

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.....36

Date of UpdateDecember 6, 2023

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.

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

Becky L. Hooey, Director
NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

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

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

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

Report Synopses

ACN: 1940351 *(1 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 *(2 of 50)*

Synopsis

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

ACN: 1938052 *(3 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 *(4 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 *(5 of 50)*

Synopsis

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

ACN: 1934572 *(6 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 *(7 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 *(8 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 *(9 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 *(10 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.

ACN: 1924482 *(11 of 50)*

Synopsis

A321 flight crew reported after takeoff the nose wheel and doors would not retract. A divert and an overweight landing were accomplished.

ACN: 1922422 *(12 of 50)*

Synopsis

Two Flight Instructors from the same flight school reported a NMAC while climbing out from the airport. The pilots reported they were given instructions from ATC which created the conflict. Evasive action was taken by both instructor pilots.

ACN: 1921212 *(13 of 50)*

Synopsis

Air carrier flight crew reported NMAC with another air carrier aircraft during initial approach. Flight crew stated the Approach Controller did not advise them in advance of the traffic conflict.

ACN: 1921092 *(14 of 50)*

Synopsis

Air Carrier flight crew reported confusing ATC clearance instructions on approach to DEN airport.

ACN: 1919611 *(15 of 50)*

Synopsis

Pilots reported a HF radio fail and diverted instead of continuing an oceanic flight.

ACN: 1918967 *(16 of 50)*

Synopsis

Air carrier flight crew reported a NMAC with another aircraft on approach.

ACN: 1918144 *(17 of 50)*

Synopsis

Air Carrier flight crew reported they were cleared to cross the runway by Tower. As this was occurring, another airliner was cleared for takeoff on the same runway by the same controller. The other airliner alerted the controller to the conflict.

ACN: 1914027 *(18 of 50)*

Synopsis

Part 135 Air Taxi Pilots reported entering a small taxiway that was not large enough for their aircraft and there was a faded X on the pavement. After parking the pilots stated they were informed their wing tip had made contact with another parked aircraft.

ACN: 1912891 *(19 of 50)*

Synopsis

CR-J200 flight crew reported prior to takeoff the Right Pack and APU were on MEL's. During climbout the Left Pack overheated and failed. The pilots asked ATC for assistance, requested a lower altitude and returned to the field.

ACN: 1911394 *(20 of 50)*

Synopsis

A321 flight crew reported similar sounding call signs led to the confusion of being cleared for takeoff while another aircraft was lining up for departure on the same runway.

ACN: 1910453 *(21 of 50)*

Synopsis

Tower Controller and Developmental reported an aircraft in the traffic pattern turned in front of another aircraft, causing an unsafe situation. Controller issued a traffic alert and the second aircraft performed a go-around.

ACN: 1907929 *(22 of 50)*

Synopsis

Pilot reported their aircraft had a complete electrical failure and returned to their departure airport .

ACN: 1907396 *(23 of 50)*

Synopsis

Center Operations Manager reported Center took over airspace from the TRACON due to TRACON frequency outages. Another Center Controller reported an aircraft flew below the minimum terrain requirements due to the controller's lack of training and lack of published procedures to follow when Center was working with unfamiliar TRACON airspace.

ACN: 1907168 *(24 of 50)*

Synopsis

Air carrier flight crew reported they erroneously thought they were cleared for a visual approach and descended below the minimum vectoring altitude.

ACN: 1905283 *(25 of 50)*

Synopsis

Tower and TRACON Controllers reported "...an unsafe situation..." when they were forced to use backup communication equipment which does not cover all of their airspace due to a loss of main transmitters and receivers. The reporters stated this is a recurring problem at this facility.

ACN: 1903643 *(26 of 50)*

Synopsis

Air carrier flight crew reported a runway incursion at DFW when they misunderstood a taxi clearance. Aircraft on short final executed a go-around.

ACN: 1901987 *(27 of 50)*

Synopsis

Air carrier flight crew reported after the landing roll out started, on a wet runway with a crosswind, the aircraft began drifting off the center line. The pilot flying corrected the deviation and returned to the center line.

ACN: 1900688 *(28 of 50)*

Synopsis

A321 flight crew reported communications issues led to a go around and descent below minimum vectoring altitude during approach phase of flight.

ACN: 1900171 *(29 of 50)*

Synopsis

Air carrier flight crew reported an altitude deviation while on final approach after another aircraft, on the ground near the runway, was causing interference with the glide slope signal for the runway.

ACN: 1898853 *(30 of 50)*

Synopsis

Flight Crew reported an incorrect altitude read back and a CRM failure, resulted in a low altitude alert.

ACN: 1896907 *(31 of 50)*

Synopsis

Air carrier flight crew reported a track heading deviation while on the VKTRY 2 arrival to DAL airport. Similar sounding fix names FAWNT and PHAUP were cited as contributing to the event.

ACN: 1896192 *(32 of 50)*

Synopsis

PA28 Student Pilot reported that the other PA28 pilot was confused in spotting traffic and made a mistake in the sequence, resulting in a NMAC, and evasive action was executed by the former during the final approach.

ACN: 1894779 *(33 of 50)*

Synopsis

Air Carrier Pilot Crew reported an encounter with severe turbulence in cruise flight. The autopilot disengaged and the aircraft descended 1000 feet. Control was regained and there was no report of injuries.

ACN: 1894504 *(34 of 50)*

Synopsis

Flight crew reported NMAC and CFTT warnings during departure climb.

ACN: 1894165 *(35 of 50)*

Synopsis

ZHU Center Controllers reported while receiving incoming traffic for their sector landing at JAS non-towered airfield, the NOTAMS for that airport were incomplete. There was reported runway work in progress but the NOTAMS were not clear if Runway 18/36 was open or closed. After contacting airport management, ATC still could not confirm the status of the runway.

ACN: 1893869 *(36 of 50)*

Synopsis

Air carrier flight crew reported during takeoff roll two military helicopters flew across the departure runway in front of the aircraft at low altitude, causing the flight crew to delay rotation to avoid a collision. The Captain stated they were not advised in advance by ATC of the helicopter traffic.

ACN: 1893014 *(37 of 50)*

Synopsis

Air Carrier flight crew reported a CFIT situation due in part by an ATC assigned extended downwind vector in mountainous terrain area. As the flight crew were discussing altitude concerns ATC issued a low altitude alert and assigned a climb and heading correction. Flight crew complied expeditiously and continued to a safe landing.

ACN: 1891563 *(38 of 50)*

Synopsis

Air carrier flight crew reported receiving a GPWS terrain warning as well as a low altitude alert from ATC on approach to DEN following a miscommunication with the Controller.

ACN: 1890320 *(39 of 50)*

Synopsis

Air Carrier Pilots reported Ground Control was acting as both Ground and Clearance Delivery on the Ground Control frequency. The pilots were cleared to cross the runway and

then told to immediately stop as a high wing single engine aircraft executed a missed approach and flew over them.

ACN: 1890178 *(40 of 50)*

Synopsis

Air Carrier flight crew reported during the landing rollout, another aircraft was over the hold short line. The PNF contacted Tower regarding the other aircraft. The reporting Captain states they should have executed a missed approach.

ACN: 1885312 *(41 of 50)*

Synopsis

C172 flight instructor and student reported a failure of the electrical system during a training flight resulted in heading deviations and lost communications. The flight continued in visual conditions to landing.

ACN: 1883563 *(42 of 50)*

Synopsis

Air Carrier Line Check Airmen and flight crew reported using non standard procedures that lead to airspeed, course and altitude deviations during an RNAV approach. During the approach the flight crew was notified by ATC of a low altitude warning.

ACN: 1877264 *(43 of 50)*

Synopsis

Air carrier crew reported an air conflict with a single engine aircraft just after lift off. The single engine Instructor Pilot, who also reported, was landing on a crossing runway stated the Tower had given them clearance for the option therefore, decided to make a 'touch and go.' After receiving an alert to turn crosswind from ATC, the Instructor saw the Air Carrier and took immediate action to avoid a collision.

ACN: 1876878 *(44 of 50)*

Synopsis

Air Carrier Pilots reported there were late runway changes in this mountainous area. Then while executing an RNP approach in a Heavy Aircraft, they received two GPWS Terrain

Warnings and conducted a missed approach. There was a tailwind on the RF leg and each pilot stated they think the terrain warning was caused by the excessive speed from the tailwind. The airport was turned around after their missed approach.

ACN: 1876346 *(45 of 50)*

Synopsis

Flight Crew reported a TCAS TA and RA on approach to landing after an air turn back caused by a dual EEC failure. The flight crew initiated evasive action and was vectored back to the approach.

ACN: 1873569 *(46 of 50)*

Synopsis

Air Carrier Pilot Crew reported while on final approach the autothrottle failed to keep the aircraft on speed. As the aircraft slowed the pilots disconnected the autothrottle and continued in manual mode to landing. The pilots reported they were aware of 5G interference around LGA.

ACN: 1872271 *(47 of 50)*

Synopsis

Flight crew reported a terrain alert due to ATC communications failure, resulted in taking evasive action.

ACN: 1871652 *(48 of 50)*

Synopsis

Air carrier flight crew reported multiple instrument malfunctions while on a missed approach at DEN. Contributing to the confusion were rapid instructions from the Approach Controller.

ACN: 1868750 *(49 of 50)*

Synopsis

Air carrier flight crew reported receiving a terrain alert on approach and executed a missed approach.

Synopsis

B767 flight crew reported a track deviation occurred when they turned off course to avoid wake turbulence from a preceding aircraft.

Report Narratives

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 : Check 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 turned to the south, we were cleared to a further left turn, to a 140 heading and 5000 ft. to intercept the XX localizer. 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 : Human-Machine Interface

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 query 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 query 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 fatigue 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 were 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't sure. Typical approach in ZZZ was talking so much and so fast we couldn't 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 proگرامing 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.

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 : Instrument
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 ZZZZ 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 ZZZZ 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.

Time / Day

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 : First Officer
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.

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.

Time / Day

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.

Time / Day

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 queried 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.

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.

Time / Day

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 : 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 : 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
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.

Time / Day

Date : 202208

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : A321

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Initial Climb

Flight Phase : Climb

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class B : ZZZ

Component : 1

Aircraft Component : Nose Gear

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Nose Gear Door

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1924482

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

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 Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1924483
Human Factors : Workload
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Weight And Balance
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Landed in Emergency Condition
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

After Takeoff from ZZZ we were unable to retract the landing gear. The First Officer was flying and after checking for an ECAM exception or quick action item I assigned flying duties and ATC communications to the First Officer. I completed the ECAM actions which failed to remedy the situation so I advised the First Officer to head to ZZZ1. I made a quick PA since it was very noisy just to put everyone at ease while I pulled out my QRH then completed the appropriate follow up items. I then notified the #1 Flight Attendant with the test items then made another PA explaining the situation. I then used the crew phone to call Dispatch and they were aware we were headed to ZZZ1. Since we were going to land at 182,000 pounds I reviewed the overweight landing checklist and discussed the options with the First Officer. The weather was clear with calm winds and a long Runway so decided it was best to land rather than burn off gas for an hour or more. I also called Dispatch to tell them my intention to make an overweight landing. The First Officer made the landing and everything was normal so we taxied to the Gate.

Narrative: 2

I was the Pilot Flying (First Officer) for this leg and the Captain was the Pilot Monitoring. Shortly after liftoff from Runway XX I noticed a nose wheel shock absorber ECAM, quickly followed by a gear not unlocked ECAM. I retained control of the aircraft and utilized the AP to increase situational awareness. As the Captain began to work the ECAM. It was quickly realized that the gear would not retract so a joint decision was made to divert to ZZZ1. Involved in this decision was the fact that ZZZ1 has many long Runways and company Maintenance facilities. During this time as the Captain was working the ECAM the gear doors were stuck down and making a lot of noise within the flight deck. This did contribute to each pilot having difficulty hearing and understanding the other. Shortly after the initial incident a request was made to divert to ZZZ1, however an emergency was not declared. After providing ATC with the relevant information on the situation they on our behalf and [requested priority handling] an to provide vectors to ZZZ1. with the Captain continuing to work the ECAM and overweight landing checklist. I began programming the Multipurpose Control Display Unit for an arrival and landing into ZZZ1. The decision to make an overweight landing was made due to the amount of time it would have taken to burn off enough fuel to get under max landing weight. After completing the overweight landing checklist and briefing the arrival and approach we made an uneventful landing into ZZZ1 on Runway XYL. Upon exiting the Runway we canceled [priority handling] and taxied to the Gate. The pre-flight walk around produced no glaring issues that would have caused this maintenance event. The correct terminology was not correctly used by myself when communicating with ATC, which may have caused some initial confusion on whether or not we were [requesting priority handling] or not.

Synopsis

A321 flight crew reported after takeoff the nose wheel and doors would not retract. A divert and an overweight landing were accomplished.

Time / Day

Date : 202207

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : IWA.Tower

State Reference : AZ

Altitude.MSL.Single Value : 2600

Environment

Flight Conditions : VMC

Light : Daylight

Ceiling.Single Value : 10000

Aircraft : 1

Reference : X

ATC / Advisory.Tower : IWA

Aircraft Operator : FBO

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Climb

Route In Use : None

Airspace.Class D : IWA

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : IWA

Aircraft Operator : FBO

Make Model Name : Small Aircraft

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Initial Climb

Airspace.Class D : IWA

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 : Multiengine

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 884

Experience.Flight Crew.Last 90 Days : 300

Experience.Flight Crew.Type : 800

ASRS Report Number.Accession Number : 1922422
Human Factors : Communication Breakdown
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 : Y
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 1080
Experience.Flight Crew.Last 90 Days : 90
ASRS Report Number.Accession Number : 1921630
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
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 : Ambiguous

Narrative: 1

My student and I were on the up wind of Runway 12C at IWA and IWA Tower told us to extend our upwind and they would call our x-wind. Once we got to TPA 2,600 ft. Tower told us to begin left x-wind for left traffic Runway 12L. I told my student to hold off on the turn because I noticed Aircraft Y had departed Runway 12L just after us and knew they were on the up wind as well. I believe Tower told that Aircraft Y we would be crossing in

front of them and that it shouldn't be a factor. Just before I was going to call tower to double check they told us, Aircraft X, to start our left turn immediately onto the x-wind. Once we turned X-wind I saw Aircraft Y climbing into us and took controls from my student and immediately added power and climbed to 2,800 ft. and Aircraft Y took the actions as well and started to descend to 2,500/2,400 ft. If either of us weren't aware of the situation and traffic we would have been at least 50 ft. from each other or closer. After this happened it didn't seem like ATC knew of the situation because they did not say anything after it had happened. At the time ATC was training a new hire.

Narrative: 2

I was doing an evaluation of a student who was training to do solo flights, in Aircraft Y at XA45 MST. We were in the traffic pattern at IWA and communicating on tower frequency 120.6. After a go around on Runway 12L, we were told by Gateway Tower to fly straight out. As we were flying straight out, there was another aircraft from our flight school, Aircraft X, that was flying straight out for a parallel runway off our right hand side. I already had them in sight before Gateway Tower advised us of their position. I also maintained visual contact with that aircraft throughout this event. Gateway Tower told the other aircraft to turn left crosswind, and advised us to look for traffic ahead and to the right, crossing right to left in front of us. Immediately, my student and I knew that the spacing was going to be tight if we continued the way Gateway Tower told us to. My student queried ATC and verified that they wanted us to fly straight out at 2,600 feet, and they confirmed the clearance. As we approached the other aircraft, we descended below TPA and they climbed above TPA to avoid each other. Although I had the conflicting traffic in sight before they even started turning, the directions given to us by ATC presented a potential hazard considering the close proximity in which they directed us to the other aircraft. This was a reminder of a lesson I have taught many students in the past, to always be on high alert even in controlled airspace.

Synopsis

Two Flight Instructors from the same flight school reported a NMAC while climbing out from the airport. The pilots reported they were given instructions from ATC which created the conflict. Evasive action was taken by both instructor pilots.

Time / Day

Date : 202207

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 5000

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Aircraft : 2

Reference : Y

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

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 : Flight Instructor

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1921212

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 Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1922253
Human Factors : Time Pressure
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
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 500
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

On arrival into ZZZ the Approach Controller vectored us off the arrival and gave us an intercept heading for the Runway XXR localizer kept us at 6,000 ft. which felt too high. We were then slowed by ATC from 230kts to 210kts then to 190kts. As we got closer to the localizer I mentioned to the CA (Captain) that the controller was keeping us high, we gave the controller a short time before requesting lower and were given 4,000 ft., then shortly after reading it back we were given 3,000 ft., the controller seemed a bit confused. throughout the descent I configured for the slow speed and descent by putting flaps out and lowering the landing gear (flaps 5 and gear down) at this point we were flying through the localizer and the CA questioned the controller, we were now at about 5,000 ft. and descending to 3,000 ft., we received a traffic alert and told the controller and then received an RA, I immediately disengaged the A/T (autothrottles) and A/P (autopilot) and followed RA commands for a descent and was then given an immediate heading of 250 from ATC (this instruction from ATC came from a different voice on the same frequency, seemingly a different controller or a supervisor who stepped in). Then I watched as the traffic passed overhead and slightly in front, I would estimate they passed by within 500 ft. After the aircraft passed left to right the controller called out the traffic to us which was obviously much too late. Also, once the traffic passed by we received the "clear of conflict" from the TCAS system and from here ATC gave us a turn and we're cleared for the visual to Runway XXR and the rest of the flight was uneventful. The approach controller seemed to be behind and possibly not seeing the full picture. We noticed this initially when we were left at 6,000 ft. while approaching the localizer with no descent clearance. We prompted approach who then gave us lower, 4,000 ft., immediately after repeating the

altitude the controller gave us 3,000 ft., this was odd and seemed like they finally realized how high they had left us. The supervising approach controller should have stepped in and taken over much earlier to avoid this situation.

Narrative: 2

On arrival into ZZZ the Approach Controller vectored us off the arrival and kept us at 6,000 ft. which felt too high. We were then slowed by ATC from 230kts to 210kts then to 190kts. As we got closer to the localizer I mentioned to the CA (Captain) that the controller was keeping us high, we gave the Controller a short time before requesting lower and were given 4,000 ft., then shortly after reading it back we were given 3,000 ft., the Controller seemed a bit confused. Throughout the descent I configured for the slow speed and descent by putting flaps out and lowering the landing gear (flaps 5 and gear down) at this point we were flying through the localizer and the CA questioned the controller, we were now at about 5,000 ft. and descending to 3,000 ft., we received a traffic alert and told the controller and then received an RA, I immediately disengaged the A/T (autothrottles) and A/P (autopilot) and followed RA commands for a descent and was then given an immediate heading of 250 from ATC (this instruction from ATC came from a different voice on the same frequency, seemingly a different controller or a supervisor who stepped in). Then I watched as the traffic passed overhead and slightly in front, I would estimate they passed by within 500 ft. After the traffic passed left to right the controller called out the traffic to us which was obviously much too late. After seeing the traffic pass by we received the "clear of conflict" from the TCAS system and from here ATC gave us a turn and we're cleared for the visual to Runway XXR and the rest of the flight was uneventful. [Suggest] retraining or termination of ZZZ Approach Controller. They were the direct cause of this incident, that had it not been for the quick reaction of both flight crew would have resulted in a midair collision.

Synopsis

Air carrier flight crew reported NMAC with another air carrier aircraft during initial approach. Flight crew stated the Approach Controller did not advise them in advance of the traffic conflict.

