airport State Reference : IL Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : IMC

Aircraft: 1

Reference : X ATC / Advisory.Tower : ORD Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Takeoff / Launch Flight Phase : Initial Climb Airspace.Class B : ORD

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ORD Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Initial Climb Flight Phase : Takeoff / Launch Airspace.Class B : ORD

Aircraft: 3

Reference : Z ATC / Advisory.Tower : ORD Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Initial Climb Flight Phase : Takeoff / Launch Airspace.Class B : ORD

Person: 1

Location Of Person.Facility : ORD.Tower Reporter Organization : Government Function.Air Traffic Control : Local Qualification.Air Traffic Control : Fully Certified ASRS Report Number.Accession Number : 1981530 Human Factors : Communication Breakdown Human Factors : Confusion Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew Analyst Callback : Completed

Person: 2

Location Of Person.Facility : ORD.Tower Reporter Organization : Government Function.Air Traffic Control : Local Qualification.Air Traffic Control : Fully Certified ASRS Report Number.Accession Number : 1981538 Human Factors : Communication Breakdown Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Events

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

Assessments

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

Narrative: 1

I was landing RWY 10C and departing RWY 10L at the end of the evening. I issued Aircraft X a takeoff clearance with a right turn heading 180. The pilot read back "right heading 180". The aircraft rolled, and after 6,000 feet and airborne, I rolled Aircraft Y on a 090 heading. Meanwhile, the North Local Controller (NLC) Controller rolled Aircraft Z on a left 070 heading. I was looking at the radar when the Aircraft X tag acquired, and it looked a little north of the runway centerline depicted on the radar, and continuing to turn left, despite a correct readback of a right turn. It was IFR, and the plane was in the clouds. I immediately coordinated with the NLC Controller to stop their plane at 2,500 feet (underneath the altitude Aircraft X had climbed out of at that point) and stopped my own departure at 2,500 feet as well. I corrected Aircraft X's turn with a right turn to the south, and issued traffic to Aircraft Y. There was no loss of separation, but wrong direction turns

are a chronic problem here, even when the pilot gives the correct readback. I have no idea. The pilot read back correct instructions, and then did an incorrect thing.

Callback: 1

Reporter stated there is no obvious cause for this recurring issue.

Narrative: 2

I was working NLC, which at the time controlled departures off of Runway 9C. I cleared Aircraft Z for takeoff, on a 070 heading assigned. The weather was IFR, with ILS critical ceilings. As Aircraft Z was rolling, I noticed Aircraft X, a southbound departure off of Runway 10L, on the radar starting what appeared to be a wrong turn to the north, moving into the departure corridor of Runway 9C. I immediately began coordination with 3LC, who controlled Runway 10L, and instructed Aircraft Z to stop their climb at a safe altitude below Aircraft X. I then turned Aircraft Z to a 360 heading, to provide more airspace for 3LC to ensure separation with successive departures. Once 3LC had Aircraft X back on course, I turned Aircraft Z back to a 070 heading on course. No loss of separation was observed between any aircraft, and the review of the tapes determined it was a pilot deviation. Aircraft Z was issued and read back a right turn heading 180, but turned left. Wrong turn departures continue to be a chronic problem at ORD. Departing parallel runways, especially in IFR weather when the aircraft cannot be visually observed in the turns, continues to introduce a very high level of risk. It is my opinion, and the opinion of many at ORD, that the only way this process will be seriously addressed is AFTER a tragic event takes place. This is not an unknown issue, it is an extremely unsafe situation that has been brought up for years, and still no changes are in the works.

Synopsis

ORD Controllers reported an air carrier aircraft initiated a wrong turn resulting in controllers taking expedited measures to maintain separation with two other departing aircraft. Controller stated that this is an extremely unsafe situation that has become a chronic problem.

Date : 202303 Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC Light : Daylight

Aircraft: 1

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

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : Personal Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear Crew Size.Number Of Crew : 1 Operating Under FAR Part : Part 91 Flight Plan : VFR Mission : Personal Flight Phase : Final Approach Route In Use : Visual Approach Airspace.Class D : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Corporate Function.Flight Crew : Single Pilot Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Private Experience.Flight Crew.Total : 131 Experience.Flight Crew.Last 90 Days : 34 Experience.Flight Crew.Type : 115 ASRS Report Number.Accession Number : 1981001 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : Y Location In Aircraft : Flight Deck Reporter Organization : Personal Function Flight Crew : Single Pilot Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Private Experience.Flight Crew.Total: 275 Experience.Flight Crew.Last 90 Days: 44 Experience. Flight Crew. Type: 250 ASRS Report Number. Accession Number: 1982194 Human Factors : Time Pressure Human Factors : Confusion Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : NMAC Detector.Person : Flight Crew Miss Distance.Horizontal : 200 Miss Distance.Vertical : 50 When Detected : In-flight Result.Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Took Evasive Action Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

On final approach to ZZZ Runway XX, after performing practice LOC XX approach and cleared to land on Runway XX, at approximately 150 ft. and 200 ft. from Runway XX, we hear Aircraft Y call on the radio "going around." At this moment, I notice off my right side, about 50 ft. below and 200 ft. or less laterally, the aircraft pass us at near 100 ft. It appeared ATC had not advised them of our position, and they had to take evasive action to avoid our aircraft. We did not recall hearing when they received clearance to land from ATC, but assume they were cleared behind us "" but ATC must have not advised them of our position to maintain separation. The aircraft I was flying in is Aircraft X.

Narrative: 2

I, pilot of Aircraft Y, had a near miss with helicopter Aircraft X. I was cleared to land, number 2, behind helicopter. As I turned for final approach, I had eyes on the helicopter. Very quickly I caught up to helicopter with no warning from Control Tower. I took evasive action by side-stepping to the right and executing go-around, as well as letting Tower know I was going around. Helicopter called Tower and asked if he did anything wrong. Tower indicated to helicopter he approached too slow, and possibly too low. Helicopter pilot contacted me to discuss incident. Helicopter pilot believes ATC had ample time to warn both pilots and to instruct on aircraft separation.

Synopsis

Helicopter pilot and single engine aircraft pilot reported a NMAC between the two aircraft when the single engine aircraft overtook the helicopter on short final during a visual approach.

ACN: 1980154 (18 of 50)

Time / Day

Date : 202303

Place

Locale Reference.Airport : CHS.Airport State Reference : SC Altitude.MSL.Single Value : 500

Environment

Flight Conditions : VMC

Aircraft

Reference : X ATC / Advisory.Tower : CHS Aircraft Operator : Air Carrier Make Model Name : Medium Large Transport, Low Wing, 2 Turbojet Eng Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Final Approach Airspace.Class C : CHS

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Last 90 Days : 185.68 Experience.Flight Crew.Type : 914.37 ASRS Report Number.Accession Number : 1980154 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Multiengine Experience.Flight Crew.Last 90 Days : 181.9 Experience.Flight Crew.Type : 335.02 ASRS Report Number.Accession Number : 1980186 Human Factors : Situational Awareness Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Flight Crew When Detected : In-flight Result.Flight Crew : Took Evasive Action Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Approach kept us high on the arrival into CHS. ATC issued a late descent and gave us and we read back an altimeter setting of 29.94. We transitioned to the RNAV RNP Z 15 in VMC conditions. We stayed on the vertical guidance until about 500 ft., we had the runway in sight but we looked low. We couldn't make out the PAPI until 500 ft., with the morning glare. Once we could, it confirmed we were low. We checked the descent and landed with no further issue. After [we were] on the ground we realized the altimeter was 29.84

Narrative: 2

While flying the AMYLU3 arrival into CHS airport, we picked up the local weather/ATIS information. The altimeter setting was 29.84 inches. We were then cleared for RNAV Z RWY 15 approach. Shortly after, we were transferred to CHS Tower. The Tower Controller advised us that ATIS was current, and the altimeter was 29.94. We both heard the transmission and the Pilot Monitoring read back 29.94. It did stand out to me that we were had a .10 difference. We configured to standard profile but inside 1,000 ft. while on glide path we looked a little low. Around 500 ft. we had roughly 3 red lights PAPI. Since I was hand flying, I leveled off. Transitioning from the outside view to the glide path. I announced leveling off or possibly correcting and the Captain acknowledged. After 500 ft. it was obvious that the outside view was the correct or safer path.

Synopsis

Air carrier flight crew reported descending below glide path on approach to CHS after the altimeter was mis-set by 0.1 inches.

Date : 202303 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC State Reference : US Altitude.MSL.Single Value : 27000

Aircraft

Reference : X ATC / Advisory.Center : ZZZ Aircraft Operator : Air Carrier Make Model Name : A320 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Cruise Airspace.Class A : ZZZ

Component

Aircraft Component : Microphone Aircraft Reference : X Problem : Malfunctioning

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1979141 Human Factors : Workload Human Factors : Troubleshooting Human Factors : Time Pressure Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Check Pilot Function.Flight Crew : Captain Function.Flight Crew : Pilot Not Flying Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1979142 Human Factors : Time Pressure Human Factors : Workload Human Factors : Troubleshooting 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 : Smoke / Fire / Fumes / Odor Anomaly, Flight Deck / Cabin / Aircraft Event : Passenger Electronic Device Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly, Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : Other / Unknown Detector Person : Flight Crew Detector.Person : Flight Attendant When Detected : In-flight Result.General: Maintenance Action Result.General : Flight Cancelled / Delayed Result Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Overcame Equipment Problem Result.Flight Crew : Landed in Emergency Condition Result.Air Traffic Control : Provided Assistance Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

As we were getting ready for the approach and land in ZZZ, FL270, the cabin crew called us via interphone, notifying us about a [situation] in the mid-cabin. [The] Captain advised me about the event. The Captain immediately told me and communicated with ATC that we [were requesting priority handling] to ZZZ1 Airport. We both donned our masks and executed the [appropriate] descent procedure. As we were descending, ATC gave us a new instruction. Level off at FL250. We set that on the FCU. We had a traffic advisory, and ATC notified us about it. We dialed the VS on the FCU less than 1500 feet per minute to successfully avoid an RA. After crossing the traffic, we selected a lower altitude on the FCU (10000); as we were descending, both cockpit crews were having issues transmitting to ATC with our masks on. So I removed my mask and used the hand mike to communicate and reaffirm the [situation]. We requested the weather and runway in use at ZZZ1. The weather was provided for Runway XX. As we loaded the MCDU with all the details, we ran the [appropriate] checklist procedure. We loaded the flight [company software] with the landing details and proceeded with the approach checklist. On the final approach to Runway XX, we discussed the need to evacuate and confirmed that no actions were required. We did this twice. We review out loud the next course of action. Once on the

ground and the aircraft stopped, I announced via the PA to the flight attendants at stations. After discussing with [the] Captain the state of the aircraft, the Captain communicated with the passengers the next course of action. The Captain informed the passengers we would taxi the airplane to the gate assigned. I announce three times passengers remain seated. We spoke with the fire chief and proceeded to taxi the aircraft. We Completed all checklists. Once at the gate and the parking checklist completed, the Captain gave the order to disembark the passengers as the residual smell was still present in the cabin. Two fire extinguishers bottles were used. One PBE (protective breathing equipment) and some passengers helped to combat the fire. A retired firefighter, deadheading crew members and Flight Attendant all went above and beyond.

Narrative: 2

I was conducting OE (Operational Evaluation) on a Captain upgrade and occupying the right seat, While in level flight at FL 270, I was the PM (pilot Monitoring), First Officer PF (Pilot Flying). Also onboard we had a Check FA (Flight Attendant) and two FAs receiving OE in the cabin, 4 jumpseaters onboard seated in the cabin not too far from the source of the fire. Approximately XA32 we received a call from the cabin, advising us of the [situation] with smoke coming out of an overhead bin mid cabin. She hung up, at the same time we got a frequency change from ATC that went unacknowledged, [FA] called back and confirmed an uncontrolled [situation] mid cabin from an overhead bin. As a cockpit crew we donned 02 masks and I attempted to respond to ATC, but the mask mic was transmitting poorly. After two attempts from myself and one from [PF], I took my mask back off and confirmed with ATC we had a [situation] and were diverting to ZZZ1. instructed PF to keep his mask on during the descent while I worked the radios. We operated in this fashion until below 10,000 feet. Also during this time, Over the PA I briefed passengers on the diversion. FA called me at some point around 10,000 and said the [situation] was out and the cabin was prepared for landing. We completed the [appropriate], checklists for approach and landing, [PF] completed landing data for ZZZ1 on [Company system], and he confirmed again with FAs prior to landing that the [situation was contained]. We briefed ourselves and the FAs that we would stop and speak to the fire chief after landing, and that we did not anticipate evacuation. After landing, [PF] called FAs to stations, I spoke to the [ground personnel] and confirmed with them the [situation was contained] and established a plan for taxi to a gate. [PF], asked FAs to remain seated and we advised passengers that we were taxing to a gate to deplane. Once at the gate, I coordinated the deplaning as quickly as possible specifically due to the strong odor remaining in the cabin. Two of passengers were treated by paramedics on the aircraft and once all passengers had deplaned I made a gate announcement asking anyone who felt the need for medical care to please come forward and see paramedics. Several more passengers were cared for gate side, eventually the FAs were also taken to the hospital for evaluation. I was advised by jumpseater, and Lead FA that they along with a nearby passenger assisted in [controlling] the [electronic device] that was inside of a backpack. Passenger burns his hands while pulling the wet [electronic device] from the backpack. The device was placed in water per procedure and the fire source was isolated. Two halon extinguishers were used. A PBE was opened, but not used as the fire was already extinguished.

Synopsis

Air carrier flight crew reported a passenger's electronic device experienced a thermal runaway during cruise. The flight crew requested and was provided priority handling to a diversion airport where the flight landed safely.

Date : 202302 Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC

Aircraft

Reference : X ATC / Advisory.Ground : ZZZ Aircraft Operator : Air Carrier Make Model Name : B777-200 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Flight Phase : Taxi

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1978509 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number.Accession Number : 1978512 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Anomaly.Ground Incursion : Ramp Detector.Person : Flight Crew When Detected : Taxi Result.General : None Reported / Taken

Assessments

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

Narrative: 1

We were cleared to push out of Gate XX in ZZZ Cargo Ramp. After engine start Ramp Tower cleared us to taxi to Box XX and contact Ground. Ground then cleared us to taxi to Runway XYL via [Taxiway] 1. As we were leaving the ramp area we saw a ground vehicle, snow plow? moving at us left to right on the active Taxiway 2 at high speed. Ground did not alert us to the vehicle's presence. We began to slow the aircraft as the vehicle did not appear to see us. We were preparing to take potential action to prevent a possible collision when the vehicle slammed on his brakes and came to an abrupt stop just before crossing in front of our aircraft. We had sufficient clearance therefore, we continued an uneventful taxi to [Runway] XYL. Cause: possible training and lack of awareness on the part of the driver of the ground vehicle. Suggestions: Better communication between our aircraft and Ground. Better training of ground vehicle drivers.

Narrative: 2

Taxi clearance given exit point XX right turn [Taxiway] XX hold short [Runway] XYL. Taxiing out from Spot XX short of XX taxiway, with no notice from Ground, a snow plow / snow brush machine was traveling at high speed on taxiway 2. I had to slow aircraft and brake to avoid plow. Plow slammed on brakes and we proceeded out with over 15 ft. wingtip clearance. I don't know if training was occurring but no radio call from Ground and just bad driving from plow driver caused diminished safety margin. Cause: Too fast speed and lack of situational awareness by plow driver. Suggestions: Better training for plow crews. More communication from Ground controllers.

