

ASRS Database Report Set

RNAV Arrival Reports

Report Set Description.....A sampling of reports that reference RNAV Arrival related incidents.

Update Number.....9.0

Date of UpdateJuly 31, 2018

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

Number of New Records in Report Set50

Type of Records in Report Set.....For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, CA 94035-1000



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

Linda J. Connell

Linda J. Connell, Director
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: 1545907 *(1 of 50)*

Synopsis

B737 flight crew reported a track deviation resulted when they were distracted by a wake turbulence encounter on arrival into IAH.

ACN: 1545119 *(2 of 50)*

Synopsis

GA pilot reported a NMAC with a drone just outside the FAF while flying the RNAV15 approach to Indianapolis Metro Airport.

ACN: 1544557 *(3 of 50)*

Synopsis

Air carrier Captain reported that the PAPIs on left and right side of Runway 28 at SBGL gave two different indications.

ACN: 1544351 *(4 of 50)*

Synopsis

B737-800 First Officer reported that the FMC database contains a visual approach into BOS, but there was no accompanying Jeppesen approach plate.

ACN: 1541023 *(5 of 50)*

Synopsis

F2TH Captain reported encountering wake turbulence in trail of B737 while flying the LUCKI ONE STAR to SAN, and that it is plausible that STAR procedures could play a role in increasing these incidents.

ACN: 1537779 *(6 of 50)*

Synopsis

B737 Captain reported that the navigation database in the FMS was in conflict with the approach plates for La Aurora Airport (MGGT).

ACN: 1536814 *(7 of 50)*

Synopsis

B737-700 flight crew reported landing without clearance after being distracted by a wake turbulence encounter on arrival into LAX.

ACN: 1535761 *(8 of 50)*

Synopsis

An Embraer ERJ flight crew reported that while on the intercept for the final approach course the aircraft descended below the vectoring altitude.

ACN: 1533375 *(9 of 50)*

Synopsis

An air carrier Captain reported a NMAC with a helicopter while on final approach.

ACN: 1533123 *(10 of 50)*

Synopsis

Air carrier flight crew reported a discrepancy between the ILS and their navigation display causing conflicting and confusing information.

ACN: 1532882 *(11 of 50)*

Synopsis

HCF Controller reported missing an overtake situation resulting in a canceled clearance. Controller reports possibly entering a higher MVA area during re-sequencing.

ACN: 1532782 *(12 of 50)*

Synopsis

General aviation pilot reported a NMAC with another aircraft in the vicinity of PCW airport.

ACN: 1532610 *(13 of 50)*

Synopsis

CRJ-900 flight crew reported ATC issued a low altitude alert when they descended below charted altitude on the approach.

ACN: 1532120 *(14 of 50)*

Synopsis

SCT controller reported vectoring a SAN arrival for spacing and entering higher MVA area.

ACN: 1532112 *(15 of 50)*

Synopsis

ALB controller reported having to vector an aircraft in snow squalls at night to a runway not served by a useable standard instrument approach.

ACN: 1531464 *(16 of 50)*

Synopsis

Corporate Aircraft First Officer reported having issues with the FMC VNAV descent mode in complying with altitude restrictions on an arrival.

ACN: 1529982 *(17 of 50)*

Synopsis

Air carrier flight crew reported receiving a GPWS obstacle warning on a visual approach to OKC in hazy conditions.

ACN: 1529871 *(18 of 50)*

Synopsis

B737 Captain reported the design of the DEN RNAV Z 16R STAR led to a TCAS RA alert for traffic on the parallel runway.

ACN: 1528605 *(19 of 50)*

Synopsis

Air carrier Captain reported a discrepancy between the FMC database and the JeppFD-Pro published procedure for BHAWK on the FYTTE4 STAR.

ACN: 1528257 *(20 of 50)*

Synopsis

SCT Controller reported when receiving a sector briefing, an A320 had been issued a clearance below the MVA.

ACN: 1527756 *(21 of 50)*

Synopsis

CKB Controller reported possibly issuing an altitude below the MVA, to an SR22, causing a low altitude alert.

ACN: 1527421 *(22 of 50)*

Synopsis

PA-28 student reported an electrical failure and fire during flight. A landing at the destination field was normal.

ACN: 1527323 *(23 of 50)*

Synopsis

B737NG flight crew reported receiving a terrain warning and observed misaligned PAPI indicator lights at MTPP.

ACN: 1527072 *(24 of 50)*

Synopsis

Two Tracon Controllers reported a Trainee vectored an aircraft below the Minimum Vectoring Altitude.

ACN: 1527071 *(25 of 50)*

Synopsis

CLT TRACON Controller and pilot reported the pilot did not comply with the crossing restriction on the RNAV STAR.

ACN: 1526986 *(26 of 50)*

Synopsis

Airliner 99 pilot on short final reported they observed a vehicle on the runway and executed a missed approach.

ACN: 1526985 *(27 of 50)*

Synopsis

Bonanza pilot reported neglecting to cancel IFR flight plan due to distractions on approach to a non-towered airport.

ACN: 1526742 *(28 of 50)*

Synopsis

Air Carrier Captain reported receiving two EGPWS terrain warnings on a visual approach to ROA Runway 24. Reporter continued the approach to landing because terrain was in sight.

ACN: 1526534 *(29 of 50)*

Synopsis

A TRACON Controller reported aircraft on an RNAV STAR are routinely too high and fast to efficiently sequence even while complying with the published crossing restrictions.

ACN: 1526257 *(30 of 50)*

Synopsis

ZLA Center Controller reported an A320 descended into military restricted airspace due to a software flaw in the aircraft FMS.

ACN: 1526065 *(31 of 50)*

Synopsis

Air carrier Captain reported airspace, airspeed, and altitude conflicts associated with the SERFR2 arrival into SFO.

ACN: 1525989 *(32 of 50)*

Synopsis

Pilot reported descending below the glidepath on an RNAV approach in order to escape icing conditions.

ACN: 1525201 *(33 of 50)*

Synopsis

Turboprop pilot reported an unexpected terrain warning on approach to BHM just prior to the MDA.

ACN: 1525159 *(34 of 50)*

Synopsis

Embraer 175 First Officer reported receiving a low altitude alert from the Tower while on a visual approach.

ACN: 1523817 *(35 of 50)*

Synopsis

Cessna 402 pilot reported an engine failure during approach that was not clearly identified until landing.

ACN: 1523694 *(36 of 50)*

Synopsis

B737-700 flight crew reported receiving a false GPWS terrain warning on approach into SMF.

ACN: 1523317 *(37 of 50)*

Synopsis

Air carrier Captain reported the company's 10-4 chart for the RNAV visual to Runway 4 at MHLM is inaccurate and resulted in an unnecessary EGPWS alert.

ACN: 1522887 *(38 of 50)*

Synopsis

Air carrier Captain reported when tracking straight in on final to MRY Runway 28L, the PAPI appeared to be dimming at a rapid rate.

ACN: 1522689 *(39 of 50)*

Synopsis

M98 TRACON Controller reported an arriving aircraft flew the RNAV Approach course even though they had not been cleared to for it.

ACN: 1522688 *(40 of 50)*

Synopsis

Tower Controller and GA pilot reported a taxiway landing after a circle to land approach.

ACN: 1522446 *(41 of 50)*

Synopsis

Air carrier Captain reported flying an arrival to CLT that company had directed not to accept.

ACN: 1522431 *(42 of 50)*

Synopsis

B737 flight crew reported receiving a late crossing restriction from ATC that ultimately resulted in a TCAS RA.

ACN: 1521830 *(43 of 50)*

Synopsis

Air carrier Captain reported a runway excursion upon landing rollout due to un-reported nil braking action due to ice.

ACN: 1521568 *(44 of 50)*

Synopsis

Air carrier pilot reported the lack of Pilot Controlled Lighting during daylight hours at MMH makes it difficult for crews to discern the runway boundary.

ACN: 1521549 *(45 of 50)*

Synopsis

A319 flight crew reported that ATC commanded the flight to go missed.

ACN: 1521419 *(46 of 50)*

Synopsis

B737-800 flight crew reported receiving a low altitude alert from Tower on the VOR 13L approach to JFK.

ACN: 1521358 *(47 of 50)*

Synopsis

B737 First Officer reported a runway excursion after landing at an airport that experienced a flash freeze just prior to landing.

ACN: 1520724 *(48 of 50)*

Synopsis

CL300 flight crew reported receiving a low altitude alert after departing the cleared altitude due to a clearance misunderstanding.

ACN: 1520097 *(49 of 50)*

Synopsis

MD80 flight crew reported an early descent resulted in an airborne conflict that was complicated by the failure of the TCAS system.

ACN: 1519790 *(50 of 50)*

Synopsis

B737 flight crew reported that they received an EGPWS sink rate warning while on final approach.

Report Narratives

Time / Day

Date : 201805
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : IAH.Airport
State Reference : TX
Altitude.MSL.Single Value : 14000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : I90
Aircraft Operator : Air Carrier
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use : GPS
Flight Phase : Descent
Route In Use.STAR : DRLLR FIVE RNAV
Airspace.Class B : IAH

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Nav In Use : FMS Or FMC
Flight Phase : Descent
Airspace.Class B : IAH

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 26000

Experience.Flight Crew.Last 90 Days : 200
Experience.Flight Crew.Type : 16000
ASRS Report Number.Accession Number : 1545907
Human Factors : Distraction
Human Factors : Situational Awareness
Analyst Callback : Attempted

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Last 90 Days : 57
ASRS Report Number.Accession Number : 1545888
Human Factors : Distraction
Human Factors : Situational Awareness

Events

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

Assessments

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

Narrative: 1

As we were heading toward MPORT on the DRLLR 5 arrival, we were given the RNAV approach to 26R (we had the ILS 26R in the FMC). We encountered what we thought might be wake turbulence twice within a minute, which distracted us somewhat. As we entered the approach in the FMC we inadvertently reentered the STAR and brought MPORT to the top, which we had just, passed, which caused the aircraft to begin a turn toward MPORT, which was behind us. The First Officer (flying pilot) disconnected the autopilot and began a turn back to the course. At this point, we were almost to DRLLR and the intercept angle was too large. ATC asked where we were headed and I replied that we had deviated from the course while we were programming our FMC and that we were headed back on course. At this point, the Controller began to vector us to the downwind leg. He did not query us further, changed frequency and flight continued to visual approach and landing.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

B737 flight crew reported a track deviation resulted when they were distracted by a wake turbulence encounter on arrival into IAH.

Time / Day

Date : 201805
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : UMP.Airport
State Reference : IN
Relative Position.Angle.Radial : 330
Relative Position.Distance.Nautical Miles : 10
Altitude.MSL.Single Value : 2400

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZID
Aircraft Operator : Personal
Make Model Name : Bonanza 35
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Nav In Use : GPS
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class E : ZID

Aircraft : 2

Reference : Y
Make Model Name : UAV - Unpiloted Aerial Vehicle
Operating Under FAR Part.Other
Flight Phase : Cruise
Airspace.Class E : ZID

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 1267
Experience.Flight Crew.Last 90 Days : 10
Experience.Flight Crew.Type : 1000
ASRS Report Number.Accession Number : 1545119

Events

Anomaly.Conflict : NMAC
Anomaly.Inflight Event / Encounter : Other / Unknown
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 0
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

We were on the RNAV 15 Approach to UMP coming up on AYUDA IAF and saw a flying object pass off our left wing tip at our altitude, 2400 feet MSL approximately 200 feet away.

Synopsis

GA pilot reported a NMAC with a drone just outside the FAF while flying the RNAV15 approach to Indianapolis Metro Airport.

Time / Day

Date : 201805
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : SBGL.Airport
State Reference : FO
Altitude.MSL.Single Value : 1600

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : SBGL
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 : Final Approach
Route In Use.Other

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 62534
Experience.Flight Crew.Last 90 Days : 240
Experience.Flight Crew.Type : 5069
ASRS Report Number.Accession Number : 1544557
Analyst Callback : Attempted

Events

Anomaly.Inflight Event / Encounter : Other / Unknown
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Primary Problem : ATC Equipment / Nav Facility / Buildings

Narrative: 1

RNAV (GNSS) Y Runway 28 into SBGL. Day VFR. PAPIs on left and right side gave two different indications. PAPI on the left showed the aircraft extremely low. PAPI on the right side showed the aircraft high. From all visual clues, PAPI on the right appeared to read correctly.

Synopsis

Air carrier Captain reported that the PAPIs on left and right side of Runway 28 at SBGL gave two different indications.

Time / Day

Date : 201805

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : BOS.Airport

State Reference : MA

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : A90

Aircraft Operator : Air Carrier

Make Model Name : B737-800

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class B : BOS

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1544351

Analyst Callback : Completed

Events

Anomaly.No Specific Anomaly Occurred : All Types

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Chart Or Publication

Primary Problem : Chart Or Publication

Narrative: 1

There is an RNAV Visual Approach to 4L at BOS in the 737 FMC, but no accompanying Jeppesen approach plate. An approach plate would greatly enhance situational awareness and safety when cleared for this approach into BOS.

Suggestions: Contact Jeppesen and have them create an approach plate for the RNAV 4L approach into BOS.

Callback: 1

Reported indicated that on a subsequent flight into BOS, the FMC database no longer contained this approach.

Synopsis

B737-800 First Officer reported that the FMC database contains a visual approach into BOS, but there was no accompanying Jeppesen approach plate.

Time / Day

Date : 201805
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : SAN.Airport
State Reference : CA
Relative Position.Distance.Nautical Miles : 75
Altitude.MSL.Single Value : 23000

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZLA
Aircraft Operator : Corporate
Make Model Name : Falcon 2000
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use : GPS
Flight Phase : Descent
Route In Use.STAR : LUCKI ONE RNAV
Airspace.Class A : ZLA

Aircraft : 2

Reference : Y
ATC / Advisory.Center : ZLA
Make Model Name : B737 Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Nav In Use : GPS
Flight Phase : Descent
Route In Use.STAR : LUCKI ONE RNAV
Airspace.Class A : ZLA

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 4925
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 1700
ASRS Report Number.Accession Number : 1541023
Analyst Callback : Completed

Events

Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Regained Aircraft Control
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

During the descent via LUCKI.1 RNAV arrival into SAN aircraft encountered wake turbulence from a B737 aircraft approximately ten miles ahead and descending via the same STAR. During the encounter, the aircraft rolled left 30 degrees followed by an abrupt, immediate, and uncommanded descending 40-45 degree roll to the right. Winds aloft were light with about a 15 knot direct headwind noted (approximately FL230).

[The First Officer] executed a recovery maneuver to level the wings and return aircraft to a normal flight attitude, disconnecting all auto-flight functions. [I] contacted ATC, notified them of the encounter, and requested immediate descent below path of aircraft ahead, which was granted. This allowed us to descend at or slightly below the altitude restrictions on the STAR and place us below the aircraft ahead.

Noted is the increased utilization of arrivals, which apply very specific lateral and vertical restrictions/crossings. In my experience, these type arrivals have the tendency to place trailing aircraft on a near identical vertical and lateral trajectory of the preceding aircraft and possibly placing the aircraft at a greater risk for this type event.