Time / Day

Date : 202207

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DEN.Airport

State Reference : CO

Relative Position.Distance.Nautical Miles : 12

Altitude.MSL.Single Value : 9000

Environment

Flight Conditions : Mixed

Light : Daylight

Ceiling.Single Value : 10000

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : 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 : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 240

Experience.Flight Crew.Type : 240

ASRS Report Number.Accession Number : 1921092

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 : 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 : 1921087
Human Factors : Situational Awareness
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 : Overshoot
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

While on LAWGR 3 STAR Arrival into Denver landing Runway 17R, runway was changed to Runway 16L. Approximately 15 miles left base, we were asked if we had the airport and we responded we did, and were immediately cleared for the Visual Approach to Runway 16L and given a speed of at least 170 knots until a 5 mile final, or so we thought. We were under the impression that we were number one or had nobody within several miles in front of us due to shortcuts and very quick "cleared for visual approach" while on approximately 10 mile final, while we were at a speed of 210 knots and ready to slow anyways; Approach Controller came back and told us with a firm voice that he needed 170 knots airspeed now. We mentioned we thought it was an airspeed of at least 170 knots, he only asked if we had the aircraft up ahead that was coming from the south and much lower on a right base in front of us for the same Runway 16 Left in sight. We responded affirmative we had that traffic in sight and would maintain visual separation and slowed to final approach speed immediately in landing configuration. He turned us over to Denver Tower at that time. Denver Tower approved an S-turn to the west and then had a plan B for us, in which they asked us to land 17R, we said OK and Denver Tower immediately cleared us to land on Runway 17R. We turned towards east towards 17R at that time. It was a visual approach as we had the runway clearly in sight. My First Officer was trying to put the localizer / ILS frequency in and program the FMC approach for 17R at that time and could not get rid of the ILS 16L. The Runway 17R is also approximately two miles further away (south) than runway 16L. This increased distance plus the additional S-turn distance caused us to be a little bit lower in altitude much further out than maybe we anticipated and created a perfect setup for an unstable approach and terrain warning which we received. Tower asked us if we had 17R in sight, we responded "yes" and she cleared us to

land again on 17R. We landed on 17R and proceeded to the gate without any further difficulty.

Narrative: 2

When given an airspeed of 170 knots to five miles, we flew faster than assigned. Confusion was between 170 knots or greater or hard 170. The question from Pilot Flying was not asked, and Pilot Monitoring did not question airspeed. We are still unsure of the actual phrasing given. Both pilots assumed we were number one for the field due to being given fix clearance limits closer and closer to the field. No traffic was called either from ATC, despite their being a regional on a right base to the same runway we were supposed to be following. Accepted a late runway change from Runway 16L to 17R and ended up getting landing flaps selected very late as well (25 to 30). Poor communication and crosscheck contributed to event. Radios were scratchy as well.

Synopsis

Air Carrier flight crew reported confusing ATC clearance instructions on approach to DEN airport.

Time / Day

Date : 202207

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 34000

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B787 Dreamliner Undifferentiated or Other Model

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZZZ

Component

Aircraft Component : HF SSB

Aircraft Reference : X

Problem : Failed

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 : 19992

Experience.Flight Crew.Last 90 Days : 173

Experience.Flight Crew.Type : 3381

ASRS Report Number.Accession Number : 1919611

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Workload

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 : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 4255
Experience.Flight Crew.Last 90 Days : 146
Experience.Flight Crew.Type : 2805
ASRS Report Number.Accession Number : 1919652
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Time Pressure
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Weight And Balance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
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
Primary Problem : Aircraft

Narrative: 1

Loss of enroute communication ability. Aircraft X from ZZZ to ZZZZ - Returned to ZZZ after loss of communication capability. Aircraft X had previous history of SATCOM issues and each time was released after system resets and ground checks. Our flight was normal through takeoff and coast out, and we were able to get a SELCAL check. Initial CPDLC logon and position report sent ZZZ1 without problem. About 12 minutes after passing ZZZZ, we got a SELCAL from ARINC (Commercial Radio) asking for a position report for ZZZZ. After several tries due to poor quality of transmission and reception on HF, we were able to provide a standard verbal position report. We tried to send a second manual CPDLC position report, but that message hung up on the "sending" prompt. Soon after that we got another SELCAL asking us if we were receiving the CPDLC messages from ATC to which we responded no. We then tried to reset CPDLC by manually logging off ZZZ1 then logging on again. That failed with EICAS (Engine Indicating and Crew Alerting System) caution "SATCOM" and "DATALINK LOST" messages. There are no checklists to

restore functions for these systems. Our next effort was to attempt to contact ATC and/or Dispatch via SAT phone, but both left and right systems showed "Not Ready" and there were no prompts to initiate calls, it was useless to us. We then tried to contact ARINC on HF again to have them advise ATC that we were unable CPDLC and were planning to continue using voice procedures. Our plan was to also get a phone patch with dispatch to advise and coordinate further action be it continuing or divert. This attempt to establish HF communication with ARINC was unsuccessful on the primary and the secondary frequencies. We could hear them talking but not able to understand. We also tried the previously given 150W frequencies but had no response on either frequency. I think our HF system was probably working OK, it seemed to just be a really bad day for HF communication, I assume to be caused by ionospheric or space weather conditions. Due to SAT failure, ACARS had reverted to HF Datalink and had no useful connectivity either. It would come and go and sometimes deliver messages but usually not. About this time I remembered that we still had IFE (Inflight Entertainment) internet connectivity, and I realized that I might be able to do a WIFI call to dispatch. Airline Wi-fi restricts video streaming and internet calls but I figured I might be able to bypass that restriction like the great Firewall of China using VPN service on my iPhone. I successfully got my VPN to tunnel out and pop up on a ZZZ2 internet node, dialed phone number and dispatch answered! Thankfully this scheme worked great, we ended up having a 1 hour and 37 minute call that was essential to our safe and fully Dispatch/ ATC coordinated return to ZZZ. Throughout the call I was worried that the internet would fail at any time and terminate the call but it worked perfectly the whole time. Dispatcher Name was awesome and set up our first conference with Maintenance who advised us that due to policy, he was unable to provide circuit breaker resets for possibly regaining SAT capability. Upon hearing this, and taking into consideration that my FO (First Officer) was still unable to establish HF communications with ZZZ radio, I was not comfortable continuing across the ocean. We woke up the Relief Pilot, filled him in on the situation and along with Dispatch all of agreed a return to ZZZ was prudent and to not risk further flight with such degraded communication capability. While Dispatch was setting up another conference call, with ZZZ3 Oceanic ATC, I got the Purser on the interphone, advised him of our situation and asked him to come up to the cockpit. Before he could make it up there Dispatch had our conference set up with the ATC supervisor. He was able to coordinate with us in realtime and based upon our verbally given LAT/LONG position, gave us a descent to FL310, then a right 180 turn and further clearance back to ZZZ. All three of us pilots were very careful to ensure correct FMC programming during the maneuver. My flying FO did a great job keeping track of the airplane while I was essentially isolated by being the only one able to talk on my cell phone. I tried using speakerphone but it just wasn't loud enough so we were forced into a split cockpit situation. We adapted and things went well. The 180 turn was accomplished in HDG mode at reduced bank angle out of concerns of steeper bank angle upsetting the satellite antenna connection. We were able to complete the turn, engage LNAV, then give the ATC supervisor accurate time estimates for the two intermediate fixes back to ZZZ. All without dropping the call. Once established on the track back home, I passed the phone to my Relief Pilot to maintain communication with dispatch while I briefed the purser. I advised him that we would be having a normal landing in about 2 ½ hours, no evac needed. I then made a PA announcement to the people. Returning to the dispatch call we discussed and decided to NOT declare an emergency with ATC unless we actually did lose the call. In that case dispatch would advise ATC of our emergency status and we would use standard procedures to advise other aircraft and regain ATC communication through all available means including other aircraft relay. We also looked at and discussed the ZZZ landing data with Dispatch and decided that an overweight landing (466k lbs.) using my Captain emergency authority had good safety margins on the runways, especially with the headwinds in ZZZ, and would be the best option compared to dumping fuel. Before terminating the call to Dispatch, I

accomplished the applicable items remaining on the diversion guide, and exchanged iMessage texts to ensure continued direct message capability with our dispatcher. The rest of the flight went normally, as we got closer to mainland, we were able to make an HF verbal position report at the first fix going home, and then we were able to establish normal VHF communication with ZZZ3 Center when we reached ZZZZZ1 intersection. The overweight landing was smoothly hand flown and not much braking was needed, the hottest brake afterward was only 1.5. We wrote up the failed equipment and gave Maintenance a print out of our overweight landing conditions page to aid their inspection requirements.

Narrative: 2

Aircraft X, ZZZ-ZZZZ. Aircraft had several log entities about SATCOM issues in past few day. System check and cleared by Maintenance. Maintenance Release reflected this cleared status. Logged into ZZZ4 GOT CLEARANCE as normal. Departed ZZZ, ZZZ4 didn't auto transfer to ZZZ1 so manually logged into ZZZ1. COMMS established with ZZZ1 near FIR boundary between ZZZZZ and ZZZZZ1 at approximately XA20z. POSITION REPORT SENT. HF SELCAL check was successfully completed with primary/secondary frequencies and 150w frequencies before FIR boundary. ETOPS weather received and EOK sent. Approx XA: 58z received a SELCAL from ZZZ radio asking for position report over ZZZZZ. Gave voice position report. Told they had not received auto position report. At about XA: 59 we attempted to send a CPDLC POS report. Stalled at sending never sent. A few mins later got a second SELCAL from ZZZ radio asking if we were receiving messages from them and that ATC was trying to contact us. It was at that point we told them we would try a CPDLC reset and try to re-establish CPDLC Logon. That failed. EICAS (Engine Indicating and Crew Alerting System) SATCOM caution message appeared. We tried several attempts at contacting HF with no luck. Very high interference and static (more than normal). Tried primarily and secondary frequencies. Made AIR TO AIR VHF call to relay better HF freq with an aircraft in area. The new HF FREQ was no better. Was able to finally get a position report via HF but extremely bad connection. We had SATCOM EICAS message. SATCOM SYS status message, NO SATCOM LINK, HF DATA MODE RADIO FAILURE, NO HF LINK, NO DATALINK MESSAGE, NO ACARS CONNECTION, LOST SELCAL ABILITY, LOST ATC DATALINK message. Only VHF working and we were out of range for VHF and lost COMMS with aircraft in area on XXX.XX. As a last ditch attempt, Captain decided to try a Wi-Fi call via Company Wi-Fi. Luckily we established a connection via cellphone with Dispatch/Maintenance. Hoping to troubleshoot the issue. We couldn't find a solution to the issue without circuit breakers resetting and that was not an option per Maintenance. Relief Pilot was called to return to flight deck. Due to concerns of total NO COMM and possible loss of Wi-Fi, Dispatch coordinated via conference call with ZZZ1 ATC SUPERVISOR to coordinate a return to ZZZ. ATC SUPERVISOR had us descend to FL310 to avoid traffic and cleared us via right turn to ZZZZZ2 direct ZZZ. He gave us VHF freq at ZZZZZ2. DATALINK was up and down...mostly down. A few ACARS MESSAGES RECEIVED none able to be sent out. Captain ran diversion guide and coordinated with FA's (Flight Attendants) and while back and forth on cell phone to Dispatch and ATC. Had purser up on flightdeck to brief. Relief Pilot assisted in updating FA's and maintaining cell call connection with Dispatch. I continued flying the airplane and monitoring. And running overweight landing data charts. Passengers were updated and safety was maintained at all times. Reaching ZZZZZ2 VHF COMMS re-established. Assigned new route. Accomplished an overweight landing on Runway XXL. Taxied to gate.

Synopsis

Pilots reported a HF radio fail and diverted instead of continuing an oceanic flight.

Time / Day

Date : 202207

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1800

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 Next Generation Undifferentiated

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

Make Model Name : Cessna Aircraft Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Cruise

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.Last 90 Days : 151

Experience.Flight Crew.Type : 6430

ASRS Report Number.Accession Number : 1918967

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 Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Last 90 Days : 27
Experience.Flight Crew.Type : 13026
ASRS Report Number.Accession Number : 1918071
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 : NMAC
Detector.Automation : Aircraft TA
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Approaching from the Northwest of ZZZ, approach gave Company X an option for a visual approach to Runway XX, instead of Runway XYR, as depicted on the ZZZZZ 5 RNAV ARRIVAL. We accepted and were given an assigned heading after ZZZZZ1, which we complied with. Additionally, we were given clearance to descend to 6,000 ft. and slow to 170 kts., which was complied with. Following an assigned heading of 180, approached verified we had the airport in sight and cleared us via a visual approach to Runway XX. Approach Control additionally cautioned us about flying behind a "heavy" jet that was on final approach to Runway XYL. The caution was noted. Approach cleared us to continue our descent to 3,000 ft. before clearing the flight for a visual approach. The flight path proceeded with a dog leg Just prior to ZZZZZ2, the captain asked for 1,500 ft. to be selected on the MCP to comply with the altitude at ZZZZZ3 as he continued the descent. We received a resolution advisory (RA) "Monitor vertical speed" as we noticed a high-wing Cessna orbiting at about 1,500. There was no ATC warning of an orbiting aircraft on the final approach at 1,500, which was outside the Class B Airspace. Flight Company XXXX descent below 2,000 ft. also brought the aircraft below the Class B tier just east of ZZZZZ2. The Captain complied with the RA as it continued with "Maintain vertical speed", until we received the "Clear of Conflict" aural alert. Glancing down to my Map display, the Cessna was pegged at 300 ft. below our altitude. We promptly notified approach control about the RA and the Cessna traffic. The flight continued to land and park without further incident.

Narrative: 2

While descending on a visual approach to Runway XX we were descending to 1500 ft. and there was a light single engine aircraft operating below the Class B airspace at approximately 1500 ft. We were not advised by ATC of said aircraft before we received a TCAS TA. Then TCAS RA told us to level off and we avoided the light single aircraft by approximately 300 ft. I inadvertently descended too early and subsequently exited Class B airspace.

Synopsis

Air carrier flight crew reported a NMAC with another aircraft on approach.

Time / Day

Date : 202207

Local Time Of Day : 1801-2400

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 : Heavy Transport, Low Wing, 4 Turbojet Eng

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 : Taxi

Route In Use.Other

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 : GPS

Nav In Use : FMS Or FMC

Flight Phase : Takeoff / Launch

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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 10000

Experience.Flight Crew.Last 90 Days : 60

ASRS Report Number.Accession Number : 1918144

Human Factors : Other / Unknown

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 Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 5000
Experience.Flight Crew.Last 90 Days : 30
ASRS Report Number.Accession Number : 1918146
Human Factors : Time Pressure
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.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : Taxi

Assessments

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

Narrative: 1

ZZZ Tower Controller cleared us to cross Runway XXL on [Taxiway] X. As we crossed Runway XXL the same controller cleared Aircraft Y for takeoff on Runway XXL. The controller then proceeded to give departure sequence updates over the frequency (XXX.X). We transmitted we were on the runway. Aircraft Y was finally able to tell the controller he saw us and was holding position. The controller then stated to Aircraft Y that he had indeed cleared us to cross [Runway] XXL and that he had made a mistake.

Narrative: 2

The flight was scheduled as an afternoon turn to ZZZ1-ZZZ-ZZZ1. I was the First Officer and was the pilot flying to ZZZ--this event occurred on the ground during the taxi to the ZZZ ramp. After landing on [Runway] XXR (approx XA10), ZZZ Tower instructed to roll to the end, taxi left on Taxiway Z, Y, X--hold short of [Runway] XXL at [Taxiway] X, and to monitor Tower XXX.X. After several departures, we were cleared to taxi to the ramp via [Taxiway] X, cleared to cross [Runway] XXL at [Taxiway] X, and notified traffic will be holding in position. At approximately the time our nose gear crossed the centerline of the

runway, ZZZ Tower cleared Aircraft Y to takeoff and was immediately acknowledged by the Aircraft Y crew. Recognizing we were not going to be clear, I tried to notify Tower that we were still on the runway--I don't think he heard my call, he was giving a takeoff sequence to several aircraft awaiting takeoff. After ZZZ Tower finished reading the sequence, Aircraft Y told the controller that he cleared them for takeoff while "Aircraft X was still on the runway". The Tower controller acknowledged the mistake and re-cleared Aircraft Y for takeoff.

Synopsis

Air Carrier flight crew reported they were cleared to cross the runway by Tower. As this was occurring, another airliner was cleared for takeoff on the same runway by the same controller. The other airliner alerted the controller to the conflict.

Time / Day

Date : 202206

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Night

Aircraft : 1

Reference : X

ATC / Advisory.Ground : ZZZ

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 : Ferry / Re-Positioning

Flight Phase : Taxi

Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase : Parked

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Flight Engineer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 35120

Experience.Flight Crew.Last 90 Days : 254

Experience.Flight Crew.Type : 1070

ASRS Report Number.Accession Number : 1914027

Human Factors : Confusion

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 Taxi
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
Experience.Flight Crew.Total : 6785
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 513
ASRS Report Number.Accession Number : 1914040
Human Factors : Workload
Human Factors : Situational Awareness
Human Factors : Confusion
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 : FAR
Anomaly.Ground Excursion : Taxiway
Anomaly.Ground Incursion : Taxiway
Anomaly.Ground Event / Encounter : Aircraft
Detector.Person : Other Person
When Detected : Taxi
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

During taxi-in to [the FBO ramp] from Taxiway 1, a marshaller was in a position that looked inappropriate for my aircraft to negotiate (very sharp turn and requirement to taxi very closely to the ramp edge and unpaved area in the dark). I saw another entry to the FBO ramp from Taxiway 2, but once on taxiway 2 the entry to the ramp was found to be marked, after entering taxiway 2, as unusable. Taxi was continued on taxiway 3. As we continued on taxiway 3 we noted the close proximity of aircraft to the taxiway and moved to the right of the taxiway 3 centerline, away from the parked aircraft, but were limited by the location of structures on the right. We continued on taxiway 3 to rejoin taxiways 4, 5 and 1 back to the FBO ramp. On arrival to the ramp, we were notified that the left wingtip had made contact with the tails (rudders) of aircraft parked closely to taxiway 3 as we negotiated our way through to taxiway 4. I had no indication during taxi that contact was made with the parked aircraft. Post incident thoughts- The ZZZ airport diagram (TPP Airport Diagram, Jeppesen 10-9) is not accurate with regard to the taxiways and ramp locations with regard to the FBO ramp, the grassy strip between the ramp and taxiway,

nor does it display the closed entry to the ramp from taxiway 3. These would have contributed greatly to preventing the occurrence that followed, as I would have chosen not to enter taxiway 3, from which the only exit was continuance of taxi on taxiway 3 to taxiway 4 (The Jeppesen taxi diagram was displayed on our MFD for reference). The tower/ground controller could have provided input regarding use of taxiway 3, as they obviously were observing our progress as we asked for continued taxi and their notification to the FBO ramp crew upon our return to the ramp that contact may have been made with other aircraft. Also contributing to the incident may have been an inappropriate OFA (Object Free Area) with regard to the aircraft tie-down areas adjacent (West) of taxiway 3 without notice via NOTAM, airport diagram or A/FD (Airport/Facility Directory, Chart Supplement) of possible hazards associated with taxiway 3 for aircraft (wingspan limitations, etc.) as normally found on airport diagrams such as ZZZ1 and others. Any or all of these factors would have allowed a far more informed decision to simply stop and ask for a tow-in to the [FBO] ramp. Continuing the taxi on taxiway 3 was a matter of quick risk analysis that in the end, without enough information and light in the area turned out to be faulty.