Synopsis

B777-200 flight crew reported a ground vehicle was moving fast towards the aircraft on the taxiway as the flight crew was taxiing for takeoff. ATC provided no notification but the flight crew was aware of the vehicle. The vehicle braked before crossing the aircraft's path.
ACN: 1977785 (21 of 50)

Time / Day

Date : 202302 Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC

Aircraft: 1

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

Aircraft: 2

Reference : Y ATC / Advisory.Ground : ZZZ Make Model Name : Caravan Undifferentiated Crew Size.Number Of Crew : 1 Flight Phase : Taxi

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function Flight Crew : First Officer Function.Flight Crew : Pilot Not Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Last 90 Days: 173 Experience.Flight Crew.Type: 538 ASRS Report Number. Accession Number: 1977785 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Other / Unknown Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Distraction

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

Person: 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) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine Experience.Flight Crew.Last 90 Days: 193 Experience.Flight Crew.Type: 457 ASRS Report Number. Accession Number: 1978133 Human Factors : Workload Human Factors : Time Pressure Human Factors : Situational Awareness Human Factors : Other / Unknown Human Factors : Confusion Human Factors : Communication Breakdown Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Detector.Person : Flight Crew Miss Distance.Horizontal : 20 Miss Distance.Vertical : 0 Were Passengers Involved In Event : N When Detected : Taxi Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We pushed from Taxiway 1 with instruction to go to [cargo area]. We set up for departure on XXR @ Taxiway 7 but we also briefed for XYL. At [the cargo area] ATC cleared us to XYL via Taxiway 2, Taxiway 3. We are both familiar with ZZZ and so I asked the CA (Captain) if I could go heads down to make the changes and he agreed. I continued to scan outside while making the changes. We proceeded onto Taxiway 4 to make the left onto Taxiway 2. On Taxiway 4 ATC gave us information regarding conflicting traffic at Taxiway 5 (to our left). I believe they told us that we would give way to an [air carrier aircraft] outbound but I don't remember for sure. We both looked left for the traffic but as we approached the left turn on Taxiway 1 I looked right and saw a Cessna Caravan traveling at a high rate of speed on a direct collision course with us. I immediately commanded the CA to "Stop! Stop!" When I saw that he was unaware of the threat I

took action applying heavy braking. We stopped in time for the caravan to pass without any corrective action on their part but it was a close call. I believe the caravan passed with 20 feet of our nose. Neither the Caravan pilot nor ATC appeared to have any idea of what just happened. After making ATC aware of the incident they informed us they were in the middle of a controller change. Their instruction for us to look left was the worst thing they could have done and almost doomed us.

Narrative: 2

Departed gate Taxiway 1 to the [cargo area] in ZZZ, on contact with ground we received taxi instructions "Taxi Taxiway 2, Taxiway 3 to XYL" We cleared, left, right, and forward, then began our taxi on Taxiway 4 to Taxiway 2. After looking for traffic and making sure I had identified the correct turn, the FO (First Officer) announced that he was going heads down to change the runway to XYL. I crossed Taxiway 6 and began my turn onto Taxiway 2 at between 8 and 10kts. Ground control contacted us with instructions or information about traffic at taxiway Taxiway 5 I don't remember exactly what they said. The FO came heads up and we both looked left into the turn for traffic at Taxiway 5. I then saw the FO turn his head to the right and then he shouted, STOP, STOP, STOP and immediately applied full brakes. As we came to a stop I saw a caravan taxi from right to left on Taxiway 2 in front of us at a high rate of speed. Our nose to the wingtip of the Caravan was about 20 feet. Ground control was going through a shift change and never mentioned the traffic conflict to either aircraft. Despite being heads up and scanning during the entire turn maneuver, I did not see the Caravan until my FO had resolved the situation. I believe that the caravan was traveling at a high enough rate of speed that they were continually in my blind spot. I also believe that the Caravan pilots never saw us, they were travelling extremely fast and never braked, maneuvered, or asked ATC about any potential traffic conflicts.

Synopsis

Air carrier flight crew reported a critical ground conflict while taxiing to the runway with another aircraft taxiing on a crossing taxiway. The First Officer abruptly applied brakes avoiding a collision and ATC later informed the pilots they were in the middle of shift change during the incident.

Date : 202302 Local Time Of Day : 1201-1800

Place

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

Environment

Light : Daylight

Aircraft: 1

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

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Landing

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Last 90 Days : 1300 Experience.Flight Crew.Type : 5500 ASRS Report Number.Accession Number : 1977439 Human Factors : Confusion Human Factors : Time Pressure Human Factors : Workload Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days: 180 Experience.Flight Crew.Type: 630 ASRS Report Number. Accession Number: 1977449 Human Factors : Workload Human Factors : Time Pressure Human Factors : Communication Breakdown Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Ground Incursion : Runway Detector.Person : Flight Crew When Detected : Taxi Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

[The flight] pushed on time. Ground Control instructed taxi to Runway XXL for departure and gave us a wheels up time of +15 min. We were then switched to Tower frequency with Aircraft Y holding short of Runway XXL full length and us as Aircraft X. Tower asked us to pull into the hold block for XXL to allow Aircraft Z behind us to access the runway via intersection Taxiway 1. Tower then gave Aircraft Z take off clearance from intersection Taxiway 1 but denied back taxi for full length. Aircraft Z then declined the takeoff clearance and informed Tower they would need to reload data and perform a checklist. After landing traffic on XXL, Tower asked Aircraft Z if they could move to give us access to the Runway via Taxiway 1, so we could make our wheels up time. Aircraft Y had a later wheels up time and was still holding short full length XXL. Aircraft Z was cleared to taxi down Runway XXL and clear Taxiway 2 back onto Taxiway 3. We were instructed to hold short of Runway XXL at Taxiway 1. I chose to hold our position in the hold block while we dealt with the additive condition of task loading with a runway change. Tower asked if we could take Taxiway 1. We replied on the radio that we needed a minute to load new data

and run a checklist. Tower responded that we had 50 seconds to make our wheels up time or we would need a new wheels up time. I responded to please get us a new wheels up time. Traffic permitting, Tower then cleared Aircraft Y and Aircraft Z for departure, leaving us as the only aircraft in the holding block. Tower informed us of our new wheels up time. We asked Tower if we should now expect a full length departure from XXL to which they replied, "Stand by." Approximately five minutes passed with no response from Tower on departure point. Approaching our new wheels up time, Tower instructed us to taxi up to and hold short of Runway XXL full length. With the intersection data loaded, I told Tower that each time they change our departure point, we need to load new data and run a checklist. Tower changed out taxi instructions to taxi up to and hold short of Runway XXL at Taxiway 1. As we taxied, the First Officer had deleted our data, when our clearance was for full length, but then reloaded when our taxi instructions changed to the intersection of Taxiway 1. As we approached XXL at Taxiway 1, Tower issued what we thought was position and hold on Runway XXL at Taxiway 1. With the additive conditions of task loading to accomplish the Before Take Off Checklist and the operational pressure to make our wheels up time along with meeting minimum fuel requirements for the flight, I was getting behind and did not hear Towers second clearance. I believe both the First Officers and I's expectation bias led us to believe that a second instruction from Tower would be a line up and wait. I did rely on my First Officers response to the call, which was line up and wait XXL at Taxiway 1. Tower did not catch our error nor make any correction. As I entered the runway at Taxiway 1, I cleared final and saw company aircraft at 800 ft on final approach. I thought it was tight but it fit into my expectation bias that Tower was trying to make our wheels up time since they had emphasized our first wheels up time. As I lined up on centerline for Runway XXL, I expected a takeoff clearance but none was received. After an awkward silence and glancing at the TCAS display and now seeing company at 600 ft on final I got the sinking feeling that there may have been a miscommunication. The next radio call was Tower instructing company to go around. Tower then asked us to copy down a phone number for possible pilot deviation. I think several things led to this communication error and runway incursion. I think the Tower Controller could understand the task loading created with multiple runway changes for intersection departures. Our error was allowing additive conditions to put us behind as a crew and then letting our expectation bias for making our wheels up time. This resulted in the communication error of reading back the wrong clearance. In the future I will not allow myself to take the runway if I feel behind for any reason regardless of a wheels up time.

Narrative: 2

While taxiing to Runway XXL for departure, Tower informed us of a flow time to ZZZ1 and instructed us to pull into the hold pad. There was an aircraft holding short of the runway at Taxiway 4 intersection for the full length. As our flow time approached, Tower told us that we would have to depart from Taxiway 1 intersection, and that we would not be able to back taxi. At this time we informed Tower that we would have to re-run our performance numbers and it would take a few minutes. Tower responded that they would have to get a new flow time for us, which we said was OK. After we had new performance numbers for the Taxiway 1 intersection departure, we let Tower know and received a new flow time. While we were waiting for our new flow time, the aircraft that was on Taxiway 4 for the full length departed. We asked which intersection we could plan on departing from, since we would have to re-run our numbers again for full length. Tower told us to standby, but never answered our question. As our new flow time approached, Tower told us to taxi to the full length intersection at Taxiway 4, at which time we informed them that we would have to change our performance numbers again. As we were in the process of changing our performance numbers, Tower instructed us to hold short of the runway at the Taxiway 1 intersection. It was during this time of high workload, while undoing the changes we had begun to make so we could meet our flow time, that we mistook Tower's instruction for a

lineup and wait clearance. When reading back the instructions, we read back "Runway XXL at Taxiway 1 lineup and wait," and did not get any response or challenge from Tower. After lining up on the runway at Taxiway 1, we expected immediate takeoff clearance as there was an aircraft on final, but the clearance didn't come and the landing aircraft was instructed to go around. Once that aircraft was clear we were informed of the possible pilot deviation. We were then given takeoff clearance. If we had gotten earlier communications from Tower about the sequence of aircraft and the need for an intersection departure, we could've avoided the additive conditions that led us to be behind. If Tower had answered our question of what takeoff point we could expect for our new sequence we could've reprogrammed our performance numbers while we were waiting, and we wouldn't have been task loaded at the last minute approaching our flow time. If we had told Tower we could only accept a Taxiway 1 intersection departure, when Tower instructed us to taxi for the full length, we could have avoided another last second change, which led to us being task loaded and miss hearing the second taxi instruction from Tower. If Tower had clarified our clearance after we read back XXL at Taxiway 1 lineup and wait we wouldn't have deviated from the initial instructions we were given.

Synopsis

Air carrier flight crew reported a communication breakdown between flight crew and ATC which resulted in a critical ground conflict.

Date : 202302 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport State Reference : US Relative Position.Angle.Radial : 250 Relative Position.Distance.Nautical Miles : 15 Altitude.MSL.Single Value : 4600

Environment

Flight Conditions : IMC Weather Elements / Visibility.Visibility : 10 Light : Daylight

Aircraft

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

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1977434 Human Factors : Communication Breakdown Human Factors : Time Pressure Human Factors : Workload Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days : 173 Experience.Flight Crew.Type : 9211 ASRS Report Number.Accession Number : 1977451 Human Factors : Workload Human Factors : Time Pressure Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Altitude : Excursion From Assigned Altitude Anomaly.Deviation - Altitude : Overshoot Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Flight Crew Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

Due to insufficient stopping margin for Runway X, but insufficient weather to land on Runway XX, we decided we needed to shoot the ILS to Runway X and circle to land XX in ZZZ. We both thought that we heard ATC descend us to 4200 ft. MSL from 5200 ft. We began descending and asked Approach to clarify the circling altitude for the approach. ATC advised us that the minimum vectoring altitude was 5000 ft., and asked us to climb back to 5000 ft. (we were descending through 4600 ft. MSL). We climbed back up to 5000 ft. promptly. We are not sure if we misheard the Controller's radio call and descended in error, or if the Controller actually gave us the descent in error. We are both fairly confident we heard the call correctly but were task saturated at the time and recognize that it could have been our fault. The rest of the flight transpired without issue.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported a CFIT event during approach after descending from the assigned altitude. The flight crew climbed to the assigned altitude and the flight continued without issues.

Date : 202302 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport State Reference : US Relative Position.Angle.Radial : 060 Relative Position.Distance.Nautical Miles : 2 Altitude.MSL.Single Value : 500

Environment

Flight Conditions : VMC Light : Daylight

Aircraft: 1

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

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : Military Make Model Name : Helicopter Airspace.Class C : ZZZ

Component: 1

Aircraft Component : Transponder Aircraft Reference : Y Problem : Improperly Operated

Component: 2

Aircraft Component : Traffic Collision Avoidance System (TCAS) Aircraft Reference : X Problem : Malfunctioning

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Last 90 Days : 200 Experience.Flight Crew.Type : 12500 ASRS Report Number.Accession Number : 1977107 Human Factors : Communication Breakdown Human Factors : Human-Machine Interface Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days: 200 Experience. Flight Crew. Type: 4000 ASRS Report Number. Accession Number: 1977092 Human Factors : Situational Awareness Human Factors : Human-Machine Interface Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : NMAC Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Detector.Person : Flight Crew Miss Distance.Horizontal : 0 Miss Distance.Vertical : 300 When Detected : In-flight Result.Flight Crew : Executed Go Around / Missed Approach Result.Flight Crew : Took Evasive Action Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Airspace Structure Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings Contributing Factors / Situations : Human Factors Contributing Factors / Situations : Procedure Primary Problem : Procedure

Narrative: 1

On an ILS approach to Runway XX in ZZZ. Cleared to land by Tower, VMC conditions. They informed us of of a Military helicopter working to the east of final and that they would remain there. The helo was close to the water as you could see the spray. As we got closer to the runway, it turned west. We watched the helo and expected it to turn east again. It never did. We went around visually at approximately 500 [ft.] AGL. There were no TCAS indications. We don't think their TCAS was turned on. The helo was encroaching on the final of the ILS. We missed it by a few hundred ft. as it went under us. I don't think either helo pilot ever saw us. We brought up our dissatisfaction with Tower on the go-around and called Dispatch when we landed. I also spoke to the Chief Pilot and the ATC Representative on duty.

Narrative: 2

We were on final approach into ZZZ cleared on the ILS Runway XX to ZZZ. Approach switched us to Tower and I checked in. Tower cleared us to land and notified us of a pair of Military helicopters east of the final approach course performing maneuvers. Tower also said that they should remain to the east of the final approach course. I told Tower we were looking and continued the approach. Neither of the helicopters showed up on our TCAS. The Captain was the first to see the helicopters and told me where they were. I finally saw them and reported them insight to Tower as he had told us where they were again. Tower said they should stay over to the east. We continued the approach. Probably around our 1000 [ft.] call, we noticed one of the helicopters had started to climb and was heading towards the final approach corridor for [Runway] XX which we were on. We both noted it and both expected the helicopter to start a turn east bound. Instead, the helicopter continued straight on a course that would have put him on a collision course with us, my guess is around 300 [ft.] MSL. Very shortly afterward, we were at about 500 [ft.] when the Captain called for the go-around as I had started to say it as well. We executed the go-around. I lost sight of the helicopter as we pitched up, but the Captain told me it never changed course and flew directly beneath us. We executed the missed approach and circled back around for a visual approach, which was successful and taxied to the gate with no further incidents. We told both Tower and Approach what happened and the Captain called it in to the Company Operations Center once we were parked at the gate. We never had the helicopter on TCAS and never received a TA or RA. We had the helicopter visually and executed the go-around based on our visual with the helicopter.

Synopsis

Air Carrier B737-800 flight crew reported a NMAC when military helicopter deviated from ATC coordinated flight path into the air carrier's approach path, without TCAS warning. Air carrier Captain performed an evasive go around to maintain visual separation, then landed.

Date : 202302 Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport State Reference : US Relative Position.Angle.Radial : 20 Relative Position.Distance.Nautical Miles : 2

Environment

Flight Conditions : Marginal Weather Elements / Visibility : Turbulence

Aircraft

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

Person: 1

Location Of Person.Aircraft: X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function Flight Crew : Captain Qualification.Flight Crew : Instrument Qualification. Flight Crew : Multiengine Qualification Flight Crew : Air Transport Pilot (ATP) Experience. Flight Crew. Total: 3428 ASRS Report Number. Accession Number: 1974847 Human Factors : Distraction Human Factors : Time Pressure Human Factors : Workload Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : First Officer Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Total : 1549 ASRS Report Number.Accession Number : 1975116 Human Factors : Workload Human Factors : Time Pressure Human Factors : Communication Breakdown Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Track / Heading : All Types Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : Weather / Turbulence Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Flight Crew When Detected : In-flight Result.Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Overcame Equipment Problem Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Aircraft X Flight ZZZ to ZZZ1. Uneventful departure, climb and en route phase of flight. We were in contact with ZZZ Center when cleared direct ZZZZZ for RNAV GPS Runway XX into ZZZ1. We had already setup, reviewed and briefed the RNAV GPS XX approach into ZZZ1 when we received clearance to cross ZZZZZ at or above 11000 ft, cleared RNAV GPS Runway XX into ZZZ1. First Officer (FO) had the terrain feature selected so we could monitor our position in relation with the rising terrain that was soon to be off of our left, east side, of the aircraft to ensure we maintained high situational awareness during the turn. Everything in the "box" looked correct and was depicting a smart turn to cross ZZZZZ and then proceed inbound on course to ZZZZZ1. Just prior to ZZZZZ we entered IMC, 11000 and 210 KIAS, as the plane began its right turn. We encountered moderate chop to light turbulence in the turn along with a gusting tailwind. This caused us to overshoot the turn and we were unable to stay on course to ZZZZZ1. At this time I was looking at the potential of reversing our turn to then complete the full approach with procedure turn. This was not remotely feasible and I requested to continue our turn direct to ZZZZZ1. ZZZ Center came over the radio, informed us of the minimum VFR terrain clearance altitude, cancelled our approach clearance and instructed us to continue our right turn back to ZZZZZ, climb and maintain 14000 ft. with which we complied. We then proceeded direct ZZZZZ for RNAV GPS Runway XX with full procedure turn. We successfully executed the approach, landing and taxi to the gate without issue. Automation limitations given current weather and meteorological conditions coupled with unfamiliarity

with the arrival/approach. Expectations of ATC and our own with conducting the approach. ATC expected us to do the full approach with procedure turn and we were setup and briefed to conduct the approach without it. The clearance received was cross ZZZZZ at or above 11000 ft, cleared RNAV GPS Runway XX to ZZZ1.