Callback: 1

Reporter stated seeing an increase in wake turbulence encounters with GPS navigation resulting in aircraft flying through exactly the same airspace just minutes apart.

Synopsis

F2TH Captain reported encountering wake turbulence in trail of B737 while flying the LUCKI ONE STAR to SAN, and that it is plausible that STAR procedures could play a role in increasing these incidents.

Time / Day

Date : 201804

Place

Locale Reference.Airport : MGGT.Airport
State Reference : FO

Aircraft

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

Component

Aircraft Component : Navigation Database
Aircraft Reference : X
Problem : Design

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 1822
ASRS Report Number.Accession Number : 1537779
Analyst Callback : Completed

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

The altitudes that load in the box for the RNAV Y to Runway 02 starting at GT566, and including GT558 and GT542 all show at or above altitudes. But, the approach plate has them as hard altitudes.

Callback: 1

The reporter stated that the airport in question is La Aurora Airport, (MGGT) Guatemala City, Guatemala. The reporter stated that the approach plates for MGGT shows all the way points as hard altitudes; however, the database for Runway 2 show the waypoints as at or above altitudes.

Synopsis

B737 Captain reported that the navigation database in the FMS was in conflict with the approach plates for La Aurora Airport (MGGT).

Time / Day

Date : 201804

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LAX.Airport

State Reference : CA

Altitude.MSL.Single Value : 2200

Environment

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : SCT

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Landing

Flight Phase : Final Approach

Route In Use : Visual Approach

Route In Use.STAR : IRNMN

Airspace.Class B : LAX

Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : SCT

Aircraft Operator : Air Carrier

Make Model Name : A380

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Final Approach

Airspace.Class B : LAX

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Last 90 Days : 298

Experience.Flight Crew.Type : 273
ASRS Report Number.Accession Number : 1536814
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC
Analyst Callback : Attempted

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 409
ASRS Report Number.Accession Number : 1536818
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Human Factors : Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Procedural : Landing Without Clearance
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Detector.Person : Flight Crew
When Detected : Taxi
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Coming in on the IRNMN 1 RNAV Arrival into LAX, we had a couple of slight wake turbulence encounters. On downwind into LAX, we found we were following an A380. I said I was going to keep the glideslope one dot high, landing behind the A380; the Captain agreed with that assessment. When cleared for the visual and told to switch to Tower at JETSA with traffic and airport in sight. The Captain reminded me to keep it a dot high behind the Super.

I was concentrating on hand flying the approach a dot high, and the Captain was closely monitoring my flying. We both forgot to switch over to Tower at JETSA and landed still on Approach frequency. I didn't realize until we had taxied clear and were holding short of 24L that were not on Tower, and still on Approach. We quickly switched frequencies to

Tower and said we were clear of the runway (Runway 24R) and holding short 24L. Tower asked us "what happened?" We replied, "We got busy on the approach."

I think we both became too engrossed in the approach, and possibility of a wake upset, that we lost our situational awareness on which frequency we were. We should have realized by our lights switch position. We had not been cleared to land, and had not contacted Tower.

Narrative: 2

We had experienced two solid bumps which we attributed to wake turbulence while flying the IRNMN 1 Arrival to Runway 24R at LAX. Upon turning base and turning over to Final Controller, we were advised we were following an A380 and cautioned for wake turbulence. We called the A380 and the field in sight and were cleared for the visual approach. I advised the New Hire First Officer to stay at least a dot above the glideslope. He initially dipped a bit, then turned off the automation, leveled, and stayed a dot above. Final advised us to contact Tower at JETSA. I put Tower frequency into radio and waited to flip the switch at JETSA. We extended gear [and] flaps and ran the Before Landing Checklist. I got caught up in observing his progress and didn't flip the switch. We landed 24R. Tower said nothing, but I clearly didn't have clearance to land!

Synopsis

B737-700 flight crew reported landing without clearance after being distracted by a wake turbulence encounter on arrival into LAX.

Time / Day

Date : 201804

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : BTV.TRACON

State Reference : VT

Aircraft

Reference : X

ATC / Advisory.TRACON : BTV

Aircraft Operator : Air Carrier

Make Model Name : Embraer Jet Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Nav In Use.Localizer/Glideslope/ILS : Runway 33

Flight Phase : Initial Approach

Route In Use : Vectors

Airspace.Class E : BTV

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Other / Unknown

ASRS Report Number.Accession Number : 1535761

Human Factors : Time Pressure

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1535763

Human Factors : Situational Awareness

Human Factors : Time Pressure

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - 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
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

When preparing for departure the ATIS is not available via ACARS or through a recorded phone line, so the recent METAR was obtained through the app. The wind information and current NOTAMs (RWY 33 GS OTS) steered us toward expecting the LOC 33 upon arrival into BTW. We were expecting a quick and compressed descent into BTW so we started our approach preparation duties early, the arrival ATIS again was not obtainable during this time because we were too far out to listen on the radio. So again, I obtained the latest METAR from the app. Still expecting the LOC 33. Upon hand off to BTW approach we were given the choice of either the GPS Y or the GPS Z to 33. The captain responded that we would like something other than the RNAV. The controller did not respond. After a period of time we told the controller the GPS Z. We briefed and set up for the RNAV Z. The controller gave us a vector and a clearance for GPS Z. While on the intercept for the final approach course the aircraft started descending below the vectoring altitude. Noticing this error we decided to break off the approach and started a climb back to the vectoring altitude. Upon starting this we received a "Caution Terrain" annunciation. Since we were already adjusting our flight path up to vectoring altitude the terrain annunciation quickly ceased. We requested vectors for the LOC 33 and finally given that, continued and landed normally. A quick change of the expected approach contributed to task saturation near the approach phase of flight and pushed the crew from Green to yellow on the TEM, leading to an altitude deviation. The first and foremost lesson is that a few minutes is certainly not enough time to set up and brief a GPS approach adequately. We should have simply stated that we did not expect this approach and will need extra time to set up for it and requested delaying vectors. This would have been the biggest barrier we could have used in this situation. Second lesson learned is when flying into an airport without digital ATIS services is to get approach information directly from ATC, that way everyone is in the loop and nothing is unexpected.

Narrative: 2

We initiated a climb to correct the deviation and it was at this point we decided not to continue the approach. I transmitted to ATC, "UNABLE RNAV REQUEST VECTORS"! During the altitude correction CAUTION TERRAIN annunciated! ATC cleared us to fly a heading and altitude and would we like vectors for the LOC33 to which I replied affirmatively. Flight concluded by successfully following this subsequent approach.

Task saturation due to ATC approach clearance which was different from what we were expecting and set up for. Elements of time compression led to a compromise in crew coordination and quickly moved us away from GREEN and into YELLOW prompting us to quickly develop a strategy to establish barriers against impending threats. CA first flight

into BVT and FO had not flown into BVT for many years past.

When time compression issues arise quickly establish a plan to create more time to effectively deal with the situation.

Synopsis

An Embraer ERJ flight crew reported that while on the intercept for the final approach course the aircraft descended below the vectoring altitude.

Time / Day

Date : 201804

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : KTN.Airport

State Reference : AK

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZAN

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 : Final Approach

Route In Use.Other

Airspace.Class E : KTN

Aircraft : 2

Reference : Y

Aircraft Operator : Corporate

Make Model Name : Helicopter

Operating Under FAR Part : Part 91

Mission : Cargo / Freight

Flight Phase : Cruise

Airspace.Class E : KTN

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1533375

Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

The first two days of flying were demanding, but fatigue was not a major factor in this event. Ketchikan was clear of clouds with very light winds. I was the Pilot Monitoring and the First Officer the Pilot Flying (PF). Prior to the descent point at cruise we set up and briefed the RNAV (RNP) M Runway 11 Approach. We planned to do the entire approach as plotted, even though it was in visual conditions. Center instructed us to contact Ketchikan Radio, and they subsequently requested that we make a position report on an 8-mile final. The approach pattern for Runway 11 brought us on a gentle arcing turn to the right, which intercepted the final approach course just about 10 miles from the runway threshold. We heard Radio transmitting with some traffic as we rounded the turn to final, descending through 3,000 as depicted on the chart. The PF commanded the start of the aircraft configuration for landing as we reached the 8-mile report fix, with the gear down and flaps initially set at 5 degrees. When we reported the 8-mile fix, we cancelled our IFR so that our company aircraft could continue unimpeded after us. Radio informed us of a helicopter in flight westbound with a sling load, but we could not determine the point from where the helicopter was westbound.

The helicopter made some very brief and garbled position report, and that was mixed in with other helicopters making similar position reports with Radio. All of the helicopters had call signs from same company, and there may have been four helicopters being dispatched from a nearby field, across the Tongass Narrows. It appeared that they were making multiple round robin trips to some location that crossed the approach path of aircraft landing on Runway 11. We received a TA from one of the helicopters as we neared 2,000 feet on final. The PF commanded Flaps 15 as we were nearing the final approach fix HEKUX. The PF slowed the rate of descent as we both strived to make visual contact with the traffic coming the opposite direction at our altitude. When we received the "Monitor Vertical Speed" RA, the PF leveled off and remained out of the red outlined zone depicted on the PFD. Neither of us could make visual contact with the helicopter, and I glanced back and forth at the TCAS display to aid in locating it. After the RA, the traffic did not appear to alter its flight course or altitude, and the altitude difference between us trended from 500 feet below, to our altitude, and finally to about 400 feet above us, as we continued east on the arrival path. My estimate was that the traffic was within 4-500 feet at our closest proximity, though we were not able to verify it visually. We did not hear the pilot of the helicopter respond to anything, whether or not he had us in sight, or whether he was taking evasive action. I assume he could see us because of our size and being visible from below. I anticipate that he was not able to alter his flight path because of his sling load, and due to economic considerations or hazards to people or structures below,

he did not want to eject it.

Following the RA, both the PF and I agreed that we were too high to continue the approach. We reconfigured the aircraft for a missed approach and initially followed the missed approach procedure. After we commenced the missed approach procedure, Radio seemed mystified about the call. Meanwhile he continued to make numerous radio calls to other helicopters in the area, including an update to our own that was approaching the area. The PF and I agreed that the best option was to land the opposite direction on Runway 29 in an effort to not conflict with other inbound. However in the turn to final, the timing would not work. Inbound flight was aware of the problem, and they adjusted their flight path to follow us visually to Runway 29 after us. The frequency was cluttered with numerous helicopters, Radio acknowledging all of the calls, and us coordinating our flight paths to Runway 29. The event concluded with us being something less than 10 minutes later than our original time of arrival, and no further conflicts were encountered. Later on the ground, I quizzed Radio about the helicopter operations, and he [as a] matter of fact described that as typical of the helicopter flight patterns.

It is highly suggested that some sort of meeting be arranged between Helicopter Company, Ketchikan Radio, the FAA, and other operators at Ketchikan Airport. There seems to be some contract secured by the helicopter company that motivates them to operate sling loads right across the final approach fix, at the final approach altitude, from a nearby off airport site to a drop zone. Even when helicopters are landing at the same field as arriving aircraft, they are not supposed to be in the same pattern as fixed wing aircraft. In my opinion, this then makes this practice more egregious when rotor wing aircraft appear to be daisy chained in their pattern directly opposite of aircraft in a predetermined flight course to landing at a public airport. The fact that the helicopters are sling loading makes the operation more disconcerting, because there is thus a natural tendency to not alter their flight paths even when they are intentionally crossing approach fixes at similar altitudes as approaching aircraft. Compounding the problem are VHF radio equipment that transmits in garbled fashion, probably because of a helicopter's inherent background noise. Finally, position reports that use nomenclature and local names known only to them are worthless except only to themselves. It subconsciously reveals that the operation is focused mostly on their needs, and not with much consideration to other aircraft using the public approaches that overlap their customized flight paths.

Synopsis

An air carrier Captain reported a NMAC with a helicopter while on final approach.

Time / Day

Date : 201804

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : SMF.Airport

State Reference : CA

Environment

Flight Conditions : IMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : NCT

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Nav In Use : FMS Or FMC

Nav In Use.Localizer/Glideslope/ILS : Runway 16L

Flight Phase : Initial Approach

Route In Use.STAR : SLMR 1

Airspace.Class E : NCT

Component

Aircraft Component : Navigational Equipment and Processing

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1533123

Human Factors : Situational Awareness

Human Factors : Troubleshooting

Human Factors : Confusion

Human Factors : Human-Machine Interface

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1533124
Human Factors : Troubleshooting
Human Factors : Human-Machine Interface
Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Detector.Automation : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Given SLMMR ONE RNAV Arrival. At fix TENCO given feeder route to FAPIN intersection cleared ILS 16L. Given the sharp intercept angle, I planned to use LNAV to intercept the localizer. The aircraft started turn to intersect and ATC asked where I was going. We told them turning to intercept the localizer, but was not receiving it. He told us to go missed and were given a heading and altitude. We complied with the instructions. Checked all our settings for the approach [and] they were all correct.

The First Officer was monitoring the raw data on lower screen and had tuned and identified the fix as per standard procedures. When given a heading to re-intercept the localizer, the heading showed us intercepting inside the FAF. I asked for a new heading. Just as we started a further turn right the localizer captured. The FMC showed the localizer extension line 1.5 to 2 miles to the right. As we flew down the localizer the two lines slowly merged. We landed safely.

There has been multiple reports from other pilots of this happening to legacy equipped aircraft at SMF. Until we find out why this is happening we should send GPS aircraft to this location. Speculation is the DME to DME update is causing a map shift late in the arrival. We were never shown off the arrival or notified we were.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Air carrier flight crew reported a discrepancy between the ILS and their navigation display causing conflicting and confusing information.

Time / Day

Date : 201804

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : HCF.TRACON

State Reference : HI

Altitude.MSL.Single Value : 4000

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : HCF

Aircraft Operator : Air Carrier

Make Model Name : Airbus Industrie Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Flight Phase : Descent

Airspace.Class C : OGG

Person

Reference : 1

Location Of Person.Facility : HCF.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1532882

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Distraction

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

I had a sequence at Maui Approach. The sectors were combined, but they probably should [not] have been combined due to workload. I had cleared [an A320] for the RNAV Y Runway 2 approach behind another jet. I got distracted by another issue going on to the south, and the next time I looked back at [the Airbus] I saw an 80 knot overtake with the aircraft ahead of them. I tried to reduce [the Airbus] to final approach speed, but it didn't happen quickly enough. I canceled the approach clearance and climbed [them] to 4,000. I turned them southeast for re-sequencing. During all of this, I had multiple calls from other sectors in my ear, and Maui Tower calling on the hotline. I also had several other aircraft that I was sequencing and that were departing. It was busy. I am pretty sure that [the Airbus] remained within the 3,500 section of the MVA, but they may have clipped the 4,500 section.