Narrative: 2

After landing at ZZZ we began our taxi to [the FBO]. We landed on runway XY, and we were instructed to taxi [taxiway 1] and cross runway XX then Taxiway 1, Taxiway 2 into parking. We followed that instruction and turned left on Taxiway 2 when we saw the line guy ready to park us. He intended to park us in a way where we would have to do a tight 180 deg turn. We opted to use taxiway 3 for more room in order to safely make that turn to parking because we saw, in the grass between Taxiway 3 and the parking ramp, a short taxiway that we thought we could use. As we approached that short taxiway, we saw that it had a yellow X on it indicating that it was unusable. At this point, we realized that Taxiway 3 was too narrow to turn around, and there were no other place that we could turn around. We decided to continue toward forward on Taxiway 3 in order to continue to Taxiway 4, turn left, then another left on Taxiway 3, to come around for another attempt at parking. We taxied slowly and monitored the wingtip clearances carefully as it was a narrow taxiway. I kept the captain aware of any obstacle proximity to the right wing tip. We arrived at Taxiway 4, turned left and followed Taxiway 4 to Taxiway 1, then again left on Taxiway 2 and into parking at a different spot which was easier to maneuver into. We were made aware of possible contact with another aircraft after we parked. Due to being very dark, and no sign of any contact with another aircraft, we had no indication that anything was wrong.

Synopsis

Part 135 Air Taxi Pilots reported entering a small taxiway that was not large enough for their aircraft and there was a faded X on the pavement. After parking the pilots stated they were informed their wing tip had made contact with another parked aircraft.

Time / Day

Date : 202206

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 7980

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Climb

Route In Use : Direct

Airspace.Class B : ZZZ

Component : 1

Aircraft Component : Air Conditioning and Pressurization Pack

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Pressurization System

Aircraft Reference : X

Problem : Failed

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 : 1912891

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 Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1912892
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Landed in Emergency Condition
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

We were in a CRJ-200 with a deferred right pack and a deferred APU. We had briefed the MEL, specifically the importance of the power application on takeoff. The takeoff and initial climb went smooth. As we were passing through 15000 ft., we got a left pack high temp caution message. I stated it was a time threat, I then told the First Officer (FO) to request us to level at 15000 ft. with ATC. Once that was accomplished I transferred the controls to the FO, told them to ask for lower, specifically 10000 ft. since we were now depressurizing. I then pulled the Quick Reference Handbook (QRH) to reset it. It did not

reset. While this was occurring, ATC had only given us 12000 ft. initially. At that point, with the cabin continuing to climb, we [requested priority landing] and told them we needed 10000 ft. or lower. I then performed the Quick Reference Checklist (QRC) for the altitude warning descended after we donned our O2 masks. Once we were at a safe altitude I then proceeded to the situation and abnormal checklist. At the time this was happening, Departure had turned us back towards the field and then had us at 8000 ft. in a box pattern to the west of the arrivals. I completed the QRH procedure and communicated with the Flight Attendant that we would be returning to the field for a precautionary landing. I then became aware that she was still on O2 despite me making a PA. I then made a second, louder PA, and then checked to verify that she had heard that. I then told the FO to ask ATC if we can start to plan for an approach to XXR. He did that, we then communicated with operations that we were returning to the field. We then briefed the approach. They FO, who had been flying up to this point, said he felt comfortable to continue flying and I would do the radios. As we proceeded in, ATC told us to switch to a unique Tower frequency. I attempted to call this frequency twice and they didn't respond, so I returned back to Approach/Departure. They then had me use the normal Tower frequency. While this was occurring, I noticed the plane had not intercepted the final approach course. I told the FO to join, and then I overrode the automation in order to get back on final as we were about 1/2 dot off centerline. By doing so we also descended about 120 ft. below our assigned altitude of 8000 ft. We immediately returned to centerline and crossed ZZZZZ at the assigned altitude. Being single pack and then having the remaining pack trip off line. The use of a non-usual Tower frequency that I didn't get a response on. The CRJ-700 has an operational note that for flight if you lose your remaining pack, proceed to unpressurized flight packs off. Additionally, more investigation into what caused the right pack to have a high temp that caused the initial deferral.

Narrative: 2

Flying a CRJ-200, with the right pack and APU deferred before Takeoff (TO). The Captain briefed the MELs and ensured I was comfortable with the starting and power settings for takeoff. The startup, taxi, take-off and initial climb went by the numbers and was uneventful. Upon reaching/passing through 15000 ft., the "left pack hi temp" caution indicated. The Captain indicated this was a time threat, leveled off and asked me to request lower from ATC at which time I asked for 10000 ft., and ATC gave me 12000 ft. He then transferred the controls to me, and I started down. The Captain, then began to reset the pack and run the Quick Reference Checklist (QRC) and Quick Reference Handbook (QRH) checklists. But in the descent cabin alt caution indicated, then cabin alt warning message indicated in short succession. At 11000 ft. The Captain indicated we needed to [request priority landing] and request a return to field which I concurred with and executed. It was determined that XXR was the best option for landing and I requested that from ATC. The Captain needed some time to complete the QRC/QRH procedures, so to give time requested that I ask for vectors to give us the time, which I did. The Captain completed his Checklists, talked to the passengers, and called Ops told them we were returning to field. At this point we prepped and briefed for the visual approach for XXR backed up with the ILS frequency, and requested vectors to final. As we were approaching the final course, there was confusion with ATC and Tower about a non-standard frequency they wanted us to use that Tower was not responding on. They then had the Captain use the normal Tower frequency. But while this was going on, I had not configured the panel correctly to intercept the course, and was going through the final course. The Captain noticed this and told me to correct the automation, but then over road the automation to correct the course as by this time we were about 1/2 dot off of course. In so doing we dropped below our assigned altitude at ZZZZZ of 8000 ft. by 120 ft. I corrected course and altitude and flew the remainder of the approach without incident. Only having one

pack, when it tripped off and the ensuing situation it caused, and the non-standard frequency and the distraction it was as we were entering the final phase of the flight. Reconsider Single Pack operations during the summer as an acceptable deferrable condition.

Synopsis

CR-J200 flight crew reported prior to takeoff the Right Pack and APU were on MEL's. During climbout the Left Pack overheated and failed. The pilots asked ATC for assistance, requested a lower altitude and returned to the field.

Time / Day

Date : 202206

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 : A321

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 : 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 : 1911394

Human Factors : Situational Awareness

Human Factors : Distraction

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 Carrier
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 : 1911402
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.Conflict : Ground Conflict, Critical
Detector.Person : Flight Crew
When Detected : Taxi
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Returned To Clearance

Assessments

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

Narrative: 1

On Date, Aircraft X, we taxied out to Runway XR via X taxiway. A similar sounding call sign (Aircraft Y) was taxiing and holding short of Runway X. Tower cleared us to line up and hold on XR and my First Officer acknowledged the clearance. Upon checking final after moving approximately 10 ft. we noticed a heavy on short final. We did not taxi anymore until the heavy landed. Shortly after that, the Tower Controller called both of us (Aircraft X & Aircraft Y) we believe realizing his mistake to clarify the clearance to line up and wait on XR and X. We held short to allow the heavy to land and then Tower once again cleared us on to line up and wait on XR. He clarified with Aircraft Y his clearance to takeoff as well on Runway X. Aircraft Y was cleared for takeoff while we were lined up and holding. There was no incursion into XR on our part but believe the Tower Controller got us mixed up. In our opinion we questioned controller but the most important fact is I always verify correct runway for takeoff and check final approach before taxiing onto hold even with takeoff clearance.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

A321 flight crew reported similar sounding call signs led to the confusion of being cleared for takeoff while another aircraft was lining up for departure on the same runway.

Time / Day

Date : 202206

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Make Model Name : SR20

Crew Size.Number Of Crew : 1

Flight Phase : Final Approach

Route In Use : None

Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Amateur/Home Built/Experimental

Crew Size.Number Of Crew : 1

Flight Phase : Final Approach

Route In Use : None

Airspace.Class D : ZZZ

Person : 1

Location Of Person.Facility : ZZZ.Tower

Reporter Organization : Government

Function.Air Traffic Control : Trainee

Qualification.Air Traffic Control : Developmental

ASRS Report Number.Accession Number : 1910453

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Person : 2

ASRS Report Number.Accession Number : 1909463

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Separated Traffic

Assessments

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

Narrative: 1

I was training on Local Control (LC) moderate traffic session. I was sequencing mixed VFR traffic to RWY XX/YY. Aircraft X was inbound from the east told to make left traffic for RWY XX. Aircraft Y was in right closed pattern for one lap. Once Aircraft X reported mid field left downwind I instructed him he was number 2 to follow Aircraft Y wings up right base. Aircraft X read back number two looking. Aircraft Y was cleared number one and was intercepting approximately a 1 1/2 mile final straight in at this time. I told Aircraft X number two follow Aircraft Y traffic that just joined 1 1/2 mile final. Aircraft X read back left base cleared to land. I did not get a good read back from Aircraft X and the aircraft never reported their traffic or interval in sight. After doing a RWY scan and clearing the RWY I turned back and that's when Aircraft X was in the base low and from my perspective it looked as if Aircraft X turned close behind Aircraft Y not in front. Instructor keyed up and instructed Aircraft X to re join the down wind to which he did not respond and Aircraft Y was now low on a straight in. I keyed up asking Aircraft X if he had Aircraft Y traffic ahead in sight he responded no instructor keyed up again and told Aircraft Y to make a right turn. Aircraft Y keyed up asking whos the aircraft in front of them. At this point I realized Aircraft X had cut off Aircraft Y I issued a traffic alert to Aircraft Y she instructed she was going around and she had been cut off. The aircraft were in unsafe positions and Aircraft Y had sight of the conflict and was well above Aircraft X est 400-500ft. I should have corrected Aircraft X on the bad read back and not have cleared Aircraft X until he had Aircraft Y in sight. I should have sent Aircraft Y around.
Recommendation - Better awareness on read backs. Safety alerts with a resolution action. Better radar or allowing the use of fused to get more accurate and faster information.

Narrative: 2

I was the OJTI in the situation on Local Control. Aircraft X was in the left downwind, midfield to Runway XX, sequenced to follow a Cirrus [Aircraft Y] on right base, to which he replied "number two, looking for the Cirrus". Once the Cirrus at had turned final, the trainee resequenced Aircraft X number two, follow the Cirrus now on a mile and a half final, Runway XX cleared to land. Aircraft X then began his base. I advised Aircraft X to make a right turn and rejoin the downwind, to which he didn't respond. I then told Aircraft Y at to also make a right turn to which she responded she was going around. Aircraft Y appeared to be behind and higher than Aircraft Y at all times. Recommendation - Pilot to remain in contact with tower and not turn base until they have traffic to follow insight, or advise tower they do not, and for tower to call their base turn.

Synopsis

Tower Controller and Developmental reported an aircraft in the traffic pattern turned in front of another aircraft, causing an unsafe situation. Controller issued a traffic alert and the second aircraft performed a go-around.

Time / Day

Date : 202206
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US
Relative Position.Angle.Radial : 132
Relative Position.Distance.Nautical Miles : 5
Altitude.MSL.Single Value : 4500

Environment

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

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Decathlon 8KCAB
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class D : ZZZ

Component

Aircraft Component : Electrical Power
Aircraft Reference : X
Problem : Failed

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Air Traffic Control.Supervisory : 3803
Experience.Flight Crew.Total : 2500
Experience.Flight Crew.Last 90 Days : 22
Experience.Flight Crew.Type : 150
ASRS Report Number.Accession Number : 1907929
Human Factors : Communication Breakdown
Human Factors : Distraction

Human Factors : Human-Machine Interface
Human Factors : Troubleshooting
Human Factors : Workload
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 : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 400
ASRS Report Number.Accession Number : 1907941
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Time Pressure
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

We were transitioning back when our aircraft had full electrical failure. We tried to troubleshoot and work the checklists with no luck. It briefly came back as we were returning and then went out as we were entering the special flight rules transition over ZZZ1 back to ZZZ which is our home base. At that point we had no luck getting it to come back so we finished the transition and headed beyond ZZZ to circle down in a safe area avoiding the marine layer that was coming in over the field. Since we were unable to squawk 7600 due to our transponder being out as well, we proceeded to approach lower level so the tower could identify us. We circled and wagged our wings to signal we had lost communications. They gave us light gun signals and cleared us to land. We arrived safely.

Narrative: 2

Electrical failure after practicing aerobatics over the practice area. We tried to troubleshoot what the issue was but after unsuccessful attempts we decided to fly back to ZZZ. Our route back required us to fly through ZZZ1 special flight rules with no Mode C transponder, radios and lights since we lost electrical power. Upon exiting the special flight rules area we descended through ZZZ's Class Delta, circled adjacent to the Control Tower, rocked our wings to get their attention and waited for instructions. Upon being acknowledge, we received our landing clearance through light gun signals and made our way to our tie down parking ramp.

Synopsis

Pilot reported their aircraft had a complete electrical failure and returned to their departure airport .

Time / Day

Date : 202206

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 6500

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Personal

Make Model Name : Small Transport, Low Wing, 2 Recip Eng

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : IFR

Flight Phase : Initial Climb

Route In Use : Vectors

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Route In Use : Vectors

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) : 5

ASRS Report Number.Accession Number : 1907396

Human Factors : Communication Breakdown

Human Factors : Workload

Human Factors : Training / Qualification

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Facility : ZZZ.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Supervisor / CIC

Function.Air Traffic Control : Enroute

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 19

ASRS Report Number.Accession Number : 1907404

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Training / Qualification
Human Factors : Workload
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Ground Equipment Issue
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

ZZZ TRACON once again lost their frequencies and we assumed their airspace. We have no training working this airspace, it is not safe for us to do it. Close the airspace when ZZZ TRACON loses their frequencies. ZZZ Tower called for a release on Aircraft X. I had no traffic and released them climbing to 11000 ft. The aircraft checked on assigned southwestern heading that was not coordinated with me. Due to working someone else's airspace that I was not trained for and have no business working, I was unfamiliar with the procedures and assumed this was normal and that I would clear them on course once above the MIA. The aircraft requested on course and I told them unable and explained to them that they were below the MIA. After that they informed me if they remained on that heading, they would run into terrain, and that they could maintain their own terrain and obstruction avoidance. I allowed them to proceed on course. ZZZ ARTCC should not be taking the X airspace when the frequencies go down unless in the event of an emergency outage to maintain safety. The procedure that dictates we take it was written back when a majority of the controllers had experience working those airports before the X airspace existed. That is no longer the case. You might as well be telling me to go work traffic in the east or the north because of a few of their controllers got COVID. It's not my airspace, I'm not trained on it, or practiced at working it. ZZZ Tower is clearly not trained to work with us either or this wouldn't have happened. Stop making us take the X airspace for a protracted period of time on a whim just because they lose a few frequencies. It's ZZZ TRACON's airspace, make them find a way to work it. Or ground all GA when it happens and let us 1 in, one out of the bigger airports.

Narrative: 2

For the past few days, at least since Date, the frequencies for X airspace portion of ZZZ TRACON have been in and out. On Date 1, the frequencies completely quit working in the X airspace and ZZZ had to assume this portion [of] ZZZ TRACON's airspace. Today, we had an aircraft depart ZZZ [Airport]. There is a procedure spelled out in a document between ZZZ Tower and ZZZ TRACON that allows DVA's (Diverse Vector Area) to be used. ZZZ Tower tried to apply the same procedures with ZZZ ARTCC, and we cannot do it. We don't have these procedures spelled out in any LOA between ZZZ Tower / ZZZ ARTCC, and

nobody is trained on how to do this. We need to figure out a more stable frequency platform for the X airspace. These frequencies are notorious for not being stable for very long. We need to add an LOA between ZZZ Tower / ZZZ ARTCC that spells out procedures for when ZZZ assumes the X airspace portion of ZZZ TRACON's airspace. We need to add training to the northwest specialty that will help them work the X airspace portion of ZZZ TRACON's airspace when we assume it. There are very few controllers that are able to work that airspace. I don't feel any are proficient at it.

Synopsis

Center Operations Manager reported Center took over airspace from the TRACON due to TRACON frequency outages. Another Center Controller reported an aircraft flew below the minimum terrain requirements due to the controller's lack of training and lack of published procedures to follow when Center was working with unfamiliar TRACON airspace.

Time / Day

Date : 202206

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 7700

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class C : 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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1907168

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Human-Machine Interface

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

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 : 1907184
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were on the approach phase with the controller as we were tracking the RNAV for Runway XR and maintaining 8000 ft. Approach then asked us if we had the runway in sight and confusion began at that point. I stated affirmative and we both thought we heard we were cleared for the visual approach. As it was during the night, the pilot flying (PF) stayed on the RNAV profile, set the bottom altitude and selected APPCH mode. At approximately 7600 ft. the controller stated a low altitude alert and instructed us to climb to 8000 ft. We then got vectored around to re-attempt the approach. As we were deviating for some weather, Center had determined that we needed to set up for Runway Y instead. As we were below 18000 ft. I changed the arrival information on the Multipurpose Control Display Unit (MCDU), checked the waypoints and re-briefed the approach. Once we got handed over to Approach Control, they gave us the option to choose a landing runway so we chose XR as it was favoring the winds. We were told to expect it. So I re-loaded the MCDU to the RNAV X Runway XR. At this point we were closer to the airport than we thought and we felt overworked/saturated by all the quick approach and runway changes. It is possible we misinterpreted ATC's clearance while dealing in the high-workload environment. Make time, slow down and ask for delayed vectors if needed. If there is any

doubt just ask your crew member to verify with ATC the proper instructions/clearance. All while keeping good crew coordination and communication which we had in this flight.

Narrative: 2

On arrival with Approach Control we were tracking XR RNAV Approach and maintaining 8000 ft. Approach asked us if we had the runway, that's when the confusion started; my First Officer (FO) stated yes and we both thought we heard cleared for the visual. As it was night we stayed with the RNAV approach set the bottom altitude and selected APP. Approximately 7700 to 7600 ft. the controller gave us a low altitude alert and told us to climb back to 8000 ft. At that point he vectored us around to shoot the approach a second time without incident. Center changed our runway to Runway Y which didn't favor the crosswind, my First Officer loaded the new approach we checked the waypoints and quickly briefed the plate. As we switched to Approach Control we were asked what runway we preferred XR was our response we were told to expect it. Once again my FO loaded the approach checked the way points and since we had just briefed it we felt comfortable with the approach. We both felt over worked at this point, we were 2 hours behind schedule and the frequency was busy, thunderstorms and turbulence were also affecting our concentration. It is possible that we may have misinterpreted his clearance. Slow down, take a breath, if you have a question in your mind it's probably your spidey sense trying get you to listen. Get a clarification and wait for confirmation, ask for a vector to slow things down and good crew communication is paramount which we had.

Synopsis

Air carrier flight crew reported they erroneously thought they were cleared for a visual approach and descended below the minimum vectoring altitude.