Narrative: 2

Arrivals from the south, landing Runway XX should conduct the approach with procedure turn to ensure they remain clear of terrain on both sides of the arrival corridor.

Synopsis

EMB-175 flight crew reported a communications breakdown between flight crew, who planned to fly the approach without the procedure turn, and ATC who expected the flight crew to fly the approach with the procedure. ATC ultimately cancelled the approach and assigned the procedure turn which landed safely.

Date : 202302 Local Time Of Day : 0601-1200

Place

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

Environment

Flight Conditions : VMC Weather Elements / Visibility.Other

Aircraft

Reference : X ATC / Advisory.Ground : ZZZ ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : B777-200 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Cargo / Freight / Delivery Nav In Use : GPS Nav In Use : FMS Or FMC Flight Phase : Taxi

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1970251 Human Factors : Time Pressure Human Factors : Situational Awareness Human Factors : Distraction Breakdown Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Function.Flight Crew : First Officer Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1971337 Human Factors : Time Pressure Human Factors : Situational Awareness Human Factors : Communication Breakdown Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Ground Incursion : Runway Anomaly.Ground Event / Encounter : Weather / Turbulence Anomaly.Ground Event / Encounter : Loss Of Aircraft Control Detector.Person : Flight Crew Were Passengers Involved In Event : N When Detected.Other Result.Flight Crew : Took Evasive Action Result.Flight Crew : Requested ATC Assistance / Clarification Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We flew into the ZZZ terminal area via the ZZZZZ 3 RNAV arrival, ZZZ1 transition, cleared direct to ZZZZZ1 prior to being given a clearance to descend via the ZZZZZ 3 landing north for the ILS XXC. We monitored the ZZZ ATIS closely throughout the flight and called our Dispatcher for realtime info when we were about 3 hours out. The latest ATIS stated multiple taxiway closures but did not list any specific ones. We knew about the severe weather that had passed through and were concerned about the runway condition codes published. We were descending to 3000 ft. and were heading south approximately 10 miles from the runway when we were cleared to 2000 ft. and given a right turn to 270 followed by another right turn to intercept the localizer and then cleared for the ILS XXC. I was the pilot monitoring (PM), the First Officer (FO) was the pilot flying (PF) and we had a Relief Pilot (Captain) on the jumpseat. At 2000 ft. we were IMC however it did not take long breakout on the glideslope. Approach was uneventful, and stable flown by the FO. The runway CC (condition codes) was recently updated to 5,5,5,5 and we discussed cleaning up on the runway at the end of the rollout if it appeared the taxiways contained clutter. The FO had selected autobrakes 3 for landing and we said we would exit the runway at a logical point depending on the condition of the runway as well as the taxiways. We also discussed allowing the jet to slow completely to taxi speed utilizing the autobrakes. On final, I queried the Tower regarding where they preferred we exit the runway and they said we could roll to the end and exit at the Taxiway X highspeed. I knew we had Taxiway XX, the other highspeed taxiway on the right side of XXC available to us as well. All of these contingencies were discussed among the 3 of us. Also, this was the only operating runway at the time and we could see airplanes lined up for takeoff and de ice. As stated, the approach was flown uneventfully to touchdown by the FO. On rollout,

spoilers deployed normally and the airplane slowed nicely. The first 2/3 of the runway was dry and free of clutter. As we rolled out I could make out either snow, frost, ice or something glistening on the last approximately 1/3 of the runway. By this time we were approaching 50 knots and we were only a little past 1/2 down the runway. I mentioned in the cockpit that we have Taxiway XX available if the stuff on the runway looked problematic. At this time I queried Tower regarding where they wanted us to exit. They said we could exit right at the end of the runway which would be Taxiway X. I took control of the jet from the FO and instructed him to clean up the flight controls so they would not be contaminated by what I could tell was heavily cluttered taxi ways. Then the Tower came on the radio and told us to exit right on Taxiway XY. I was expecting to go to the end of the runway by now so I started wondering why the last second change and then could not see and XY taxiway sign. I asked the crew where XY is and they said we just passed it. OK, time for a clarification note. At this time the FO and Relief Pilot thought we passed XY when we actually passed XX. We landed on Runway XXC and XY does not touch XXC, it touches XXR, so Tower told us to exit on a Taxiway that did not touch our runway. The FO told Tower we missed XY and stated we can take Taxiway Y which the Tower then instructed us to do. The braking action on the runway the whole time was good. Taxiway Y is a 90 degree taxiway and there was a line of snow across the entrance from the runway being cleared. I slowed to the minimum speed I could use to make my right 90 degree turn and then planned to make the next left 90 degree turn onto Taxiway Z to proceed north toward our ramp. When I began to make my left 90 degree turn onto Taxiway Z, the nose of the airplane moved a little left and I could feel the nosegear turn but the jet was essentially going straight forward. I announced something like we aren't turning and immediately straightened the nosegear and stood on the brakes. Then I announced that we aren't stopping. We did eventually come to a stop on the Taxiway Y centerline with the nose of the jet facing east and oriented slightly east of Taxiway Z. I set the brake and the FO informed Ground that we were unable to negotiate a left turn onto Taxiway Z due to ice and snow and that we would require assistance. There was discussions with ground regarding if I wanted to try taxiing onto Runway XXR to attempt to turn around and we all agreed that the appearance of that runway was unsuitable for taxi. We told Ground Control that we would call our company to bring a tug to pull us out and take to the ramp. Airplanes were still taking off of Runway XXC when the Tower asked us if we could pull up 20 feet or so because our tail was hanging over the XXC holdshort at Taxiway Y. I was dumbfounded that we could be over the hold short because I saw 1 or 2 airplanes take off Runway XXC. I had one of our Maintenance crew visually check our position and he confirmed that we were in fact over the hold short about 20 feet and monitored my very slow pull forward and let me know what I was clear of the hold short. Then our Maintenance attempted to join a lift tug with our nose gear to move the airplane but he was unable to get sufficient traction with the tug to engage the nose gear due to ice. There was some discussion of taxiing forward across Runway XXR and proceeding north on Taxiway A however one brake check by the Operations vehicle proved that the ice on the runway would not allow taxi. It was decided then that we would have to wait for liquid de ice to come and spray the taxiway and end of Runway XXR to allow me to taxi. The plan was to deice the route and taxi on Taxi Y onto Runway XXR, turn right and proceed approximately 50m south on Runway XXR and make a right turn on Taxiway XY and then another right turn onto Taxiway Z to proceed north to our ramp. A lot of time elapsed while waiting on the liquid deice when a dumptruck showed up with a broadcast spreader on the back and after some coordination with our Maintenance, he spread some material all over the area approximately 50m in front of the jet. Whatever he used, it worked great and the tug was able to hook up within 15-20 minutes. The airport had a truck with a rep onsite for consult however their communication was poor as the Tower/Ground had constant trouble communicating with him and we missed several opportunities for the tug to attempt a pushback onto Taxiway Z. With Runway XXC being the only operating

runway, the Tower was reluctant to have us push back and possible render that runway unusable. While waiting for an opportunity to move, the same man who drove the dumptruck with the broadcast spreader showed up with a front end loader and proceeded to scrape the area infront of the jet so the tug could have traction as well as remove the ice/snow that bordered Taxiway Z that may hinder the pushback of the tug. Once he finished that, Runway XXC was closed and the airport began cleaning it up again and ops moved to XXL. Our tug then had no problem pushing us back onto Taxiway Z and then towed us north on Z to our ramp., Cause: Inadequate information regarding taxiway condition and which were best suited for runway exit. Short fused change in runway exit instructions from Tower. Told to do one thing and then told to do something different with little time. Instructed to exit via a taxiway that did not exist for the runway in use. Solution: Publish standard taxi routes, publish taxiway condition and limit which taxiways are used to only the ones cleared, in this case, it appeared none of the exit taxiways had been cleared. We were cleared to exit at the runway end, once that instruction was given, because of the nature of the adverse conditions, the clearance should not have been changed in close, unless there is a safety of flight issue which is why I was thinking our instructions changed.

Narrative: 2

Uneventful flight from ZZZZ-ZZZ until landing rollout and clearing XXC after landing from a normal flight, approach, and hand flow ILS landing. We had discussed rolling all the way to the end to clear the runway at Taxiway X which ZZZ Tower approved. On landing roll, after the aircraft was at a taxi speed, we were is a position to safety exit at Taxiway XX, but before we could coordinate with ATC ZZZ Tower asked us to clear at XY. I told them "WILCO", and the Captain, Relief Pilot, and I started looking for Taxiway XY as we taxied past XX. We recognized some signage pointing to XY, but did not realize at the time Taxiway XY did not connect to Runway XXC. We told ZZZ Tower we were unable to clear at XY, but could exit the runway at Taxiway Y. They approved, and we exited XXC at Taxiway Y. After clearing at Taxiway Y, Taxiway Z was too icy to turn the aircraft north to taxi to the gate. The Captain stopped the aircraft in the Taxiway Y and Taxiway Z intersection slightly north of the taxi line facing east. We were unable to steer or reliably stop the aircraft, so we elected to set the parking break and wait for a tow-in to the gate. ZZZ Tower cleared an aircraft to take-off as we cleared the runway, but did not realize our tail was still in the runway clear zone by approximately 5 feet. ZZZ Tower asked us to pull forward, so we coordinated with ZZZ Tower and airfield management truck to clear the runway and then re-set the parking break to continue waiting for a tow-in. We started the APU and waited over 3 hours for Company Maintenance and airfield operations to remove enough ice from the taxiway in order for the tug to get enough leverage to back us onto XXC and then forward onto Taxiway Z and then to our parking spot. Cause: The confusion from the ZZZ Tower Controller about Taxiway XY being attached to Runway XXC, and the lack of communication about the condition of Taxiway Y and Z for our runway exit. Nowhere in the NOTAMs do they mention Taxiway Y or Z's condition. Solution: Better communication from the ground handler about adverse airfield conditions, and real time information from ZZZ Tower via ATIS about taxiway closures. Controllers should also be proactive about proper taxiways to use in adverse weather.

Synopsis

Air Carrier Pilot Crew reported during the landing roll-out ATC changed the taxiway they were to use to exit the runway. The problem, as reported by the pilots, the runway was much slicker than advertised and the jet began to slide out of control. The taxiway given by ATC does not have a connection to the runway and once stopped the jet needed a

ground tug and snow removal equipment to proceed. The pilots stated, lack of information regarding runway condition and the late taxiway change complicated the situation.

ACN: 1970208 (27 of 50)

Time / Day

Date : 202302 Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC State Reference : US Altitude.MSL.Single Value : 14000

Environment

Flight Conditions : VMC

Aircraft

Reference : X ATC / Advisory.TRACON : ZZZ Aircraft Operator : Air Carrier Make Model Name : B737 Undifferentiated or Other Model Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Nav In Use : GPS Nav In Use : FMS Or FMC Flight Phase : Descent Route In Use : Vectors Route In Use.STAR : ZZZZ1

Person: 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 Total: 11362 Experience Flight Crew Last 90 Days : 163 Experience.Flight Crew.Type: 9068 ASRS Report Number Accession Number : 1970208 Human Factors : Communication Breakdown Human Factors : Other / Unknown Human Factors : Situational Awareness Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Experience. Flight Crew. Total: 303 Experience. Flight Crew. Last 90 Days: 163 Experience. Flight Crew. Type: 303 ASRS Report Number. Accession Number: 1970210 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Automation : Air Traffic Control Detector.Person : Air Traffic Control Were Passengers Involved In Event : N When Detected : In-flight Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

When we were with Center they gave us a heading for separation, and they told us direct to ZZZZZ. I confirmed with the First Officer (FO) that was the correct fix, and we went direct to ZZZZZ. We were then switched over to Approach Control, and they said descend via the ZZZZI RNAV. Later as we were descending, Controller, asked, "Where are you going? Are you going direct ZZZZI?" We stated "we were going direct to ZZZZZ from Center before we switched with you." Controller then said we are getting close to the mountain, and then gave us a heading, and altitude. Once established on that heading, Approach Control, gave us direct to ZZZZI and descend via. We landed and taxi to the gate without any other issues.

Narrative: 2

During the descent phase of flight, ZZZ to ZZZ1, Center gave us a heading. Then we were given direct ZZZZZ, a fix on the ZZZZ21 STAR, and descend via the ZZZZ21 arrival. The next Controller asked us if we were direct ZZZZ21. I replied no and told them we were told direct ZZZZZ. The Controller told us we were approaching the mountain and turned us to a new heading and level off at 13000 ft. They then gave us direct ZZZZ21 and descend via the ZZZZ21 arrival. We landed without further incident.

Synopsis

B737 flight crew reported after changing to the next Controller they were ask which fix they were flying too. The Controller changed the fix on the STAR and said you are getting too close to high terrain.

Date : 202301 Local Time Of Day : 1801-2400

Place

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

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : EMB ERJ 170/175 ER/LR Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Nav In Use : GPS Nav In Use : FMS Or FMC Flight Phase : Initial Climb Flight Phase : Takeoff / Launch Route In Use.SID : ZZZ7

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer Flight Phase : Takeoff / Launch Flight Phase : Initial Climb Airspace.Class D : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1969944 Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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) Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1969945 Human Factors : Workload Human Factors : Time Pressure Human Factors : Distraction Human Factors : Distraction Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : NMAC Detector.Automation : Aircraft TA Detector.Automation : Aircraft RA Detector.Person : Flight Crew Miss Distance.Horizontal : 400 Miss Distance.Vertical : 0 Were Passengers Involved In Event : N When Detected : In-flight Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

We were cleared for takeoff on Runway XX on departure. As we were making the left turn we had TA followed immediately by an RA that we complied with. We advised ATC that we were complying with an RA. After complying with the RA we received a frequency change and resumed with the flight. After taking off we encountered and complied with an RA for an aircraft that was around 3,000 feet off the departure end of Runway XX. The aircraft came within about 300 feet horizontally of our flight. Better communication plan between tower and departure to assure lengthy time and distance between aircraft in the airspace.

Narrative: 2

[Reporter provided no additional information].

Synopsis

Air carrier flight crew reported an NMAC after takeoff and during the initial climb. They reported a TA then RA from an aircraft departing from another runway. The pilot's reported following the RA commands.

Date : 202301 Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ORD.Tower State Reference : IL

Aircraft

Reference : X ATC / Advisory.Tower : ORD Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Initial Climb Airspace.Class B : ORD

Person: 1

Location Of Person.Aircraft: X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function Flight Crew : First Officer Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification. Flight Crew : Multiengine ASRS Report Number Accession Number : 1969688 Human Factors : Confusion Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Workload Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number.Accession Number : 1969680 Human Factors : Workload Human Factors : Time Pressure Human Factors : Distraction Human Factors : Confusion 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 - Track / Heading : All Types Anomaly.Deviation / Discrepancy - Procedural : Clearance Detector.Person : Air Traffic Control Result.Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Became Reoriented Result.Air Traffic Control : Issued New Clearance Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On takeoff I thought I heard "fly heading 180". I read back "180" without being corrected and the Captain concurred with the heading. After takeoff the Tower told us to turn to 040 and the Captain inquired about our original heading. We were later told to contact the tower for a possible deviation. It was a short and fast taxi with no other aircraft in sequence for takeoff. I'm not sure if I read back the wrong initial heading or we were given it in error. I felt a little rushed and had just finishing a checklist as we were cleared for takeoff. We should have taxied slower and been more methodical in preparation for takeoff to reduce task saturation.