Maui Approach sectors should have been split for this amount of traffic. The other things distracting me were due to other controllers straying from what our SOP states (i.e. an aircraft was on a routing other than the PDR because the pilot requested it, and the previous controller had approved it, and an aircraft inbound to Maui stopped at 10,000 when they are supposed to be descending to 8,000 causing them to get stuck above another aircraft and making sequencing more difficult). The SOP should be followed to avoid these unnecessary distractions.

Synopsis

HCF Controller reported missing an overtake situation resulting in a canceled clearance. Controller reports possibly entering a higher MVA area during re-sequencing.

Time / Day

Date : 201804

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : PCW.Airport

State Reference : OH

Altitude.MSL.Single Value : 2200

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 12000

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : PCW

Aircraft Operator : Personal

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Nav In Use : GPS

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class E : CLE

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : PCW

Make Model Name : Small Aircraft

Flight Phase : Initial Approach

Airspace.Class E : CLE

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 551

Experience.Flight Crew.Last 90 Days : 23

Experience.Flight Crew.Type : 424

ASRS Report Number.Accession Number : 1532782

Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We flew to PCW for a fun flight for lunch and to practice an approach VFR into the airport, the RNAV 9 approach. I announced to CTAF my distance (10 miles) and direction (west) of the airport, and that I was on the RNAV 9 approach for a straight-in landing. It was a nice day and there was a lot of traffic at the airport. Shortly after, we heard another plane give a similar announcement, although the transmission was extremely weak. We began looking for that plane.

My passenger saw the plane on his iPad using Garmin Pilot first and then on our plane's ADS-B. It showed the plane's location and approximate altitude. Garmin Pilot indicated the plane was at our 1 o'clock and approximately 8 miles ahead of our plane, but we did not see it. At that point, I was on the approach between the initial and final approach fixes at about 2,200 feet MSL and getting ready to descend further. We still did not see the plane. Garmin Pilot indicated then that it was at 3 o'clock at approximately one mile from our plane, and approximately 100 feet above our altitude. Shortly thereafter, both ADS-Bs showed the other plane did a 180 degree right turn from about our 6 o'clock (behind us - we still did not see the plane) still 100 feet above but descending. Shortly after that, the ADS-B in our plane began to alert us of this traffic, and the Garmin Pilot was now alerting us also. At that time the Garmin Pilot showed our location and the other plane's location to be on top of each other and indicating same altitude. Visually, we could not see the aircraft left or right of our tail.

At that point, my passenger was insistent that I divert to the right because both ADS-Bs were now giving traffic alerts that indicated the plane was at the same altitude and over/under us (we could not tell) and going at a faster airspeed than we were (we were at about 90 knots, his airspeed was about 115 knots on landing). He feared we were going to collide with the plane if I did not divert to the right. I did divert to the right to follow the upwind leg of the pattern and made a call on CTAF. At that point I looked to my left and saw the plane at about 300 feet below us at our 9 o'clock low and starting a touch-and-go on Runway 9. While we were still on the upwind leg with the plane now in sight, he then did a climbing right turn passing in front of us, approximately 400-500 feet above us and headed for his next destination. The only other radio transmission we heard from this plane was that he was exiting the area and again, it was extremely weak.

Had it not been for the ADS-B on our plane and my passenger's iPad on Garmin Pilot, we may have had a mid-air collision. Talking with other pilots at the restaurant who followed us in stated that our transmissions were loud and clear. We heard their transmissions loud and clear as well.

Synopsis

General aviation pilot reported a NMAC with another aircraft in the vicinity of PCW airport.

Time / Day

Date : 201804

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : IMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 500

Aircraft

Reference : X

ATC / Advisory.TRACON : 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

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Initial Approach

Route In Use : Vectors

Airspace.Class D : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Check Pilot

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1532610

Human Factors : Fatigue

Human Factors : Situational Awareness

Human Factors : Distraction

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 1532609
Human Factors : Situational Awareness

Events

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

Assessments

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

Narrative: 1

We were descending for approach. My Initial Operator Experience (IOE) Captain upgrade student picked up ATIS. Visibility 10 SM and a few clouds at 2,100 ft., which was what had been forecast. I briefed a visual approach to Runway 30 backed up with the RNAV GPS Z Runway 30. (ILS 30 OTS). As we checked in with the final Approach Controller we were told [a new] ATIS was current. [First Officer] picked up [new ATIS] and briefed me that the ceiling had gone down to 500 feet BKN. I quickly briefed the full RNAV approach and [we] were given a vector to the south.

We were eventually given a descent to 3,000 feet and cleared for the approach. As we approached, the snowflake began to descend from the top of the PFD and it was at this point I lost situational awareness and was thinking I would be cleared to descend to 1,600 feet. on the snowflake. I began a descent and didn't realize we were not yet at [the descent point] until descending thru 2,000 feet. I then began a climb back to 3,000 ft. and shortly thereafter were informed by the Approach Controller that he had an altitude alert and told us to confirm [we would cross a waypoint] at 3,000 feet. We acknowledged we were returning to 3,000 feet. and continued the approach.

We ultimately failed to break out at minimums and executed the missed approach. We took vectors back around and on our second attempt, broke out at minimums, and landed.

I can only say that fatigue may have been a factor in doing something so stupid. It was the final leg of a 4-leg day. We had been delayed on maintenance the night before and were reduced to a 10-hour layover with a late show the following day. I only got about 6 hours sleep and had been doing IOE with a different student until [this] flight. Additionally, on the preceding leg, we got a wind shear warning accompanied by moderate to severe

turbulence shortly after takeoff, which may have contributed to still being somewhat distracted.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

CRJ-900 flight crew reported ATC issued a low altitude alert when they descended below charted altitude on the approach.

Time / Day

Date : 201804

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : SAN.Airport

State Reference : CA

Altitude.MSL.Single Value : 4700

Environment

Flight Conditions : Marginal

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : SCT

Aircraft Operator : Air Carrier

Make Model Name : B757 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Descent

Route In Use : Visual Approach

Airspace.Class B : SAN

Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : SCT

Aircraft Operator : Air Carrier

Make Model Name : Heavy Transport

Operating Under FAR Part : Part 129

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class B : SAN

Person

Reference : 1

Location Of Person.Facility : SCT.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) : 6

ASRS Report Number.Accession Number : 1532120

Human Factors : Situational Awareness

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

Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Aircraft X was descending toward SAN and in sequence behind Aircraft Y on base. I was previously clearing aircraft for the visual and I had multiple VFR aircraft inbound to adjacent airports. I asked Aircraft X if he had Aircraft Y in sight. He said yes and I told him, " to follow Aircraft Y, cleared visual approach runway 27, caution wake turbulence".

I glanced up at the weather and saw the weather had changed from SCT to BKN030. I asked Aircraft X if he had the field in sight, he said no, he still had Aircraft Y in sight but not the field and asked for the RNAV approach. I didn't have enough separation behind the heavy for an instrument approach, so I turned Aircraft X to a 240 heading initially, then a 210 heading to get more space. I never cancelled his approach clearance and he was still descending on the visual approach clearance.

He descended to 4700 feet in 5000 feet MVA and I told him to fly heading 210 and climb to 5000 feet. The pilot seemed confused. Then I turned him to a 290 heading and he read back "do you want us on a 210 or 290". I turned him again to a 290 heading to join and since he was now in a lower MVA (3800 feet) and enough separation between him and the heavy, I cleared him for the approach.

Recommendation: If I had cancelled his approach, I would've had to tell him maintain visual separation from the Heavy. However, since he was still following the heavy for the field, technically I thought I had separation. Once I realized I wasn't going to keep him on the visual approach, I should have stopped his altitude at 5000 feet for the appropriate MVA. At the time, I was more worried about getting him away from the heavy and skirting just west of the OTAY jump zone (there is a jump zone just south of a 15-mile final at SAN).

Synopsis

SCT controller reported vectoring a SAN arrival for spacing and entering higher MVA area.

Time / Day

Date : 201804

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ALB.TRACON

State Reference : NY

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : ALB

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

Route In Use : Vectors

Airspace.Class C : ALB

Person

Reference : 1

Location Of Person.Facility : ALB.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1532112

Human Factors : Other / Unknown

Human Factors : Time Pressure

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Airspace Structure

Contributing Factors / Situations : Chart Or Publication

Contributing Factors / Situations : Procedure

Contributing Factors / Situations : Weather

Primary Problem : Procedure

Narrative: 1

The RNAV approach to Runway 28 was not authorized at night. We were conducting VOR approaches to Runway 28. The weather all shift had been variable with snow squalls moving through. In between squalls the ceiling and visibility supported visual approaches. During the snow squalls, visibility dropped to as low as 1 SM. Winds were very strong and gusty out of the west. I was working all positions from the tower cab during the mid-shift.

[The aircraft] checked on with current ATIS and I advised them to expect the VOR approach to Runway 28. The pilot stated they "didn't have the charts for that approach". I read them the current wind and offered the ILS to Runway 1 as an alternative. They could not accept Runway 1 due to the winds. The pilot asked if the visual approach to Runway 28 was available. I said it was and began vectoring the aircraft for the visual approach.

During the next few minutes a snow squall started moving through and visibility started to deteriorate. I turned up the lights as high as possible and vectored the aircraft to approach the airport from the south (the snow squall appeared out the windows to be more to the north). The aircraft reported the field in sight and I cleared them for the visual approach. They conducted the visual approach and landed without incident despite the deteriorating conditions. During final approach and landing, visibility was approximately 4 SM in light snow.

This did not feel like a safe operation. The pilot should have the charts available to conduct all instrument approaches at the destination airport. We need the RNAV approach to Runway 28 to be authorized at night again. The RNAV approach produces consistent approaches from the aircraft and makes for a much safer operation.

Using the VOR approach to Runway 28 is not a safe operation. Pilots do not consistently fly the approach properly. I estimate approximately 50% of the pilots do not track the final approach course properly. Some pilots wander left and right of course while others fly a steady track but are offset from the proper approach course by a half mile. The VOR approach course is not aligned with the runway which requires the pilots to maneuver on short final at low altitude to line up with the runway. I don't know if the radio signal from the VOR is not reliable enough to provide consistent approaches or if the pilots don't get enough experience with VOR approaches to be proficient but we should not be relying on the VOR approach as our only option for Runway 28.

Synopsis

ALB controller reported having to vector an aircraft in snow squalls at night to a runway not served by a useable standard instrument approach.

Time / Day

Date : 201804
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZDV.ARTCC
State Reference : CO
Altitude.MSL.Single Value : 32000

Environment

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

Aircraft

Reference : X
ATC / Advisory.Center : ZDV
Aircraft Operator : Corporate
Make Model Name : Light Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Descent
Route In Use.STAR : PUFFR4
Airspace.Class A : ZDV

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 10000
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 2500
ASRS Report Number.Accession Number : 1531464
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : FLC Overrode Automation
Result.Flight Crew : Returned To Clearance

Assessments

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

Narrative: 1

Enroute [to] Denver Centennial. Cleared to descend via the PUFFR4 RNAV arrival. As Pilot Monitoring (PM), I selected the "bottom" altitude in the Alt Selector (9,000 FT). Approximately 30 miles from the FMS-generated top of descent, and in LNAV/VNAV, the aircraft began descending to cross SLMON above FL210. Neither the Pilot flying (PF) or I thought much of it as we were at FL320. I remarked that the descent seemed early and we should monitor. The aircraft continued to descend and approximately 10 miles east of SLMON we were descending through FL215. I remarked to the PF, "We need to make sure this captures the altitude." The aircraft continued to descend below FL210 while we were still several miles from the fix. I told the PF, "Altitude, take the aircraft we are not leveling!" The PF disconnected the autopilot and we were approximately 200 feet low passing SLMON. The PF chose VS mode for the next several crossing restrictions. As we continued the PF again engaged VNAV. The next restriction was HUUKK at 15,000 FT. The aircraft remained level until 5 miles before reaching HUUKK. Again the aircraft descended early in an attempt to cross the next fix above 14,000 FT. Again I voiced to the PF, "Altitude, it is descending early!" The PF was momentarily confused thinking we were to cross HUUCK at 14,000 FT. I stated, "Hand-fly and climb to 15,000 FT. We are 200 feet low!" The PF disconnected the AP and manually controlled the aircraft for the remainder of the arrival and approach.

We debriefed after landing and could not determine any reason why the aircraft should have descended prematurely in either instance. However, we did determine that the PF needed to be more proactive in disengaging the automation when things started to go poorly. He was attempting to use vertical speed mode to climb back to the proper altitude when we were low. When doing that he failed to disengage the VNAV mode so the flight director was giving him conflicting information. As PM I attempted to notify him of the mode selections but it's possible I was giving too much information during a stressful moment. The PF also stated that he was trying to be "gentle" so the passengers would not feel the changes in pitch. To this I say who cares about the coffee let's not bust the altitude!

Live and learn. Lesson learned is even though RNAV arrivals are to be flown in LNAV/VNAV be sure to cross check everything. Trust but verify!

Synopsis

Corporate Aircraft First Officer reported having issues with the FMC VNAV descent mode in complying with altitude restrictions on an arrival.

Time / Day

Date : 201803
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : OKC.Airport
State Reference : OK
Altitude.AGL.Single Value : 1500

Environment

Flight Conditions : Marginal
Weather Elements / Visibility : Haze / Smoke
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 2400

Aircraft

Reference : X
ATC / Advisory.TRACON : OKC
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 : FMS Or FMC
Flight Phase : Initial Approach
Route In Use : Visual Approach
Route In Use : Vectors
Airspace.Class C : OKC

Person : 1

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1529982
Human Factors : Situational Awareness

Person : 2

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

Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1529988
Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

While enroute to OKC, arrival ATIS noted ILS approaches were inoperative. While descending to 3000 feet we were cleared the visual approach to 35R. Weather was 2400 BKN and 10 miles and hazy visibility. After descending through 2000 ft., we received a GPWS "obstacle" warning and immediately initiated a climb. Climbed several hundred feet, reestablished, and intercepted an approach path to Runway 35R. Followed by normal landing.

Cause: In an our aircraft without the ability to use RNAV as a primary approach guidance. Suggestions: During post flight discussion with Captain, in retrospect we should have backed up the visual approach with the RNAV approach for the vertical guidance to the runway.

Narrative: 2

During a visual approach to RWY 35R at OKC with no ILS (both inoperative) - visibility 10 miles and haze, ceiling 2,400 feet, received a GPWS 'obstacle' warning about 1,500 feet AGL. Climbed immediately about 300 feet.

Cause: Descended prior to establishing a 1:3 descent angle. Due to very hazy visibility - were focused on finding runway. Suggestions: Although airplane not authorized for RNAV approach - due to very hazy conditions - use RNAV vertical guidance until closer to runway.

Synopsis

Air carrier flight crew reported receiving a GPWS obstacle warning on a visual approach to OKC in hazy conditions.