Time / Day

Date : 202206

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Aircraft

Reference : X

Make Model Name : No Aircraft

Person : 1

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) : 15

ASRS Report Number.Accession Number : 1905283

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors : Distraction

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

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 : 1905288

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Person : 3

Location Of Person.Facility : ZZZ.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Approach

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 4

ASRS Report Number.Accession Number : 1905277

Human Factors : Communication Breakdown

Human Factors : Workload

Human Factors : Confusion

Human Factors : Distraction

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

Person : 4

Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Local
Function.Air Traffic Control : Supervisor / CIC
Function.Air Traffic Control : Ground
Qualification.Air Traffic Control : Developmental
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 0
ASRS Report Number.Accession Number : 1905276
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Person : 5

Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Developmental
ASRS Report Number.Accession Number : 1905602
Human Factors : Workload
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Ground Equipment Issue
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Approach/departure control lost all frequencies and were forced in the moment to transition to portable transceivers with highly reduced range while they transitioned into ad hoc procedures/agreements to accommodate the outage for the foreseeable future. A decision was made by management to move to TRACAB procedures, requiring all radar positions to be combined to work on a Tower display with only a portable radio while Local Control (LC) was combined to the Ground Control (GC) position. SWAP was in effect, many aircraft were not being released from center due to weather and were asking for Tower

enroute options. The workload for GC/LC was significantly higher than any times we would normally combine those positions. The radar position was unable to communicate with airplanes further than 30 miles from the airport below 6000 ft., and further than 40 miles at any altitude. Due to weather all across the east coast, we received several diversions and low enroute jet aircraft on escape routes from ZZZ1 and ZZZ2 areas. Multiple diversion arrivals were minimum fuel. There was heavy-extreme precipitation moving across our airport eastbound along the final. The increased workload from weather deviations, dissatisfied pilots stuck at low altitudes clogging up the frequency with requests, and lack of several aircraft on frequency to receive from approach control leading them to frequently transmit over approach/other aircraft, multiple adjacent facilities trying to coordinate while unclear of the extent of our limitations, all led to what I believe was an unsafe situation. Our Tower and approach Controllers did a phenomenal job working through adversity and maintaining a safe operation, but they should not have been put in that position to begin with. This needs to be considered a trigger for ATC Limited and contingency plans to divest most of/all of the airspace need to be enacted. There was far too much ambiguity and uncertainty about what our approach control could handle as far as overflight range and altitudes and overall volume of traffic in these conditions. The safest outcome would have been to divest our airspace above 6000 ft. and beyond 30 miles, to only operate arrivals and departures into/out of ZZZ and ZZZ3, and to immediately issue a NOTAM for limited operations. We were simply not equipped to operate IFR traffic into or out of ZZZ4 or other airports beyond 20-30 miles from our airport. Better contingency plans need to be in place for this outage, and the equipment needs to be reviewed and replaced as necessary to reduce the disappointing frequency of this type of outage.

Narrative: 2

I clocked in for my shift early. As soon as I clocked in all TRACON frequencies, main, standby and pass through, stopped functioning. Controllers on position were only able to use the limited range "PET" radios for extremely limited communication. Land lines were functioning as normal, so I jumped in and helped ZZZ1 sector 1 and sector 2 with landline coordination. This facility has had multiple events in the last month of radio communication failures that seemly get repaired and put back in service, but after a short time the problems come back. The agency needs to take some acknowledgment and ownership of the persistent problem so there can be a permanent solution. It feels as though the agency is blaming the circumstances of why this may be happening, rather than finding an actual solution to this safety issue.

Narrative: 3

Our radios failed and we could only receive from aircraft. We had to transmit via the PET 2000 back up radios. They are only good with a range of about 30 miles with aircraft above 4000 ft. We weren't able to provide services to certain aircraft because of the terrible radio issues. Pilots are complaining about the quality of our transmissions and that is very unsafe. We should be in ATC limited but management doesn't want that to happen. ATC services are very limited and can be a safety issue. There should be a better plan when this happens because this isn't the first time this has happened.

Narrative: 4

Upon showing up to work and completing my pre duty weather brief, I was informed that we had lost all standby and main frequencies in the TRACON. The tower lost standby frequencies but mains were still working. I went to the Tower to work ground control and Controller in Charge (CIC). Shortly thereafter, I also combined up to work Local control because a CPC was coming upstairs to work approach from the tower cab (TRACAB).

Management ensured proper coordination with adjacent facilities and ensured the transition to TRACAB ops went smoothly. The major problem is that approach has to use the backup radio system (PETS) in order to transmit to aircraft. This only works depending on aircraft altitude and other factors- for aircraft 20-30 miles from the airport. This makes it impossible to work most overflights and at times potentially dangerous to work departures or arrivals if they are on our frequency too far away. During this time there was radar depicted and pilot reported precipitation. Restricted area was also active. This lies close to the airport and nearly dead center in our airspace. Repair the communications for our facility. Add in more redundancies. This and other outages happen very frequently. When communications unexpectedly go out for an approach control facility that owns thousands of square miles of airspace including a multiple live fire ranges, it can put pilots in potentially unsafe situations. I am not certain if any communications to adjacent facilities went out today, but frequently that also happens when we lose coms. I think it is obvious how that poses an even greater risk to pilots in the airspace.

Narrative: 5

When I walked into my shift on Date I was briefed that all the Standby TX/RX frequencies were OTS in the TRACON & Tower but that the Main TX/RX frequencies still worked. At about XA00L the Main TX/RX frequencies also went out in the TRACON but the Mains still worked in the Tower. The TRACON immediately switched to the PET2000s handheld backup radios. The main issue at that point was that the PET2000 can only reach out 20-30 miles and the overlying/adjacent facilities are unable to work our airspace. The traffic complexity went up because we had moderate to heavy weather rolling in and ZZZ1 Center was in SWAP (Severe Weather Avoidance Plan). The traffic volume was average for ZZZ but it was very difficult to work without reliable communications with anyone outside of 20 NM from ZZZ, and multiple aircraft were beginning to divert and declare minimum fuel. Our frequency became over congested with calls from aircraft that we could not reach and it created an unsafe situation, as it became difficult to relay anything to aircraft that were already within communication range. Some were minimum fuel. We could not communicate with anyone outside of 20-30 NM with the PET2000. An example of a direct decline in our ability to provide our usual Air Traffic Services. We work all arrivals and departures for ZZZ4. ZZZ4 is more than 20 NM from ZZZ. At the time a lot of the arrivals were IFR and coming from ZZZ5, ZZZ2 and ZZZ1. We couldn't communicate with these arrivals until they were within 15 miles from ZZZ4. ZZZ1 was in SWAP and already had a high workload. The radio issues ZZZ had, created extra coordination calls between all busy facilities for each flight. We had to figure out how to get each aircraft in and out of ZZZ airspace. We have ZZZ, ZZZ3, ZZZ4 and at least 12 other airports/helipads, most are uncontrolled, in our airspace as well as dozens of approach plates that we know. Pilots fly in and out of all of these on a daily basis and none of the adjacent facilities and overlying facilities are able to work our airspace. Without reliable radios, ZZZ cannot efficiently and safely work aircraft in or out of ZZZ airspace. At one point we had an influx of arrivals coming from areas we couldn't reach with our communications. At least 2 aircraft had declared minimum fuel and at least 1 other aircraft was reaching the point of having to divert. The aircraft that we could not reach and that were on our frequency began to congest our frequency with multiple calls because we couldn't reach them. This made it very difficult to reach the aircraft already in range, some with minimum fuel, and it made it more challenging to properly set them up for an instrument approach. ZZZ1 was in SWAP and we had moderate to heavy weather in our airspace. We had aircraft on our frequency but out of range that kept requesting to deviate for weather and it took some time to get a hold of them to approve the deviation. More than usual vectors had to be issued to ZZZ arrivals. Most were still high when they were finally within communication range and they needed to be descended and vectored in clean air to be able to bring them in. The PET2000 made it difficult to efficiently work our traffic and created an unsafe

situation. Equipment failures have been happening on a consistent basis. Having reliable radios would completely cut out all of the aforesaid problems.

Synopsis

Tower and TRACON Controllers reported "...an unsafe situation..." when they were forced to use backup communication equipment which does not cover all of their airspace due to a loss of main transmitters and receivers. The reporters stated this is a recurring problem at this facility.

Time / Day

Date : 202205

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DFW.Airport

State Reference : TX

Altitude.AGL.Single Value : 0

Aircraft : 1

Reference : X

ATC / Advisory.Tower : DFW

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

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : DFW

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class B : DFW

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 : 1903643

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 : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1903619
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : Ground Conflict, Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Runway
Detector.Person : Air Traffic Control
When Detected : Taxi
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

After landing at DFW on Runway 35R, we were cleared to taxi via EL, hold short of [Runway] 35C. It's a fairly long distance to get to 35C after landing 35R. As we were approaching 35C several Tower calls to landing traffic were to "hold short of EK, expect crossing traffic." This primed me to believe that we would be the crossing traffic. We were still rolling toward 35C holding point when an aircraft was cleared to cross 35C, I believe at Zulu. Then I believe [another air carrier aircraft] was cleared to cross and contact XXX.XX and I mistook that clearance to be for us. We had never come to a complete stop so when the copilot read back, Tower said "negative" and I immediately braked but with the momentum we had, we crossed the hold short line. (The nose was well short of the runway edge.) [An air carrier] was issued a go-around. As we had approached 35C, I saw the arriving aircraft. I mistakenly thought it was a mainline (large) aircraft instead of a smaller regional aircraft. Because it looked so small I believed it was pretty far out from landing. [The landing aircraft] may have been between 200-100 ft. AGL when they executed their go-around. With the clearance of another aircraft to cross just moments earlier, my bias that the landing aircraft was much further out seemed confirmed. Hearing the Tower give land, hold short clearances, I was primed to be able to cross with aircraft on short final.

Narrative: 2

We landed on Runway 35R, exited the runway on Q4 and turned left on EL to hold short of 35C. After we turned onto EL I went heads down, called ramp control to get an entry point, and started the after landing flow. I heard Tower give a clearance to someone with

a similar sounding call sign but I didn't pay much attention to it because I didn't think it was ours and I was doing my flow. Immediately after that the Captain exclaimed "That was us!" or something to that effect with vigor and authority. I was startled by this, and read back to Tower "clear to cross Runway 35C." Tower replied with something to the effect of "Negative, hold short of 35C," however I don't remember the exact wording. The Captain slammed on the brakes but it was too late, our nose was already over the line. I told Tower "We're already over the line," and then I heard someone was going around. Tower then cleared us to cross the runway on EL and then cross 35L. After clearing 35L we were not given any more instructions by Tower so I called ground and obtained a clearance to the gate. In my opinion the Captain had get-home-itis. This was his last leg, he was taxiing very fast, and we turned off 35R on the high speed at 60 kts. which moved me in my seat. He slowed down slightly but we were still taxiing way faster than normal, every turn shifted my body in the seat due to centrifugal force. We were still going too fast in my opinion and I was going to say something but I didn't have the time to. There was little time in between the radio calls and the other duties that needed to be done I couldn't get a word in. I was also very tired, I only got 6 hours of sleep because of the obscenely early van and departure time. Taxi at normal speeds, don't be in such a rush to get home.

Synopsis

Air carrier flight crew reported a runway incursion at DFW when they misunderstood a taxi clearance. Aircraft on short final executed a go-around.

Time / Day

Date : 202205

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZZ.Airport

State Reference : FO

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : 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 Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1901987

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Troubleshooting

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 : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1902013
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Time Pressure
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Ground Event / Encounter : Other / Unknown
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

We arrived at XA:00 at ZZZZ. Rain was in a tempo line in the forecast. The ATIS was calling VFR with light and variable winds. We ran the landing data for the runway condition in case the rain started at the field. When we started the descent, we could see rain at the field on the radar. We were handed off to ZZZZ Approach, and no one would answer. It took a few minutes for Tower to get a hold of Approach to come up on the frequency. The First Officer (FO) was the pilot flying (PF), and did a nice job to get back on profile after being delayed in the descent due to the lack of communication with approach. I asked Approach multiple times what the weather at the field was. It took a while for him to get back to us, but he just said rain. Tower said the same. I believe Tower added winds at 130 at 8 KIAS. We saw the field above minimums and the FO continued and landed. We ended up getting pushed to the left side of the runway. I'm not sure if we were pushed by a gust of wind or if we had any hydroplaning. We weren't sure how close we were to the edge. It was hard to tell with the rain at night which made it impossible to see the centerline. The speed brakes deployed normally and the FO deployed the reversers The FO corrected back to centerline. I came on the brakes and took the aircraft shortly after. I felt us hit a patch of water momentarily and felt the auto brakes cycle. We were at taxi speed well before the taxiway and taxied to the ramp. We conducted a post flight inspection and found no indication of damage to the aircraft. We had the same aircraft for the return leg to ZZZ the next morning. The FO conducted the preflight in the daylight and again found no damage. We could have possibly entered a hold at the IAF, but I don't think we would have received a better weather report from Tower or the Approach Controller. They only told us there was rain at the field without any intensity description or updated ceiling/visibility.

Narrative: 2

First Officer pilot flying (PF). Night flight on descent and approach to ZZZZ, we were aware of thunderstorms near the airport. We had the most current weather reports and calculated landing data for a wet runway even though the field was reported to be in good conditions without rain. Struggles began with Approach Control not responding to our calls. We called the Tower, and they asked us to try Approach frequency again. Back and forth we got the report from the Tower that there was rain at the field. Selecting

autobrakes 3, and quickly emphasizing a landing on a wet, ungrooved runway at night, we were ready for the approach and landing. The airport runway lights were in view so we continued to landing. Fully configured and on profile, we touched down in the touchdown zone. Speedbrakes and reversers deployed we started our roll out but I noticed we were drifting to the left of the runway very quickly. Very quickly we corrected back to centerline. The Captain took control and we rolled to a taxi speed and taxied to the gate. We don't know how close to runway edge we had come because of limited visibility, night and rain. We conducted a postflight inspection which revealed no evidence of damage to the aircraft. We had the same aircraft the next morning. With the sun out, I did the preflight inspection of the entire plane focusing on the left side, again to find no evidence of damage, or any reports from maintenance. We departed to ZZZ without incident. Afterwards, I believe that with a slick, slippery runway, we may have either hydroplaned, or simply got blown to the left from a right crosswind. With limited visibility, it was very difficult to recognize. Again, approach, landing and touchdown were nothing but normal. This is a very challenging approach especially during the wet season when it's at night, and all you have is runway edge lighting, no approach light system, and no centerline lighting. It might be prudent to change the arrival time to daytime during the wet season but that's beyond my paygrade!

Synopsis

Air carrier flight crew reported after the landing roll out started, on a wet runway with a crosswind, the aircraft began drifting off the center line. The pilot flying corrected the deviation and returned to the center line.

Time / Day

Date : 202205

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 9000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : A321

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Vectors

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 : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1900688

Human Factors : Confusion

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1899993
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Human-Machine Interface
Human Factors : Confusion
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 - Speed : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

I was the FO (First Officer)/PM (Pilot Monitoring) for this leg. This was our first leg of the sequence. I had never flown with this CA (Captain) prior to this sequence, but was comfortable and we worked well together. Conditions were Day VMC with Moderate turbulence and tailwinds on final until about 7-8 miles on final. This was my first time ever into ZZZ since my 727/FE IOE. I had discussed this with the CA enroute, but after studying the Jeppesen pages, the arrival and approach seemed fairly straightforward, with the big remaining threat for me being the terrain of the Mountains and surrounding both sides of the arrival corridor. We had initially planned and briefed the ILS XX as the CA had previously flown that approach the last time he had been to ZZZ. During descent on the arrival, Center told us to expect the ILS XYR and told us to expect moderate turbulence for most of the way down into the terminal area. The CA had the FAs (Flight Attendants) complete their service and prepare for landing and turbulence procedures. We began to encounter moderate turbulence descending through FL220 as we were completing loading and briefing the new approach to XYR and running checklists. We both seemed to feel

comfortable with the new runway and briefing. As we descended on the arrival, Approach Control notified us that multiple previous aircraft had experienced 5-10 kt. gains and losses on final approach. Once crossing the Mountains and overhead ZZZ1 Airport, the turbulence somewhat subsided and we now had a 15-20+ kt. tailwind pushing toward ZZZ. Around ZZZZZ fix, we called the airport "in sight" and were cleared to "Cross ZZZZZ1 at or above 9000 ft., cleared the Visual Approach to XYR." The PF (Pilot Flying) was attempting to slow the aircraft to configure, but the tailwind and high Pressure Altitude were not helping us out. We intercepted the GS and began descending again, making it difficult to slow. We checked in with Tower and they cleared us to land, and again mentioned the 5-10 kt. gain and loss from previous aircraft. Inside ZZZZZ1, the PF stated he was going to disconnect the autopilot and descend below the glide path and level off to slow and configure. At this point, I began turning off the automation (Flight Directors, and HDG/VS to ZZZ2), turning my attention back and forth to the airspeed indicator watching for 250 kts so we could lower the gear. All the while remembering my concern of unfamiliarity with this airport and terrain. As PF began leveling off at around 6100 ft. and began to slow, Tower stated something to the effect of "... would you like an S-turn to the East (to help us slow and configure)?" PF stated yes and I told Tower, who cleared us to S-turn to the East. As PF started the turn (which was toward the West), he stated to me something to the effect of "we're probably just going to go around out of this one." I had already begun thinking of the possibility of a go around, as I didn't think we were going to be able to meet stable approach criteria, so when PF said that, I immediately began thinking of how we would execute that, on top of getting turned back toward final, letting Tower know, setting MA altitude, turning automation back on, etc. (Of course, all of this was happening in my mind very quickly. Regarding the turn, and although I read back the clearance to turn to the east, I can't remember thinking we were turning the wrong way... as I specifically remember thinking that we were turning away from the Mountains terrain, which was good. I know now that I was entirely task saturated with simply Aviating) At what seemed like the same instant the PF was turning back toward the approach course, Tower told us to turn back immediately. I can't remember if they used a cardinal direction or simply "right," but we were told to turn. At this point, PF called for the Go Around and we executed it, were given a heading, altitude, and airspeed from Tower to fly and sent back to Approach Control where we were cleared the visual to [Runway] XYL which we backed up with the ILS. Approach and landing were uneventful. There were many causal factors for this event. As I have been formulating this narrative, I can see the Threat and Error Management model and the lines going through the "Swiss cheese." The first factor was me. Human error. My lack of knowledge of the airport and environmental conditions (terrain, weather patterns, etc.) played a part. Even though we discussed as a crew, I didn't know what I didn't know. so didn't ask the proper questions of the PF who had been there before. My duties of PM. Monitoring. looking back on the situation, I kept letting myself get "task loaded" with one little "non standard" input after another, trying to take care of each item.. all the while getting quickly closer and closer to the field and unable to configure. While not as big as a factor, Automation Management played some part, as we had initially coupled the approach to Glide slope and then turned it off and I had to help set everything up for a hand flown approach. Communication - though Tower cleared and I read back "S-turn to East," there was obviously some miscommunication between sender and receiver.; Though not a large factor, the runway change from XX to XYR took away from our focus somewhat.; Task Saturation - I know this was my biggest causal factor. Once the Go Around was completed, I remember feeling a huge "weight" being lifted, or like I "came to" from a fog. I realized then that I had allowed myself to become overly task saturated and was just working in survival mode trying to give the PF what he needed/asked for, while monitoring the aircraft and keeping it from terrain (vertical and lateral). The Airport Conditions -Weather, or the strong tailwind on final, made it nearly impossible to fly the approach in the "standard" way we

normally fly. I don't feel like the PF or I understood by what the Controllers had said that the tailwind would be that bad or affect us in that way.; Loss of Situation Awareness-this is the main reason I am typing this right now. Due to all of the other factors mentioned, I lost situational awareness and, although I read back "S-turn to East," I was so saturated I didn't even think to monitor and verify which direction east was. I just knew I was turning away from some big terrain and it felt right. In a "perfect world," the ATIS for ZZZ would have had a better description of what was occurring on approach... as we found out later, that many aircraft had been going around that day. That is much different than letting us know there's a 5-10 kt. gain or loss. So, I would say #1.. be more descriptive and "plain English" explanation on ATIS. #2-I would like to have seen a "19-" Overview and Overview Weather page for ZZZ. Again, I had never been there. The PF had, but had never had any issues, so had nothing to say about how ZZZ was anything special.; An Overview page(s) would help visualize the approach corridors and weather patterns specific/unusual to ZZZ. #3-This scenario would be a good simulator scenario if anyone could find time to put it into a syllabus. There were so many factors, some insidious, that there would be a lot of good learning points.; #4-Possibly change the way Controllers provide clearance instructions- especially during high-stress events. Had the Tower Controller told us to "S-Turn to the RIGHT," I don't think we would have turned the wrong way. (I am not denying my culpability, merely saying that would have been better for PF/PM in this situation).