Narrative: 2

We were cleared line up and wait 28R. While still taking 28R, then cleared for takeoff, before we got on the runway (Aircraft X heading 180 cleared for takeoff) I selected 180 and pointed to the heading, and accepted the clearance. The First Officer repeated clearance to ORD Tower. After takeoff I started a left turn to 180, Tower then instructed us to turn right to 040. After the turn I inquired about the 180 heading. I was asked what I was given and replied 180. We checked on with Departure and later they told us to call ORD tower to inquire for a possible deviation. No correction from Tower was given by Tower after accepting and repeating the 180 heading. No conflict with other aircraft was reported or experienced. We were running late because of maintenance, ACARS was on MEL. Was given line up and wait while still on Taxiway N, cleared for takeoff while taxiing on to runway. We were just finishing the checklist before we entered the runway when they cleared us for takeoff. We paused takeoff for a moment to check winds and make sure before takeoff check was complete. I didn't hear before takeoff check complete because of Tower clearing us for takeoff. I then started takeoff roll. I as Captain and flying pilot should have waited to set my heading when we stopped before takeoff roll. I may have inadvertently caused the First Officer to acknowledge the takeoff clearance while he was stating the before takeoff check was complete.

Synopsis

Air carrier flight crew reported ORD Tower assigned them a 180 heading after departure, but were later advised they had been assigned a right turn heading 040.

Date : 202301 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : MLB.Tower State Reference : FL Relative Position.Angle.Radial : 270 Relative Position.Distance.Nautical Miles : 1.5 Altitude.AGL.Single Value : 700

Environment

Flight Conditions : VMC Weather Elements / Visibility.Visibility : 10 Light : Daylight Ceiling.Single Value : 10000

Aircraft: 1

Reference : X ATC / Advisory.Tower : MLB Aircraft Operator : FBO Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 91 Flight Plan : VFR Mission : Training Flight Phase : Final Approach Route In Use : Visual Approach Airspace.Class D : MLB

Aircraft: 2

Reference : Y ATC / Advisory.Tower : MLB Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer Crew Size.Number Of Crew : 1 Operating Under FAR Part : Part 91 Flight Phase : Final Approach Route In Use : Visual Approach Airspace.Class D : MLB

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : FBO Function.Flight Crew : Instructor Qualification.Flight Crew : Flight Instructor Qualification.Flight Crew : Instrument Qualification.Flight Crew : Commercial Qualification.Flight Crew : Multiengine Experience.Flight Crew.Total : 700 Experience.Flight Crew.Last 90 Days : 242 Experience.Flight Crew.Type : 660 ASRS Report Number.Accession Number : 1969524 Human Factors : Confusion Human Factors : Situational Awareness Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : FBO Function.Flight Crew : Pilot Flying Qualification.Flight Crew. Student Experience.Flight Crew.Total : 51 Experience.Flight Crew.Last 90 Days : 51 ASRS Report Number.Accession Number : 1969525 Human Factors : Situational Awareness Human Factors : Confusion Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : NMAC Anomaly.Deviation - Track / Heading : All Types Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Detector.Person : Flight Crew Miss Distance.Horizontal : 500 Miss Distance.Vertical : 200 When Detected : In-flight Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Flight training operation with instructor pilot and student pilot. At the time the Tower Controller was working both Tower and Ground frequencies with 5+ aircraft in the airspace and numerous others calling Ground. Student pilot checked in over the VFR reporting point requesting a full stop landing at the MLB airport. Tower Controller proceeded to reprimand the student pilot for "stepping on" someone completing a read back. The read back was being broadcasted on MLB Ground, so we had no way of knowing someone else was communicating on Ground frequency as we were monitoring Tower. This is often a problem when the Tower is working both frequencies. The student pilot proceeded to

repeat the call to Tower. Tower instructed the student pilot to enter a right base and report a two-mile base for Runway 9R. The student pilot read that back. Approaching a two-mile base the combined frequencies were so busy that we were unable to get a word in to report the two-mile right base. Approaching the extended centerlines for Runways 9L and 9R, the instructor (myself) and student noticed an aircraft on the opposite base heading directly at us. Two aircraft were approaching head on for opposite bases for parallel runways with no traffic advisory by ATC. The Controller seemed task saturated at the moment and multiple aircraft were not receiving clearances until short final. I (the instructor pilot) took over and deviated to the west to avoid a traffic conflict. At this point, we were trying to get in touch with Tower to notify the Controller of our position and that we were deviating for traffic. I got on the radio and called Tower notifying the Controller that we were approaching final for 9L deviating for traffic. Tower proceeded to reprimand us saying that deviation was unnecessary and that we were assigned the parallel Runway "9R". I then initiated a right turn to reestablish on the final for Runway 9R with the opposing traffic in sight at all times, however this brought us close to the opposing traffic. It was determined that both myself and the student pilot believed we were cleared to approach Runway 9L when we were actually given 9R. At MLB, pilots are used to being given the same runway 95% of the time, so complacency played a role in us assuming we were supposed to approach Runway 9L. Additionally, we were distracted and startled as we were accepting the clearance for right base 9R after we got reprimanded for inadvertently stepping on an aircraft transmitting on a frequency that we were not required to monitor. This disturbance likely interfered with us mentally processing the nonstandard approach clearance to Runway 9R. As we approached the two-mile reporting point, the Controller was so busy such that we could not get a word in to confirm our twomile base and landing clearance. This led to the pressure and distraction that caused our brain's to default to the usual approach clearance to land 9L. To prevent a recurrence, pilots need to be vigilant when assigned approach clearances at VFR airports where they are complacent with getting the exact same clearance multiple times a day. Also, when a traffic conflict is present, pilots need to do everything possible to stay well clear of conflict. Additionally, Controllers should not reprimand pilots unnecessarily during critical phases of flight as this causes significant distraction in the cockpit that heightens the risk of pilot error. To ensure traffic de-confliction, the Controller workload and frequency should not get so busy as to prevent effective communication.

Narrative: 2

This event started at the visual reporting point for using "9R and 9L" at MLB. We reported at the point and were gripped at for stepping on someone else on frequency. The other aircraft we "stepped on" was on the Ground frequency so we had no way of knowing as we were tuned into Tower. We then got clearance for 9R and report a 2 mile right base. Once we reached the reporting point the frequency was so busy we were unable to get any word. We continued on our base leg until we noticed another aircraft also on base leg from the other direction, while MLB does have parallel Runways 9R and 9L we got no traffic alerts for this traffic. The instructor took control and attempted to deviate west. The instructor notified Tower and told us to continue to 9R. The instructor then proceeded to intercept the final approach for 9R. During all of this we did come close to other traffic with having them in sight the whole time. We then proceeded to come to 9R where we asked Tower if we were still clear to land but he never gave us a response as the frequency was so busy. We ended up going around and landing on 9L. In order, to prevent situations like this happening again pilots need to make sure that they don't get complacent in critical phases of flight. Also, traffic alerts when 2 planes are both on base legs from opposite directions would be helpful so there is no confusion on where the other plane is going and everyone is going to the right runway.

Synopsis

Flight Instructor with student reported NMAC with another aircraft in traffic pattern that was complicated by a congested traffic pattern and busy tower frequency.

Date : 202301 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : RCA.Airport State Reference : SD Altitude.AGL.Single Value : 0

Aircraft

Reference : X Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 4 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Cargo / Freight / Delivery Flight Phase : Taxi

Component

Aircraft Component : Electronic Flt Bag (EFB) Aircraft Reference : X Problem : Design

Person: 1

Location Of Person Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function Flight Crew : Pilot Flying Function.Flight Crew : First Officer Qualification Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification. Flight Crew : Multiengine ASRS Report Number. Accession Number: 1967403 Human Factors : Fatigue Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : First Officer Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Relief Pilot Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1967402 Human Factors : Workload Human Factors : Time Pressure Human Factors : Confusion Human Factors : Confusion Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe Anomaly.Ground Incursion : Taxiway Detector.Person : Flight Crew When Detected : Taxi Result.Flight Crew : Became Reoriented Result.Flight Crew : Requested ATC Assistance / Clarification Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft Contributing Factors / Situations : Airport Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings Contributing Factors / Situations : Software and Automation Contributing Factors / Situations : Procedure Contributing Factors / Situations : Chart Or Publication Primary Problem : Ambiguous

Narrative: 1

This was our second long day of sitting on the aircraft waiting for fuel to be loaded. Our first day ended when the airfield closed, because we delayed several hours due to insufficient support for two aircraft and a single fuel truck in operation. From the time we completed our aircraft preflight procedures and briefing, approximately 2 hours had passed. I was the Pilot Flying (PF) in the right seat and the Captain (CA) was the Pilot Monitoring (PM) in the left seat. There were two additional First Officers (FO) seated in the observer seats. The company pages for Ellsworth AFB states that for departures "expect taxi clearance to runway via Taxiway Delta and back taxi." There is further information provided for the arrivals section that states this is due to pavement degradation. This expected clearance is exactly what the company aircraft in front of us received the day prior, and is what we briefed. When we received our taxi clearance we were simply told to taxi via "Alpha Bravo." As we commenced our taxi there was a marshaller positioned directly in front of us, and he signaled for us to taxi straight ahead, then directed us for an immediate right turn towards DELTA Taxiway. As we were nearing the runway, the FO in the left observer seat reminded me to turn left onto Alpha, which the entire crew agreed with. As we turned down the taxiway, it appeared to be very close to some blast fences on the right, so with the CA's concurrence I opted to taxi left of the center line so we had ample wingtip clearance on the right side. This area where we were taxiing was a large (vacant) parking ramp. This Taxiway Alpha has a slight right turn, then a left turn back to parallel the runway. As we made this right turn (approximately 45 deg) I immediately realized something was wrong. The taxiway had a dead end directly in front of us, and the

blue taxiway lights were now on our left side. I quickly came to a stop and we queried Ground Control, while referencing our taxi diagram. The crew thought that perhaps the blue taxiway lights were center line taxi lights, and the Ground Control commented that those lights "used to be green." The crew further interpreted this to be center line taxi lights, so we again continued to taxi to the left to intercept what we thought was center line taxi lights. We again realized this was not the case, and these recessed lights denoted the right side of the taxiway. We crossed over the recessed taxi edge lights onto the appropriate taxiway, and continued our taxi to Runway 31 without any further issues. At no time did the aircraft ever leave a hard surface or an area in which was not intended for aircraft travel, it was simply an area that was not specifically marked as the Alpha Taxiway. Where we were actually located was on a back alleyway for the hardstand parking locations of the ramp. Several factors played into this event, including the following; The long delay due to fueling issues, and duration from the time we briefed. Expectation bias originating from the company airport page and the marshaller/equipment in front of us. Poor taxi diagram available for the airfield which appears to identify two parallel Alpha taxiway lines, which is actually the taxi width line on the ramp area. Incorrect information from ground control concerning taxiway edge lights and colors versus taxiway center line lights, which did not exist. Poor ramp lighting and non standard airport markings. Even though we briefed what was expected and all monitoring pilots had taxi diagrams open and followed along the taxi route, we were still easily confused due to the information we had available. I believe that instead of "expecting" a clearance to back taxi on the runway, this should be standard operating procedure at this airport. There are far too many hazards and traps with the limited information on this airfield and non standard markings.

Narrative: 2

PM (Pilot Monitoring) briefed taxi route per company page; via Delta and back-taxi to departure Runway 31. We were cleared by ATC to taxi via Alpha, Bravo. Upon signaling marshaller, we were directed onto Delta, the marshaller and a piece of equipment blocking a straight-out taxi. Prior to entering taxiway Delta I advised a left turn was necessary to enter taxiway Alpha "Outer" there being two taxi lines depicted on the airport chart. A turn was made and we followed taxiway Alpha "Outer" realizing, as we neared the curve in the taxiway that something was amiss. We stopped the aircraft, gueried ATC, and were assured our taxi path was correct. Being situated behind the Captain (4th Observer) I did not have a good view of the taxiway ahead and to the right of the aircraft, however, I could see out the left window clearly. The Captain and I observed a wide swath of taxiway left of the aircraft, and the PM maneuvered accordingly. We joined taxiway Bravo at the runway end, and departed Runway 31. The non-standard markings, poor airfield and taxiway lighting, and operations of a military airfield were contributing factors. The marshaller put us on the wrong path initially by blocking a straight-out taxi. The two taxi "lanes" for taxiway Alpha are misleading. There is no Jepp AMM (Airport Moving Map) for RCA making Ownship position a guesstimate. It seemed once we made the turn that we were taxing on the "Outer" taxi lane for taxiway Alpha. ATC never stopped or queried us, and when we queried ATC we were given inaccurate information back. Additionally, we had observed a military aircraft take that path in advance of our departure, making it seem there were two, legitimate, taxi lines for taxiway Alpha. The company page could clarify the taxiway Alpha markings. Not being familiar with military airfields it looked as if there were two taxi lines for taxiway Alpha. Further, we could have pressed ATC for the suggested route of taxiway Delta with the back-taxi to the runway.

Synopsis
Air carrier First Officers reported difficulty locating the correct taxiway to the runway at RCA airport. The pilots stated their EFB does not contain complete airport information, and cited poor taxiway lighting, initial confusing marshaller signals and inadequate help from ATC as additional contributing factors.

ACN: 1966386 (32 of 50)

Time / Day

Date : 202301 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US Altitude.MSL.Single Value : 1600

Environment

Flight Conditions : VMC Light : Daylight

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : Military Make Model Name : Small Aircraft, Low Wing, 1 Eng, Retractable Gear Crew Size.Number Of Crew : 2 Flight Plan : IFR Mission : Training Flight Phase : Final Approach Route In Use.Other Airspace.Class D : ZZZ

Aircraft: 2

Reference : Y Aircraft Operator : Military Make Model Name : Small Transport, Low Wing, 2 Turbojet Eng Crew Size.Number Of Crew : 2 Flight Plan : VFR Mission : Training Flight Phase : Climb Airspace.Class D : ZZZ

Person: 1

Location Of Person.Facility : ZZZ.TWR Reporter Organization : Government Function.Air Traffic Control : Local Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2 ASRS Report Number.Accession Number : 1966386 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Situational Awareness Human Factors : Situational Awareness Human Factors : Time Pressure Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : ATC

Person : 2

Location Of Person.Facility : ZZZ.TRACON Reporter Organization : Government Function.Air Traffic Control : Approach Qualification.Air Traffic Control : Fully Certified Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 11 ASRS Report Number.Accession Number : 1966400 Human Factors : Workload Human Factors : Time Pressure Human Factors : Situational Awareness Human Factors : Communication Breakdown Human Factors : Confusion Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Airborne Conflict Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Air Traffic Control When Detected : In-flight Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Aircraft X on the final approach course for the VOR approach to Runway XX circle to Runway YY. Aircraft Y was executing climb out which was issued as runway heading and VFR but only read back to the radar Controller as VFR without a restriction. Aircraft Y was switched to Departure prior to us noticing that they had turned southeast bound. I was no longer talking to Aircraft Y but Aircraft X was on my frequency so I cancelled their approach clearance and turned them to a 220 heading however I didn't give them an altitude to maintain and they were below the minimum vectoring altitude. I was not aware that Aircraft Y was VFR on their climb out so there was no loss of separation. Better communication between the radar and local Controller. Another Controller called down to the TRACON and was coordinating and relaying information instead of me directly. I was hesitant to assign an altitude when I wasn't sure what Aircraft Y was doing but I should have assigned the MVA as soon as I vectored them off the approach and canceled their approach clearance. I wasn't aware the aircraft was VFR and if I would have known I wouldn't have cancelled the approach clearance.

Narrative: 2

I had several practice approaches. Aircraft Y was doing a circle to Runway YY, followed by another Aircraft Z doing same approach, followed by an Aircraft X doing a VOR/DME XX circle to Runway YY. Aircraft Y said they wanted to fly VFR to ZZZ1 on the go. I issued "fly

runway heading, maintain VFR". I misheard read back, they read back "maintain VFR". Aircraft Y, on departure, turned southeast towards the Aircraft X. They were maintaining VFR and the closest they got was 500 ft. and 3.1 miles. The Local Controller issued a turn to the Aircraft X at 1600 ft. busting MVA. Missing the read back was primary cause of the event. I also issued the runway heading speaking faster than I normally would, which was mainly due to being busier than I have been in last couple of months. I will also say that a lot of Controllers would have issued "turn left to ZZZ1, maintain VFR" for the climb out. If that was issued the Aircraft Z would have did the same thing. I wanted to keep it simple since I was busy. The military quite often as of late says they want to depart VFR to one destination then flies to random waypoints.