Time / Day

Date : 201803

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : DEN.Airport

State Reference : CO

Altitude.MSL.Single Value : 8500

Environment

Flight Conditions : VMC

Light : Night

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : D01

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Final Approach

Flight Phase : Initial Approach

Airspace.Class B : DEN

Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : D01

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase : Final Approach

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class B : DEN

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 11669

Experience.Flight Crew.Last 90 Days : 250

Experience.Flight Crew.Type : 2300
ASRS Report Number.Accession Number : 1529871
Human Factors : Situational Awareness
Human Factors : Human-Machine Interface
Human Factors : Confusion
Human Factors : Distraction

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC Overrode Automation
Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

RNAV approaches, especially arcing ones, at DEN have been a hot issue lately. There is even a bulletin emphasizing that these should be flown with use of the autopilot. The 16R RNAV Z also has a turning arc, to reverse course just outside the "FAF" for many of the approaches. On this approach, autopilot on, we could see oncoming traffic while on base, and rolling final. This converging traffic, we presumed, was for the parallel runway. Our convergence caused a TCAS RA with 300 feet vertical separation. We had a descending RA then climbing one, after which the traffic could be viewed as on a parallel path and below us. In the climb, we dropped gear and flaps so that we could slow and not abandon the approach. We were able to stabilize the approach around 1000 feet AGL, though due to the confusion of ATC handoff, configuration change, and new procedures, we did not turn the TCAS to TA only and ignored it once on a parallel path, where the TCAS event disappeared shortly thereafter. Landing was uneventful and the event was debriefed in the cockpit. Some of the issues that arose were as follows:

Visual approach to the left runway and RNAV Z approach for the right runway were converging on final at about the same place. In the visual only environment, the convergence would be better monitored, but an instrument approach and visual traffic, at night no less, presents an unexpected convergence where perhaps separation is anticipated. The TRACON gave a traffic advisory, but there was confusion due to expected separation of the "RNAV". Procedurally, TCAS can be selected to TA in a close proximity or parallel approach environment, but we were still converging to our respective finals. In accepting the RNAV approach, were we somehow subjecting ourselves to this close proximity environment? It wasn't noted that way on the Jeppesen charts either. It seems TCAS is really still needed in this situation for any overshoot.

Should the TRACON turn visual approach traffic at the same turn point as the RNAV Approach, or stagger it? Is it ok for TRACON to break separation with instrument approach aircraft with a traffic call? Perhaps the TCAS software is too slow and sensitive and unnecessarily responds. Better TRACON coordination is needed as the continuous radius

final intercept on the RNAV presents at a much steeper angle than the typical 30-degree intercept and sets off TCAS. Requiring an autopilot to be on in this situation (by bulletin) may not lead to greater awareness, anticipation, or prevention of the situation. Guidance in Flight Operation Manual and 737 Aircraft Manual do not seem to indicate any procedural latitude once the traffic is acquired and separation is ensured. I think this event will provide some valuable insight for other parties, particularly TRACON, and fleets.

Synopsis

B737 Captain reported the design of the DEN RNAV Z 16R STAR led to a TCAS RA alert for traffic on the parallel runway.

Time / Day

Date : 201803

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZAU.ARTCC

State Reference : IL

Altitude.MSL.Single Value : 26000

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZAU

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Flight Phase : Descent

Route In Use.STAR : FYTTE4

Airspace.Class A : ZAU

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 8617

Experience.Flight Crew.Type : 3343

ASRS Report Number.Accession Number : 1528605

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Assessments

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

Narrative: 1

Prior to descent reviewing STAR procedure and FMC waypoints, I noticed a discrepancy between EFB JeppFD-Pro procedure and FMC waypoints. The RNAV ARRIVAL procedure has waypoint BHAWK crossing below FL260 and above FL220. The FMC database has BHAWK crossing at FL220A.

Synopsis

Air carrier Captain reported a discrepancy between the FMC database and the JeppFD-Pro published procedure for BHAWK on the FYTTE4 STAR.

Time / Day

Date : 201803
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : SCT.TRACON
State Reference : CA
Altitude.MSL.Single Value : 5000

Environment

Light : Night

Aircraft

Reference : X
ATC / Advisory.TRACON : SCT
Aircraft Operator : Air Carrier
Make Model Name : A320
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Nav In Use : FMS Or FMC
Flight Phase : Descent
Route In Use : Vectors
Airspace.Class D : PSP

Person

Reference : 1
Location Of Person.Facility : SCT.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1528257
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew

Events

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

Assessments

Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure

Contributing Factors / Situations : Staffing
Primary Problem : Human Factors

Narrative: 1

I took over the position and was told that Aircraft X was descending on the downwind vectors for CEKMA to start the RNAV visual approach 31L. I took the position and noticed that Aircraft X was in a 6,000 ft MVA and he was descending below 5,900 ft. I said Aircraft X maintain 6,000 ft. He told me he was assigned 5,000 ft by the previous controller. I turned him south immediately into lower terrain and he was out of the 6,000 ft block within seconds. I should have issued a low altitude alert. By the time I went to issue it, he was in a 5,000 ft block and it was no longer necessary.

I should have verified the altitude that Aircraft X was descending to in the briefing. I should have also issued a low altitude alert as soon as I noticed him descending below the MVA.

Synopsis

SCT Controller reported when receiving a sector briefing, an A320 had been issued a clearance below the MVA.

Time / Day

Date : 201803

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : CKB.TRACON

State Reference : WV

Altitude.MSL.Single Value : 33000

Aircraft

Reference : X

ATC / Advisory.TRACON : CKB

Make Model Name : SR22

Crew Size.Number Of Crew : 1

Flight Plan : IFR

Nav In Use : GPS

Flight Phase : Descent

Person

Reference : 1

Location Of Person.Facility : CKB.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1527756

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.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

Aircraft was direct to DOCAY intersection from south for the RNAV 36 approach at MGW airport. MVA vicinity [of] DOCAY/MGW is 35, MVA area just south of DOCAY is 33. Prior to DOCAY, the aircraft was observed descending to 30. A low altitude warning was given with a climb back up to an altitude appropriate with the MVA (035) for the segment of the

approach prior to DOCAV however (and without listening to the tapes), I believe I may have given the pilot an incorrect crossing altitude at DOCAV of 33 which was then compounded by the pilot descending even lower than what I mistakenly may have issued. Aircraft was able to successfully complete the approach and land at MGW airport. Not to excuse the incorrect altitude given, it's possible I may have been distracted at the time performing CIC related duties.

No procedural recommendations, controller error sole factor. Two foot deviation from appropriate altitude for segment of approach.

Synopsis

CKB Controller reported possibly issuing an altitude below the MVA, to an SR22, causing a low altitude alert.

Time / Day

Date : 201803

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 11

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : FBO

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Initial Approach

Flight Phase : Descent

Route In Use : Vectors

Airspace.Class D : ZZZ

Component

Aircraft Component : Electrical Power

Aircraft Reference : X

Problem : Failed

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Function.Flight Crew : Trainee

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 165

Experience.Flight Crew.Last 90 Days : 15

Experience.Flight Crew.Type : 65

ASRS Report Number.Accession Number : 1527421

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed As Precaution
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Certificated flight instructor and Instrument student, were on an instrument training flight. After flying two instrument approaches to ZZZ1 airport, the crew asked Approach for vectors to final for the RNAV (GPS) XXR approach into ZZZ Airport.

After approximately 1.4 Hobbs (of 1.8 total), while on vectors at 3,000 feet inside the Special Flight Rules Area and just outside Class Bravo airspace, the pilot in the left seat noticed that the trim might have gone out. Very shortly thereafter, the GPS (Garmin 430) pulsated and then went black, losing both Communication radio and GPS instrument approach. The crew immediately contacted Approach to notify them of the equipment lost and asked for vectors to ZZZ Runway XXR. While being vectored, the crew noticed that the ammeter read zero amps. Then, the crew felt a pulsating pressure inside the cockpit similar to fluctuating pressurization. The crew reported a lost alternator to Approach, so Approach gave clearance to proceed at own navigation and altitude to ZZZ.

After contacting Tower, the communications became unusable. When the radio was garbled, the crew recycled the alternator switch. The GPS and communications cleared up for approximately 30 seconds before it pulsated and went black and smoke billowed out of the ammeter gauge. A small fire flared up covering the size of the ammeter and surrounding gauges. The crew immediately turned off the Master Switch and opened the left window vent to clear out the acrid electrical smoke.

Subsequently, Tower cleared out the pattern to Runway XXR, and the crew landed uneventfully to XXR. Upon clearing the runway, the aircrew used a hand-held transceiver to contact Ground. Ground cleared the crew to taxi immediately to the East ramp via taxiway bravo.

The crew shutdown the aircraft and pulled it into the next row's hangar section. Shutdown and post-inspection were normal.

Synopsis

PA-28 student reported an electrical failure and fire during flight. A landing at the destination field was normal.

Time / Day

Date : 201803

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MTPP.Airport

State Reference : FO

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : MTPP

Aircraft Operator : Air Carrier

Make Model Name : B737 Next Generation Undifferentiated

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Final Approach

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1527323

Human Factors : Confusion

Human Factors : Other / Unknown

Human Factors : Situational Awareness

Analyst Callback : Completed

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1530301

Human Factors : Other / Unknown

Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.Inflight Event / Encounter : Unstabilized Approach
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

PAPI for Rwy 28 at MTPP is out of calibration and poses a hazard. At the final approach fix to Rwy 28 at MTPP, only three lights of the PAPI were visible and they were all white. We noted it and expressed an intent to find the visual glideslope by descending until one red light showed. As I began to feel low-ish, I considered that it was an expected illusion due to the ground sloping down toward the runway. Inside of two miles, with just over a dot low on the FMS glideslope and a definite "OK, this doesn't feel right" voice in my head, a fourth PAPI light (red) appeared at the far right and the second PAPI light turned red so that we were seeing WHITE-RED-WHITE-RED as the EGPWS announced "TOO LOW - TERRAIN." I adjusted flight path and landed safely.

Clearly the two right lights of the PAPI (at a minimum) are out of alignment. The third seems aimed low (presenting white when it should be red). The fourth seems aimed laterally off course so that it is not visible until short final.

Suggestions:

I recommend that the airport authority be advised of the problem and that, until such time as [Company] can verify that the NAVAID meets acceptable standards, releases to MTPP contain a message advising crews to disregard the PAPI and maintain the FMS glideslope.

Callback: 1

Reporter stated that he felt he was high on the RNAV (GNSS) Runway 28 approach at Port-au-Prince at the final approach fix and shortly thereafter when he saw only three PAPI lights that were all white. Reporter stated that if he had not felt high he probably would have stayed on the FMS generated glide path and not have attempted to "feel his way" down to the PAPI. Reporter then stated that when he realized he was actually low, the Nav Display showed slightly more than 1 dot low on the approach. The PAPIs showed white-red-white-red from left to right and the terrain warning sounded.

Narrative: 2

We had made a normal descent and initial approach to land, with the FO acting as PF. As we turned onto final approach and aligned with the runway, we looked at the runway and both felt as though we were a bit high. The PAPI lights confirmed that assessment, showing 3 white lights/1 red. The weather conditions were clear and we could see the runway and the PAPI lights clearly. We agreed to execute a visual approach and landing. We slightly increased our descent rate in an effort to create the 2 white/2 red PAPI display

and a more "on glide path" picture of the runway. We translated for feeling too high to more of a normal runway picture, but the PAPI lights were still showing slightly high (2 white/1 pink/1 red). We continued our higher than normal descent rate until, it was clear that the lights were incorrect. I instructed the FO to shallow out his descent rate. My instructions came concurrently with an EPGWS warning. The FO recognized the situation about the same time and did a very good job of return the jet to a normal glide path and landing.

The event occurred most simply because we both allowed the benign weather conditions, good visibility, and the PAPI display bias us toward trusting our eyes rather than our instruments. Had we remained on the RNAV glide path, I suspect that that we would have maintained a constant 700-900 foot descent rate and landed normally. The important contributing factor was the PAPI lights. Candidly, I cant say with certainty that we looked high on the visual glide path before we saw the PAPIs or not, but I suspect that seeing 3 white/1 red at least caused us to question the correctness of our RNAV glide path.

Synopsis

B737NG flight crew reported receiving a terrain warning and observed misaligned PAPI indicator lights at MTPP.

Time / Day

Date : 201803

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : HSV.Airport

State Reference : AL

Altitude.MSL.Single Value : 3000

Aircraft

Reference : X

ATC / Advisory.TRACON : HSV

Aircraft Operator : Corporate

Make Model Name : Super King Air 200

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Vectors

Airspace.Class C : HSV

Person : 1

Reference : 1

Location Of Person.Facility : HSV.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Instructor

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1527072

Human Factors : Distraction

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Facility : HSV.TRACON

Reporter Organization : Government

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1527477

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.General : Flight Cancelled / Delayed

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

Assessments

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

Narrative: 1

Aircraft X was on a vector for an RNAV Approach. Aircraft X was being revectoring after an auto pilot issue during initial turn on. Aircraft X was issued a 090 heading and 3,000 feet. Myself, the trainee and the Controller in Charge (CIC) were all distracted with flight plan issues with another aircraft due to a radar outage at an adjacent sector. Aircraft X was close to the 3,700 foot Minimum Vectoring Altitude (MVA) and was issued an immediate turn and climb to 4,000 feet. Aircraft X did not respond to the initial heading and altitude assignment. Aircraft X was reissued the turn and climb. Aircraft X entered the 3,700 foot MVA climbing through 3,400 feet and turning away from the MVA.

Radar outages increase workload exponentially. OJT Instructor, trainee and CIC need to be more vigilant. The flight plan changes should have been delegated to another person so the radar controllers could focus in the active traffic.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Two Tracon Controllers reported a Trainee vectored an aircraft below the Minimum Vectoring Altitude.

Time / Day

Date : 201803
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : CLT.Airport
State Reference : NC
Altitude.MSL.Single Value : 13400

Aircraft

Reference : X
ATC / Advisory.TRACON : CLT
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 900 (CRJ900)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Descent
Route In Use.STAR : CHSLY3
Airspace.Class E : CLT

Person : 1

Reference : 1
Location Of Person.Facility : CLT.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1527071
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1527374
Human Factors : Human-Machine Interface
Human Factors : Confusion
Human Factors : Situational Awareness

Events

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

Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
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 : Company Policy
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

I was working Satellites Sector when I observed Aircraft X coming in the CHSLY3 arrival at the top end of window on the short side. Aircraft X crossed NODEW at 13,400 feet instead of 9,000 feet! This happened because our altitude windows are too broad. The pilot is usually letting the FMS fly, so I'm not sure why it doesn't tell them they cannot make the descents. Maybe computers aren't smarter than humans? I don't know. Anyways, Center doesn't care because he is in the window, the pilot doesn't care, because he is not getting spun. So here we are stuck working a high arrivals with conflicting aircraft departing. Same as other reports that I have filed. This plane had to go to a different runway to lose altitude to land.

Change the arrival windows, change the optimized profile descents, or change our letter of agreement with Center. Any of those would help.