Narrative: 2

I was the Pilot Flying and was cleared for the visual XYR ZZZ maintaining 9000 MSL till ZZZZZ1. Level at 9000 MSL and several miles to ZZZZZ1 attempted to slow aircraft from 250 IAS to begin landing configuration. There was a 20+ kt. tailwind on final with light to moderate turbulence. Aircraft did not slow to allow configuration and descent was initiated at ZZZZZ1 on glide path with autopilot on. I deselected autopilot and descended to around 6,000 ft. to get aircraft to slow to configure. Around [the] tower issued maneuvering airspace to the east to help in slowing the aircraft. I turned the aircraft to the west believing that was the east direction. Several seconds later Tower issued traffic alert and to maneuver right which I complied with due to traffic landing on XYL. Never received a TA/RA from my aircraft. I decided to go around unable to meet stable approach criteria. ATC vectored me around for an uneventful visual landing on XYL. The following are two causal factors that contributed to the event: Just like we do with weather avoidance at cruise to help a tense tasked saturated event Tower should issue clear to maneuver "right or left" to help reduce errors. I initially believed I was turning East in a task saturated event hand flying the aircraft. I had departed ZZZ1 to the south and not sure if that had a bearing on my situation awareness on direction. I was narrowly focused on getting the aircraft slowed to begin configuration. Approach had warned of 5 to 10 kt. airspeed fluctuations on final from previous aircraft but that did not match actual conditions. After talking to Tower on the phone he had mentioned multiple aircraft had executed go arounds due to constantly changing wind conditions on approach. This information should be relayed to give a better picture of conditions especially on what appeared to be clear skies visual approach landings. The initial perception of conditions did not match reality added to being backed into a corner and unable to configure the aircraft in time for landing. As mentioned above, having Tower issue left/right directions could have stopped me from turning in the wrong direction. Also having been notified on what other pilots experienced or had to do would have built a bigger picture on actual conditions and the reality of the weather and flight conditions to be better prepared.

Synopsis

A321 flight crew reported communications issues led to a go around and descent below minimum vectoring altitude during approach phase of flight.

Time / Day

Date : 202205

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.TRACON : 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

Nav In Use : FMS Or FMC

Nav In Use.Localizer/Glideslope/ILS : ILS

Flight Phase : Initial Approach

Airspace.Class B : ZZZ

Component

Aircraft Component : Flight Director

Aircraft Reference : X

Problem : Malfunctioning

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

ASRS Report Number.Accession Number : 1900171

Human Factors : Communication Breakdown

Human Factors : Distraction

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Workload

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 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 : 1900096
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Time Pressure
Human Factors : Human-Machine Interface
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.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Event / Encounter : Aircraft
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : CFIT / CFIT
Anomaly.No Specific Anomaly Occurred : Unwanted Situation
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 : Became Reoriented
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Ambiguous

Narrative: 1

We were originally cleared for the ILS XYZ approach. After we intercepted the ILS we spotted the field we were cleared for the visual approach with a crossing restriction. I had thought he referenced a fix we were past so everything seemed fine with where we were at. It wasn't until ATC called and told us to cross what I had thought was a different fix at 4000. We were already at 3500. He then told us to maintain present altitude until ZZZZZ. At that time we were on the glide slope. We were a little confused about what had just happened. After crossing ZZZZZ we attempted to intercept the glide slope again. At that time we didn't need to be too aggressive to do it so it didn't really concern us. It wasn't until we got a little further that we realized that we were quite low while on the glide slope. At this time Tower cleared us to land and informed us they had a low altitude alert which we responded that we were aware of and were able to correct fairly easily. We reported the glide slope error to the tower. At the same time another aircraft reported the same. Tower replied that they think it might have been due to an aircraft on the ground. Aircraft in the path of the glide slope affected the glide slope accuracy. Was not apparent until short final. No alert from Approach or Tower regarding the possible affect of this aircraft. Personally I will be more vigilant when flying a visual approach while using the ILS for guidance.

Narrative: 2

Cleared for the ILS XYZ approach and shortly after intercept we had the field insight, and were cleared visual. We were given a crossing restriction for a fix that we believed we crossed at 4000 only to realize we were coming up on it at 3500. ATC then told us to maintain present altitude until ZZZZZ. It intercepted again and we thought we had corrected but we saw that we had become lower than we should on the glide slope. At this point we disconnected the automation and corrected back to where we should be. ATC cleared us to land and we told them we were correcting our altitude. Once on the ground we reported the glide slope inaccuracy and heard reports of the same from aircraft behind us. There was an aircraft on the ground believed to be the cause of the failure that we recognized on final. [I would suggest to] maintain better vigilance of the aircraft automation which the aircraft is following when on a visual approach.

Synopsis

Air carrier flight crew reported an altitude deviation while on final approach after another aircraft, on the ground near the runway, was causing interference with the glide slope signal for the runway.

Time / Day

Date : 202205

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : SBD.Airport

State Reference : CA

Altitude.MSL.Single Value : 3300

Aircraft

Reference : X

ATC / Advisory.TRACON : SCT

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 : Initial Approach

Airspace.Class D : SBD

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 : 1898853

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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1898854

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Human Factors : Distraction

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

Events

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

Assessments

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

Narrative: 1

Flying as Aircraft X we were on the ZIGGY 7 arrival into SBD, SCT TRACON asked us with the winds they were landing SBD Runway 24 the winds were 280/11 we informed them that we would need Runway 6. SCT said we were number 2 due to an aircraft that was conducting the ILS 6 circle to land Runway 24 that we need to slow up and took us off the arrival and started vectoring us and assigning altitudes and started slowing us. SCT vectored us to a left downwind and descend to 4000 ft. SCT said turn left heading 140 descend to 3000 ft. PM (Pilot Monitoring) read back the instruction to SCT and pointed to 3000 ft. that I placed in altitude on the MCP. That heading would have put us inside SUDOC and I asked PM to extend me off of PETIS while descending SCT gave us a heading and cleared us for the approach. I selected approach and monitored our descent and our heading to join the localizer. SCT came back to us with an altitude alert to climb to 3400 ft. I turned off the autopilot and climbed back 3400 ft. SCT came back to us and said minimum vectoring in that area was 3400 ft. for terrain, we descended below 3400 ft. but I believe we were no lower than 3300 ft. The Controller said he gave us 3600 ft. but we read back 3000 ft. with no correction by SCT. Once we climbed to 3400, SCT recleared us for the approach and to maintain 3400 ft. till established on the glideslope. The flight continued with us flying the ILS 6 to a full stop landing with no further issues. The cause started back on the arrival when we were taken off ZIGGY 7 because you had a plan that you briefed now completely changed due to being vectored for the arrival and approach and situational awareness is not what you think you were going to get from being vectored. On the Ziggy 7 arrival I was expecting to fly south of the airport after overflying PETIS and then direct PDZ and vectors after PDZ to the ILS 6. On the segment from PETIS to PDZ I was expecting an altitude greater than 4700 due to minimum altitude for that segment. When SCT took us north of the airport for the left downwind for Runway 6 and descended us to 4000 ft. I didn't think to question the Controller about the altitude descent to 3000 ft. thinking it was coming in from a different direction and that 3000 ft. was the correct altitude to descend too. Also thinking I heard 3000 ft. and the PM read back of the Instruction to SCT without being corrected and PM pointing to the altitude I believed we were all on the same page. Next time I will be more alert of my situational awareness when things that you plan go totally different than planned and be more aware of altitude and heading being assigned by the Controller so that this problem would never happen again.

Narrative: 2

The aircraft was turning base to final Runway 6 in SBD. SOCAL gave us a descend to 3600. The aircraft descended through 3600. As Pilot Monitoring I was looking outside for the Runway as it was VFR conditions. Then SOCAL told us to begin a climb to 3400 as there was a low altitude alert and that 3400 was the MVA in that area. The Pilot Flying turned off the Autopilot and began a climb by 3300 ft. and we preceded to immediately return to 3400 ft. During this there was a brief discussion on what altitude SOCAL had assigned. The altitude alerter had been set for 3000 and not 3600. The approach was continued and the aircraft landed without incident. The altitude alerter was set incorrectly on 3000 instead of 3600 and this caused the aircraft to descend below the 3600 ft. SBD with the high terrain and only one end of the Runway we are allowed to land on in our operations can prove difficult. That particular day we were close to our 10 kt. tailwind landing limitation. We were also taken off our original arrival and then given several vectors that compounded the complexity.

Synopsis

Flight Crew reported an incorrect altitude read back and a CRM failure, resulted in a low altitude alert.

Time / Day

Date : 202205

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZFW.ARTCC

State Reference : TX

Aircraft

Reference : X

ATC / Advisory.Center : ZFW

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 : Cruise

Airspace.Class A : ZFW

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 : 1896907

Human Factors : Situational Awareness

Human Factors : Distraction

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 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 : 1896910

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

Assessments

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

Narrative: 1

We were cleared to FAWNT on the VKTRY 2 arrival into Dallas which was misheard as PHAUP on the VKTRY 2. FAWNT was also not on our flight plan due to being cleared directly to VKTRY on our release. "Direct PHAUP" was read back to ATC and programmed into the FMS. After a few minutes ATC alerted us to the fact that we were not where we were supposed to be and gave us a 230 heading and direct FAWNT. We understood the miscommunication and flew the assigned heading and reprogrammed the FMS to fly to FAWNT. The rest of the flight was a non event. The cause was miscommunication and not realizing that there were similar sounding fixes on the same approach. In the future, verify the fix and ask for phonetic spelling for similar sounding fixes on the STAR. Question uncommon clearances.

Narrative: 2

We were cleared as filed. Route was ZZZ VKTRY VKTRY2. We were cleared direct to the VKTRY intersection. Were told to turn approximately 15 deg to the left for traffic. Air Traffic Control then cleared us to FAWNT for the VKTRY arrival. We read back direct PHAUP. ATC later told us to make an immediate left turn towards FAWNT. Since the FAWNT intersection was never on our original clearance and the intersections both sounded similar we thought we were being cleared direct to PHAUP. This was further confused by the fact that we were told to turn left when we input direct to PHAUP. It was close to our 12 o'clock position. It took a few minutes to program the arrival since we had already bypassed the FAWNT Intersection and the FMS did not want to accept the arrival. The two intersections have very similar sounding names.

Synopsis

Air carrier flight crew reported a track heading deviation while on the VKTRY 2 arrival to DAL airport. Similar sounding fix names FAWNT and PHAUP were cited as contributing to the event.

Time / Day

Date : 202204

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Training

Flight Phase : Landing

Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Airspace.Class D : ZZZ

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1896192

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 : Y

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Private
ASRS Report Number.Accession Number : 1895900
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Air Traffic Control
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.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were conducting an IFR flight from ZZZ1 to ZZZ. This was part of a cross-country Part 141 training flight ZZZ - ZZZ2 - ZZZ1 - ZZZ while working on my Flight Instructor rating. I was in the right seat, with my Flight Instructor in the left seat. I was using a view-limiting device, while my Flight Instructor was able to look outside. We were conducting the VOR-XXR approach into ZZZ for a full-stop landing on Runway-XXR. Very close to the VDP and around 100 ft. prior to minimums, I observed an ADS-B aircraft target on the MFD (Multi-function Flight Display) that was turning right base inside of us cutting us off. At the same time, we heard Aircraft Y make a radio call about them turning base. My Flight Instructor and I both made a comment of "what the [expletive] is that aircraft doing." The aircraft had previously been instructed to follow us and was sequenced to be number two by the Tower. The Tower asked the aircraft for clarification and if they had us in sight. The Tower also informed the aircraft they appeared to be cutting us off. I was still under the hood, and transferred flight controls to my Flight Instructor who began a climb and slight right turn to avoid the aircraft. I immediately removed my view-limiting device and looked outside to see the aircraft directly below and to our right. The aircraft was only a couple hundred ft. below us, very much too close for comfort. We climbed above up to 2100 ft. before cancelling IFR, descending back into the VFR traffic pattern for Runway-XXR and completing a lap of right traffic to follow Aircraft Z before landing. We taxied back to the ramp with no further incident. I believe the pilot of Aircraft Y became confused about who she was following. Instead of clarifying and ensuring, or admitting she did not have the aircraft in sight, she instead simply read back the sequence, and then proceeded to turn base a few moments later. I believe fatigue, stress, and a hesitancy to seem like she did not know what she was doing all could have played into the hesitancy to ask before turning. The pilot of Aircraft Y should have remained in the downwind and asked the Tower, not turn base and then announce that. The radio call the pilot made about turning base seemed to indicate she was very confused, and seemed to be an attempt to check she was doing the correct action. Suggestion - Ensure that in training, students are taught

what to do in situations where they are given a sequence and they become confused, or do not know who they are supposed to follow. Emphasis should be placed on remaining in the downwind and asking the Tower, not just turning and advising the Tower they are turning base.

Narrative: 2

I was on a night local solo, coming back to ZZZ. I was on the downwind for Runway XXR. Tower told me, "Follow traffic on 3 mile final, number 2, cleared to land." I saw the aircraft on short final and I assumed that was the traffic I'm following. Before I turned base, I saw the IFR traffic on the MFD (Multi-function Flight Display), but couldn't tell if they were going to Runway XXR or XXL. When I started turning base I called Tower, "Aircraft Y is turning base, but Tower didn't reply [to] me at the moment." I called them again to verify if I can turn base. That's when they said, "Do you have the traffic in sight?", and I saw the IFR traffic at my 11 o'clock and climbing. Then, Tower told the IFR traffic to go around, and cleared me to land Runway XXR. After I landed, ZZZ Ground gave me a number to call. [The cause was] a communication misunderstanding. I thought the aircraft on short final was the traffic I'm supposed to follow. I assumed the IFR traffic that appeared far away was going to land on Runway XXL. I will ask to clarify the clearance, and if I'm confused about the clearance I should always ask before action. Also, be more situationally aware by listening to the other aircraft's radio calls, and have the big picture in mind.

Synopsis

PA28 Student Pilot reported that the other PA28 pilot was confused in spotting traffic and made a mistake in the sequence, resulting in a NMAC, and evasive action was executed by the former during the final approach.

Time / Day

Date : 202204

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Relative Position.Angle.Radial : 180

Relative Position.Distance.Nautical Miles : 15

Altitude.MSL.Single Value : 37000

Environment

Flight Conditions : Mixed

Weather Elements / Visibility.Visibility : 5

Light : Night

Ceiling.Single Value : 370

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Cruise

Airspace.Class A : 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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 90

Experience.Flight Crew.Type : 9000

ASRS Report Number.Accession Number : 1894779

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Workload

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 : 95
Experience.Flight Crew.Type : 1150
ASRS Report Number.Accession Number : 1894775
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Time Pressure
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.Ground Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Automation Overrode Flight Crew

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

Shortly after leveling off at FL 350, we encountered severe turbulence that resulted in temporary loss of aircraft control. The autopilot automatically disconnected and the aircraft was hand flown to recovery. We were unable to maintain altitude and an approximate 1000' descent without clearance was needed to recover back to normal airspeed. The event lasted approximately one minute. We had been using the weather radar throughout departure and climbout and there were zero radar returns in the area at the time of the event. No injuries or damage was noted and we continued on to our destination ZZZ1.

Narrative: 2

Severe weather in area, reroute departure for weather. Leveling off at FL 350, still IMC, broke out just in time to see a large cell (that was NOT painting on weather radar). Frequency was saturated, unable to get a turn in time to miss the top of the cell. Hit the turbulence for maybe 10 seconds, autopilot kicked off lost 1000 feet before recovery. Less saturated frequency would have been a huge help.

Synopsis

Air Carrier Pilot Crew reported an encounter with severe turbulence in cruise flight. The autopilot disengaged and the aircraft descended 1000 feet. Control was regained and there was no report of injuries.

Time / Day

Date : 202204

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 2500

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Flight Phase : Climb

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : ZZZ

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Airspace.Class E : ZZZ

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

ASRS Report Number.Accession Number : 1894504

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

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 : 1894505

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 : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Automation : Aircraft RA
Detector.Person : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

I was flying the leg. Climbing out of ZZZ. Took the handoff to Departure. Checked on with them and we were turning 210 heading the Controller stated there was traffic 500 ft. above us and to stop the climb ASAP. My Captain took the controls and clicked off the auto pilot and descended 200 ft. to level off at 2500 ft. As we leveled off the Controller realized we were flying into terrain and gave us a heading and a climb. We got a "terrain, terrain" warning followed by an immediate "monitor vertical speed" that would not allow me to climb more than about 1000 fpm. Once we got turned around to the East and clear of the conflict and the terrain it was a normal flight to ZZZ1. I believe ATC was not entirely aware of the other traffic. When they [warned] us of the traffic they seemed startled on the radios. Lack of planning. Better watch of traffic and planning on ATCs side.

Narrative: 2

My FO (First Officer) was flying. Climbing out of ZZZ. Took the handoff to Departure. Checked on with Departure as we were turning 210 heading the Controller stated there was traffic 500 ft. above us and to stop the climb ASAP. I took the controls from my FO (First Officer), clicked off the auto pilot and descended 200 ft. to level off at 2500 ft. As we leveled off the Controller realized we were flying into terrain and gave us a heading 360 and a climb. We got a "terrain, terrain" warning followed by an immediate "monitor vertical speed" that would not allow me to climb more than about 1000 fpm. We started a climb and the turn to 360 and cleared the terrain ASAP. The terrain takes precedence over the RA which we did. Once we got turned around to the East and clear of the conflict and the terrain it was a normal flight to ZZZ1. Bad Controller communication. The Controller was shocked and flustered while this was happening, he stated he did not see this coming and was surprised. He did apologize and said sorry for that. [They shouldn't release] a jet aircraft with a light piston right over the departure path.

Synopsis

Flight crew reported NMAC and CFTT warnings during departure climb.

Time / Day

Date : 202204

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZHU.ARTCC

State Reference : TX

Aircraft

Reference : X

ATC / Advisory.Center : ZHU

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase : Descent

Airspace.Class G : JAS

Person : 1

Location Of Person.Facility : ZHU.ARTCC

Reporter Organization : Government

Qualification.Air Traffic Control : Developmental

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 3

Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 0

ASRS Report Number.Accession Number : 1894165

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors : Confusion

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Facility : ZHU.ARTCC

Reporter Organization : Government

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 12

Experience.Air Traffic Control.Time Certified In Pos 1 (mon) : 0

ASRS Report Number.Accession Number : 1894169

Human Factors : Workload

Human Factors : Troubleshooting

Human Factors : Time Pressure

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types

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

Detector.Person : Air Traffic Control

Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

VFR aircraft landing JAS- When we looked up NOTAMs, 2 listed showing Runway 18/36 excluding emergency aircraft. No other NOTAM said anything about runways being closed. The word CLSD was not included in either of the NOTAMs. This seemed like information was missing and caused confusion and ambiguity on whether the runways were open or not. ZZZ Supervisor called the airport and confirmed they were doing minor work on the runways. They stated there was the possibility of vehicles on the runway, but crews were monitoring UNICOM. This could be a dangerous situation. We advised the pilot of the information we had - and he stated he did not see any NOTAMs pertaining to closed runways on his end. Whoever issues and posts these NOTAMs needs to ensure they are properly listed with all pertinent information needed. This ambiguity could have created a dangerous situation for all involved.