Synopsis

A Tower Local Controller and TRACON Departure Controller reported the Local Controller issued a vector off course to an aircraft on short final which placed it below the Minimum Vectoring Altitude.

ACN: 1964518 (33 of 50)

Time / Day

Date : 202301 Local Time Of Day : 0001-0600

Place

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

Environment

Light : Night

Aircraft: 1

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

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Nav In Use : FMS Or FMC Nav In Use : GPS Flight Phase : Landing Airspace.Class B : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : First Officer Function.Flight Crew : Pilot Not Flying Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine Experience.Flight Crew.Last 90 Days : 150 Experience.Flight Crew.Type : 1358 ASRS Report Number.Accession Number : 1964518 Human Factors : Communication Breakdown Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Fatigue Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function.Flight Crew : Captain Qualification.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1964833 Human Factors : Workload Human Factors : Situational Awareness Human Factors : Communication Breakdown Human Factors : Time Pressure Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Detector.Person : Flight Crew Detector.Person : Air Traffic Control Were Passengers Involved In Event : N When Detected : Taxi Result.Flight Crew : Took Evasive Action Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

We were taxiing west via [Taxiway] XX to [Runway] XXL during early morning "" probably some early morning tiredness "" in complete darkness following Aircraft Y. We switched to Tower after [Taxiway] XY and assumed "" expectation bias "" that Aircraft Y and Aircraft X were the only two aircraft on frequency. Airport was not very busy. Aircraft Y was cleared for takeoff and as they powered up we were told to "line up and wait, Runway XXL." We completed the before-takeoff checklist and as we turned south on [Taxiway] XZ to cross [the Runway] XXL hold-short line "" I was FO (First Officer) "" I said, "Final's Clear." However, we did note and talk about that there was an aircraft on final. We assumed "" incorrectly, expectation bias "" that this aircraft was on approach to [Runway] XXR. I assumed this, since we never heard Tower say something to the effect of, "Aircraft X, Aircraft Y on five-mile final." I'm also unsure if there were any transmissions between Tower and Aircraft Y that we heard, until we were taking the runway. Lastly, if I remember correctly, ATIS was reporting [Runway] XXL departures and [Runway] XXR arrivals "" not

that this means that an aircraft couldn't land on [Runway] XXL, but it added to expectation bias. As we continued south on [Taxiway] XZ the lights appeared to be trending toward our runway. At the point we started to question if this aircraft was landing on our runway, we heard Aircraft Y transmit, "OK Tower, what do you want us to do?" Tower then stated, "Aircraft X, continue across to exit runway... Aircraft Y, go around." At this point, Aircraft Y was probably on a one-mile final. I don't recall exactly the amount of time that elapsed between us clearing onto [Taxiway] XA. However, it seemed to be about six to nine seconds. I could see the large Aircraft Y go around at about 100 ft. above where we just were. I think that we should have stopped the aircraft and asked Tower to clarify if the aircraft on final was landing on [Runway] XXR or XXL. Due to darkness and the fact that I don't normally fly at night nor do I get the sight picture of taking the runway with an aircraft landing on that same runway, it is difficult to visually confirm if they were landing on [Runway] XXL or XXR. Stopping the aircraft would also give us more time for this situation to play out and to communicate. It was just a compressed timeline and our brains could not take it all in during that short period. We never saw or realized the lights of Aircraft Y, until we were approaching the hold-short lines and by then it was taking us by surprise. We did not realize any aircraft was on final until that point. On the ATC side, I would like to understand their procedures. After some research, I am curious if Tower is allowed to issue line up and wait, LUAW, clearances during night and periods of low visibility. Additionally, I thought if they instructed an aircraft to LUAW, they had to add, "...aircraft on XX-mile final.." I never heard if Tower "" we were not on frequency yet "" issued Aircraft Y a "continue" or a "cleared to land" clearance. I'd be curious to get those transcripts. I'm also wondering if any air/ground/runway collision avoidance systems in the Tower were activated? Or was the Aircraft Y crew the last link in the chain that prevented this? Was there another controller in the Tower that saw this happening? Why did they issue us a LUAW with an aircraft on such short final for the same runway? Why did we even need to LUAW "" there were no delays or backups? Did Aircraft Y sidestep? I have noticed an increase in new controllers - was this a new controller? Maybe they lost situational awareness on how far from landing Aircraft Y was. I really have more questions, since this could have turned out disastrous and my guess is this isn't the first time it has happened. My trust in ATC was somewhat high for Tower controllers. I've heard plenty of new Ground controllers struggling lately, but I assumed the Tower controllers were on a higher level for a place like ZZZ. This has really opened my eyes to how the next aviation accident may play out and serves as significant lesson learned for me.

Narrative: 2

We were cleared for "line up and wait" on [Runway] XXL with an aircraft on about a twomile final for the same runway. When given the clearance, we both acknowledged the runway and noted the aircraft on final. Due to the dark and angle of the aircraft, we thought he was lined up on [Runway] XXL. Aircraft Y queried Tower as to what they wanted him to do. At that point Tower realized they put us in position incorrectly and asked us to expedite across the runway. When we got on the runway we also recognized the mistake. I tried to expedite across but the engines were at idle thrust and did not spool up in time. Tower sent Aircraft Y around when they were about 1/2 mile out. Suggestion: Better communication and coordination between Approach and Tower when landing aircraft on [Runway] XXL during an early morning push.

Synopsis

B737-700 flight crew reported being issued a line up and wait clearance from the Tower Controller while another air carrier was on short final for the same runway. The flight crew continued across the runway per ATC instructions and the other air carrier executed a go-around.

ACN: 1963705 (34 of 50)

Time / Day

Date : 202301 Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : P50.TRACON State Reference : AZ Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC

Aircraft

Reference : X ATC / Advisory.TRACON : P50 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 Mission : Passenger Flight Phase : Final Approach Airspace.Class C : TUS

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1963705 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days : 224 Experience.Flight Crew.Type : 2566 ASRS Report Number.Accession Number : 1963713 Human Factors : Situational Awareness Human Factors : Confusion Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

We requested the RNP approach. ATC vectored us off arrival and descended us to 6000 ft. ATC gave us a 150 heading to intercept the course between LIPTE (IF) and WASON. The crossing altitude for WASON is 5500 ft. As we were intercepting the course we started descending to cross WASON at 5500 ft. because we were too high for the approach. ATC told us we were below MVA.

Narrative: 2

RNAV APPROACH. On check-in with approach controller in Tucson, requested the RNAV RNP Y 11L. Controller approved and then gave us vectors. This was a bit confusing since the waypoint that we were heading to was the start of the approach. After vectors and descents the controller vectored us on the approach inside the IAF. The altitude assigned was 6000 ft. until intercept. On the profile view the altitude was 5500 ft. We began the descent and was questioned on the descent. Stated that we were cleared inside the IAF and descent was so that we would be stable for the approach. I also stated that we were visual and could accept a visual approach if that was below his MVA. I do not think the controller should vector inside the IAF on an RNP.

Synopsis

Air carrier flight crew reported ATC Low Altitude Advisory on approach to PHX airport.

ACN: 1962880 (35 of 50)

Time / Day

Date : 202301 Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC State Reference : US Altitude.MSL.Single Value : 28000

Environment

Flight Conditions : VMC Weather Elements / Visibility.Visibility : 10 Light : Daylight

Aircraft

Reference : X Aircraft Operator : Corporate 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 : Passenger Flight Phase : Cruise Route In Use : Direct

Component

Aircraft Component : Pressurization Outflow Valve Aircraft Reference : X Problem : Malfunctioning

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Corporate Function Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification Flight Crew : Flight Instructor Qualification.Flight Crew : Multiengine Experience Flight Crew Total: 2390 Experience.Flight Crew.Last 90 Days: 62 Experience.Flight Crew.Type: 406 ASRS Report Number. Accession Number: 1962880 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Corporate Function.Flight Crew : Pilot Flying Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Total : 27000 Experience.Flight Crew.Last 90 Days : 100 Experience.Flight Crew.Type : 4000 ASRS Report Number.Accession Number : 1963496 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly. Aircraft Equipment Problem : Critical Anomaly. Deviation - Altitude : Excursion From Assigned Altitude Anomaly. Deviation / Discrepancy - Procedural : Clearance Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy Detector.Automation : Aircraft TA Detector.Automation : Aircraft Other Automation Detector.Person : Flight Crew Miss Distance.Vertical: 1000 Were Passengers Involved In Event : N When Detected : In-flight Result.General: Maintenance Action Result.General : Flight Cancelled / Delayed Result Flight Crew : Requested ATC Assistance / Clarification Result Flight Crew : Took Evasive Action Result.Flight Crew : Landed As Precaution Result.Air Traffic Control: Provided Assistance

Assessments

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

Narrative: 1

Cruising at 28,000 ft., I noticed an air movement sound and identified a rapid rate of cabin depressurization at 2,100 ft. per minutes as indicted on the cabin pressure gauge. Simultaneously the Captain, noticed the same rate and begin an immediate descent and called for donning of oxygen mask. Due to radio traffic, I was unable to make immediate contact with ATC as the event occurred during change over from ZZZ to Center. Upon contact with Center I notified them we were in a descent, requested priority handling and was unable to honor their level instructions at 25,000 ft. Due to TCAS alert during descent, we had to slow the descent around 25,000 ft. until alert cleared and then we descended to 11,000 ft. During descent, cabin altitude climbed to above 17,000 ft. and the passenger oxygen mask automatically deployed as designed. Upon reaching 11,000 ft. we consulted the checklist and completed all steps as required. With immediate situation, over we verified remaining fuel and terrain clearance and determined we could continue safely to

ZZZ1 in a depressurized cabin. We landed safely in ZZZ1 40 minutes later with no other issues.

Narrative: 2

While in cruise flight at FL280 both Crew Members noticed that the cabin pressure had suddenly started to reduce, both by a noticeable noise of 'rushing air' and the cabin pressure gauge showing the cabin climbing at 2,100 ft./minute. Oxygen masks were donned, I initiated an immediate descent, and the Copilot attempted to make a request for priority handling descent to ATC (Center). Due to frequency congestion the Center Controller wasn't able to hear our initial call, but subsequent attempts clarified our situation. Center Controller told us to stop our descent at FL250 due to a traffic conflict. As I initiated the immediate descent, I had noticed that there was one aircraft that would likely be a conflict so I had already initiated a shallowing of our descent. Our TCAS depiction of the conflicting aircraft turned "AMBER", but we were never closer than 1,000 ft. above the other aircraft. as soon as the conflict cleared, we continued the immediate descent to 11,000 ft. The cabin altitude warning light came on during our descent, the cabin overhead oxygen masks automatically deployed (X passenger on board). The cabin altitude never rose above 17,000 ft., and once we leveled off at 11,000 ft. the cabin stabilized at a 3,000 ft. indication on the gauge and maintained a 3.2 PSI differential. All appropriate checklist items were accomplished and we determined that there was no structural cause (most likely an outflow valve had failed) and ascertained that our passenger had suffered no stress, we elected to continue to destination.

Synopsis

C525 flight crew reported loss of Cabin Pressure Control during climb. The flight crew requested priority handling and immediately descended. Oxygen masks were deployed and donned. The flight crew was unable to control the cabin pressure and elected to continue at a lower altitude with a depressurized cabin to destination airport.

Time / Day

Date : 202212 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport State Reference : US Relative Position.Distance.Nautical Miles : 1 Altitude.MSL.Single Value : 500

Environment

Light : Daylight

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : FBO Make Model Name : Skyhawk 172/Cutlass 172 Crew Size.Number Of Crew : 1 Operating Under FAR Part : Part 91 Flight Plan : None Mission : Training Flight Phase : Final Approach Route In Use : Visual Approach Airspace.Class D : ZZZ

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : FBO Make Model Name : Skyhawk 172/Cutlass 172 Crew Size.Number Of Crew : 1 Operating Under FAR Part : Part 91 Flight Plan : None Mission : Training Flight Phase : Landing Route In Use : Visual Approach Airspace.Class D : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : FBO Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Instructor Qualification.Flight Crew : Instrument Qualification.Flight Crew : Flight Instructor Qualification.Flight Crew : Commercial Qualification.Flight Crew : Multiengine Experience.Flight Crew.Total : 1250 ASRS Report Number.Accession Number : 1961816 Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : Y Location In Aircraft : Flight Deck Reporter Organization : FBO Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Instructor Qualification.Flight Crew : Flight Instructor Qualification.Flight Crew : Commercial Experience.Flight Crew.Total : 430.1 Experience.Flight Crew.Last 90 Days : 88.2 Experience.Flight Crew.Type : 396.8 ASRS Report Number.Accession Number : 1961837 Human Factors : Other / Unknown Human Factors : Other / Unknown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : NMAC Detector.Person : Flight Crew Miss Distance.Horizontal : 300 Miss Distance.Vertical : 100 Were Passengers Involved In Event : N When Detected : In-flight Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

My student and I were on approach to land after a training flight. We contacted Tower 10 NM from the airport and were told to report 5 NM Left Base for the Runway in use. When we reported 5NM from the airport, we received a landing clearance. There was another aircraft in the pattern practicing touch and goes, who I believe was cleared to land #2 behind us. As we were on approximately a 1 NM Final for Runway XX, the aircraft in the pattern turned onto Final in front of us. My student immediately executed a go-around to the right side of the runway, and the other aircraft executed a go-around a few moments later. In this situation, I believe the aircraft in the pattern thought the aircraft they were

cleared to land behind was already on the ground, instead of still being in the air. I believe ATC should have done a better job at tracking inbound aircraft, and as the pilot not flying of the aircraft, I could have done a better job at monitoring the ADS-B Receiver data.

Narrative: 2

We were in the traffic pattern and were instructed to stay left traffic for runway XX and report left base for each landing. While setting up for our second landing in the downwind we were given clearance to land number two. The aircraft we thought we were following was on short final and we proceeded to turn left base to follow them. When we turned left base there was another aircraft on final that we could not see and were completely unaware of. We were unaware of the near mid-air collision until landing and having another instructor inform my student and I that we had nearly collided. ATC gave no indication to be looking for another aircraft on final and gave no indication to us that there was a near miss. It seemed like ATC might have forgotten that they had cleared both of us to land.

Synopsis

GA pilots reported a NMAC while in the airport traffic pattern and cited communication issues with ATC contributed to the event.

Time / Day

Date : 202212 Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC State Reference : US Altitude.MSL.Single Value : 27000

Aircraft: 1

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

Aircraft: 2

Reference : Y ATC / Advisory.Center : ZZZ Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Airspace.Class A : ZZZ

Person: 1

Location Of Person.Facility : ZZZ.ARTCC Reporter Organization : Government Function.Air Traffic Control : Enroute Qualification.Air Traffic Control : Fully Certified Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6 ASRS Report Number.Accession Number : 1958829 Human Factors : Communication Breakdown Human Factors : Distraction Human Factors : Workload Human Factors : Situational Awareness Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Person: 2

Location Of Person.Facility : ZZZ.ARTCC Reporter Organization : Government Function.Air Traffic Control : Enroute Function.Air Traffic Control : Supervisor / CIC Qualification.Air Traffic Control : Fully Certified Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 4 ASRS Report Number.Accession Number : 1957816 Human Factors : Workload Human Factors : Situational Awareness Human Factors : Distraction Human Factors : Communication Breakdown Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Airborne Conflict Anomaly.Deviation - Altitude : Overshoot Anomaly.Deviation / Discrepancy - Procedural : Clearance Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Returned To Clearance Result.Flight Crew : Requested ATC Assistance / Clarification Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

I initially climbed aircraft Y to 35000 ft. (their requested final), but realized, at the time, they weren't climbing that well and I had some traffic that needed descending into ZZZ. I issued aircraft Y direct routing to pull them to the north and issued an amended altitude of 25000 ft. for the aircraft X ZZZ arrivals, who I proceeded to descend to 26000 ft. I called traffic and received no response from aircraft Y. Aircraft X and the first ZZZ began flashing which does happen on occasion when aircraft are climbing and descending towards each other but they were tail to tail and I didn't think anything of it. Aircraft Y's next altitude showed 25500 ft. I issued a 30 degree left turn and stop climb to aircraft Y and went to aircraft X and issued a 30 degree left turn and stop descent. Aircraft X stopped their descent and made the turn while aircraft Y just turned and continued climbing and extra 1500 to 2000 ft. through aircraft X. When I went to issue a brasher warning to aircraft Y it took two calls to get a response. I was partially distracted as we were discussing our lack of staffing and trying to develop a plan with Traffic Management Unit on how to implement Traffic Management Initiatives. Ultimately I missed the read back of the altitude, but I feel like the pilots of aircraft Y were also not engaged or paying attention. Almost every time I made a transmission to them they either didn't respond or missed part of it. Remove the masks while working traffic. I had said, and have meant to, file reports that since Day 0 after masks being implemented again. I and others have noticed a significant increase in the number of issues with communication. Where I would experience 2 to 5 instances a shift of aircraft not responding, asking for clarification or clearances again, or giving bad read backs, I have been experiencing 3 to 10+ instances a session of these issues since

implementation of the masks again. There have been multiple other controllers that have complained about similar issues since the mask mandate's return.