Narrative: 2

During the descent into CLT on the CHSLY 3 I was unable to make the altitude crossing at NODEW 8,000-9,000 feet. I planned to follow the top of descent snow flake and was expecting to have a level off and a new top of descent given to me by the FMS. This was a mistake because the arrival was different than landing north. During the descent I started the descent and once through BLUEJ I shallowed the descent and then ended up too high on the approach. ATC contacted us to ask if we can make the crossing at NODEW. We said we will try to make the crossing. Descending at 250 knots and at the maximum we were at 11,000 feet over NODEW. I called ATC to inform we will not make the altitude crossing. ATC then gave us a heading and a descent to 8,000 feet.

I made an error to not follow the FMS guidance for the descent and I had some expectation biases with the arrival by expecting a level off. I will look to include my crew and discuss my plans for the descent. I will look to adhere to the FMS guidance and recheck the arrival windows on the descent.

Synopsis

CLT TRACON Controller and pilot reported the pilot did not comply with the crossing restriction on the RNAV STAR.

Time / Day

Date : 201803
Local Time Of Day : 0001-0600

Place

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

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Icing
Weather Elements / Visibility : Fog
Weather Elements / Visibility : Snow
Weather Elements / Visibility.Visibility : 1.75
Light : Daylight
Ceiling.Single Value : 2000

Aircraft

Reference : X
ATC / Advisory.UNICOM : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Airliner 99
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Cargo / Freight
Flight Phase : Final Approach
Route In Use : Direct
Airspace.Class D : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 1289
Experience.Flight Crew.Last 90 Days : 136
Experience.Flight Crew.Type : 201
ASRS Report Number.Accession Number : 1526986
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Ground Personnel

Events

Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Deviation - Procedural : Other / Unknown
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 200
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Heavy snow was falling in the area of my intended destination and runways were closed by NOTAM. Myself as Captain and a company First Officer were scheduled to fly and TAF showed weather to improve. We called the airport around and they confirmed about 8" of snow had fallen and they were in the process of clearing it. The weather improved and we were released by company dispatch. One runway was opened though one remained closed by NOTAM. We called airport and verified airport condition of one inch or less plowed snow and a runway was open. The initial part of flight was uneventful and we requested an RNAV Approach utilizing LPV minimums.

Center verified one runway was closed but one runway was open. We began the approach and checked again with UNICOM regarding runway condition (plowed and open.) Pilot Monitoring made at least 3 CTAF calls that I can recall. Upon reaching minimums the first approximately 1000 feet of the runway was clearly visible and descent for normal landing was initiated. Shortly afterwards a dark vehicle that looked like a snow plow was observed about 500 feet down the runway halfway on the east side moving toward the runway threshold. Both myself and the First Officer observed the vehicle. We executed a missed approach and queried UNICOM about the status of the runway. Shortly afterwards they said the runway was now clear. A subsequent approach resulted in a missed approach due to deteriorating conditions. Visibility at this time was reported below our applicable minimums and we went to our alternate. At the time it only seemed like an inconvenience, but we were incredibly fortunate that the vehicle was not further down the runway where it was not yet visible and where our ability to avoid a collision minimized.

Synopsis

Airliner 99 pilot on short final reported they observed a vehicle on the runway and executed a missed approach.

Time / Day

Date : 201803
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2400

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Bonanza 36
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Final Approach
Airspace.Class E : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 2426
Experience.Flight Crew.Last 90 Days : 26
Experience.Flight Crew.Type : 2234
ASRS Report Number.Accession Number : 1526985
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Procedural : Clearance
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA

Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Miss Distance.Horizontal : 600
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Busy clear morning. Filed IFR. Vectored around VFR traffic. Had to request descent from 3,000 feet to 2,400 feet to avoid traffic that passed over at less than 500 feet. Winds were changing and originally requested RNAV X with calm winds. Winds changed to 310 so requested RNAV XX. Winds continued to change to 330 and departing traffic was using YY. I was cleared to FAF and was doing an autopilot coupled approach which was fine until turning final when the needles were not centering and I was south of the final approach course. I was monitoring CTAF. Traffic announced departure on YY turning east. I was coming in from the east which increased the anxiety along with continuous chop. At that point ATC called and canceled radar coverage which has never happened in all the times I have flown into ZZZ. Controllers were very busy on this clear VFR day. Upon hearing the cancellation I switched to CTAF at ZZZ and hand flew the approach while communicating with the outbound traffic departing on YY. Later that day I flew back to ZZZ1 and did the RNAV XY and the needles were centered with no problems. When I got home I had a message from TRACON to call. I called and was told that I didn't cancel my IFR flight plan going into ZZZ. We discussed the situation and they reinforced that controllers cannot cancel flight plans, only pilots can. I apologized for the inconvenience that I caused through my own confusion. It was a very valuable learning experience and accentuates the compounding of factors that lead to errors being made.

Synopsis

Bonanza pilot reported neglecting to cancel IFR flight plan due to distractions on approach to a non-towered airport.

Time / Day

Date : 201803

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ROA.Airport

State Reference : VA

Altitude.MSL.Single Value : 8000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZDC

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 : Initial Approach

Airspace.Class E : ZDC

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1526742

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Automation : Aircraft Terrain Warning

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

On left downwind for Runway 24 going into ROA we began experiencing moderate turbulence at about 8,000 feet. We were cleared to descend to 4,000. Being an airport with terrain in all quadrants, I asked for vectors outside of the final approach fix of HIBAN on the RNAV 24. Approach complied and vectored us onto the downwind and turned us base approximately 3 nm outside HIBAN. We had all of the terrain and the field in sight and relayed that to the Controller. We were then cleared to turn direct the field and I turned to a heading that was close to direct and would allow us to intercept the approach course. Runway 24 has no PAPI or VASI nor does it have an ILS so my only form of vertical guidance came from the GPS "snow flake". We were at 4,000 in the turn direct and received an EGPWS terrain warning. It was visual and we had the terrain in sight and I was intercepting the final approach course and starting a slow descent to the FAF altitude of 3,700 feet. I disengaged the autopilot and followed the approach course and the vertical guidance to the runway. About a snow flakes width high just inside the FAF we received our second EGPWS warning. Again in visual conditions well clear of terrain I elected to continue to an albeit very turbulent but normal landing. Wind shear advisories were in effect and surface wind was 260/24/37.

In hindsight perhaps the moderate turbulence and shearing wind contributed to the EGPWS warnings. All terrain was in sight and well cleared and in no way was the aircraft in any sort of undesired state nor was safety compromised. Additionally while turning base to final there is rising terrain on the opposite side of the approach course by several miles and perhaps the forward looking functions sensed that hill based on the turn to final. Moving forward, I intend to fly the full approach to Runway 24 to avoid the left base just outside HIBAN.

Synopsis

Air Carrier Captain reported receiving two EGPWS terrain warnings on a visual approach to ROA Runway 24. Reporter continued the approach to landing because terrain was in sight.

Time / Day

Date : 201803
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : CLT.TRACON
State Reference : NC
Altitude.MSL.Single Value : 18000

Aircraft

Reference : X
ATC / Advisory.TRACON : CLT
Aircraft Operator : Air Carrier
Make Model Name : Regional Jet 200 ER/LR (CRJ200)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Descent
Route In Use.STAR : PARQR3
Airspace.Class B : CLT

Person

Reference : 1
Location Of Person.Facility : CLT.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Flight Data / Clearance Delivery
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1526534
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control
When Detected : In-flight
When Detected : Routine Inspection

Assessments

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

Narrative: 1

I was working Radar Flight Data when it was brought to me that Aircraft X was coming into CLT via the PARQR3 in a south configuration at FL210. I went and observed the

aircraft cross NCOMA at FL180 showing 360 kts. This was most likely pilot error, but there is nothing we can do at that point to help. With our arrival windows being so drastic it allows both the pilots and center controllers to utilize the top of the window if they choose, but farther down the road crossing restrictions are not made putting CLT controllers at the mercy of the OPD.

The arrival windows need to be changed to allow any and all aircraft to make the descent profiles. It also holds the center accountable to make sure they put the aircraft in a workable position for approach.

Synopsis

A TRACON Controller reported aircraft on an RNAV STAR are routinely too high and fast to efficiently sequence even while complying with the published crossing restrictions.

Time / Day

Date : 201803

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : ZLA.ARTCC

State Reference : CA

Altitude.MSL.Single Value : 23700

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.Center : ZLA

Aircraft Operator : Air Carrier

Make Model Name : A320

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Airspace.Class A : ZLA

Airspace.Special Use : R2501

Person

Reference : 1

Location Of Person.Facility : ZLA.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1526257

Human Factors : Situational Awareness

Human Factors : Human-Machine Interface

Events

Anomaly.Airspace Violation : All Types

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Air Traffic Control : Issued Advisory / Alert

Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

[Aircraft] checked in on the [RNAV] Arrival over [a Restricted Area] at FL240 with clearance to descend via. [The Restricted Area] is active surface to 23,000 feet. The first restriction was a number of miles ahead with an altitude window FL300-FL240. [Aircraft] is at the bottom of the restriction. He should not begin his descent until after the fix ahead. I noticed the altitude change to FL238. I verified he was level at FL240. He answered in the affirmative and I then watched him descend to FL237. I told him to stop his descent, climb and maintain FL240 and issued the brasher statement. The pilot complied.

Airbus aircraft have had this problem since day 1 of the descend via program. If the aircraft is at the bottom of the altitude window and the aircraft presses descend via in the FMS, the FMS will delete the [first] restriction and begin the descent. I have seen this on multiple occasions, not once or twice. At least five times if not more. Airbus and the airlines need to fix this issue. The aircraft descended into restricted airspace where there are fighter jets and other military aircraft that we can't see and are not in communication with [us]. This is a very dangerous problem.

Synopsis

ZLA Center Controller reported an A320 descended into military restricted airspace due to a software flaw in the aircraft FMS.

Time / Day

Date : 201803

Place

Locale Reference.Airport : SFO.Airport
State Reference : CA

Aircraft

Reference : X
ATC / Advisory.TRACON : NCT
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
Flight Phase : Initial Approach
Flight Phase : Descent
Route In Use.STAR : SERFR2
Airspace.Class B : SFO
Airspace.Class E : NCT

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 1526065

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

The SERFR2 arrival into SFO is a setup for a Class B airspace violation. There is the potential to fly below the Class B airspace between EPICK and EDDYY and again between EDDYY and SWELS, all while remaining on the VNAV path profile. The speeds printed on

the arrival all exceed 200 kts which is the limit for operating below Class B airspace.

See the problem here? You can fly the arrival as published and violate the speed limit below Class B airspace or you can slow down for the airspace and violate the published speeds on the arrival. Why would the FAA design a procedure like this? It's even more disconcerting when you don't know it's coming. For example, consider a case where you're in LNAV/VNAV, exactly where you're supposed to be, flying the published speeds on the arrival, and ATC says, "XXX be advised you're exiting Class B airspace. You will re-enter in two miles." What are we supposed to do at that point? It's too late to slow down and that's an instant violation if anyone cares to press the issue. The published altitudes on the BSR3 arrival (the pre-NextGen non-RNAV version of the SERFR2) are more appropriate and keep you within Class B airspace.

Additionally, the SERFR2 almost always leads into the Tipp Toe Visual Runway 28L approach. The published altitude at MENLO on the Tipp Toe Visual says "5000 for Class B airspace." But the published altitude at MENLO on the SERFR2 arrival says "4000." The bottom of Class B airspace at MENLO is at 2500. So we have a charting disparity between the arrival and approach for the same intersection, and the note on the approach "5000 for Class B airspace" is incorrect. We've seen many cases around the country where the mad push to install NextGen procedures creates some unintended consequences. This appears to be another one.

Synopsis

Air carrier Captain reported airspace, airspeed, and altitude conflicts associated with the SERFR2 arrival into SFO.

Time / Day

Date : 201803
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : 1H0.Airport
State Reference : MO
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Icing
Weather Elements / Visibility : Rain
Weather Elements / Visibility.Visibility : 8
Light : Daylight
Ceiling.Single Value : 1600

Aircraft

Reference : X
ATC / Advisory.TRACON : T75
Aircraft Operator : Personal
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Descent
Route In Use : Direct
Airspace.Class B : STL

Component

Aircraft Component : AHRS/ND
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 5000
Experience.Flight Crew.Last 90 Days : 20
Experience.Flight Crew.Type : 700
ASRS Report Number.Accession Number : 1525989

Human Factors : Situational Awareness
Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

There was no mention in a briefing for ice. In fact, the departure from ZZZ was through IMC without incident. Upon reaching the 1H0 area I was offered direct ODUJY and the RNAV 34 into 1H0. At that time a Falcon Jet went into SUS and reported zero ice on the approach. About 10 miles from the fix I entered IMC as I descended through 4,000. Initially, the ice appeared to be light rime but almost immediately I encountered freezing rain and clear/rime mixed with jagged edges on my leading edges and a useless ice covered windscreen. The controller instructed to "maintain 2,200 MSL" then corrected himself to, "maintain 2,600 until ODUJY." The actual altitude for ODUJY is 2,800 and 2,200 at the FAF. I was hand flying the aircraft to avoid autopilot disconnect and un-commanded aerobatics. There seemed no alternative but continue as the ceiling was reported to be at about 2,000 MSL. Just after the FAF, the navigation displays partially malfunctioned, but since I had a heading from ODUJY to the FAF I continued the approach to VMC and the icing abated. I continued to just above circling minimums and after some mild excursions found the airport. As the aircraft shed the significant ice I was able to circle to land 34. I considered the missed approach, but given an unexpected response from the EFIS and heavy ice, I elected to stay VMC. No damage to anything but the pilot's nerves.

Synopsis

Pilot reported descending below the glidepath on an RNAV approach in order to escape icing conditions.

Time / Day

Date : 201803

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : BHM.Airport

State Reference : AL

Altitude.MSL.Single Value : 1500

Environment

Flight Conditions : IMC

Light : Daylight

Ceiling.Single Value : 1200

Aircraft

Reference : X

ATC / Advisory.Tower : BHM

Aircraft Operator : Fractional

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Flight Phase : Initial Approach

Airspace.Class C : BHM

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Fractional

Function.Flight Crew : Captain

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1525201

Human Factors : Situational Awareness

Events

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Automation : Aircraft Terrain Warning

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 : Weather
Primary Problem : Environment - Non Weather Related

Narrative: 1

The weather at BHM was reported as ceiling 1,200. We chose to fly the RNAV 36, an LNAV approach with an MDA of 1,480 MSL (847 AGL). We were inside the FAF, descending to 1,500 on the autopilot at 1,000 FPM. At 1,500 MSL or just prior we heard "Caution Obstacle". I immediately began the missed as ATC called with a low altitude alert. After the missed we checked our setup and the vertical profile we had flown and found everything to be correct as far as we could tell. We did not use the advisory glideslope, opting instead to descend to MDA after the FAF. There are a few obstacles noted on the approach plate, however we didn't expect a warning from them. We circled around for the ILS 6 and landed uneventfully.

Synopsis

Turboprop pilot reported an unexpected terrain warning on approach to BHM just prior to the MDA.