Narrative: 2

VFR aircraft landing JAS was handed off from I90. We were looking at the NOTAMs, 2 of which listed the Runway 18/36 was "EXC EMG AIRCRAFT". The other NOTAMs were only Tower light outages. This seemed incomplete. There seemed to be a NOTAM missing regarding the closure of Runway 18/36, and a lot of ambiguity as to if the runway was indeed closed. The Supervisor called the airport, and they said that they were doing minor work and there were vehicles on [the] runway but that they were monitoring the UNICOM. This seems like it could be a very dangerous situation. I understand this is a small airport, but it is imperative that NOTAMs are properly listed. The ambiguity here could have created a dangerous situation for all involved. The airport manager/county judge who answered the phone needs to properly understand how NOTAMs should be filed.

Synopsis

ZHU Center Controllers reported while receiving incoming traffic for their sector landing at JAS non-towered airfield, the NOTAMs for that airport were incomplete. There was reported runway work in progress but the NOTAMs were not clear if Runway 18/36 was open or closed. After contacting airport management, ATC still could not confirm the status of the runway.

Time / Day

Date : 202204

Local Time Of Day : 1201-1800

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 : 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 : Takeoff / Launch

Airspace.Class B : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Military

Make Model Name : S-70/UH-60 Blackhawk/Seahawk/Pavehawk/Knighthawk

Crew Size.Number Of Crew : 2

Flight Phase : Final Approach

Airspace.Class B : ZZZ

Aircraft : 3

Reference : Z

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Military

Make Model Name : S-70/UH-60 Blackhawk/Seahawk/Pavehawk/Knighthawk

Crew Size.Number Of Crew : 2

Flight Phase : Final Approach

Airspace.Class B : 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 : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 104
Experience.Flight Crew.Type : 2602
ASRS Report Number.Accession Number : 1893869
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 : First Officer
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 5664
Experience.Flight Crew.Last 90 Days : 146
Experience.Flight Crew.Type : 2490
ASRS Report Number.Accession Number : 1893885
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
Miss Distance.Vertical : 100
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Departing [Runway] XXL ZZZ XA: 35 on Date, a pair of military helicopters were passing left to right over Runway YY, below 100 ft. We switched to tower frequency and received immediate takeoff clearance w/ traffic advisory on 6 mi final. Not advised of military helicopters flying in formation over Runway and as we began takeoff roll we assumed they would hold short of XXL. As it became evident they would not, an abort was quickly considered, and I decided against it as we had entered the high speed regime. We delayed rotation as we ran directly below the two military helicopters, had we rotated we would have collided. Had the military helicopters had a midair, or descended we would have collided. Contacted ZZZ Tower upon arrival in ZZZ1, Supervisor initiated an investigation. Received a call several hours later from supervisor requesting additional info. Sup stated we should have been advised of military helicopters traffic, however a review of tapes

indicated no advisory was made. He further stated that evidence reviewed warranted further investigation, that he was writing a report and submitting it for review of procedures. If we were made aware of the traffic there is 0% chance we would have accepted the takeoff clearance. Suspect local controller was distracted by traffic on final. This was an unsafe operation, we should not have been given takeoff clearance, or advised of traffic so we could have not taken off. In retrospect an immediate reject while still in low speed regime may have been the safest course of action, but we really expected them to hold short of our runway.

Narrative: 2

We were approaching the approach end of [Runway] XXL when ground instructed us to switch to tower, which I did. Before I could get a word out we heard "Aircraft X are you ready". I replied yes and tower told us there was an aircraft on a 6 mile final (assumed for XXL) and we were clear for takeoff. As we are turning onto the runway the Captain gave me the jet and I began to advance the throttles. As this is happening I see 2 military helicopters flying down Runway YY (which was closed according to the latest ATIS). As we were now steadily accelerating I watched as these helicopters rapidly approached the Runway XXL/YY intersection. I assumed they would stop but it was becoming apparent that they were not. At that point I had so many things quickly cross my mind: are we going to abort, will we hit these guys if I rotate on time, is their rotor wash going to affect us, etc. I recall watching in horror as these very low (estimated by me at 100 feet AGL) helicopters were crossing our path right about the time V1 was happening. I lost sight of the helicopters and made a choice to delay my rotation hoping not to collide with them. The whole incident had the most unnerving affect on me as the PF because it almost completely distracted me from doing the only job that mattered which was flying the plane. I was so focused on the what-ifs of the situation that I would have been at a serious disadvantage had we experienced an engine failure or some other malady. As we climbed away from the runway I tried to refocus and push the incident out of my immediate thoughts. The Captain made a remark to tower when were handed off to departure and the reply from tower was "visual separation". This incident really shook me up.

Synopsis

Air carrier flight crew reported during takeoff roll two military helicopters flew across the departure runway in front of the aircraft at low altitude, causing the flight crew to delay rotation to avoid a collision. The Captain stated they were not advised in advance by ATC of the helicopter traffic.

Time / Day

Date : 202204

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : P80.TRACON

State Reference : OR

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.TRACON : P80

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class E : P80

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

Experience.Flight Crew.Total : 32

Experience.Flight Crew.Last 90 Days : 32

Experience.Flight Crew.Type : 32

ASRS Report Number.Accession Number : 1893014

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.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.Total : 205
Experience.Flight Crew.Last 90 Days : 179
Experience.Flight Crew.Type : 205
ASRS Report Number.Accession Number : 1893019
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
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
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On the final segment of the HHOOD4 STAR, Runway 10L transition at 3,000 ft., we were about 5nm west of the last waypoint, NNUTT, on the published track. This area has rising terrain to the west. We were given a low altitude alert from ATC, with a climb to 3,500 ft., and a left turn to a heading of 160 I believe. We executed the instructions and continued the approach to land on 10L after receiving a visual approach clearance shortly after the turn. It seemed like a long downwind since there was little traffic in the area. The FO (First Officer)/ PF (Pilot Flying) mentioned that he didn't like the look of the hills rising ahead. I agreed and added that our terrain display showed only green ahead. Because it was night, we could not make out the terrain clearly, but we were becoming uneasy. We both agreed it was time to check on our base vector when ATC gave us the low altitude alert, climb, and turn. In retrospect, I feel that I should have asked about the base turn earlier. It didn't make sense that we should be on such a long downwind, when it appeared we were number 1 for the runway. I was biased towards believing there was a reasonable explanation, rather than it being in error.

Narrative: 2

While conducting the JKNOX.HOOD4 arrival into PDX at night for Runway 10L ATC descended us to 3,000 ft. in the vicinity of NNUTT intersection. Beyond NNUTT on a heading of 278 at 3,000 ft. with flaps 2 in LNAV/ALT HOLD the flight crew noticed and discussed mountainous terrain ahead of the aircraft with increasing urgency. FO (First Officer)/PF (Pilot Flying) commented on the rising terrain ahead of the aircraft. CA

(Captain)/PM (Pilot Monitoring) commented that he expected a turn toward the final approach course already and thought we were extending our downwind too far. FO/PF said, "I want to turn"; and seconds later ATC instructed us to climb immediately to 3,500 and turn left approximately 90 degrees. CA/PM set MCP altitude to 3,500 and FO/PF pressed altitude intervene. CA/PM suggested turning off automation and FO/PF immediately clicked off the autopilot and autothrottles, and advanced the throttles smartly to initiate a climbing turn while the CA/PM selected HSEL and adjusted the heading bug to the assigned heading. ATC issued a low altitude alert and advised that the MVA in the area was 3,500 ft. FO/PF briefly leveled at 3,500 ft., then continued the climb to 4,000 ft. due to concerns about terrain. ATC thanked us for the prompt response to their climb instructions, vectored us further left to a heading of 130, and cleared us for the visual approach Runway 10L. Flight crew conducted a normal visual approach with ILS backup without automation. While handing us off to Tower, the controller thanked us again.

Synopsis

Air Carrier flight crew reported a CFIT situation due in part by an ATC assigned extended downwind vector in mountainous terrain area. As the flight crew were discussing altitude concerns ATC issued a low altitude alert and assigned a climb and heading correction. Flight crew complied expeditiously and continued to a safe landing.

Time / Day

Date : 202204

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DEN.Airport

State Reference : CO

Altitude.MSL.Single Value : 7000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : D01

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class B : DEN

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 : 1891563

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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1891570
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We were on arrival into DEN on the AALLE3 arrival, just passing the fix "DOGGG" at 11,000, and Approach Control gave us descend and maintain 8000, we responded with the same instruction and descended to 8000. While we were descending Approach said there was wind shear advisories in effect and that there had been multiple go arounds. The frequency was congested and other aircraft were being called by Approach Control to speed up for spacing and aircraft were responding with unable. Approach Control responded that she was trying to space out all aircraft to give everyone a chance for approach to land. Approach Control called us and instructed us to descend and maintain 6,500 feet and my FO (First Officer) repeated the clearance, at this time the approach Controller "did not" reply with an altitude correction or change. Approach Control instructed us to turn heading 270 and slow to 190 knots, my FO repeated the instruction. I increased my descent to 2,000 feet per minute and made the right turn to 270, however my speed was increasing to 220 so I extended the spoilers to slow to 190. I reached up to slow my descent rate, and I realized autopilot did not capture 6,500 feet, I looked down and my speed was decreasing to 185-190 knots. The low speed indicator increased with the stall margin indicator, and we got the terrain warning once and I immediately and simultaneously, disconnected autopilot and got a momentary stick shaker. I stowed the spoilers, added max thrust, and leveled for a split second and as speed increased with no drag I initiated a climb up to 7,500 feet. I advised my FO to tell Approach we were correcting, Approach was calling to confirm our altitude and advise us that we should be at 7,500 feet and they received a low altitude alert for us. My FO advised approach that we were climbing to 7,500 and Approach responded with everyone watch their altitudes, and advised us to turn heading 325, and maintain 150 knots until FRONZ and cleared us for the visual to 35R. My FO repeated the clearance. The winds were extremely gusty and our turn was wider with the strong winds and windshear. At this time the intercept heading came to late from approach, and I overshot the approach course and I was already in a

turn to re-intercept the approach course. We intercepted the course, and were configuring to be stabilized by the final approach fix FRONZ. We were fully configured and stable by FRONZ and approach instructed us to contact Tower, Tower cleared us to land. After being cleared to land, we encountered windshear caution, but continued and then Tower called and advised us to expect a loss of 30 knots at 150 feet, we continued and made a safe landing on Runway 35R. I believe the cause of this event was due to Approach giving us an altitude of 6,500 feet, a heading instruction and speed reduction instruction. I believe the terrain warning which alerted Approach, was due to an aggressive descent rate with autopilot connected at a low altitude. I believe the stick shaker was caused by the fully extended spoilers which I had extended to slow to 190 knots per approaches speed restriction and my aggressive pitch up attitude to level off at 6,500 feet. We became immediately task saturated with a congested frequency we were not able to query in time. I could have requested my FO query Approach about the altitude restriction, and I could have requested to slow early and decreased my descent rate. In the future, I will take the initiative exercise my authority in having my FO's query about instructions given by ATC to insure no miscommunications, and prevent task saturation, which will allow greater focus of the whole environment.

Narrative: 2

We were inbound on ALLEE3 arrival into DEN. The entire arrival was turbulent. As we passed the fix DOGGG at 11,000, speed 210, approach had us descend and maintain 8,000. We read back clearance and began the descent. During the arrival the Controller announced LLWS and multiple aircraft were going around. The Controller asked another flight to speed up to 150, they said they were unable due to two previous go arounds. The frequency was congested. The Controller stated she was trying to space out all aircraft to get onto the approach. We were told to descend and maintain 6,500. I read back the altitude clearance, 6,500, and there was no response or correction. We had talked about what we were going to do to mitigate the LLWS/ go around threat. We confirmed the altitude with one another. The atmosphere was hazy. I was trying to divide attention between inside the cockpit and outside to maintain airport visual. During the descent, the Controller gave us a turn to heading 270 and a speed of 190. I read back the clearance. The winds were gusty, our ground track during the turn was wide. During a break in the frequency I reported field in sight. The Controller came back and did not clear us for visual but to standby and wait for more instruction. Within seconds the Controller came back to tell us they had gotten a low altitude warning on us. I looked down to see that the autopilot did not capture the altitude. "Terrain Terrain" went off once, and the speed shaker went off momentarily. Immediately my Captain disconnected autopilot, stowed the flight spoilers, and increased thrust. I was watching the altitude increase. I got on the frequency and told the Controller once we were at 7,000. She came back and said she had cleared us for 7,500. She told everyone on frequency to watch their altitudes. As we got to 7,500 the Controller told us to turn to heading 325 and that we were cleared for the visual 35R. She gave us a speed of 150 to FRONZ. My Captain was hand flying and by this time we had slightly overshoot the approach course. He turned to re-intercept the approach course. I cleaned the box, got the aircraft configured and switched to Tower. At FRONZ we got a wind shear caution. Initially my Captain began to climb and I was ready to readout trends but quickly we realized it was caution. As we realized that, the wind shear had gone away. Tower had advised us that we could expect 30 knots loss of airspeed 150 feet above touchdown. Tower had cleared us to land and we were able to safely land. I believe the cause of this event was due to the Controller giving us a low altitude of 6,500 and not receiving a correction during readback. The LLWS, reports of go arounds, and trying to get slow while descending created task saturation. Autopilot not capturing the 6,500 altitude was another contributing factor. To avoid recurrence of this event I will verify altitudes when given unusual ones by ATC. I will also watch the autopilot more diligently regardless

of PF/PM. I will query to avoid confusion. I will be more cognizant of making sure the aircraft is always in a safe configuration.

Synopsis

Air carrier flight crew reported receiving a GPWS terrain warning as well as a low altitude alert from ATC on approach to DEN following a miscommunication with the Controller.

Time / Day

Date : 202204

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Ground : 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

Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y

Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear

Crew Size.Number Of Crew : 1

Flight Phase : Landing

Airspace.Class D : 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 : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 3000

ASRS Report Number.Accession Number : 1890320

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Troubleshooting

Human Factors : Workload

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 Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 8250
ASRS Report Number.Accession Number : 1890334
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Situational Awareness
Human Factors : Confusion
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 : NMAC
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 40
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 : Human Factors
Contributing Factors / Situations : Staffing
Primary Problem : Ambiguous

Narrative: 1

As we called for pushback it became apparent that Ground Control was acting as both Ground and Clearance Delivery on the Ground Control frequency. There were numerous aircraft requesting, pushback, clearance and taxi. We were stepped on multiple times calling for and receiving pushback clearance. We were left on Ground Control frequency for our taxi, including crossing Runway XX and XYL for taxi to Runway XX at [Taxiway] 1 for takeoff. At approximately XX43Z, we were cleared to "cross Runway XYL at [Taxiway] 4 and taxi to Runway XX via [Taxiway] 2 and [Taxiway] 3." After read back of instructions, I then turned the strobe and wing lights on and upon hearing the Captain state, "clear left", I looked to my right, cleared the right side and stated "clear right." As we were about to cross the runway edge line (we had already crossed the hold short line), the Ground

Controller stated "(Company) STOP" over Ground Control frequency. The Captain immediately slammed on the brakes bringing the aircraft to an abrupt stop. I immediately looked left to see a [single engine high wing aircraft] going around to avoid us. His altitude was less than 50 ft. as I saw him climbing out. Ground Control then stated "oh good, they are going around to miss you." Once it was apparent that we were not going to collide, Ground Control immediately re-cleared us to cross Runway XYL at [Taxiway] 4 and taxi via [Taxiway] 2 and [Taxiway] 3. I repeated the clearance and we proceeded to cross. About 10 seconds later, a different Ground Control voice told us to switch to Tower frequency. The Captain then called the FAs (flight attendant) to ensure no one was injured during the abrupt stop. One of our FAs was jostled into the bulkhead during the stop but no one was injured. We then proceeded to takeoff uneventfully. Air Traffic Controllers (including Ground Control) need to be handling one function at a time. While the regulations may allow for multiple frequency coverage and combining of functions (Ground and Clearance) it is apparent that they cannot do both well. Additionally, with a high volume of traffic at ZZZ, we should have been switched to Tower frequency for runway crossings to avoid a landing aircraft conflict with us taxiing.

Narrative: 2

We pushed from Gate X at ZZZ and were given taxi instructions to taxi [Taxiway] 5 [Taxiway] 6 [Taxiway] 7 hold short of Runway XX. We complied. Further taxi instructions were issued to cross Runway XX and proceed [Taxiway] 8 to [Taxiway] 4 and hold short Runway XYL. We were in the process of complying when Ground issued us clearance to cross Runway XYL on [taxiway] 4 then taxi [Taxiway] 2 to [Taxiway] 3 for takeoff on Runway XX. I cleared left and the FO (first officer) cleared right. I did not see any traffic when I cleared my side. Once we began to cross the hold short at [Taxiway] 4 headed south, Ground Control said "(Company) STOP" and I abruptly applied brakes and stopped the aircraft with the nose just slightly over the runway side marking, at the same time I looked left to see a [single engine high wing aircraft] in the process of doing a go-around. Ground Control said at that moment "oh good they are going around to miss you" the same Ground Controller then told us to complete the cross of Runway XYL; and then a different Controller got on the radio. The stop was very abrupt so I checked with the Flight Attendants to make sure they were okay. They reported that they were fine but may have bumped into stuff and possibly be bumped or bruised. I spoke to all of them in the jetway as they were deplaning and 1 reported no injury and two reported possible bruising. One on her left forearm and one reported on her buttocks. I don't believe anyone fell over, just were thrown forward and bumped into stuff. Ground frequency was very congested, the Controller was both Ground and clearance and very very busy. We were issued clearance to cross both runways by Ground Control and it probably should have been a switch to Tower to cross the runway to prevent this situation from happening.

Synopsis

Air Carrier Pilots reported Ground Control was acting as both Ground and Clearance Delivery on the Ground Control frequency. The pilots were cleared to cross the runway and then told to immediately stop as a high wing single engine aircraft executed a missed approach and flew over them.

Time / Day

Date : 202204

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Weather Elements / Visibility : Icing

Light : Dusk

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 : FMS Or FMC

Nav In Use : GPS

Flight Phase : Landing

Route In Use : Direct

Airspace.Class B : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : EMB ERJ 145 ER/LR

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Takeoff / Launch

Flight Phase : Taxi

Airspace.Class B : 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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1890178
Human Factors : Distraction
Human Factors : Other / Unknown
Human Factors : Situational Awareness
Human Factors : Time Pressure
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 : Pilot Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1890182
Human Factors : Troubleshooting
Human Factors : Time Pressure
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Communication Breakdown
Human Factors : Other / Unknown
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 : FAR
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

We were cleared to land on Runway XXC by Tower on frequency XXX.XX at ZZZ. While outside a 5 mile final, I heard Tower issuing hold short instructions to another aircraft, Aircraft Y. That aircraft was issued instructions to hold short of Runway XXC at Taxiway X, so we could land. I overheard some confusion with that aircraft by the pilots with that clearance to hold short. As we were approaching 500 ft. above the ground, I remembered hearing the confusion that the Aircraft Y had with the hold short instruction, so I looked

towards Taxiway X to make sure that the aircraft was actually holding short of our landing runway. The sun was starting to go down at this time, so it was very difficult to see the Aircraft Y and its position relative to the hold short line at that taxiway (from the altitude we were at). It did appear however that the aircraft was behind the hold short line and was indeed holding short of our landing runway. As a result, we elected to continue the approach and land. During the landing roll out on [Runway] XXC rolling past Taxiway X, it was clearly evident that the Aircraft Y was 1/3 across the hold short line and was technically in a runway incursion status while we landed the aircraft. On the landing rollout, I queried Tower, my exact words, 'Tower Aircraft X, on the landing rollout, it would have been nice to know that Aircraft Y was across the hold short line at X.' I was Pilot not Flying (PNF) and then at 60 kts., I took the flight controls and cleared the runway. While taxiing in, the Tower Controller queried the Aircraft Y if he was actually holding short and the Aircraft Y pilot actually admitted over frequency that he was across the hold short line by 3-5 ft. (it was clearly more than that however, it was the first 1/3 of their aircraft). Upon taxi in, we were given a phone number to call and I discussed the situation with a ZZZ Tower Manager. He agreed that ASRS reports should be filed. Captain's Analysis: We should have initiated a go-around if any doubt at all existed that the aircraft was not holding short of our landing runway. I should have queried ATC before landing to ensure if the aircraft was holding short (after hearing the previous confusion with the Aircraft Y crew on the hold short instructions on frequency while we were outside a 5 mile final). Aircraft Y should have informed the Tower that they had accidentally crossed the hold short line and Tower could have then issued us a go-around clearance. ATC could have double checked to ensure Aircraft Y was holding short after the previous confusion existed.