Narrative: 2

I was Controller in Command looking at staffing for the day as well as a previous radio issue with another sector. I heard from across the room the XXX [sector] controller exclaim something, and the XXY controller sitting right next to him) suggest that he tells the Aircraft X to stop descent. XXX said to Aircraft Y "stop your climb" and turned them 30 degrees left. Then he told Aircraft X to stop their descent and turn 30 degrees left. While I heard this, I quick looked Sector XXX on the See All Scope. I saw Aircraft Y continue to climb after he was told to stop, and Aircraft X stop their descent. Once the aircraft were safe, XXX sent them both back on course and recovered well. I was not able to grab a handset to listen in quickly, so I only heard the controller's side of the conversation. Later, he told me that he is sure he issued 25000 ft. to Aircraft Y, but he was not sure if the altitude was read back correctly. I have no recommendations.

Synopsis

A Center Controller and the Controller in Charge reported an aircraft did not respond to an assigned altitude or the Controller missed the readback and aircraft flew into confliction with descending traffic. The Center Controller stated wearing a mask caused the communication difficulties.

ACN: 1958407 (38 of 50)

Time / Day

Date : 202212 Local Time Of Day : 0601-1200

Place

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

Environment

Flight Conditions : VMC Light : Daylight

Aircraft

Reference : X ATC / Advisory.TRACON : ZZZ Aircraft Operator : Corporate Make Model Name : BAe 125 Series 1000 (Hawker Horizon) Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 135 Flight Plan : IFR Mission : Passenger Nav In Use : FMS Or FMC Nav In Use : GPS Flight Phase : Initial Approach Route In Use : Visual Approach Route In Use : Vectors Airspace.Class D : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Corporate Function Flight Crew : Captain Function.Flight Crew : Pilot Flying Qualification Flight Crew : Air Transport Pilot (ATP) Qualification Flight Crew : Instrument Qualification Flight Crew : Multiengine Experience.Flight Crew.Total: 16599 Experience.Flight Crew.Last 90 Days: 112 Experience Flight Crew. Type : 1025 ASRS Report Number Accession Number: 1958407 Human Factors : Confusion Human Factors : Other / Unknown Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Corporate Function Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Commercial Experience. Flight Crew. Total: 1150 Experience.Flight Crew.Last 90 Days: 80 Experience. Flight Crew. Type: 80 ASRS Report Number. Accession Number: 1958364 Human Factors : Communication Breakdown Human Factors : Confusion Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Inflight Event / Encounter : Weather / Turbulence Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Air Traffic Control Were Passengers Involved In Event : N When Detected : In-flight Result.Air Traffic Control : Issued New Clearance Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

While being vectored for a visual approach Runway XX into ZZZ we were stepped down 15000, then 14000, then 13000 ft. and then 12000 ft. I read back each altitude as it was given as well as direction of flight. As we were given a turn to the left and asked if we had the runway in sight I responded "NO". That there was a few clouds between us and the airport and we couldn't quite see it yet. We then were given a turn and asked to climb to 13000 ft. We complied. I asked if the Controller indeed wanted us to climb to 13000 ft. and Controller said yes because it was the minimum vectoring altitude in that this area. We continued being vectored, picked up the runway, was cleared for the visual and landed. Once taxied clear of runway was asked to call the Tower.

Narrative: 2

While being vectored for the visual approach Runway XX into ZZZ we were being stepped down 15000 ft, then 14000, then 13000, and then 12000 ft. We read back each altitude as it was given as well as direction of flight. As we were given a turn to the left, and asked if we had the runway in sight, the Captain responded "No". There was a few clouds between us and the field and we didn't have the airport in sight yet. We were then giving a turn and asked to climb to 13000 ft. We complied. Next the Captain asked if the Controller indeed wanted us to climb to 13000 ft. and the Controller said yes because it was the minimum vectoring altitude in the area. We continued being vectored, picked up the

runway, and was cleared for the visual and landed. Once taxied clear of runway, was asked the call the Tower.

Synopsis

Hawker flight crew reported receiving multiple step down altitudes from ATC on approach. Without the airport in sight, the flight crew was given a vector and a climb to the minimum vectoring altitude, then conducted another approach to a successful landing.

ACN: 1957805 (39 of 50)

Time / Day

Date : 202212 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Tower State Reference : US

Environment

Flight Conditions : VMC Light : Daylight

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Initial Climb Airspace.Class C : ZZZ

Aircraft: 2

Reference : Y ATC / Advisory.Tower : ZZZ Aircraft Operator : Personal Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear Crew Size.Number Of Crew : 1 Operating Under FAR Part : Part 91 Flight Plan : VFR Mission : Surveying / Mapping (UAS) Flight Phase : Cruise Airspace.Class C : ZZZ

Person: 1

Reporter Organization : Government Function.Air Traffic Control : Instructor Function.Air Traffic Control : Local Qualification.Air Traffic Control : Fully Certified Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 11 ASRS Report Number.Accession Number : 1957805 Human Factors : Communication Breakdown Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Training / Qualification Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Person: 2

Reporter Organization : Government Function.Air Traffic Control : Local Function.Air Traffic Control : Trainee Qualification.Air Traffic Control : Developmental ASRS Report Number.Accession Number : 1957806 Human Factors : Communication Breakdown Human Factors : Confusion Human Factors : Confusion Human Factors : Workload Human Factors : Distraction Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Training / Qualification Communication Breakdown.Party1 : ATC Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : NMAC Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Detector.Person : Flight Crew When Detected : In-flight Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Prior to the event, this session had been very taxing on both myself as a trainer and the trainee. For my experience level there wasn't much complexity if I had been working the traffic on my own. However, for the trainee it was which made it difficult for both of us. Earlier in the session, we had two VFR's in the pattern. I had to do a lot of prompting/teaching/training and it was a lot for both of us. After this, I noticed signs that the trainee was flustered. Stumbling over his words, making multiple typing errors etc. and I should have ended the training. If I had this would not have taken place. However, he continued training and continued struggling. Prior to the event the trainee made a decision that was not the most efficient/effective decision that I was explaining to him. During this time Aircraft X was on departure roll. The Aircraft Y had been maneuvering approximately 4 miles southeast ZZZ and never came further west than midfield. So they weren't a factor initially. So I looked away to jot down some notes. I heard and looked up when the Aircraft Y said their next operation would be 1 mile north ZZZ1. At that time they were still no factor for Aircraft X. I assumed they would go directly southbound and thus not be a factor for Aircraft X so I again looked away to write. I heard the trainee switch Aircraft X to ZZZ [Approach], then switch the Aircraft Y to ZZZ1 Tower. I was made

aware of the developing situation by the Controller in Charge (CIC) after both aircraft had already been switched. When I looked up Aircraft X was about 1.5 miles northwest of the Aircraft Y who was flying due west. Aircraft X began to climb and at the point that he crossed directly overhead the Aircraft Y he was approximately 800 ft. above him. However, both aircraft had already been switched. The trainee said he called traffic but after listening to the tapes afterwards he hadn't. ZZZ called and reported that the Aircraft X reported a near mid-air. I immediately ended training at that point. I continued to work until being relieved. In our debrief, the trainee and I reviewed the tapes. We also reviewed the radar display replay with the Supervisor. There were several missed opportunities that would have/should have prompted the trainee to issue traffic. This particular trainee has nearly 400 hours and is currently on an extension. He was given nearly double the normal amount of hours allotted to local trainees because of Covid. The consensus of the training team is that he is close but he has to show consistency. I again feel bad because I wish I would have ended the session sooner and this would not have happened. I should have recognized we both were taxed from earlier in the session and possibly that's why we both missed it. I also feel like the Swiss cheese model, we were failed by the CIC who didn't see it until after both aircraft were already switched. I'm not really sure what to recommend. I will as a trainer going forward try and do better at realizing when either my trainee or myself is overwhelmed and either take over or end training. I also felt as if the Tower team failed. When I work CIC I take a more active hands on approach in assisting trainer/trainees because I know how taxing training can be and how easily things can be missed. Had the CIC recognized this sooner as well we could have resolved the issue.

Narrative: 2

Aircraft X departed Runway XXR and was given an altitude restriction of 4000 ft. in which said aircraft read back then begun departure procedures. Aircraft Y was performing east to west survey lines just east of ZZZ1 airspace restricted at 2700 ft. Aircraft Y was pointed out to ZZZ Area sector which was combined with Area 1 sector and also a verbal point out was approved by ZZZ1 Tower as well. Aircraft X was climbing via the ZZZZZ.3 departure and instructed to contact ZZZ Departure. Aircraft Y informed me that they would like to perform more survey work one mile north of ZZZ1 Airport and would like to contact ZZZ1 Tower. I then informed Aircraft Y radar services was terminated and to contact ZZZ1 Tower. Aircraft X had to performed a rapid climb out of 2500 ft. to climb above Aircraft Y which was at 2600 ft. Aircraft X climbed 800 ft. to 900 ft. above Aircraft Y. This happened because traffic was not exchanged between both aircraft and preventative measures was not set in place. First and foremost traffic should have been exchanged between both aircraft and if preventative measures was not set in place then it should have been a SAFETY ALERT. Aircraft Y should have been issued the traffic and instructed to descend into ZZZ1 airspace once all conflicts was resolved then instructed to contact ZZZ1 Tower. Aircraft X should have been informed of said traffic and instructed that said traffic was descending if preventative measures was in place. Above all a safety alert should have been issued before instructing either aircraft to contact the Area 1 sector or ZZZ1 Tower.

Synopsis

Tower Local Controller reported a departing Air Carrier encountered a NMAC with a VFR survey mission aircraft. The Controller and their trainee failed to issue traffic information to either aircraft and handed them off to adjacent airspace frequencies.

Time / Day

Date : 202211 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MIA.Airport State Reference : FL

Aircraft

Reference : X ATC / Advisory.Tower : MIA 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 : Initial Approach Airspace.Class B : MIA

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : Captain Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1950817 Human Factors : Communication Breakdown Human Factors : Troubleshooting Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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) Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1949308 Human Factors : Troubleshooting 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 : Crossing Restriction Not Met Anomaly.Deviation - Altitude : Overshoot Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Ground Event / Encounter : Ground Equipment Issue Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Automation : Air Traffic Control Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Overcame Equipment Problem Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Returning from ZZZZ, expecting and set up for ILS 30. MIA in west ops for winds which were out of the north approximately 20-25 kts with higher gusts. Approach told us to expect ILS 27. I was Pilot Flying (PF). Pilot Monitoring (PM) set up ILS 27. Set up and briefed flaps 15 landing. Vectored by approached to intercept LOC while descending to intercept glidepath. Cleared for the approach and switched to Tower. We intercepted glideslope before LOC. Everything looked good until FAF when tower called us with an altitude alert. We were on glideslope but 250-300 low. PM called out ground contact (we were IMC) and position clear of buildings. We continued approach but several times the glideslope indications went both up and down quickly (as if an aircraft was taxiing past the transmitter). Broke out several hundred feet above mins and continued to landing. After landing PM called tower to inform them of the issues on the ILS. Tower responded that there were issues with the ILS and we should have been given the RNAV approach. Double checked the ATIS and it was showing ILS 27 available. Cause: Miss communication between controlling agencies.

Narrative: 2

Captain flying ILS to 27. Just past CHHAZ tower called out Low Altitude Alert for us. We showed on glide path. I referenced the approach and saw CHHAZ should be at 1,800 ft. We were just above 1,500 ft. showing on glide path. Something not correct obviously, I stated ground contact looking down at the shoreline. I could see forward and the ground just in front of the aircraft, but no approach lights yet. The glideslope then abruptly jumped up and then down and then something close to on glideslope. Just like you get when someone crosses the glideslope signal flying the ILS Runway 30. The ILS signal was steady after that. The Captain continued while I leaned forward and maintained visual with the ground just in front of the aircraft. At about 700-800 ft. AGL I called the approach lights in sight. Captain landed uneventfully. As we cleared I told the tower there was

something wrong with the glideslope. Tower stated that had been reported and we should have been on the RNAV. Approach was still clearing aircraft for the ILS however. Cause: With a known problem with the glideslope, the ILS glideslope should have been turned off. Approach control should not have been clearing aircraft to fly it. Suggestions: The tower altitude alerting feature works well. We both missed the FAF crossing altitude check and were tracking the steady glideslope signal. The tower alert followed seconds later by a 3-5 second spurious signal certainly got our attention. Without the tower alert we may have never realized we must have crossed the FAF probably 150 ft. -250 ft. low showing on glideslope.

Synopsis

Flight crew reported ATC failed to issue the proper approach resulting in receiving erroneous glide slope references, low altitude alert and incorrect crossing altitude.

Time / Day

Date : 202210 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US

Aircraft

Reference : X ATC / Advisory.TRACON : ZZZ Aircraft Operator : Air Carrier Make Model Name : B737-800 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Nav In Use : FMS Or FMC Nav In Use : GPS Nav In Use.Localizer/Glideslope/ILS : ILS XX Flight Phase : Descent Airspace.Class C : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Oheck Pilot Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1940351 Human Factors : Communication Breakdown Human Factors : Situational Awareness Human Factors : Time Pressure Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1940339 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : Weather / Turbulence Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Automation : Air Traffic Control 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 Advisory / Alert

Assessments

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

Narrative: 1

We were being vectored for the ILS to [Runway] XX. They leveled us off on the descent at FL180. We now were about 4000 ft. above the normal glide path. Approximately 5-7 miles from ZZZZZ they asked if we were going to be able to get down. I said we could use a turn to the north to buy some time to descend. Controller gave us a 300 degree heading. Shortly after the vector he said turn left to 180. Lots of weather and terrain to the west of our position. I requested a right turn, but he quickly said no, turn left immediately. So we did. We were cleared down to 8000 ft. Then he said turn left to a heading of 140 and descend to 5000 ft. The new Captain and I both pointed to 5000 in the altitude window and verbalized the assigned altitude. While passing through 5600 ft., the controller said to climb and maintain 6000 ft. and that there was a terrain warning. So we did. We were cleared for the approach and landed Runway XX. After landing we were told to call TRACON because of a possible altitude violation. 5000 ft. is low for ZZZ, but the altitude at ZZZZZ1 is 5100, so I thought that was a MVA altitude to get us under the rain so we could do a visual approach. We are human and sometimes make mistakes, but both of us really believe we heard and read back 5000 ft. Being held up way too high on a vector with lots of weather in the area. Several changes in altitudes and initial approach fixes to join the approach. This was a distraction. Approach offering other options after keeping us held up so high. I've had this happen several times over the years in ZZZ. We even talked about the possibility in our briefing of the approach at cruise.

Narrative: 2

During the descent to ZZZ, we were assigned a late descent, to cross ZZZZZ at or above 8000 ft. and clear the ILS XX approach. Due to the multiple cells and a very deep descent rate, we asked for a north deviation. A clearance to deviate to the north was approved, followed by a clearance to descend to 8000 ft. Once our altitude was not a factor, we were given a south heading, to what we replied, that we wanted to continue on the north deviation. Controller replied that he was unable, and we were told to turn left to a 180

heading. As we tuned to the south, we were cleared to a further left turn, to a 140 heading and 5000 ft. to intercept the XX localize. Descending through 5600 ft., we were told that our last assigned altitude was 6000 ft. We stopped the descent and climb back up to 6000 ft. At that point we were given a clearance of, 140 heading, 6000 until establish and clear for the ILS XX. Convective weather, late descent clearance, followed by a multiple clearances that included different way-points, headings, and altitudes Suggestion: A better descent profile to the airport.

Synopsis

Air Carrier Check Airman and new Captain reported misunderstanding ATC and descending below the assigned altitude. The pilots stated the weather was poor, the descent clearance was late and delay vectors were being used to help with the descent.