Time / Day

Date : 201803

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 2400

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling : CLR

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class C : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 2000

Experience.Flight Crew.Type : 490

ASRS Report Number.Accession Number : 1525159

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : FLC Overrode Automation

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

Assessments

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

Narrative: 1

Tower gave us a low altitude alert on visual approach to Runway XX. ATC had cleared us to the final approach fix of ZZZZZ and to descend to 4,000 feet. The wind was calm with 10SM visibility and sky clear. We saw the field, ATC cleared us [for] the visual. We flew the visual with the RNAV (GPS) XX as backup. I bugged 3,000 feet which was the crossing altitude for ZZZZZ. At this point we were still slowing and descending. I felt that our angle on the direct ZZZZZ was going to have us turn final inside the fix. The pilot monitoring stated we were right on, to slightly below the glideslope and it looked good. Instead of setting 2,800 feet I had set 2,400. Nobody caught it. We were cleared at this time for a visual approach. We were crossing over ZZZZZ, 5.2 miles from Runway XX. I saw we were in flight path angle mode at 3.8 degrees and at 2,400 feet MSL. The radar altimeter read between 1,200-1,100 feet. Pilot monitoring said "altitude." I turned off the autopilot and hand flew. I started a slight climb and joined final. At this point Tower said he received a low altitude alert. We maintained that altitude for about a mile and a half until the glide slope intercepted, and continued the approach.

On our preflight brief we both spoke about how the Captain had not flown in 9 days and over a month for myself. During the approach brief the Captain brought up the fact that if we are cleared the visual approach to be careful not to get too high as it's a 90 degree turn from our flight path direct ZZZZZ to the runway. I believe our recency of flying and my caution of not getting too high on the visual approach affected my decision making. On our debrief we talked about how we were in good shape to make a normal base to final approach but I just felt like I was high. I should have called for the go around instead of just maintaining a below traffic pattern altitude until reaching the slope intercept. A go around would have given us safe altitude and presented the opportunity for me to better reset for a visual approach. In the future I will be more forceful with expressing my inputs and not allow a lower altitude to be selected and flown when already below a glideslope. Also, in high workload environment maintain pilot flying duties.

Synopsis

Embraer 175 First Officer reported receiving a low altitude alert from the Tower while on a visual approach.

Time / Day

Date : 201803
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : Marginal

Aircraft

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

Component

Aircraft Component : Engine
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1523817
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Confusion

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

I was shooting the RNAV XX approach when I had an engine malfunction. The flight had been relatively smooth with no ice. During the start of this event, I had the aircraft descending at a rate of 500 fpm enroute to ZZZ. I was told by ATC Center to cross ZZZZ at or above 3100 feet and that I was cleared for the approach, before they switched me off to traffic advisory. The aircraft was set to it's cruise setting of 26" MP, 2300 rpm, and 85 pph during the descent. Just as the aircraft reached ZZZZ, I switched off the autopilot and began the manual turn inbound for the final approach course. The weather was reporting winds of 010 at 9 gusting 14 at the time, so I knew I had a slight quartering tailwind of about 3 knots and a strong right crosswind. As I descended down to 1900 feet on the inbound, which was my FAF altitude, I began to put the airplane in-range. I brought the power back to 21" and turned both fuel pumps on, then I tilted my head down to verified fuel selector were set to BOTH and closed the cowl flaps.

When I brought my head back up a second later I was uncoordinated with the ball to the right. I thought I had become uncoordinated while I was closing the cowl flaps, so I tried to correct, but the amount of right rudder I needed seemed was quite offsetting. I attributed the strange control inputs due to the wind. I re-trimmed the rudder and kept going on the approach. My next step was to set the flaps to 10, but I looked at my speed and I was doing about 130 knots, which was low so I opted to hold off on putting flaps down. I believed it was due to the tailwind on the approach. When I intercepted the glideslope, I lowered my gear and proceeded with the before landing checklist. At this point also I decided to bring the flaps down to 15 as well. I was focused on flying the instrument approach since I did not have the airport in sight at the time, but I was having trouble keeping the speed, so I added power to about 24" and even then, the airplane was flying at 110 knots. I suspected at the time that this was due to the tailwind that I had on approach. The airplane had a decent crab angle to the right on approach, so I was anticipating on putting in right aileron and left rudder on the flare. I got the airport in sight at about 1000 feet high and began to put in the rest of the flaps at about 200 feet. As the flaps came down, I noticed I had to put more and more right rudder to keep it coordinated. At this point I started to suspect something was off. Things only got stranger for me when I brought the power back to idle and initiated the flare. As I put in the throttle to idle, and put in my crosswind corrections, I was caught off guard when the airplane started yawing in a direction I was not expecting. I reacted and did the best I could to keep the plane aligned with the runway during the landing.

After touchdown, the MP caught my attention. The left engine was showing ambient, but the left engine's propeller was still spinning during the rollout. I moved the throttle, but it showed no response. As the airplane slowed down, the prop finally stopped spinning and I knew what had happened. I rechecked the fuel pumps and they were both set to the low position. I check all my switches and lever positions to make sure everything was where it was supposed to be during the final approach, and it was. I did not attempt anything else with the engine at that point, and only let it coast to the parking spot. After a while I did notice an oil puddle start to form underneath the left engine.

Synopsis

Cessna 402 pilot reported an engine failure during approach that was not clearly identified until landing.

Time / Day

Date : 201803

Place

Locale Reference.Airport : SMF.Airport

State Reference : CA

Altitude.AGL.Single Value : 700

Aircraft

Reference : X

ATC / Advisory.Tower : SMF

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Landing

Airspace.Class C : SMF

Component

Aircraft Component : GPWS

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 371

ASRS Report Number.Accession Number : 1523694

Human Factors : Human-Machine Interface

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Last 90 Days : 425

ASRS Report Number.Accession Number : 1523628

Human Factors : Human-Machine Interface

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

We were on stabilized final, on glide path, on VASI, configured to land. At about 600-700 feet we got a "Too Low Terrain" verbal alert. We were confused as the terrain was flat, we were very stable on glide path, and light wind. We saw no reason whatsoever for the alert. We went around. We put in the RNAV Approach for back up on subsequent visual approach. Maintenance said they would run some tests on the system and look for history. Very odd.

Narrative: 2

Below 1,000 feet on glidepath, on glideslope, two red and two white on PAPI at 700 feet we received a "Too Low Terrain." We did not immediately go around because we were completely on path, on glideslope and stable approach. A second "Caution, Too Low Terrain" sounded and Captain said you think we should go around. I said "Yes", so we went around, but neither one of us could figure out why we got the GPWS?

Synopsis

B737-700 flight crew reported receiving a false GPWS terrain warning on approach into SMF.

Time / Day

Date : 201803

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MHLM.Airport

State Reference : FO

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : MHTG

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

Flight Phase : Initial Approach

Route In Use : Visual Approach

Component

Aircraft Component : Electronic Flt Bag (EFB)

Aircraft Reference : X

Problem : Design

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1523317

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

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

Narrative: 1

RNAV Visual Runway 04 approach, "Caution Terrain" EGPWS warning triggered halfway through turn after SAP11 fix. Flaps 2 and speed 190 as per approach. Enhanced GPWS corresponding yellow. Aircraft on autopilot with green "FINAL APP" and aircraft on path on course in visual conditions with 20 mile visibility. Disengaged autopilot and flew to landing.

10-4 does note RNAV 04V for "visual guidance" however the approach as built should not be triggering terrain warnings or 10-4 pages should note possible warnings. Approach is inaccurate.

Synopsis

Air carrier Captain reported the company's 10-4 chart for the RNAV visual to Runway 4 at MHLM is inaccurate and resulted in an unnecessary EGPWS alert.

Time / Day

Date : 201803

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MRY.Airport

State Reference : CA

Altitude.AGL.Single Value : 600

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : MRY

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

Flight Phase : Final Approach

Route In Use.Other

Airspace.Class C : MRY

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1522887

Human Factors : Situational Awareness

Human Factors : Time Pressure

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Airport

Primary Problem : Airport

Narrative: 1

Executed a RNAV GPS Y 28L. Approach minimums 863 ft MDH, Category C visibility 2 1/2 miles. Final approach course offset 17 degrees. From HUGON inbound VMC night conditions. From approximately 5 miles PAPI (3.5 degrees) was observed and appeared operative. At approximately 600 ft while tracking a straight in final, the PAPI appeared to be dimming at a rapid rate. At the lowest point the illumination appeared 20% of normal illumination as observed before 600 ft. Using the glidepath on the PFD a normal landing occurred. Additionally the remaining illumination indicated 4 white lights versus the typical on glidepath of 2 red 2 white. After landing I inquired of the tower the status of the PAPI. The controller indicated PAPI is NOTAMed out of service below 500 AGL. After parking at the gate I contacted the controller if that NOTAM was published as it was not included on any weather and NOTAMs I had received. The controller indicated it was only noted in the Airport Facility Directory. Reviewing Jepp approach chart, taxi chart and [company] iPad I could not readily find any notice of this condition.

At night and IMC only perform RNAP RNP Z 28L. This approach descends the aircraft to 257 ft DH with straight in lateral and vertical guidance. Well inside the out of service portion of the PAPI. Beginning the RNP 28L begins at Salinas a better option might be an approach to 10R under most conditions.

Synopsis

Air carrier Captain reported when tracking straight in on final to MRY Runway 28L, the PAPI appeared to be dimming at a rapid rate.

Time / Day

Date : 201803
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : M98.TRACON
State Reference : MN
Altitude.MSL.Single Value : 5000

Aircraft

Reference : X
ATC / Advisory.TRACON : M98
Aircraft Operator : Air Carrier
Make Model Name : A319
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Final Approach
Flight Phase : Initial Approach
Route In Use.Other
Airspace.Class B : MSP

Person

Reference : 1
Location Of Person.Facility : M98.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) : 18.3
ASRS Report Number.Accession Number : 1522689
Human Factors : Situational Awareness
Human Factors : Confusion

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.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
Primary Problem : Procedure

Narrative: 1

Aircraft X flew the RNAV Approach without being cleared for the approach. Aircraft X turned towards airport and came into conflict with the other traffic on the parallel runway and the traffic on the same runway. The controller was LUCKY they assigned the aircraft 5,000 feet or he would have been in conflict with MULTIPLE aircraft on final. We advertise Visual and RNAV approaches on VFR days. In my opinion this causes some aircraft to fly the RNAV Approach without being cleared for it. The VAST majority of the aircraft that fly into this airport can't even fly the RNAV approach due to equipment in the aircraft. Our runway configuration is not conducive to the RNAV Approach. Aircraft need to be sequenced and it is impossible to let aircraft fly the RNAV during airport "rushes". I recommend we advertise ILS/Visual Approaches on VFR days. Advertising the RNAV Approach will lead to a possible midair incident!

Synopsis

M98 TRACON Controller reported an arriving aircraft flew the RNAV Approach course even though they had not been cleared to for it.

Time / Day

Date : 201803
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : Marginal
Weather Elements / Visibility : Cloudy
Weather Elements / Visibility : Rain
Weather Elements / Visibility : Turbulence
Light : Daylight
Ceiling.Single Value : 1500

Aircraft

Reference : X
Aircraft Operator : Personal
Make Model Name : Small Transport
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Nav In Use : GPS
Flight Phase : Landing
Airspace.Class D : ZZZ

Person : 1

Reference : 1
Location Of Person.Facility : ZZZ.Tower
Reporter Organization : Government
Function.Air Traffic Control : Ground
Function.Air Traffic Control : Flight Data / Clearance Delivery
Qualification.Air Traffic Control : Developmental
ASRS Report Number.Accession Number : 1522688
Human Factors : Distraction

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 6197
Experience.Flight Crew.Last 90 Days : 58
Experience.Flight Crew.Type : 1836

ASRS Report Number.Accession Number : 1522941
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Ground Incursion : Taxiway
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Aircraft X was inbound on a circling approach. The pilot reported circling east for the runway at which point the Local Controller who was also assigned Controller in Charge cleared the pilot to land and turned the runway lights on high. As the pilot was in the left downwind, the pilot provided a bases report of around 1380 ft. As Ground Control and Flight Data I began working on submitting the PIREP and cutting a Special weather observation. Due to our facilities lack of weather equipment we rely on PIREPs for more accurate information than the estimates we as a tower are able to provide. While I was recording the ATIS I heard the Local Controller say, "He just landed on [the taxiway]." I then observed Aircraft X on his landing roll on the taxiway. Looking out the window it is near impossible to tell if an aircraft was lined up for the runway or taxiway due to the close proximity of the surfaces and the vantage point from the tower. Also, it is rare that the facility is operating on the runway we were on during this event.

Having seen this occur more than once recently at this facility by both training and experienced pilots something must be done! Wrong surface landings were the topic of our FBO and Tower meeting this past month and a few recommendations were made including painting the word "TAXI" or the letter of the taxiway for the taxiway. Other more radical suggestions included changing of signage near the runway or removal of [the parallel] taxiway due to the close proximity.

Narrative: 2

The METAR was 3sm BRRR BKN015 OVC050 13/12 A2986. On approach from altitude I picked up icing and significant turbulence. I reported Icing to Approach and that the icing stopped with little altitude depth. I also reported moderate turbulence to Approach with last response after told to contact tower and frequency. I was cleared for the RNAV approach, circle to land. I broke out on the approach with airport in sight at 1380 ft, and as requested, reported to Tower that I was starting the circle to land east of the airport. Tower cleared me to land.

I continued to a left downwind the east of the airport with airport in sight. I estimated weather at the time was broken at 1300 ft AGL and visibility east and north of the airport

worse than on the approach. Estimated was visibility at 1.5 miles but the airport was visible. I'm not sure why, but I lined up for the taxiway on turn to final rather than the runway. The approach to landing was not rough nor did it require maneuvering. I was lower on downwind than normal landing due to the weather at the airport, and the turn to final was lower than normal such that I added power to get back to glidepath. I landed incorrectly on the taxiway and recognized the error after touching down. I chose to complete the landing rather than take off. The landing was normal and there was no issue making the turn off at the end of the taxiway and taxi to parking.

I was given a number to call from Tower and called Tower after shutdown of the engine. Tower informed me of a possible pilot deviation. I provided my phone number, address and pilot Certificate number. During the discussion I told Tower of the somewhat lower visibility to the east/north of the field. This airport is my home airport and I use it often during the year. During rain or weather, the runways often switch to the southeast runways which were lit but at mid-day, the ambient light was relatively high so they were not prominent.

I was rested and no health issues, flight was approximately 2.5 hours. I want to review the sight picture for the runways to see if that could have contributed to my error. I'm told by Tower that this has happened more than they would like and are trying to understand solutions. I also want to see if the taxiway is marked, although it clearly doesn't have runway markings.

Synopsis

Tower Controller and GA pilot reported a taxiway landing after a circle to land approach.