Narrative: 2

I was landing on [Runway] XXC and on rollout the captain noticed that an airplane was hanging over the hold short line of [Runway] XXC and Taxiway X. He (Captain) notified ATC because it was a significant incursion and if we had known there was no way we would have landed. The landing did not have any incident other than seeing (again we were on rollout when we noticed) the other aircraft over the hold short line. ATC wanted to talk to us so we called them. They encouraged us to file reports. ATC said we were not in any kind of trouble. Runway incursion while landing.

Synopsis

Air Carrier flight crew reported during the landing rollout, another aircraft was over the hold short line. The PNF contacted Tower regarding the other aircraft. The reporting Captain states they should have executed a missed approach.

Time / Day

Date : 202203

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : Mixed

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 2000

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Training

Flight Phase : Cruise

Route In Use : Vectors

Airspace.Class E : ZZZ

Component : 1

Aircraft Component : DC Battery

Aircraft Reference : X

Problem : Failed

Component : 2

Aircraft Component : Electrical Power

Aircraft Reference : X

Problem : Failed

Component : 3

Aircraft Component : Communication Systems

Aircraft Reference : X

Problem : Failed

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
Experience.Flight Crew.Total : 900
Experience.Flight Crew.Last 90 Days : 195
Experience.Flight Crew.Type : 317
ASRS Report Number.Accession Number : 1885312
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Human Factors : Training / Qualification
Human Factors : Troubleshooting
Human Factors : Workload
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 : FBO
Function.Flight Crew : Trainee
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 126.3
Experience.Flight Crew.Last 90 Days : 9.1
Experience.Flight Crew.Type : 126.3
ASRS Report Number.Accession Number : 1886013
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Training / Qualification
Human Factors : Time Pressure
Human Factors : Human-Machine Interface
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Landed in Emergency Condition

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While operating under IFR flight rules and mixed VMC/IMC conditions during an instrument training flight and receiving radar vectors for the ILS the electrical system failed completely. The flight was continued in VMC conditions and landed without further incident at the airport of origin. On the downwind of the ILS the aircraft and crew encountered an area of moderate turbulence in IMC conditions while the student (PF) was flying the aircraft and the instructor (PM) was monitoring. The student was struggling to maintain altitude and heading (+/- 20 degrees, 150 feet) so the instructor (PM) told the student (PF) to fly the attitude indicator and keep the wings level. Once clear of the turbulence the student returned to the assigned heading and altitude. The controller then stated that the aircraft had been flying off course by approximately 20 degrees to the right and the instructor advised the controller of the encountered turbulence as the reason for the deviation. The controller issued a turn inbound to intercept the ILS. However, because the student (PF) was not yet prepared for the approach, delay vectors were requested and a turn to 360 was issued. The controls were transferred to allow the student to focus on preparing for the approach without the added workload of flying once the aircraft was on the assigned delay vector heading. While receiving delay vectors for the ILS the student (PM) was preparing for the instrument approach. ATC asked that we once again check our heading as they were showing the aircraft flying approximately 15-20 degrees right of the assigned heading. It was verified that we were on the appropriate heading on the HSI of 360 and checked the magnetic compass which indicated 020. The instructor (PF) noticed a message had come up on the Garmin G5 that we were using as the primary instrument source which read "Not receiving ARINC data". The instructor (PF) grabbed the STC for the G5 and handed it to the student (PM) asking that they find information on this message and to run the appropriate checklist. The instructor (PF) attempted to report the equipment issue to ATC on the communication 1 radio and the Garmin 430 GPS/COMM1/NAV1 subsequently failed. Realizing this may be an electrical system failure and in present VMC conditions the instructor decided to stay in those conditions and vacate the assigned heading and altitude while the failures were being addressed. The instructor (PF) began a descending turn to return to the airport and to stay below the layer of clouds. The instructor (PF) attempted to contact ATC on the communication 2 radio and was not able to contact them however was still able to hear the instructions and altitude alerts for deviating altitude and heading assignments. The instructor (PF) squawked 7600 and continued to contact ATC once more to no avail. The communication 2 radio and the transponder failed soon after. This occurred within a time frame of approximately 2 minutes. To begin troubleshooting the instructor (PF) looked at the ammeter and it was showing an indication of 0, the high voltage light was not illuminated, and there were no circuit breaker faults. Because this was an un-annunciated electrical failure the student (PM) was instructed to turn off the master switches, as all of the electrical components had failed, in accordance with the checklist. The flight was continued under VFR in VMC conditions. The student (PM) was able to use their handheld radio to make contact with the ATC tower and advised of what had happened. The tower issued a landing clearance and the aircraft landed safely without further incident by the instructor (PF). Maintenance personnel were able to determine that the battery had suffered a catastrophic failure.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

C172 flight instructor and student reported a failure of the electrical system during a training flight resulted in heading deviations and lost communications. The flight continued in visual conditions to landing.

Time / Day

Date : 202203

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.TRACON : 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

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

Flight Phase : Final Approach

Route In Use : Direct

Airspace.Class B : 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 : Check Pilot

Function.Flight Crew : Captain

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 18000

Experience.Flight Crew.Last 90 Days : 189

Experience.Flight Crew.Type : 15000

ASRS Report Number.Accession Number : 1883563

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Training / Qualification

Human Factors : Troubleshooting

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 : Check Pilot
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 2797
Experience.Flight Crew.Last 90 Days : 166
Experience.Flight Crew.Type : 2797
ASRS Report Number.Accession Number : 1883549
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Time Pressure
Human Factors : Situational Awareness
Human Factors : Human-Machine Interface
Human Factors : Distraction
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 3

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 927
Experience.Flight Crew.Last 90 Days : 76
ASRS Report Number.Accession Number : 1883547
Human Factors : Workload
Human Factors : Time Pressure
Human Factors : Situational Awareness
Human Factors : Other / Unknown
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Observer
Detector.Person : Flight Crew
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 : Human Factors
Primary Problem : Human Factors

Narrative: 1

I was in the Jumpseat for a Captains FAA Observation. Up until the descent, the observation was going well. With ZZZ landing East, the crew decided to brief for a RNAV (RNP) Y to Runway XXL. Descending through FL190 or so there was some CBs that had built up, no Flight Attendant notification of possible turbulence. There was some moderate turbulence associated with the CBs, I suspect this was the start of loss of some SA. The crew had been given direct ZZZZZ on the ZZZZZ1 and a descend via clearance, 6000 ft. was set in the MCP. New Captain trying to get the plane to start a descent (system I believe was still calculating the direct ZZZZZ and had not started down yet) pushed the Alt INTV which deleted the ZZZZZ's altitude restriction of 12000 to 9000 ft., retaining the speed of 250 kts. He did verbalize this but did not reiterate that the restriction was 12000 to 9000 ft., the LCA (Line Check Airman) only retyped in 12000. This started the high on Path situation. The plane achieved 12000 ft. some 5 miles prior to ZZZZZ. The SPD INTV was selected to 280 kts. 280 kts. is what they crossed ZZZZZ at, I verbalized to the right seater (the LCA in the right seat), "check your speed, should be 250 kts". New Captain used VS, then selected 250 kts. in the MCP but still was not descending for the next restriction ZZZZZ1 at 210/6000. VS was this Captain's go to mode, he tried several times to select VS but was pushing the round white "light sensor" on the MCP, located above and right of the VS select button. Started down in VS (at this time some 2300 ft. above the Path), speed now 250 kts. I verbalized the restriction. The LCA received relief from ZZZZZ1's altitude of 6000 ft., speed of 210 kts. was not mentioned. ATC stated, cross ZZZZZ2 at 3000 ft. cleared for the RNV Z XXL. The crew was also dealing with the fact that they had originally requested RNAV (RNP) Y, this is what they briefed. Approach stated later they could not issue the Y but could for the Z, the crew was working on a this approach change briefing in the middle of the altitude restriction issue adding to further loss is SA. With 3000 ft. in the MCP, VNAV would not reengage initially so VS was still in use. LCA stated to use LVL CHG as new Captain was struggling with speed management. At this point it looked like everything was coming back under control. Once speed was lowered to an acceptable value, VNAV was selected again and TDZE was selected. I started taking some notes, glancing up to see that they were out of VNAV descending now

through 3000 ft. (still prior to ZZZZZ2) I started to say something but the LCA had already started to comment. It looks as if 2800 ft. was going to be the lowest they were going to get, with correction now being applied. I suspect but can't be for sure, a new mode was selected trying to gain control of the speed or VNAV just disengaged. Flaps were first called for at 250 kts. and a comment from the LCA that he was too fast. When trying to correct the low altitude situation with (I believe) a MCP mode change, LNAV was deselected as CWS R was now displayed in the FMA. Unfortunately this happened right at ZZZZZ2 where a left turn was required. There was a great number of distractions going on, it seems that the input from the LCA was not promptly executed, paired with a lagging SA, this was leading to additional distractions. ATC had now called "low altitude warning" as the new Captain allowed (and the LCA along with myself didn't catch) the plane to sink again now to 2500 ft. The CWS R grabbing our attention and the LCA calling for a left turn, this off course situation was also being called out by ATC. Turning off the Autopilot to regain a desirable state was achieved and the remaining approach and landing was uneventful.

Narrative: 2

A number of things and errors led to going 400 below altitude on ZZZZZ arrival, for RNAV approach. We were cleared to descend via the ZZZZZ arrival for RNAV/RNP Y XXL. Just past ZZZZZ1 we were cleared direct to ZZZZZ2, this put us high on the path by 2000+ ft. Captain selected alt intervene during this descent which deleted the altitude restriction at ZZZZZ2. He asked for 12,000 to be put back in. He was using vert speed trying to control aircraft. When realized we weren't going to make 6000 ft. restriction we asked for relief. The aircraft was getting fast approx 264 Kias below 10,000. New clearance was to comply with 3000 ft. restriction by ZZZZZ3. Vertical speed was being used to try and control descent. Taking the plane out of vertical path. Because we had been previously cleared the approach Final approach fix altitude was put in to altitude window. When the plane was put into vert speed mode. It no longer had projections and descended below 3000 ft.

Narrative: 3

Descending on the ZZZZZ RNAV arrival was given clearance direct ZZZZZ1 and descend via the arrival. We had just passed the top of descent point and the aircraft vertical mode was "altitude hold." I selected altitude intervene incorrectly, the aircraft did not descend but the next altitude 12000-9000 at ZZZZZ1 was deleted. I then asked the pilot monitoring to put in 12000 as that was the next altitude on the arrival at ZZZZZ2 instead of the correct 9000 at ZZZZZ1. We were already 2200 above path when given the clearance. As I attempted to regain glide path, we were given a different approach leading to more distraction while the aircraft leveled at 12000. Through various FMC changes we descended below 3000 ft. to 2500 on the RNAV Y XXL approach. I disconnected the autopilot and corrected while also turning left and on course. Everything was reengaged and we landed uneventfully on XXL.

Synopsis

Air Carrier Line Check Airmen and flight crew reported using non standard procedures that lead to airspeed, course and altitude deviations during an RNAV approach. During the approach the flight crew was notified by ATC of a low altitude warning.

Time / Day

Date : 202202

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 200

Environment

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

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Takeoff / Launch

Route In Use : Direct

Airspace.Class D : 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 : None

Mission : Training

Flight Phase : Landing

Route In Use : None

Airspace.Class D : 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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 155
Experience.Flight Crew.Type : 8000
ASRS Report Number.Accession Number : 1877264
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : 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 : 225
Experience.Flight Crew.Type : 5725
ASRS Report Number.Accession Number : 1877273
Human Factors : Workload
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

Person : 3

Location Of Person.Aircraft : Y
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 3603
Experience.Flight Crew.Last 90 Days : 120
Experience.Flight Crew.Type : 1156
ASRS Report Number.Accession Number : 1881246
Human Factors : Workload
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Confusion

Human Factors : Communication Breakdown
Human Factors : Time Pressure

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 0
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert

Narrative: 1

During a normal takeoff and climb from Runway XX at the ZZZ, we saw a single engine aircraft at our altitude turning away from us. At approximately the same time we heard the Tower Controller tell the single engine aircraft to turn crosswind now. The single engine aircraft was at our altitude and very near to us. We did not have any time to react as we did not see the single engine aircraft until it was wing high turning away from us. Apparently, the single engine aircraft was supposed to do a full stop landing on Runway XYR and either did a touch and go, or a go-around from that Runway. I only first saw the single engine aircraft about when I was retracting the landing gear, and that's when I also heard the First Officer comment on the aircraft. The horizontal distance was likely much less than 1000 feet, possibly even 500 feet. Had the single engine aircraft not reacted, a collision could have occurred at the Runway XX intersection with the Runway XYR extended center line. The single engine aircraft turned away between us departing XX and the Control Tower, for further geographic reference. Tower frequencies may have been split at that time as I heard the Tower Controller, but not the single engine aircraft on frequency. It's also possible that I just may have missed the single engine aircraft transmission. From our vantage point on Runway XX, our visibility of Runway XYR is not good as structures and aircraft block it from our view. Controller staffing limitations may have been a factor here too. Captain Response, Controller staffing needs improvement.

Narrative: 2

We were "cleared for takeoff Runway XX full length, shortened". I was the Pilot Flying. During our initial climb at approximately 300 ft. AGL, I heard the Tower Controller tell an aircraft "turn crosswind now, turn crosswind now, you were cleared for a full-stop only". I looked outside my forward side window and saw a single engine aircraft in a right bank at our altitude, approximately 500 feet from our aircraft. The aircraft was operating on the crossing Runway, XYR. I did not maneuver because by the time I saw the single engine aircraft it was already clear of our flight path. After seeing we were clear of the single engine aircraft I looked back inside and saw a yellow TCAS TA icon on the Navigation Display. The Tower Controller told us to switch to Departure and apologized for the incident. Of note, the first half of Runway XYR is not visible from the approach end of Runway XX due to large buildings between the two Runways. First Officer response, maybe a more diligent outside scan when flying in and out of airports with a lot of student Pilot Training.

Narrative: 3

I was coming back from practice area to ZZZ with my Student after practicing maneuvers. We were instructed to enter right base over the freeway for Runway XYR and we received "Runway XYR cleared for the option" clearance therefore we decided to do touch and go. When we were on the go, we were told by ZZZ Tower controller to turn right crosswind immediately. As I looked at my left side I saw a commercial aircraft just departed Runway XX and climbing out. I immediately turned right before the intersection of the Runways to avoid collision. Tower Controller also said "I meant cleared to land" when he instructed us to turn right. I was confused that first we were cleared for the option, so why other traffic would interfere us. Second, even if they gave us landing clearance we still have a chance to go-around, so why would they give take off clearance to other traffic.

Synopsis

Air carrier crew reported an air conflict with a single engine aircraft just after lift off. The single engine Instructor Pilot, who also reported, was landing on a crossing runway stated the Tower had given them clearance for the option therefore, decided to make a 'touch and go.' After receiving an alert to turn crosswind from ATC, the Instructor saw the Air Carrier and took immediate action to avoid a collision.

Time / Day

Date : 202202

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZZ.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 15000

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Turbulence

Aircraft

Reference : X

ATC / Advisory.Center : ZZZZ

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 : Cargo / Freight / Delivery

Nav In Use : GPS

Nav In Use : FMS Or FMC

Nav In Use.Localizer/Glideslope/ILS : RNP

Flight Phase : Initial Approach

Flight Phase : Final Approach

Route In Use : Direct

Route In Use.STAR : ZZZZZ

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 : 1876878

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Human-Machine Interface

Human Factors : Other / Unknown

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Distraction

Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : 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 : 1876883
Human Factors : Workload
Human Factors : Training / Qualification
Human Factors : Time Pressure
Human Factors : Human-Machine Interface
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.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Release Refused / Aircraft Not Accepted
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Flight plan release filed ILS ZZZZZ1 for Runway XXR. ATIS at cruise was calling for Runways YYL/R. Loaded and briefed ILS ZZZZZ2 for YYL. ATC clearance passing ZZZ1: pilot's discretion to FL250 ILS ZZZZZ2 for Runway YY. Prior to ZZZZZ3 we were given a heading of 160 for 2 minutes then back to ZZZZZ3. Next ATC clearance was direct ZZZZZ4 descend to 18000. Around ZZZZZ4 frequency change. Next controller gave us direct ZZZZZ5 descend 15000. We had briefed/anticipated this possibility. We requested RNP ZZZZZ6. At this time, there was confusion with ATC with which runway we were going to get assigned. Holding instructions were being given to other aircraft. We briefly talked about the possibility of holding at ZZZZZ5. Airport was in the process of switching the

Runways to XXL/R. ATC came to us and assigned YYR. Apparently we would be the last ones in before the switch. Quickly loaded the FMS and briefed the approach. We reconfirmed our approach assignment based on all the transmissions to other aircraft being given XXL. Cleared for the RNP ZZZZZ6. After ZZZZZ5 but prior to ZZZZZ7, ATC gave us a clearance to maintain 190 kts. Passing ZZZZZ7, we asked to slow down to meet the restriction at ZZZZZ8. ATC's response was "you're cleared for the approach". Aircraft configuration at this time was gear down, flaps 20 slowing to meet the "at 185 kts." at ZZZZZ8. Aircraft is in VNAV PATH descending, speed brakes were being used to help slow. The next sequence of events happen very quickly and are in the best order of memory. While waiting for the airspeed to go below the next flap setting, we received a terrain caution from the GPWS. ATC asks if we are "on track", "do you see the runway?" We break out of some clouds and can visually see terrain. In my quick assessment of the aircraft's descent rate and track, it didn't look like we were going to clear the terrain. Pilot Flying selects ALT HOLD to discontinue approach. We receive another terrain caution. With all of these factors and knowing that we were very close to mountainous terrain, a GO-AROUND was performed as there was some doubt that we may not be on track. We maintained the approach ground track while cleaning up the aircraft. ATC provided vectors to the ILS ZZZZZ 9 and landed. ATC [made a] last minute change of runway. Assigning an airspeed to maintain after clearance for the approach was given and not deleting the airspeed assignment. Approach design could be a factor as the 185 kts. restriction at ZZZZZ8 doesn't allow for configuration to happen in this Heavy Aircraft. (180 kts. for flaps 25/30). High TAS with aircraft descending in VNAV PATH makes it difficult to slow. Having loaded Runway YYR approach in the secondary flight plan could have helped with less FMS workload and more monitoring of the approach.