Time / Day

Date : 202210 Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US Altitude.MSL.Single Value : 5000

Environment

Weather Elements / Visibility : Turbulence Weather Elements / Visibility : Thunderstorm

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 Flight Phase : Descent Airspace.Class E : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Captain Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine ASRS Report Number.Accession Number : 1938996 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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) Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1938997 Human Factors : Situational Awareness Human Factors : Communication Breakdown Human Factors : Human-Machine Interface Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Deviation - Altitude : Overshoot Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Automation : Aircraft Terrain Warning Detector.Person : Flight Crew When Detected : In-flight Result.Flight Crew : FLC complied w / Automation / Advisory Result.Flight Crew : Took Evasive Action Result.Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Became Reoriented Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

During the final descend to ZZZ we contacted ZZZ Approach and received instructions to descend 3000 ft. and expect vectors for ILS X at ZZZ airport. We descended through 4000 ft. to 3000 ft. with vertical speed 1000 fpm and received next instruction to descend to 2000 ft. I've read back this instructions with no ATC challenge and set 2000 ft. on altitude preselector. Pilot flying (PF) verbalize new altitude and we continued descend to 2000 ft. as instructed by ATC. We were in IMC conditions and experienced light turbulence also according SOPs pilot flying MFD was on terrain mode (for terrain airport) and my MFD was on Weather mode with radar on (due to Weather activity along the route). Terrain depiction on PF MFD was normal and did not lead us to guery ATC instructions. When we crossed approximately 2500 ft. aural warning "PULL UP TERRAIN" went off and second later we executed terrain escape maneuver. Few second later during climb approximately at 3500 ft. ATC querying as about altitude and notified us what last assigned altitude was 3000 ft. I notified ATC what we executed terrain escape maneuver and we will climb to 5000 ft. We leveled off at 5000 ft. After level off I notified ATC and explain what happened. ATC query us about our intentions and after quick brief we decided to continue as planned to destination. Rest of the flight went uneventful. We didn't receive instructions to call ATC by phone. We debriefed this situation on the ground upon completion of the flight. During debrief we both agreed that ATC gave us instructions to descend to 2000 ft. but we should guery this instructions because FAF altitude is 2600 ft. Both of us have never been at ZZZ and we were unfamiliar with common ATC procedures at this airport. Pilot Flying during approach briefing mentioned notes on 10-7 page for visual approach for Runway X but we did ILS approach and follow ATC instruction. We should query any ATC instructions if in doubt.

Narrative: 2

Late night on approach into ZZZ ILS X approach was briefed and told to be expected by ATC as the slightly gusty winds were right down the runway and the ceiling was somewhat low around 2000 ft. As I briefed the approach, I noted that it was a terrain airport due to terrain out west and I also noted the ridge that was around 1804 ft. and featured on the company notes page for ZZZ. This was primarily a caution for people executing a visual approach into Runway X not an ILS approach. Beginning the descent from 8000 to 3000 as instructed by ATC, ATC told us to expect vectors for the X ILS as briefed. As we closed in on leveling off at 3000 ft. (about 4-5 miles east south-east on downwind) we hear another instruction from approach control to descend and maintain 2000 ft. Pilot monitoring (PM) read back altitude with no challenge from ATC. 2000 was set in the altitude window and we began a descent (around 1000-1200 fpm). Within a very short window of time after this, with no other present warnings or cautions we got a GPWS "GND PROX", and "Pull up". With minimal delay I executed an escape maneuver and climbed to 5000 which was well clear of the terrain displayed on the MFD terrain display function. After recovering we queried ATC about the altitude they had assigned, ATC said it was 3000 and said we were coming in broken and unreadable. After the event we received vectors for the ILS X and then proceeded and landed without incident. Next time I will more than triple check the altitude that ATC has us to descending to intercept the course and glideslope. ATC made a clear error in issuing this clearance, and then after the fact said "no I said to descend and maintain 3000". I'm sure late night fatique was at play, when people are saying one thing but meaning another. Whatever the case better work all around was due to help avoid a scenario like this. I should have caught right when the instruction was given that the glideslope intercept altitude was 2600 ft. on the approach not 2000 ft. It's a great idea to pay close attention to the lay of the land, even if it's only a dot or simple feature on our approach plates it's there for a reason. The terrain feature I suspect that must have triggered the terrain closure warning would have been the ridge that is mentioned to be at 1800 ft. on the airport 10-7. In our debrief we noticed on the plate the only significant terrain illustrated on the plate is out to the west, while the 1800 ft. peak is denoted only by a dot.

Synopsis

Flight crew reported they were descending to their ATC assigned altitude when they received a Terrain Warning.

Time / Day

Date : 202209 Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport State Reference : US Relative Position.Angle.Radial : 160 Relative Position.Distance.Nautical Miles : 12 Altitude.MSL.Single Value : 7000

Environment

Light : Daylight

Aircraft

Reference : X Aircraft Operator : Air Carrier Make Model Name : B737-800 Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Initial Approach

Component

Aircraft Component : Navigational Equipment and Processing Aircraft Reference : X Problem : Malfunctioning

Person: 1

Location Of Person.Aircraft: X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : First Officer Function Flight Crew : Pilot Not Flying Qualification.Flight Crew : Multiengine Qualification Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience. Flight Crew. Last 90 Days: 165 Experience Flight Crew. Type: 2200 ASRS Report Number. Accession Number: 1938052 Human Factors : Fatigue Human Factors : Time Pressure Human Factors : Workload Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : Flight Crew

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1937138 Human Factors : Workload Human Factors : Communication Breakdown Human Factors : Time Pressure Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe Anomaly.Deviation - Altitude : Excursion From Assigned Altitude Anomaly.Deviation - Altitude : Overshoot Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Regained Aircraft Control Result.Flight Crew : Overcame Equipment Problem

Assessments

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

Narrative: 1

While on approach, we were turned onto a base leg by ATC and given a clearance to turn, slow and descend to 8000 ft. I responded to ATC. However, the Captain was in the middle of finding out his HUD was inoperative. He made the turn but did not dial in the altitude in the MCP window. He realized that he had not put an altitude in the MCP panel and queried me what the altitude was. Unfortunately, I told him the wrong altitude of 7000 ft. We were both heads up at that time, looking for the proceeding aircraft turning final. Leveling off at 7000 ft., I had a feeling something was not right. At that point, ATC issued an Altitude Alert and told us to climb back to 8000 ft. We climbed back to 8000 ft., turned final and intercepted the localizer and landed. Several things where big contributors. I was tired. I had been working PM trips then switched to a early AM wakeup call. After the event, I called in fatigued. Possibly recognizing my night of poor rest, I should have called in fatigued earlier. Second the failure of us not following our standards in setting the MCP panel. I should have queried ATC again to verify our altitude when I realized the Captain did not know what it was. Last, the Captain was tasked saturated with dealing with the inoperative HUD. This definitely was an added distraction and we both should have been more aware of it interfering with tasks at hand.

Narrative: 2

While on downwind I was trying to get the HUD to work when we were given turn to base and descend clearance at the same time. I heard the turn while I was extending a line in the FMS for final and asked what the altitude was, my FO (First Officer) thought it was seven thousand but wasn"TMt sure. Typical approach in ZZZ was talking so much and so fast we couldn"TMt get a verification. I looked at the FAF fix and saw 7000 ft. and figured that was the clearance. Approach then called us and advised the clearance was 8000 ft. and climb back to 8000 ft. and we complied and continued the approach with no further incident. Distractions with the HUD, ZZZ Approach speaking so fast and so much were certainly additive conditions. Its very hard to continually track ZZZ and all of their clearances. Insist on verification of clearance. Take some of the load of the PF, like requiring the Pilot Monitoring to do all radio and FMS programing while below 10,000 ft., or all the time for that matter. That way, the Pilot Flying can concentrate on flying the aircraft and listen better to ATC clearances.

Synopsis

Air Carrier flight crew reported receiving an ATC low altitude alert during approach. The flight crew immediately climbed to assigned altitude and continued the approach.
ACN: 1937836 (44 of 50)

Time / Day

Date : 202209 Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON State Reference : US Altitude.MSL.Single Value : 11000

Environment

Flight Conditions : VMC Light : Daylight

Aircraft

Reference : X Aircraft Operator : Air Carrier Make Model Name : B777 Undifferentiated or Other Model Crew Size.Number Of Crew : 3 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Climb Route In Use : Vectors

Component

Aircraft Component : Pressurization Outflow Valve Aircraft Reference : X Problem : Malfunctioning Problem : Improperly Operated

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Total : 16022 Experience.Flight Crew.Last 90 Days : 95 Experience.Flight Crew.Type : 3110 ASRS Report Number.Accession Number : 1937836 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : Maintenance

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Total : 3167 Experience.Flight Crew.Last 90 Days : 160 Experience.Flight Crew.Type : 2015 ASRS Report Number.Accession Number : 1937841 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly. Aircraft Equipment Problem : Less Severe Anomaly.ATC Issue : All Types Anomaly. Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly. Deviation / Discrepancy - Procedural : Clearance Anomaly. Deviation / Discrepancy - Procedural : Maintenance Anomaly. Deviation / Discrepancy - Procedural : MEL / CDL Anomaly. Deviation / Discrepancy - Procedural : FAR Anomaly. Inflight Event / Encounter : Fuel Issue Detector.Automation : Aircraft Other Automation Detector.Person : Flight Crew Were Passengers Involved In Event : N When Detected : In-flight Result.General : Maintenance Action Result.General : Flight Cancelled / Delayed Result.Flight Crew : Took Evasive Action Result.Flight Crew : Returned To Departure Airport Result.Flight Crew : Requested ATC Assistance / Clarification Result.Air Traffic Control: Provided Assistance

Assessments

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

Narrative: 1

Arrived at aircraft to find maintenance had deferred an aft outflow valve status message. It was not on our planning paperwork. Reading the deferral there was no pilot action required. Maintenance had put aft outflow valve in manual position with deferred sticker next to it. We took note and assumed switch position was correct for deferral. During climb noticed cabin climbing rapidly. At 10000 ft. Master caution went off, cabin altitude above 10000 ft. Pilot Flying (PF) Immediately with ATC permission descended below 10000 ft. Captain called Maintenance Control and he read deferral. The Captain suggested we put switch in auto position and Maintenance Control did not approve. We manually closed aft

valve which brought cabin down. Masks never deployed. We took delay vectors while talking to Dispatch. [Requested priority handling] and returned to ZZZ, opting to land overweight instead of dumping fuel. Took our time ran all checklist and landed 5000 pounds overweight. Landing uneventful.

Narrative: 2

Arrived at Aircraft X for the Day 0 flight from ZZZ to ZZZZ, 1 hour prior to push. I met a mechanic at door 2L who was coming out. I asked if he was working an issue. He advised his colleague had just deferred the aft pressurization outflow valve and the new Maintenance Release was on its way. This condition was not included in the pre-flight paperwork, so it was a surprise to us. I jumped in the right seat and started my setup, noticing the AFT OUTFLOW valve switch was in MAN and had a deferral sticker above it. The Maintenance Release printed while I was setting up, so I handed it to the Captain as I continued loading the FMC and organizing the cockpit for departure. When the International Relief Officer (IRO) returned from the walk-around, the three of us conferred about the outflow valve, noting maintenance had left the switch in MAN and reading through the Maintenance Release deferral noted there was no pilot crew action required. Ground ops proceeded normally and we departed on Runway XXR via the ZZZZZ departure. During climb to 14000 ft., the Captain noted the cabin pressure was climbing, approaching 11000 ft. We briefly experienced the CABIN PRESSURE WARNING and quickly coordinated for a descent back to 10000 ft. (Passenger masks did NOT drop). The Captain directed myself to continuing flying and take the ATC radios while he and the IRO worked the problem. The Captain contacted Dispatch via sat comm and looped in Maintenance Control. I was working the ATC radio and flying, so was not directly listening to their conversation. I do recall the Captain asking Maintenance Control if we should place the AFT OUTFLOW switch back to AUTO, which they did not approve. I believe they intimated that something with the deferral was amiss and a return to ZZZ was advisable. The Captain continued coordinating with Dispatch and Maintenance Control regarding a return to base while the IRO worked communication with the Flight Attendants, informed passengers of our intentions and monitored my flying. ATC was vectoring us around at 10000 ft. while we worked the issue. We were 20000 pounds over max landing weight so I asked ATC for a location to dump fuel. After a delay and some coordination they responded they could not approve a fuel dump unless we were [requesting priority handling]. The Captain then came on the radio and [requested priority with ATC]. ATC then sent us to the ZZZZZ fix for holding and descended us to 5000 ft., but said nothing about approval to dump fuel. Re-configuring for a ZZZ return, completing checklists/coordination and starting the APU helped us burn sufficient fuel whereby we decided to land slightly overweight (5000 pounds) instead of dumping fuel given our height AGL and ATC's apparent confusion regarding fuel dump approval. Approach and landing to Runway XXC were uneventful and fire trucks escorted us back to gate, where we transitioned to a new tail and pressed ahead to get the passengers to ZZZZ.

Synopsis

B777 flight crew reported departing with a deferred outflow valve. On climb, the cabin altitude began climbing rapidly. The flight crew descended and performed an air turn back to make a precautionary landing at departure airport.

Date : 202209 Local Time Of Day : 0601-1200

Place

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

Environment

Flight Conditions : VMC Light : Daylight

Aircraft: 1

Reference : X ATC / Advisory.Tower : ZZZ Aircraft Operator : Corporate Make Model Name : Falcon 7X Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 91 Flight Plan : IFR Mission : Passenger Flight Phase : Takeoff / Launch Airspace.Class C : ZZZ

Aircraft: 2

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

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Corporate Function.Flight Crew : Pilot Not Flying Function.Flight Crew : Captain Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1934630 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person : 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Corporate Function.Flight Crew : Pilot Flying Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Total : 10718 Experience.Flight Crew.Last 90 Days : 53 Experience.Flight Crew.Type : 1182 ASRS Report Number.Accession Number : 1935000 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : Ground Conflict, Critical Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Ground Incursion : Runway Detector.Person : Flight Crew Result.Flight Crew : Rejected Takeoff Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Airport Primary Problem : Airport

Narrative: 1

I was Pilot Monitoring (PM) on our Part 91 Flight from ZZZ-ZZZ1. ZZZ Tower cleared us for take-off from Runway XXR. The Pilot Flying (PF), advanced the power levers and shortly after we began our takeoff roll, pulled the power levers to idle and stopped the aircraft on the runway. At the same time ZZZ canceled our takeoff clearance. The PF, had noticed that a B737 downfield at the approach end of YYL had crossed over the hold short line and was holding just short of the runway. Shortly after that, ATC cleared the B737 to cross the runway into the gate area. Once they were clear of the runway, ZZZ Tower cleared us for takeoff. This event shows how important it is for the crew to remain vigilant of other aircraft operating on and around your departure runway.

Narrative: 2

I was Pilot Monitoring (PM) on our Part 91 flight from ZZZ-ZZZ1. ZZZ Tower cleared us for take-off from Runway XXR. The Pilot Flying (PF) advanced the power levers and shortly after we began our takeoff roll he pulled the power levers to idle. At the same time ZZZ Tower cancelled our takeoff clearance. The PF had noticed another aircraft that had crossed over the hold short line and was holding just short of the runway (Approach End YYL). Shortly after, ATC cleared the aircraft to cross Runway XXR. Once the aircraft was clear of the runway we were cleared for takeoff.

Synopsis

Falcon 7X flight crew reported observing B737 over runway hold line resulted in rejected takeoff.