Time / Day

Date : 201802

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZDC.ARTCC

State Reference : VA

Altitude.MSL.Single Value : 15000

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : CLT

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use.STAR : CHSLY 3

Airspace.Class E : ZDC

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1522446

Human Factors : Human-Machine Interface

Human Factors : Training / Qualification

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : FLC Overrode Automation

Result.Flight Crew : Returned To Clearance

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Chart Or Publication

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

Narrative: 1

At the end of a long day, we were flying into CLT, we had originally filed for the MAJIC 2 STAR, but were subsequently cleared for the CHSLY 3 STAR. Passing CHSLY, ATC (Washington Center) cleared us to "Descend via the CHSLY 3 Arrival." We had previously briefed it and accepted that clearance. After a few queries from ATC (both Washington Center and Charlotte TRACON) for us to verify that we could accept a "descend via" clearance, we told them yes. They conveyed their understanding that Company was not allowed to accept descend via clearances. We of course assured them that we accept such clearances all the time all over the country.

About that time, we realized that something was clearly out of the ordinary due to their queries. We discussed the fact that we remembered something about certain STARs not being filed going into CLT. We rechecked and sure enough, there is a directive [to] not accept ATC clearances for [several STARs].

These STARs are not useable because many of the approaches required to fly the STAR cannot be loaded in the FMC." We realized that we were at this point, already flying this STAR, and the alternative STAR (MAJIC 2) was not even close to the CHSLY. We carefully rechecked all the points and restrictions, re-verified that the aircraft was on path and would stay on path.

CLT was landing north, and the CHSLY would bring us to vectors on a right downwind. The ILS to 36R was loaded and briefed, seemingly the same as any other RNAV STARs. We maintained the correct path all the way through the arrival, got vectors to the visual to 36R, and landed uneventfully. Clearly, we did in fact accept a STAR that says that we should not have.

We had no problem flying this STAR and loading this approach. Perhaps there would have been a problem loading a different approach had the runway configuration been different. If this is the case, then why make these STARs unavailable to all approaches? I feel there needs to be research done about this, because it seems no other airlines are having this issue, and it is clearly an issue for the local ATC when Company has to have a special arrival different from most other airlines.

Synopsis

Air carrier Captain reported flying an arrival to CLT that company had directed not to accept.

Time / Day

Date : 201802

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : SNA.Airport

State Reference : CA

Relative Position.Distance.Nautical Miles : 8

Altitude.MSL.Single Value : 16700

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : SCT

Aircraft Operator : Air Carrier

Make Model Name : B737-700

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use.STAR : ROOBY THREE

Airspace.Class E : SCT

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 404

Experience.Flight Crew.Type : 17000

ASRS Report Number.Accession Number : 1522431

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : First Officer

Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Last 90 Days : 303
ASRS Report Number.Accession Number : 1522449
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Undershoot
Anomaly.Deviation - Altitude : Crossing Restriction Not Met
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
When Detected : In-flight
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 : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

On descent to SNA, RNAV arrival was changed from DSNEE 3, to ROOBY 3 due to landing direction at SNA. We were cleared to descend via the ROOBY 3. We were subsequently issued a late clearance to cross ROADE at 16,000 ft or below. The profile descent was to cross ROADE between FL190 and 17,000 ft. We were only about 8 to 10 miles to the intersection on the profile, but very high to comply with the late clearance. I deployed speedbrakes, selected Vertical Speed and between 4500 to 5000 FPM, but advised the First Officer I didn't think we'd be able to comply given the short distance to the fix.

He advised ATC of the situation and said we would do our best to make it. ATC responded he wanted to get us below climbing traffic in opposite direction. Shortly thereafter, we noticed the traffic on TCAS. It appeared to be an impending conflict. I reduced the rate of descent as traffic continued to climb and converge. We received the TCAS advisory followed immediately with a Climb RA. We complied with the RA PATH change and advised ATC of our actions. Once clear of the traffic, we re-established the Vertical PATH and continued the profile descent on the arrival. ATC stated they would investigate the opposite direction traffic.

We received a late clearance that was very difficult if at all possible to make. Moreover, we were being cleared to hustle down to clear opposite direction traffic that was converging and climbing towards us. It seemed to us that it would have been better to assign us a level off and or off course vector to avoid the potential conflict. We were not sure whether ATC was in communication with the TCAS traffic in question.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

B737 flight crew reported receiving a late crossing restriction from ATC that ultimately resulted in a TCAS RA.

Time / Day

Date : 201802
Local Time Of Day : 0001-0600

Place

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

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Rain
Weather Elements / Visibility : Snow
Light : Night

Aircraft

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 11500
Experience.Flight Crew.Last 90 Days : 49
Experience.Flight Crew.Type : 322
ASRS Report Number.Accession Number : 1521830
Human Factors : Other / Unknown

Events

Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

FO (First Officer) found maintenance discrepancy on walk-around that led to an aircraft swap. TAF for ZZZ projected reduced vis with SN & BR for our arrival time. I had flown the [previous] leg and we'd planned for FO take the second leg; however, given WX forecast and FO's 100 hrs in type, I said I'd take the ZZZ leg too and he could fly both legs the next day. Departed for ZZZ 1 - 1.5 hours late. Once established in cruise, aware of marginal weather conditions, we briefed early for an ILS CAT III 12R. We also looked at the CAT III for 12L and pulled landing data for both runways, but were aware 12L was likely not a viable option due to reported braking action and shorter runway length. Flight was otherwise uneventful until we were on the downwind leg getting vectored to final. ATC announced 12R was now closed for snow plowing, that they hoped to re-open in about 30 minutes, and to expect vectors for 12L. We quickly got an update on 12L braking action but it was still "Medium" so not a viable option as we needed "Good" for that runway. We asked about the possibility of plowing on 12R to finish any earlier than 30 minutes. No luck there. In the meantime, we had been weight restricted out of [our departure airport], so fuel was tight and we had no time to loiter. So, we began a divert to our flight plan alternate of ZZZ1; however, after loading the route we realized we'd be landing with 3K or less on fuel. We quickly looked at other possible options and saw ZZZ2 was about 45 minutes closer than ZZZ1 and had acceptable weather, so we changed our divert to there. The ZZZ2 airfield was closed and there were big questions about parking, passengers, refueling, etc, but we could sort that out once safely on the ground. We landed uneventfully in ZZZ2 and I called dispatch to coordinate next steps. He said visibility and braking action had improved in ZZZ and planes were landing with no problems if we could possibly try again. Our [crew duty time limit] was going to be tight, but we agreed to make the honest effort. I briefed that we would still do the CAT III autoland regardless of how much the weather improved just because it had been such a long day. We were able to get fuel and soon relaunched for the 1-hr flight back to ZZZ. Between ATIS and ATC, we were staying constantly up to date on ZZZ weather and braking action and it was all positive. We got vectors for the CAT III ILS 12R and were handed off to tower on final. Then tower cleared us: "Braking action poor, cleared to land 12R." We were in utter disbelief and sought to clarify the poor braking action. Tower relayed that a [previous arrival] landed 45 min earlier and reported braking action poor. We broke off the approach as we inquired about 12L. Braking action on 12L was basically unknown: plowed "more recently" than 12R, but they would send a vehicle out to check. We told them we must have braking action "Good" on that runway and they said they were not optimistic about us having that. Meanwhile, fuel was getting tight again. Fuel meters officially pegged, we began second divert for flight plan alternate of ZZZ3 where WX was 800/5 BR with light SE winds. I had begun to show some signs of fatigue enroute to ZZZ, so the FO suggested he fly to ZZZ3 since he was a "night owl" and fully alert. I felt this was a great idea, ZZZ3 weather reports showed no indications of runway contamination or braking reports, so we swapped controls. Dispatch inquired if we could make it to ZZZ1 instead of ZZZ3. We checked and saw we'd be landing with about 3K pounds of fuel if we did that, so declined and continued to ZZZ3 where we could land with 5-6K. We set up for the ILS in ZZZ3. [Another runway] was available, but did not have an ILS approach. Increased briefing time for the RNAV (GPS), longer vectors required (approaching from south), as well as no indications of any runway contamination, made the ILS seem like a perfectly rational choice. Per landing data, we could land with autobrakes 3, but opted for Max just for the extra cushion. We had to dodge a couple of weather cells near final, but otherwise vectors

to final were normal, the approach was very stable and the landing was on the numbers and on speed. In the rollout, we both quickly realized and the FO announced we weren't slowing down. I saw he had TR's (Thrust Reversers) fully engaged and speed brake was deployed, so I commanded, "Max manual brakes, max manual brakes!" I looked again to ensure the FO was fully braking. At this point we were decelerating some but approaching the end of the runway. I jumped on the brakes to no avail and we slowly slid off the end of the runway into the grass where we soon came to a stop in a rather smooth, non-violent manner. We took stock of the situation, having pax remain seated and FA's check their condition. No unusual lights or indications in cockpit and cabin, all looked very stable, immediate evacuation not required. We fired up the APU, secured the engines and began coordination with ATC, company, etc. No reported injuries, everyone calm. Ground crew reported no immediate signs of aircraft damage. One of them took a measurement from the tail cone back to runway threshold and it was 115 ft. Another responder called this a "flash freeze," saying that it happened the day before as well.

Synopsis

Air carrier Captain reported a runway excursion upon landing rollout due to un-reported nil braking action due to ice.

Time / Day

Date : 201802

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MMH.Airport

State Reference : CA

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.CTAF : MMH

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Flight Phase : Final Approach

Airspace.Class E : MMH

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1521568

Human Factors : Situational Awareness

Events

Anomaly.No Specific Anomaly Occurred : All Types

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Airport

Contributing Factors / Situations : Equipment / Tooling

Primary Problem : Equipment / Tooling

Narrative: 1

A report was filed regarding the lack of pilot controlled runway lights during daytime at MMH. Today that condition still exists. Several safety issues are evident. Airport Diagram indicates MIRL Pilot Control Lighting (PCL) is available on both runways. There is no note it is nighttime only. Runway 27 is serviced by two RNAV approaches. RNAV GPS 27 CAT C MDH 1,283 ft with required visibility of 3 miles. With a VDP at 4.0 miles acquiring the runway environment with visibility in the 3-4 mile range would be enhanced with daylight enabled PCL. RNAV (RNP) M RWY 27 CAT C DH of 250 ft and required visibility of 3 miles. In visibility of 3 miles and thin layer of snow it is very difficult to acquire and maintain runway boundaries visually with just PAPI during daytime operations. Other considerations where day PCL would enhance safety. Close proximity freeway parallel to runway and unlit parallel taxiway. PCL would clearly differentiate runway for those

Runway 9 is service by on RNAV approach:

RNAV (RNP) M RW 09. CAT C DH 265 ft and required visibility 3 miles. Without day PCL similar issues are present as with runway 27. Additional other issues unique to runway 9 arise that compromise safety in operations to runway 9, day, 3 mile visibility.

1. Approaching runway 9 there is a chevron marked paved 3,500-foot runway 27 overrun. With a thin layer of snow, no PAPI, no REIL and no PCL it would be very easy to think the landing surface is below you and actually land in the overrun.
2. Considering most if not all [Company] operations to below 300 ft and 3 mile visibility are at airports with a control tower with operational control of the runway lights this is a very unique airport configuration for [company] pilots.
3. Due to the distance of the Google Earth [view] of the approach to runway 9 it does not reflect the illusion the runway 27 overrun creates with snow covering paved surfaces or in 3 mile visibility conditions.
4. Close up of the overrun; the cross paved connector from the overrun to parallel parking apron taxiway. Covered with a thin layer of snow and low visibility creates an illusion the runway 9 landing surface is well before the actual runway 9 threshold. Additionally, none of these attributes are evident on Google Earth.

Suggestions:

1. Add note on dispatch release that daytime PCL are only available with prior contact with airport operations.
2. Make PCL available during daylight operations without prior contact with airport operations.
3. Install PAPI right side runway 9.
4. Install REIL runway 9.
5. Company produce video to runway 9 highlighting above safety issues.
6. Mandate MMH as a special qualification airport requiring sign off.

Synopsis

Air carrier pilot reported the lack of Pilot Controlled Lighting during daylight hours at MMH makes it difficult for crews to discern the runway boundary.

Time / Day

Date : 201802

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZZ.ARTCC

State Reference : FO

Altitude.MSL.Single Value : 12500

Aircraft

Reference : X

ATC / Advisory.Center : ZZZZ

Aircraft Operator : Air Carrier

Make Model Name : A319

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Visual Approach

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1521549

Human Factors : Confusion

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1522575

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Flying RNAV (RNP) Approach past ZZZZZ Intersection I was instructed by approach to go-around due to ATC terrain proximity warning.

Aircraft was config 2 with green on FINAL APP using autopilot 1. Altitude approximately 12,500+, speed 180 kts. TCAS was on First Officers (FO) screen indicated all green and no warnings issued. Complied with ATC instructions, flew missed. Came back to fly the RNAV Visual Flight Procedure. Followed RNAV 10-4 pages. Due to difficulty obtaining ATC phone number and language difficulties was not able contact for go-around clarification.

Narrative: 2

Requested RNAV RNP approach. We were issued and cleared for that approach. While on the approach just past ZZZZZ Intersection ATC (approach control) instructed us to execute a missed approach. The approach was being flown by the captain on AP1. The speeds and altitudes were executed exactly as published. We did the full missed as instructed. I asked for the reason for the missed approach clearance, and ATC responded that we were below his terrain coverage. I had the terrain displayed (EGPWS) on my side and the altitude of the aircraft was well above the terrain displayed and our position was exactly as depicted on the approach plate. On the next approach we requested the RNAV VISUAL. We accomplished that approach to a full stop landing. We were unable to determine any errors on our part so we are questioning ATC radar/terrain coverage vs the RNAV RNP Approach altitudes. The captain asked ground control for the ATC phone number. Due to language barriers, we could not determine the reason for the Approach controls request for go around.

This was the crews first time landing [at the] north runway. Asking to use the RNAV might have been the issue since other aircraft were using RNAV VISUAL.

Without knowing the reason for the ATC go around instructions, I can not provide any conclusions to avoid a recurrence of the event.

Synopsis

A319 flight crew reported that ATC commanded the flight to go missed.

Time / Day

Date : 201802

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : JFK.Airport

State Reference : NY

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Tower : JFK

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.VOR / VORTAC : JFK

Flight Phase : Final Approach

Flight Phase : Initial Approach

Airspace.Class B : JFK

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1521419

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1521411

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

FO flying the VOR 13L Approach with LNAV VNAV. After DMYHL FO hand flying started descending right turn for runway alignment. When aircraft was banked right I lost sight of runway with overhead panel blocking and restricting my view. Tower called us and said "ALTITUDE ALERT, Check ALTIMETER 30.25". Still unable to see runway, I commanded FO to LEVEL OFF and stop descent!! I then said "we need to SEE and intercept VASI before further descent" FO complied with my command to landing.

During approach brief, FO and I both briefed the fact that neither one of us had flown this approach more than 2 or 3 times in our entire careers here, noting unfamiliarity. I think event occurred because descent was started a bit early but note that FO is only one that has a visual on runway during runway alignment as aircraft is in bank to right.

This approach is very unique in our system and has unique characteristics that SHOULD be noted in our 10-7 pages (IMMEDIATELY!!) To PREVENT future events such as; "IF cleared approach VOR Runway 13L/R maintain MDA until proper descent path and runway alignment can be attained!!"