Narrative: 2

ZZZZ [Airport] had winds from the northwest at around 10 kts., a 2000 ft. ceiling, and ATIS advertised RNP approaches to runways YYL/R. We built and briefed the ILS ZZZZZ2 arrival and the RNP ZZZZZ6. On the arrival between ZZZZZ3 and ZZZZZ4 we get switched to Approach control- in one transmission the controller tells us to expect the Visual RNP ZZZZZ9, to descend to 15000 ft., and to proceed directly to ZZZZZ5- the terminus of the arrival and the IAF for the Runway YYL/R RNP procedures. We requested the RNP ZZZZZ10 due to the low ceilings. After a slight delay, the controller told us to expect that. The PM loaded the new approach and gave me a briefing on the differences. On the approach past ZZZZZ5 but prior to ZZZZZ7, the controller assigned us 190 kts. - slower than the required 215 kts. at ZZZZZ7. At this point, I had completed the "LAVS" procedure and was configured with flaps 15 and speed breaks extended to help reduce speed. Approaching ZZZZZ8, the Pilot Monitoring told the controller we needed to reduce our airspeed. The controller said we were cleared for the approach and to resume published speeds. With the speed window open, I selected 185 kts. (the required speed at ZZZZZ8) and called for landing gear down and flaps 20. Passing ZZZZZ8, I reduced the selected speed to 160 kts. in order to slow for the RF leg and to meet the speed restriction at ZZZZZ11. At this point on the approach, I was at 180 kts. with the flaps at 20, landing gear down, speed breaks extended on LNAV and VNAV PTH. Further, I noticed we had about a 10 kt tailwind. Several seconds into the RF leg we received a GPWS terrain CAUTION alert. The Pilot Monitoring and I decided a go-around was appropriate. As I was taught in training and had previously briefed, I discontinued the RNP approach by pushing the ALT HOLD switch to remain in LNAV. However, momentarily after pushing ALT HOLD we received another terrain CAUTION alert. The Pilot Monitoring and I agreed we needed more altitude, so I simultaneously pressed the go-around switch and disconnected the autopilot. The Pilot Monitoring was communicating with ATC at this point. I used the Navigation Display to keep the flight path aligned with the RF course. Realizing the Pilot Monitoring was still talking to ATC, I pushed the LNAV button on the Mode Control Panel

and resumed a normal go-around procedure up to the ATC assigned altitude of 14000 ft. I called for the autopilot once the Pilot Monitoring was done communicating with ATC. We cleaned the airplane up to flaps 5 and, because ZZZ1 was in the process of turning the airport around, received vectors to the ILS ZZZZ12. The Pilot Monitoring rebuilt the FMS and briefed me on the new approach and I requested the In-Range and Approach checklists. I flew the ILS to XXL and landed with no further incident. I believe the terrain CAUTION alert was caused by a high descent rate on the approach- a product of high airport elevation, a tailwind, and a 185 kt. speed requirement at the beginning of the RF leg. Even though the FMA's showed we were on VNAV PTH, our descent rate was around 2000 fpm when the terrain CAUTION alert happened. Additionally, as well prepared as we were for the arrival and approach, there were numerous unnecessary threats that degraded the level of safety for the operation. First, ATC was the biggest threat. Each runway in ZZZ1 has multiple approaches- not knowing what runway or approach ATC will assign until 10000 AGL is a setup for failure. While the Pilot Monitoring is busy requesting and loading a different approach, it removes them from the control loop of the airplane. Further, ATC requiring other than posted speeds on an RNP approach causes an increase in the Pilot Flying's workload. Second, the actual speed requirements on these ZZZZ RNP approaches are unrealistic for a Heavy Aircraft. If that 185 kt. restriction at ZZZZ8 didn't exist, I would have been fully configured with flaps 30 and landing gear down with a much slower indicated airspeed. Maybe the terrain caution would not have activated at a slower indicated airspeed/lower rate of descent. Lastly, the weather (marginal VMC and a tailwind on downwind/base) was a threat to safely executing the RNP into YR. Along the arrival and approach I heard ATC assign airplanes the ILS approach to XXL- I knew they would be turning the airport around after our approach. With the winds shifting to the south, the approach we were assigned wasn't very feasible. It would be helpful if we only had one RNP approach for each runway that we could fly. If the controllers knew we could only ever do the RNP ZZZZ6, for example, it would eliminate a lot of unnecessary time spent on the radio, heads down, and changing what was already set up and briefed. Further, either the required speeds on the RNP's to YYL/R need to be lowered or there should be a tailwind restriction or a note cautioning pilots to tell ATC they cannot safely make those posted speeds. Additionally, it would be beneficial to include a set-up like this for simulator training. Having to evade terrain while simultaneously fly an RF leg on an RNP is something that I do not recall seeing before in training.

Synopsis

Air Carrier Pilots reported there were late runway changes in this mountainous area. Then while executing an RNP approach in a Heavy Aircraft, they received two GPWS Terrain Warnings and conducted a missed approach. There was a tailwind on the RF leg and each pilot stated they think the terrain warning was caused by the excessive speed from the tailwind. The airport was turned around after their missed approach.

Time / Day

Date : 202202

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Altitude.MSL.Single Value : 5000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory. TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Vectors

Airspace.Class C : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory. TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Airspace.Class C : ZZZ

Component

Aircraft Component : Fuel Control Computer

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

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1876346
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
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1876354
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Aircraft RA
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 : Became Reoriented
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

At about 5000 ft. near ZZZZZ on approach into ZZZ, after an [priority handling] turn back en route to ZZZ1 for dual EEC failures and Display Source indicating on captain's side PFD, we got a traffic call from ATC. I slowed my descent as the target on my screen was getting closer. At that time ATC canceled our approach clearance and turned us right. Seconds later we got a RA to climb so I climbed about 500 ft. to avoid the traffic, which the PM (Pilot Monitoring) saw visually in our climbing turn. Eventually the passing traffic moved behind us and we were re-issued an approach clearance for the visual approach to

[Runway] XXL at ZZZ. We landed uneventfully and taxied safely to the gate, whereupon the flight was cancelled due to the engine EEC failures.

Narrative: 2

At approximately 5,000 ft. MSL, near ZZZZZ on the RNAV Z XXL into ZZZ, received an RA to climb and turn right. PF (Pilot Flying) had noted approaching traffic and ZZZZ1 had just issued a level off and cancellation of our approach clearance, which PNF (Pilot Not Flying) was repeating when RA sounded. PNF gained visual of small aircraft as we were in the turn and estimates RA was successful in avoiding the 500 ft. near midair bubble but would have certainly been such without evasive action. Reported RA to ZZZZ1. Cleared for visual approach and landed with no further event. Additional Controllers for this airspace. Too congested.

Synopsis

Flight Crew reported a TCAS TA and RA on approach to landing after an air turn back caused by a dual EEC failure. The flight crew initiated evasive action and was vectored back to the approach.

Time / Day

Date : 202202

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : LGA.Tower

State Reference : NY

Environment

Weather Elements / Visibility : Icing

Weather Elements / Visibility : Turbulence

Light : Night

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Medium Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Nav In Use.Localizer/Glideslope/ILS : ILS 04

Flight Phase : Landing

Route In Use : Direct

Airspace.Class B : LGA

Component

Aircraft Component : Autothrottle/Speed Control

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 Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1873569

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Troubleshooting

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 Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1873567
Human Factors : Workload
Human Factors : Troubleshooting
Human Factors : Situational Awareness
Human Factors : Distraction
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 / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Deviation / Discrepancy - Procedural : Landing Without Clearance
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Environment - Non Weather Related
Primary Problem : Ambiguous

Narrative: 1

We were cleared directly to BENNG roughly 20 miles out by Approach. The approach is a Non-Autopilot coupled approach (ILS 04 LGA) so the Captain being Pilot Flying set up the aircraft earlier than normal to insure we would be stable when needed. Shortly after turning inbound we switched over to Tower and simultaneously the throttle rolled back to the point that if left alone the aircraft would be in an undesired state. The Captain attempted to ease the throttle up to see if it would mitigate the situation but it didn't. He proceeded to turn them off all the automation and I monitored closely the instruments while doing my flows and call outs, I advised the speed fluctuations verbally "speed increasing/decreasing." Due-to the 5G network in the area and active NOTAM in the ATIS I was being extra vigilant with my focus on the aircraft instruments. We were configured and stable at my 1000 ft. and 500 ft. call outs and continued on the approach to land. After landing, Tower gave us directions to turn off and go ground. While turning off we noticed the landing light was still off giving us the cue that we may have missed the

landing clearance. Tower gave us instructions to taxi off the runway per normal operation, and at no point did Tower or Ground advise that there was an issues, and nothing further was said to us. Verify landing light on. Clearance received at 1000 ft. configured call.

Narrative: 2

We were cleared directly to BENNG roughly 20 miles out by Approach. The approach is a Non-Autopilot coupled approach (ILS 04 LGA) so I decided to start to set up the aircraft earlier than normal to insure we would be stable when needed. Shortly after turning inbound we switched over to Tower and simultaneously the throttle rolled back to the point that if left alone the aircraft would stall. I attempted twice to ease the throttle up to see if it would correct and it did not, so I chose to turn them off while still on the Flight Director. I advised what I was noticing to the First Officer who then looked to notice any other deviations. During this time I am still making call outs to finish configuring the plane while looking for any other deviations due to the 5G network in the area. We were configured and stable when needed and continued on the approach to land. After landing, Tower gave us directions to turn off and go to Ground. While turning off we noticed the landing light was still off giving us the cue that we may have missed the landing clearance. Tower gave us instructions to taxi off the runway per normal operation, at no point did Tower or Ground advise that there was an issue. [I suggest] being more aware when an abnormal situation comes up as such, remember once situation is over to zoom out and look at the bigger picture, [and to] confirm the landing light is on when cleared to land if unsure earlier.

Synopsis

Air Carrier Pilot Crew reported while on final approach the autothrottle failed to keep the aircraft on speed. As the aircraft slowed the pilots disconnected the autothrottle and continued in manual mode to landing. The pilots reported they were aware of 5G interference around LGA.

Time / Day

Date : 202201

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : VABF.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Haze / Smoke

Light : Dusk

Aircraft

Reference : X

ATC / Advisory.Center : VABF

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 4

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final 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

Experience.Flight Crew.Total : 12942

Experience.Flight Crew.Last 90 Days : 173

Experience.Flight Crew.Type : 457

ASRS Report Number.Accession Number : 1872271

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 : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 5922
Experience.Flight Crew.Last 90 Days : 232
Experience.Flight Crew.Type : 685
ASRS Report Number.Accession Number : 1872281
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 3

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 : 12464
Experience.Flight Crew.Last 90 Days : 151
Experience.Flight Crew.Type : 667
ASRS Report Number.Accession Number : 1872285
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

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

Narrative: 1

On arrival we were assigned 3,000 feet. 4 crew members heard the same instructions. ATC delayed our turn from downwind to base to final. I configured accordingly in anticipation of a short approach. At some point, we received a terrain warning. I immediately turned right and climbed as I deemed appropriate, ATC never assigned a heading and simply advised us that we should be at 3,800 feet. We kept asking for a heading and approach clearance at that point. He seemed a bit confused and I believe he forgot about us and never monitored our position on final. We had a stable final approach and landing. I called the tower to address the approach controllers clearance and they said it was normal and it was not an issue, of course this is what's I heard; a lack of

communication and a different English dialect may have been a distinct factor in this event.

Narrative: 2

On the Pokon 2A arrival. Assigned direct to EMROS and 3,000 [feet]. All 4 confirmed assigned 3,000 [feet]. Weather was VFR, smoke, and twilight. On extended downwind leg, terrain was approaching to east. Pilot Monitoring asked about approach clearance or turn and simultaneously we got a GPWS terrain warning ahead. Pilot Flying initiated a right turn and climb. ATC then advised a climb to 3,800 feet. We climb and asked for a heading. Finally received a heading of 310 and clearance for ILS, made a stable approach and landing. We asked ATC upon landing and they said it was a normal approach and not unusual. Language barrier was present.

Narrative: 3

On arrival we were assigned an altitude of 3,000 ft. All four crew members concurred. ATC then delayed our turn from downwind to base. We had configured for a short approach, but found ourselves much further from the field. We recognized that there was terrain on our current heading, and shortly after received a terrain warning. The Captain immediately turned the aircraft to a safe heading, and we immediately asked ATC for a heading. He never gave us a heading, but asked us to climb to 3,800 ft. We positioned ourselves for an intercept for the approach, and safely executed the approach and landing. Upon arrival, we called ATC, and they claimed the arrival was normal. Language, and the controller not monitoring our position, played into the event.

Synopsis

Flight crew reported a terrain alert due to ATC communications failure, resulted in taking evasive action.

Time / Day

Date : 202201

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : D01.TRACON

State Reference : CO

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.TRACON : D01

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Initial Approach

Route In Use : Direct

Airspace.Class B : DEN

Component : 1

Aircraft Component : GPS & Other Satellite Navigation

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Radio Altimeter

Aircraft Reference : X

Problem : Malfunctioning

Component : 3

Aircraft Component : GPWS

Aircraft Reference : X

Problem : Malfunctioning

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
ASRS Report Number.Accession Number : 1871652
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Other / Unknown
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Training / Qualification
Human Factors : Workload
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 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 : 1871653
Human Factors : Workload
Human Factors : Training / Qualification
Human Factors : Time Pressure
Human Factors : Other / Unknown
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.Aircraft Equipment Problem : Critical
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Automation : Aircraft Other Automation
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overrode Automation
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

During a discontinued approach at DEN that was commenced above the FAF altitude, I was the Pilot Flying [and] lost situational awareness while distracted by multiple altitude and heading commands by the ATC controller. In addition, I was further distracted by multiple "Unable RNP", "Terr Pos", and "ATC Faults" EICAS (Engine Indicating and Crew Alerting System) indications during the arrival and approach. The loss resulted in a flap overspeed incursion. While distracted following multiple ATC calls I had failed to ask for Flaps 5 after having previously requested Flap 5 speed. With Flaps 20 set the aircraft exceed the limit for 5 to 7 seconds at a maximum of 6 to 7 knots. I increased the aircraft pitch in the climb while manually reducing thrust to quickly bring the aircraft speed below max flap speed. An [write up] for the overspeed was submitted at the flight's conclusion. The cause of the incident was failure to primarily fly the aircraft while acting as pilot at the controls. Secondarily the controller contributed to the incident by giving multiple rapid instructions; more time should have been given to allow the crew to configure the aircraft for the transition from the approach mode to the missed approach/discontinued approach mode. Continued training during simulator training sessions practicing go around and discontinued approach procedures.

Narrative: 2

A short vector to final and high altitude necessitated our discontinued approach to DEN to [Runway] 17R. In addition to multiple ATC vectors and altitudes, we received "Unable RNP", "Terr Pos", and "ATC Fault" EICAS (Engine Indicating and Crew Alerting System) indications during the arrival, which were advertised on ATIS, but distracting. The flap speed limit of 210 knots was exceeded momentarily by about 7 knots by PF (Pilot Flying). I called out the speed deviation and it was promptly corrected. Maintenance was notified of the over speed after landing. An unexpected short vector and discontinued approach, compounded by numerous EICAS annunciations and controller instructions, detracted from primary duties of flying the aircraft. Continued simulator training with go-around and missed/discontinued approaches, emphasizing VNAV during the procedure.

Synopsis

Air carrier flight crew reported multiple instrument malfunctions while on a missed approach at DEN. Contributing to the confusion were rapid instructions from the Approach Controller.

Time / Day

Date : 202201

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : SKED.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 8400

Environment

Flight Conditions : IMC

Aircraft

Reference : X

ATC / Advisory.Center : SKED

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 Phase : Initial Approach

Component

Aircraft Component : Air/Ground Communication

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

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1868750

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 : 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 : 1868751
Human Factors : Workload
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.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Weather
Primary Problem : Human Factors

Narrative: 1

As we were switched over to Bogota FIR, it was very hard to understand the Controller because there was a high pitched squeal on the radio. I felt like my SA (Situational Awareness) started to go down at this point because I was focusing on trying to understand the Controller. I misunderstood multiple clearances and had to ask twice for the clearance. We were given the RNAV RNP X 31L. The Captain and I had briefed and gone over the points on both the STAR and approach multiple times each. We were finally headed to AMVES when we were cleared direct to BO710. We briefed [that] we were going to do our arrival check procedure 1 nm prior to this point. 1 nm mile prior the Captain rolled in 8400 feet in the MCP alt window. For some reason we were stuck in VNAV ALT. She selected 500 fpm down on the VS to get us going down and quickly selected VNAV again. We were high on the path and realized we were past the final approach point about the same time we got a terrain caution. The Captain called for a go around at this point. I think there were many contributing factors that led to this event. First of all I have less than 75 hours in the airplane as well as having never been to Bogota before. My SA started going down when we started to have communication issues [with] Bogota center. I had trouble understanding clearances which contributed to my task saturation. We briefed and checked points multiple times on the first approach going into [Runway] 31 as well as the arrival check procedure. I think since we had such a high ground speed between high altitude and tail wind that may have caused us to be high on the path before we had a

chance to get on it. Taking the clearance direct to BO710 as opposed to taking direct AMVES did us no favors. I was task saturated and unfortunately was not as good of a backup as I should have been.

Narrative: 2

Entering Bogota airspace the radio frequency 124.2 was unreadable due to a high pitch squeal so receiving and understanding ATC instructions were difficult. Unable to clearly understand the approach we were given we asked for the RNAV-X 31L. This is the approach we thoroughly briefed. After several vectors and route changes we were cleared direct to BO710 (IAF) at FL 15,000, cleared for the approach. One mile prior we did our arrival check procedure with the airplane in VNAV ALT. I used v/s -500 to get the airplane out of ALT and immediately went to VNAV. We were slowing and configuring below 180 kts. We recognized we were not in VNAV PATH at the FAP while task saturated and fully configured. Shortly thereafter we received a terrain caution and executed a published missed approach with no issues. I believe the missed approach was initiated above 11,200 and above radar altitude 1300 ft. There was no updated ATIS, the weather was lower than the last we received so we were IMC during the approach phase. There was a significant tailwind at the time we needed to slow down and go down. (I did slow early to account somewhat for this). Shortcuts on the approach, language barrier, poor radios, VNAV ALT close to initial fix with the tailwind. Even with a slower airspeed and understanding how to get out of ALT I'm not certain we would have caught the path. I should not have taken the shortcut from AMVES to BO710. This would have given the airplane (and us) more time to be stable.

Synopsis

Air carrier flight crew reported receiving a terrain alert on approach and executed a missed approach.

Time / Day

Date : 202201

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZAB.ARTCC

State Reference : NM

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZAB

Aircraft Operator : Air Carrier

Make Model Name : B767 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight / Delivery

Flight Phase : Cruise

Airspace.Class A : ZAB

Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZAB

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight / Delivery

Flight Phase : Cruise

Airspace.Class A : ZAB

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 : 1867921

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 : 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 : 1867922
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Track / Heading : All Types
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 : Took Evasive Action
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

So there we were, the best Captain & FO (First Officer) in the fleet, approximately 11 miles right in trail of [a company aircraft] from waypoint WSTIN direct to TCC (for approx 590 nm). About 40 east of TCC the winds shifted so that they were straight on the nose and therefore we became directly in [the other aircraft's] wake turbulence. I directed the FO to offset 1L which he did and then he called to request the offset from ATC. Albuquerque approved. And then they immediately came back and said to call them with a possible pilot deviation; which I did after landing. The autopilot in the jet is programmed to take a very aggressive bid (45 degree cut or more) to get on the offset. I believe this aggressive bid is what triggered Albuquerque 's concern as the traffic was well outside of 10 miles with no loss of separation when the jet completed the offset.

Narrative: 2

There we were... We'd been about 11nm behind [a company aircraft] since takeoff, cruising at the same altitude. As we were nearing TCC (maybe 60-80 miles out), the wind shifted a bit and the 100mph winds on the nose blew [the other aircraft's] wake turbulence right to us. We entered a 1nm left route offset to avoid getting tossed around and then requested the offset from ABQ ATC. They approved it, but then asked us to call them with a possible pilot deviation. Wake turbulence generated the need for us to move the jet. However, we clicked the button before ATC gave us the thumbs up, so its aggressive LNAV offset correction was a surprise that didn't need to happen.

Synopsis

B767 flight crew reported a track deviation occurred when they turned off course to avoid wake turbulence from a preceding aircraft.