ACN: 1934572 (46 of 50)

Time / Day

Date : 202209

Place

Locale Reference.ATC Facility : N90.TRACON State Reference : NY Altitude.MSL.Single Value : 11000

Aircraft: 1

Reference : X ATC / Advisory.TRACON : N90 Aircraft Operator : Air Carrier Make Model Name : B737 Next Generation Undifferentiated Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Descent Airspace.Class B : LGA

Aircraft: 2

Reference : Y ATC / Advisory.TRACON : N90 Aircraft Operator : Air Carrier Make Model Name : Commercial Fixed Wing Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Flight Phase : Descent Airspace.Class B : LGA

Person: 1

Location Of Person.Aircraft: X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function Flight Crew : Pilot Not Flying Function Flight Crew : Captain Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Multiengine Experience Flight Crew Total: 6197 Experience.Flight Crew.Last 90 Days : 157 Experience.Flight Crew.Type: 4674 ASRS Report Number. Accession Number: 1934572 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC Analyst Callback : Attempted

Person : 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days : 201 Experience.Flight Crew.Type : 1775 ASRS Report Number.Accession Number : 1934561 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 / Discrepancy - Procedural : Clearance Anomaly.Inflight Event / Encounter : Wake Vortex Encounter Detector.Person : Air Traffic Control When Detected : In-flight Result.Flight Crew : Requested ATC Assistance / Clarification Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Descending into LGA on the Milton 4 arrival. We were given a clearance to cross MARRC intersection at FL180. I read that back and we started down on path to cross MARRC at FL180. As we got close to MARRC, we encountered very strong wake turbulence. The aircraft encountered moderate turbulence and an uncommanded rolling moment. The Autopilot disconnected and we lost guidance both vertically and laterally. We got that straightened out fairly quickly. In the midst of dealing with that, we were cleared to cross BEUTY at 11,000 ft. I read back BEUTY at 11,000 ft. as normal, and as normal there is no reply to that from ATC. I noticed at the time that the chart showed to "expect" BEUTY at 13,000, but I didn't think much of that because many times we get altitudes other than the charted "expect" altitudes. We descended normally to cross BEUTY at 11,000 ft. and we got a frequency change. We checked in at 11,000 ft. and got no answer as the frequency was very congested. I waited a while and tried again. The controller asked what altitude we are at, which immediately sets off alarm bells in my head and the First Officer (FO) as well. I replied that we are at 11,000 ft. and there was no reply. I waited a moment as the controller dealt with other aircraft and I asked him why he asked us. He responded that we were assigned 13,000 by the last controller. I replied that we heard 11,000, and at that time I had read back 11,000. He had nothing else to say to us on the matter. We continued on to LaGuardia as normal with no further discussion with ATC on the matter. On the post flight debrief, the FO concurred that while he had his hands full as flying pilot

due to the wake turbulence encounter that he heard 11,000 as well, and he heard me read back the clearance to cross BEUTY at 11,000. Also, he agrees that ATC did not reply with any correction at that time.

Narrative: 2

We were on the Milton 4 arrival and instructed to cross MARRC at 18,000. As we were descending, we encountered what we believe was wake turbulence at approximately 19,000 and around 18,500 the autopilot went into CWS P and CWS R. At this point I was hand flying the airplane and the Captain was in the process of turning the flight directors off then on and restoring LNAV/VNAV, when ATC gave us a crossing restriction at BILEY. I thought I heard the controller say cross BILEY at 11,000. The Captain read back cross BILEY at 11,000, then he set 11,000 in the mode control panel. With LNAV/VNAV and the Autopilot on, we continued our descent. We leveled at 11,000 and ATC asked what our assigned altitude was, the Captain responded 11,000, that we had been told to cross BILEY at 11,000. ATC had us turn left then back to the right. I mentioned to the Captain, I wonder why he asked our assigned altitude, with BILEY being charted as expect to cross at 13,000, I wanted to know if we got the 11,000 altitude wrong. He queried ATC and the Controller said he was expecting us to cross BILEY at 13,000, he didn't know why the previous Controller would have instructed us to cross BILEY at 11,000. We landed in LGA and taxied to the gate. With the turbulence or wake turbulence, the automation going into CWS P and CWS R we had a lot going on. I thought I heard the crossing restriction being 11,000 and that's what the Captain heard as well. It's possible that we misheard the instruction and we should have confirmed the altitude with ATC.

Synopsis

B737NG flight crew reported descending below cleared altitude on arrival into LGA following a miscommunication with ATC. A wake turbulence encounter earlier in the descent was cited as contributing.

Date : 202209 Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MDW.Airport State Reference : IL Altitude.AGL.Single Value : 0

Aircraft: 1

Reference : X ATC / Advisory.Tower : MDW 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 : Taxi

Aircraft: 2

Reference : Y ATC / Advisory.Tower : MDW Make Model Name : Single Engine Turboprop Undifferentiated Crew Size.Number Of Crew : 1 Flight Phase : Final Approach Airspace.Class C : MDW

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1933983 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Experience.Flight Crew.Last 90 Days : 120 ASRS Report Number.Accession Number : 1933974 Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy Anomaly.Deviation / Discrepancy - Procedural : Clearance Anomaly.Ground Incursion : Runway Detector.Person : Air Traffic Control Detector.Person : Flight Crew When Detected : Taxi Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We were cleared to Taxi [Taxiway] T lane, [Taxiway] E3 to [Runway] 31C, cross 31R. While crossing [Runway] 31R, we noticed an aircraft we thought was landing [Runway] 31C seemingly headed for us. We crossed the runway and simultaneously switched to Tower frequency to hear the Tower Controller telling the aircraft, an Aircraft Y, that he had been cleared to land [Runway] 31L and I believe he said, Cleared to land 31R. The aircraft landed 31R. We were on Taxiway E3, number 3 in line for take-off and not clear of the Runway 31R hold-short line. ATC should have sent the aircraft around.

Narrative: 2

We where cleared to taxi [Runway] 31C, cross [Runway] 31R, [Taxiway] E3 lane, and hold short 31C. Cleared final for 31R before crossing hold short line for 31R and noticed an aircraft on what looked to be on final for 31C. As we taxied to hold short 31C on E3 lane, the aircraft flew over us and landed 31R. We where number 3 in line for departure on the E3 lane when Tower cleared the Aircraft Y to land 31R. We departed for ZZZ with no further issues. ATC should have sent the aircraft around and the Pilot should not have over flown us to land 31R. Runway 31R should be decommissioned and used for a taxiway only.

Synopsis

Air carrier flight crew reported when cleared across runway, an aircraft overflew them landing on the wrong runway assigned, resulted in a runway incursion.

Date : 202209 Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZZZ.ARTCC State Reference : US Altitude.MSL.Single Value : 3600

Aircraft

Reference : X ATC / Advisory.Center : ZZZ Aircraft Operator : Air Carrier Make Model Name : Regional Jet 900 (CRJ900) Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Initial Approach Airspace.Class E : ZZZ

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function.Flight Crew : Pilot Not Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number.Accession Number : 1930863 Human Factors : Communication Breakdown Human Factors : Situational Awareness Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : First Officer Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument ASRS Report Number.Accession Number : 1930980 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 / Discrepancy - Procedural : Published Material / Policy Anomaly.Inflight Event / Encounter : CFTT / CFIT Detector.Person : Flight Crew When Detected : In-flight Result.Flight Crew : Returned To Clearance 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

ZZZ Center left us high at about 17,000 feet 30 miles from the airport. I gueried Center requesting a descent and was immediately given a descent to 8,000 feet and shortly thereafter a descent at pilot's discussion down to 3,000 feet. We were on an assigned heading on a downwind leg setting up for the ILS Runway XX. Abeam the final approach fix we began to wonder when we would get a base turn. As we got closer to abeam the initial approach fix, I queried Center. Center did not respond. I reached out to them twice more on XXX.Y before changing frequencies to the published approach frequency of XYX.Y. I contacted approach three times without a response then recognized that we were below the MSA. We initiated a climb to 3,600 feet for the MSA and I called Atlanta Center on guard three times again without a response. After I entered the lost communication squawk code, we were almost immediately contacted by another aircraft relaying a message. ZZZ Center asked us to contact them on XXX.Y. We responded that we have been contacting them on this frequency and we are not hearing a response. Shortly after, we heard a very broken transmission telling us to contact ZZZ Center on XZZ.ZZ. After contacting Center on this new frequency, the Controller apologized for not giving us a frequency change and said that they normally lose communication around 3,000 feet on XXX.Y. We had not been given a frequency change prior and because the tower was not open we were not able to contact them.

Narrative: 2

ATC left us at 17,000 MSL 30 miles from airport (north east). We had not heard from ATC so we requested lower. We got 8,000. After that we were still high so requested another descent so ATC gave us 3,000 on a heading (downwind) for Runway XX in ZZZ. We leveled at 3,000 MSL abeam the airport on the downwind and continued flying that heading with an anticipation for a 90 deg turn right for vectors for the ILS XX, 2-5 miles past the IAF we queried ATC and received no response, we tried multiple times on the freq and on Guard Frequency but never got a response. We decided to climb to 3,600 MSL (the MSA) and proceed to the IAF for the procedure turn and ILS XX and squawk lost communications. Within a minute of this, ZZZ called us on Guard Frequency and we reestablished communications and landed without further issue. Cause - Dropped below ATC radio coverage according to ATC. Suggestion - Monitor MSA, and lost communications procedures late at night.

Synopsis

CRJ-900 flight crew reported they were not given a frequency change and were unable to reach ATC as they approached the airport. While attempting to establish communications the flight crew inadvertently descended below the minimum altitude for the area. Flight crew corrected altitude and established communication with ATC.

ACN: 1928467 (49 of 50)

Time / Day

Date : 202208 Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : SCT.TRACON State Reference : CA Altitude.MSL.Single Value : 1800

Environment

Light : Daylight

Aircraft: 1

Reference : X ATC / Advisory.TRACON : SCT Aircraft Operator : Air Carrier Make Model Name : Large Transport, Low Wing, 2 Turbojet Eng Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Nav In Use : FMS Or FMC Nav In Use : GPS Nav In Use.Localizer/Glideslope/ILS : ILS Z Rwy 8 Flight Phase : Landing Route In Use : Direct Airspace.Class C : BUR

Aircraft: 2

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

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Function.Flight Crew : Pilot Flying Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) Qualification.Flight Crew : Instrument Experience.Flight Crew.Last 90 Days : 189 Experience.Flight Crew.Type : 189 ASRS Report Number.Accession Number : 1928467 Human Factors : Communication Breakdown Human Factors : Other / Unknown Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Workload Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 2

Location Of Person.Aircraft: X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Pilot Not Flying Function.Flight Crew : First Officer Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Instrument Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number. Accession Number: 1928464 Human Factors : Workload Human Factors : Time Pressure Human Factors : Other / Unknown Human Factors : Distraction 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 : NMAC Detector.Automation : Air Traffic Control Detector.Automation : Aircraft RA Detector.Person : Flight Crew Detector.Person : Air Traffic Control Miss Distance.Horizontal : 0 Miss Distance.Vertical : 400 Were Passengers Involved In Event : N 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 : Environment - Non Weather Related Primary Problem : Ambiguous

Narrative: 1

On approach to BUR, we were cleared for the ILS to Runway 8. We were in the middle of configuring for landing when about the time we were passing VNY airport, ATC (Approach) gave us a traffic advisory for an aircraft on our right that would be passing below and behind us. I looked down to see a converging symbol about 500 feet below us and instinctively turned off the autopilot anticipating a TCAS. Immediately following we received a "monitor vertical speed" then a "Climb" call and symbology. I hand flew the maneuver as required and noticed that the plane symbol appeared right below us at 400 feet. I want to say we were at flaps 15 and decelerating below 170 kts at the time though

it all happened very quickly. We notified Approach we were responding to a TCAS RA. Soon after we received a "clear of conflict" message. Approach asked if we wanted to continue, and we said "Yes". I finished configuring and we were able to get back on the glideslope and hit the 1,000 foot mark fully stabilized. The landing was uneventful. Personally, this was too close for me. I understand this is a busy place but we had a Controller, another Pilot who should have seen us, and clearance for an ILS approach. The only thing that saved us from hitting that aircraft was the TCAS. We were down to one slice of swiss cheese preventing us from what could have been a major accident. Please talk to ATC and see if there's a learning point for them in this. We did everything by the book and we almost got killed. Thank the Lord for TCAS and for our airline that has worked so hard on this training for so long. It paid off in spades today and I am thankful for all of you in Safety.

Narrative: 2

We were on the ILS Z for Runway 8 at BUR. I was the Pilot Monitoring (PM). We were inside of the FAF with flaps 15 and landing gear down. At around 1,800 feet - 2,000 feet MSL, ATC issued a Traffic Advisory (TA). The traffic was at our 1 o'clock position at one mile and 700 feet below us. I was looking but could not spot them as it was a little hazy. The visibility was at 7 SM. Soon after we received a TCAS "Monitor Vertical Speed" advisory followed shortly by a "Climb" RA. The Captain was the Pilot Flying (PF). He had disengaged the autopilot, autothrottles and pitched up to satisfy the RA command. Once we were clear of the conflict we continued our descent to the runway and were stable at 1,000 feet AGL. We landed without any further incident. Pointing out traffic sooner during the approaches into BUR and paying extra attention to VFR traffic in that area.

Synopsis

Air Carrier Pilot crew reported a NMAC while on the ILS Z Rwy 8 to BUR. The pilot crew follow the RA maneuver and after the all clear, reestablished the ILS and landed.

Date : 202208 Local Time Of Day : 1201-1800

Place

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

Environment

Weather Elements / Visibility : Cloudy

Aircraft: 1

Reference : X Aircraft Operator : Air Carrier Make Model Name : EMB ERJ 170/175 ER/LR Crew Size.Number Of Crew : 2 Operating Under FAR Part : Part 121 Flight Plan : IFR Mission : Passenger Flight Phase : Taxi

Aircraft: 2

Reference : Y Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer Flight Phase : Final Approach

Person: 1

Location Of Person.Aircraft : X Location In Aircraft : Flight Deck Reporter Organization : Air Carrier Function.Flight Crew : Captain Qualification.Flight Crew : Instrument Qualification.Flight Crew : Multiengine Qualification.Flight Crew : Air Transport Pilot (ATP) ASRS Report Number.Accession Number : 1927304 Human Factors : Confusion Human Factors : Distraction Human Factors : Distraction Human Factors : Situational Awareness Human Factors : Time Pressure Human Factors : Communication Breakdown Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Person: 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 : 1927177 Human Factors : Situational Awareness Human Factors : Confusion Human Factors : Confusion Human Factors : Distraction Human Factors : Distraction Communication Breakdown.Party1 : Flight Crew Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types Anomaly.Conflict : Ground Conflict, Critical Detector.Person : Flight Crew Result.Flight Crew : Requested ATC Assistance / Clarification Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

When we reported "ready to taxi" at spot X, Ground Control cleared us "Taxiway 1, Taxiway 2 to Runway XX cross Runway XY". As we approached XY we cleared both ways and turned on the lights. At that same time Ground Control called us with instructions to follow behind a Learjet on Taxiway 3, other side of the Runway, to XXC. When we were well past the hold line and actually entering the Runway I looked left again and saw an aircraft on final for Runway XY. I added power to expedite our crossing and the aircraft on final executed a missed approach. Skies were overcast and Instrument approaches were in use. Runway XY was not listed as an active Runway on the ATIS. I believe there was miscommunication between the Ground Controller and the Tower Controller who may have been accommodating requests for that Runway to avoid thunderstorm activity in the area. Had I not been looking across the Runway for the traffic we were instructed to follow, I likely would have been looking left the whole time and may have picked up the traffic on approach sooner. Otherwise, better communication between Tower and Ground Control may need to be established when unusual Runway operations are being used.

Narrative: 2

We received our taxi clearance at spot X on the ramp at ZZZ. Our clearance was Taxiway 1, Taxiway 2 to Runway XXC, cross Runway XY. We read back taxi instructions and proceeded on our route. As we neared Runway XY and prepared to cross and checked for traffic, Ground control notified us of a Learjet on Taxiway 3 near Taxiway 4. They instructed us to follow the Learjet as they passed us from left to right to Runway XXC. After confirming those instructions we were past the hold short line for Runway XY. When the Captain checked final again he noticed an aircraft on final to land XY. At that point we were already inside the hold short line and the Captain added thrust to expedite our taxi across the Runway. By that time the plane final had initiated a go around. We finished our taxi to Runway XXC with no further incidents. Nothing was said to us by Ground or Tower

about the aircraft that went around. The current ATIS at that time advertised Runway XXC for departure and approach but no mention of using Runway XY. There were thunderstorms all around the airport at the time of our departure. My best guess is that the inbound aircraft landing on XY, requested Runway XY for weather avoidance. It seems there could have been better coordination between Ground and Tower as to what Runways were being used. The timing of Ground telling us to follow an aircraft across the Runway from which we were to cross took our full attention away from more thoroughly scanning for traffic as we approached and crossed a Runway. The ATIS didn't mention Runway XY being open closed or in use. That information could have been another level of safety and added awareness.

Synopsis

Air Carrier flight crew reported they entered a Runway ATC cleared them to taxi across when they noticed another aircraft on short final executing a go-around maneuver.