Also I noted the RNAV (RNP) to 13L that could have been better choice for maximizing all available automation and additional guidance. Especially since Captain may NOT see runway when aircraft in right turn. PM can be monitoring LNAV and VNAV as well as external guidance and track with the RNAV approach. Maybe this could be mentioned on 10-7 pages.

I noticed in company pages there is more emphasis about different gate procedures than approaches related to JFK. In passed several years valuable information has been taken away as important references from 10-7 pages.

Kudos to JFK Tower Controllers for providing us their awareness!!

Narrative: 2

Cleared for the VOR 13L to JFK. As PF, the approach was initially started in LNAV/VNAV with autopilot engaged. While in the turn to final, V/S mode engaged to retain descent guidance. On short final ATC (Tower) advised they received a low altitude alert. Autopilot was manually disengaged and altitude corrected. Descent continued once reference to the VASI was available. Landing completed without incident.

Unfamiliarity with approach and geographic visual cues noted on the approach plate. V/S mode engaged sooner than optimum.

Earlier assignment of approach by ATC to allow greater time for review of the approach.

Practice of this approach in recurrent simulator sessions to allow faster identification of visual geographic points.

Synopsis

B737-800 flight crew reported receiving a low altitude alert from Tower on the VOR 13L approach to JFK.

Time / Day

Date : 201802

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Weather Elements / Visibility : Icing

Aircraft

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Landing

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : First Officer

ASRS Report Number.Accession Number : 1521358

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Airport

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

We were operating Aircraft X on day 2 of a 4 day trip. The first leg was the Captain's leg in our rotation. We arrived and had a 2 hour sit. The next leg was supposed to be my leg per our rotation. After review of the weather there was low visibility and possible contamination reports in [Destination Airport] and I would not be able to land with my status on the 737. We decided it needed to be the Captain's leg. While conducting the walk around I found a maintenance issue that would not allow the airplane we had to fly up to [Destination Airport]. We were given another aircraft and it too had a small maintenance issue that was resolved. We ended up departing about 1.5 hours late. As we flew up to [Destination Airport] we were checking the weather conditions and it seemed as if we would be able to fly an ILS CAT 3 to runway 12R. We sent for landing data for both 12R and 12L. 12L runway data required us to have braking action "Good" or better for us to use it. The data for runway 12R gave us a better safety margin due to its length. We were assigned the ILS 12R by [Destination Airport] approach. On downwind leg [Destination Airport] stated that runway 12R would be shut down for snow removal and to expect runway 12L. We re-sent for new landing data for 12L and it still showed we needed braking action "Good" or better. We kept quarrying [Destination Airport] approach for a braking action report for 12L and could not get a response. [Destination Airport] then told us the braking action for 12L was "Medium" and per our landing data we could not land on that runway. They told us that it would be around 30 minutes to plow runway 12R. At that point we were starting to approach our Bingo fuel to divert to our alternate. We were also weight restricted so we did not have a lot of extra fuel in general. We then decided to divert initially, but after loading in the FMC we would land there with 3,000lbs of fuel or less. We realized we needed a much closer divert airport and found ZZZ1 to be a good option. We landed at ZZZ1 with no issues except that there was not going to be fuel services available after [a certain time]. As we found a place on the ramp to talk to operations we were told that the fueler was called back out to the airport and would be there in 10 minutes. Dispatch wanted us to fly back. A flight plan was sent to our ACARS printer and my Captain was able to verbally discuss this flight back over to [Destination Airport]. From what I heard from the phone call, the weather was improving and aircraft were getting into [Destination Airport] with no problems. The Dispatcher also added ZZZ2 as an alternate and it was a good and legal alternate. Our CCO (Crew Critical Off) time was getting close to the max duty day but we accepted an extension and there was some back and forth about our max CCO time. My Captain received another phone call stating we were good. We got our clearance from ATC and had a void time [to comply with]. We decided we could make the void time and the CCO time if we hustled for this 1 hour flight back to [Destination Airport].

The Captain was once again the pilot flying for this leg due to our plan to fly a CAT 3 ILS to 12R in [Destination Airport]. Between ATIS and ATC, we were staying constantly up to date on [Destination Airport] weather and braking action and it seemed a landing on 12R was going to happen. We were getting vectors for the CAT III ILS 12R and were handed off to tower on final approach and they stated "braking action poor, cleared to land runway 12R". I believe we were both shocked by that statement and we had to execute a missed approach. Tower then stated [another aircraft] landed 45 minutes earlier and reported the braking action poor. We then asked tower about the conditions of runway 12L. We never really got a solid report about 12L's conditions other than it was plowed more recent than 12R. We told them we must have braking action "Good" on that runway and they said they were not optimistic about us having that. The Captain was showing some signs of fatigue enroute, but at this point I could tell the Captain needed a break from flying the airplane. I told him that I felt well rested and would take over aircraft control. So we transferred controls and I became pilot flying. Once again we did not have a lot of fuel to wait out the 30 minutes or more it would take to plow runway 12R. We were told not to expect better than "Medium" braking action on 12L. So we made the decision to divert to our alternate

of ZZZ2 and informed our Dispatcher. Our Dispatcher asked us if we could make [a different alternate], but once again after looking at the fuel on landing at [a different alternate] we would be 3,000lbs or less. The Dispatcher's response was either "OK" or "Roger" with not much more info such as fuel burn to ZZZ2, current weather, field conditions, or another suggestion of a closer or better alternate. We pressed on to ZZZ2. Looking at the weather we got from ATC as we approached ZZZ2 we had winds 140/09, 5 SM, with BR, and Overcast at 800ft, temp 00, dew point -02, Altimeter 30.15. As we got closer to ZZZ2 the automated weather service also confirmed the same conditions. We requested runway data for 06 and showed we were good to land with brakes 3 and "Good" braking action. We decided on brakes MAX which would give us 1,695 feet of extra distance on the [7,600+] foot runway. We did look at runway 18 because of it being [a little longer]feet longer but the only approach option was an RNAV that took us down to 492 ft AGL. A full RNAV approach brief in my opinion requires a lot more information along with a reference to the QRH that with our current fuel status time was of the essence. Also the FOM states preference for instrument approach procedure backup should be from best to worst stating a precision approach as the best option. Runway 06 ILS would take us down to 200 FT AGL. Another factor I thought about was we really did not want to have to perform a go around at that point due to low ceilings and get into an even more critical fuel situation. The runway data for 06 gave us a 2 KT headwind and a 7 KT crosswind which were all legal for my status on the 737. Also the visibility was better than 4,000 RVR or 3/4SM and we had no knowledge of any contamination on the runway and there were no braking action reports. I conducted the ILS approach to 06 and was stable along with a touchdown in the touchdown zone markers with minimum float. I got the thrust reversers to max and the speed brakes were deployed. However, I started to realize we were not slowing down as we should have been for the expected conditions. I started to apply manual braking.

I verbalized this to the Captain and he commanded, "Max manual brakes, max manual brakes". The Captain also came on the brakes to confirm Max manual braking. I did the best I could to maintain directional control and braking but we approached the end of the runway and slid off into the grass. The airplane did come to a stop at this point and we were only 115 FT from the end of the runway to our tail. (Ground personel showed us that exact number with a measuring device). We evaluated the situation, having passengers remain seated and Flight Attendant (FA) check their condition. No unusual lights or indications came on. The landing gear and aircraft seemed in good shape. We decided an evacuation was not required. We fired up the APU, secured the engines and began coordination with crash rescue, ATC, company, and airport operations. No reported injuries, and all passengers and crew were ok. No immediate signs of aircraft damage. We were able to de-plane everyone off the aircraft through door 1L with air stairs. One of the Ground Operations personel came into the flight deck and told us we experienced a "flash freeze" on the runway surface due to the atmospheric conditions in ZZZ2. He said that a "flash freeze" also occurred around the same time the night before. The Captain and I made sure everyone was off the airplane, did our final walk through the cabin, and secured the aircraft.

Synopsis

B737 First Officer reported a runway excursion after landing at an airport that experienced a flash freeze just prior to landing.

Time / Day

Date : 201802

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : L30.TRACON

State Reference : NV

Altitude.MSL.Single Value : 7000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility.Visibility : 10

Ceiling.Single Value : 20000

Aircraft

Reference : X

ATC / Advisory.TRACON : L30

Aircraft Operator : Corporate

Make Model Name : Challenger 300

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Vectors

Route In Use : Visual Approach

Route In Use.STAR : SITEE2

Airspace.Class B : LAS

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 7100

Experience.Flight Crew.Last 90 Days : 75

Experience.Flight Crew.Type : 1100

ASRS Report Number.Accession Number : 1520724

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Engineer
Experience.Flight Crew.Total : 21000
Experience.Flight Crew.Last 90 Days : 125
Experience.Flight Crew.Type : 3700
ASRS Report Number.Accession Number : 1520127
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.ATC Issue : All Types
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Upon arriving into the LAS area, we were cleared to descend via the TYSSN.5 RNAV arrival. On that arrival, the Controller restricted us to 12000 feet as we neared KADDY. After passing KADDY we were given numerous changes to heading, altitude and speed. While being vectored for a visual approach to Runway 19R at LAS, the Controller and pilot workload was extremely high and the reported turbulence was moderate to severe in the LAS area. Surface winds were reported 190@23G36 and all arriving traffic was requesting Runways 19L and 19R. Where our confusion started was when we were told by ATC to bring up the SITEE2 RNAV Visual to 19R. We misunderstood this as a charted visual approach and weren't expecting to get another arrival within twenty or so miles of the airport in visual conditions. After searching through our approaches, we told ATC we didn't have it in our database. ATC told us it was the SITEE2 RNAV arrival and to let them know when we had it loaded. During this confusion, we were in a rush to get the arrival loaded and briefed resulting in a misunderstood instruction of a "heading change only" to be a

heading and altitude change to 5000 feet. ATC alerted us to climb immediately back to 7000 feet as we reached about 5700 feet. We were handed off to the Final Controller, given a descent to 5200 feet, speed of 170 knots and a heading to intercept final. The approach and landing continue without further issues. The crew was never notified to call a number but I reached out to ATC to understand where the issues were and understand how to avoid this in the future.

Narrative: 2

Because of the confusion about the routing and approach, I can not say how the 5000 feet (should have been 7000 feet) got set in our altitude window. I'm not sure if he gave us that altitude by error, or if we misunderstood the clearance and set the wrong altitude.

The root cause, I believe came from the Controller issuing an arrival procedure when we had just completed the original one we were assigned, and we were close in to the terminal area approximately 15 miles from the airport, (your mind is geared for the approach at that time) thus creating the confusion in the cockpit, thus the distraction and altitude deviation.

Synopsis

CL300 flight crew reported receiving a low altitude alert after departing the cleared altitude due to a clearance misunderstanding.

Time / Day

Date : 201802

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : AUS.TRACON

State Reference : TX

Altitude.MSL.Single Value : 7500

Environment

Flight Conditions : Mixed

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : AUS

Aircraft Operator : Personal

Make Model Name : MD-80 Series (DC-9-80) Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Flight Plan : IFR

Mission : Personal

Flight Phase : Initial Approach

Route In Use : Direct

Route In Use.STAR : WLEEE 4

Airspace.Class E : AUS

Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : AUS

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Component

Aircraft Component : Traffic Collision Avoidance System (TCAS)

Aircraft Reference : X

Problem : Failed

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Captain

Function.Flight Crew : Flight Engineer / Second Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Engineer

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 18000
Experience.Flight Crew.Last 90 Days : 20
Experience.Flight Crew.Type : 5000
ASRS Report Number.Accession Number : 1520097
Human Factors : Situational Awareness

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 20000
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 16000
ASRS Report Number.Accession Number : 1520149
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Air Traffic Control
Detector.Person : Flight Crew
Miss Distance.Vertical : 500
When Detected : In-flight
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 : Aircraft
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

During our descent into the AUS area we were cleared to descend via the WLEEE 4 RNAV Arrival. I was the Pilot Flying (PF). As I recall, we were inside BITER and the Controller asked us to maintain 8,000 feet. With such a short distance between waypoints (6.6, 4.8, 6.0) I had slowed to 230kts. to meet the restrictions over LUKKE (230 kts., at or above 6,000 feet). Since the Flight Mode Annunciator (FMA) indicated 8,000 feet and Altitude Hold, I had the Pilot Monitoring to set and arm 6,000 feet in anticipation to meeting the restrictions at BASTO (at or above 8,000 feet) and the restrictions at LUKKE. The Controller called out traffic at our 11 O'clock position. While looking for the traffic, I glanced at the 6,000 feet in the FMA, thought I was late in my descent, and started to descend to make the 6,000 foot restriction at LUKKE. At approximately 7,500 feet the Pilot Monitoring (PM) called out the altitude deviation. Realizing my mistake, I initiated an immediate climb, at the same time the Controller gave us instructions to climb

immediately to 8,000 feet with a corrective heading. We never saw the traffic. The Number 2 TCAS system never gave us a Traffic Advisory (TA) or a Resolution Advisory (RA). After landing at AUS, the Number 2 TCAS system was tested and failed, the Number 1 TCAS tested normal.

Narrative: 2

I saw the traffic on the TCAS@1200' below and climbing. I scanned outside but could not see the aircraft as there was a cloud deck below us. I again checked the TCAS, observed the traffic about 900-1000' below. I again scanned outside, saw no traffic and returned to the observing the traffic about 400' below us and our aircraft in a descent. Just as I told the Captain to immediately climb, ATC told to climb to 8000' and a heading was assigned. A Traffic Advisory (TA)/Resolution Advisory (RA) was never activated and on landing the Number 2 TCAS (the one in use at the time of the incident) was tested and failed. The Number 1 TCAS was tested and passed.

Synopsis

MD80 flight crew reported an early descent resulted in an airborne conflict that was complicated by the failure of the TCAS system.

Time / Day

Date : 201802

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 100

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : B737 Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : GPS

Nav In Use : FMS Or FMC

Flight Phase : Final Approach

Route In Use : Visual Approach

Route In Use : Vectors

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Last 90 Days : 220

Experience.Flight Crew.Type : 1054

ASRS Report Number.Accession Number : 1519790

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Type : 1120
ASRS Report Number.Accession Number : 1519791
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

While operating our flight, we received radar vectors to join RNAV 28 approach. VMC conditions prevailed after being established and a visual approach was conducted once airport environment was in clear view. Surface wind was reported 240-18G30 causing momentary speed fluctuations of +/-15 knots. During final approach, EGPWS indicated a brief sink rate warning, which was arrested so the approach could continue to a safe and uneventful touchdown and rollout.

Narrative: 2

VMC visual approach with RNAV GPS 28 as a backup, the surface wind were 240/18G30. Captain hand flying the airplane because of gust and turbulence (PIREP for severe turbulence in the area) at about 100 feet AGL we got a brief sink rate warning. We also encountered speed fluctuations of +/- 15 Knots. The landing was uneventful.

Synopsis

B737 flight crew reported that they received an EGPWS sink rate warning while on final approach.