

ASRS Database Report Set

Emergency Medical Service Incidents

Report Set Description.....	A sampling of reports concerning Emergency Medical Service (EMS) incidents.
Update Number.....	20.0
Date of Update	May 31, 2018
Number of Records in Report Set.....	50
Number of New Records in Report Set	12
Type of Records in Report Set.....	For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.

National Aeronautics and
Space Administration

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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: 1525835 (1 of 50)

Synopsis

Air carrier Captain reported that while in the flare to land a helicopter was cleared to cross their runway.

ACN: 1523945 (2 of 50)

Synopsis

A Helicopter Maintenance Technician reported that the balancing spring for the dual controls was not in the proper position.

ACN: 1520126 (3 of 50)

Synopsis

BE20 pilot reported descending below cleared altitude inbound because he had the wrong altimeter setting after misunderstanding ATIS.

ACN: 1514838 (4 of 50)

Synopsis

BK-117 pilot reported that after the main rotor contacted tree branches during a landing attempt, the helicopter was repositioned to land in a nearby field.

ACN: 1514837 (5 of 50)

Synopsis

A119 pilot reported that an iPad was inadvertently left between the center console and the cyclic temporarily restricted lateral movement of the cyclic.

ACN: 1512163 (6 of 50)

Synopsis

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

ACN: 1510232 (7 of 50)

Synopsis

Airbus A300 flight crew reported that during descent they received a Traffic Alert and came within 200 feet of a helicopter.

ACN: 1507993 (8 of 50)

Synopsis

BHT-407 Captain reported entering IMC in a VFR only aircraft.

ACN: 1501457 *(9 of 50)*

Synopsis

Eugene air traffic control Tower operator reported Tower lighting panel out of service, hindering IFR operations.

ACN: 1497370 *(10 of 50)*

Synopsis

PHX Tower Controller reported an aircraft departed on a closed runway.

ACN: 1483884 *(11 of 50)*

Synopsis

Air Ambulance pilot reported experiencing a near mid-air collision with an opposite direction aircraft while setting up for landing at a hospital. Both aircraft took evasive action by banking right.

ACN: 1483761 *(12 of 50)*

Synopsis

A helicopter pilot reported that they were unable to land on a highway intersection due to a tailwind and irregular landing zone.

ACN: 1483007 *(13 of 50)*

Synopsis

S46 TRACON Controller reported canceling a Visual Approach clearance to avoid VFR traffic that was not in communication with ATC.

ACN: 1482595 *(14 of 50)*

Synopsis

Helicopter pilot reported a NMAC with a UAV shortly after takeoff from a hospital.

ACN: 1479349 *(15 of 50)*

Synopsis

BE200 pilot reported landing after unsuccessful attempts to fully extend the gear resulting in left landing gear collapse on landing.

ACN: 1477762 *(16 of 50)*

Synopsis

Pilot of a turbojet reported issues with Tower managing aircraft separation at an airport with multiple closures of taxiways and one runway.

ACN: 1467662 *(17 of 50)*

Synopsis

ZDV Controller reported the D01 TRACON Controller would not allow an expedited routing for a Medevac Lifeguard aircraft.

ACN: 1466557 *(18 of 50)*

Synopsis

ZOB Center Controller reported having to go into no notice holding and the problems that followed.

ACN: 1465594 *(19 of 50)*

Synopsis

King Air 90 pilot reported deviating without clearance for a thunderstorm that suddenly appeared on the nose during transition from IMC to VMC. XM weather and the aircraft radar did not show the buildup.

ACN: 1461306 *(20 of 50)*

Synopsis

EC135 helicopter pilot reported entering IMC on a return to base from a transport flight, requested assistance from ATC, and was able to descend on an RNAV approach to VMC and landed successfully.

ACN: 1453177 *(21 of 50)*

Synopsis

Air ambulance helicopter pilot reported that a patient, possibly injured while cooking methamphetamine, may not have been properly decontaminated prior to transport.

ACN: 1452718 *(22 of 50)*

Synopsis

Maintenance Technician reported an AS355 helicopter airspeed indicator was replaced with an incorrect unit. The original faulty indicator was reinstalled and the aircraft returned to service without documentation.

ACN: 1451748 *(23 of 50)*

Synopsis

AS-365 Captain reported contact with a van on landing at a hospital helipad.

ACN: 1448460 (24 of 50)

Synopsis

Helicopter pilot reported a NMAC with an airliner in the vicinity of MLI airport.

ACN: 1445516 (25 of 50)

Synopsis

LR-35 Captain reported displeasure with the way his First Officer managed his duties during arrival. The result was a missed crossing restriction at a higher than cleared speed.

ACN: 1440232 (26 of 50)

Synopsis

SLC Local Controller reported a strong wind shift caused go-arounds of two aircraft into conflicting courses.

ACN: 1439512 (27 of 50)

Synopsis

Helicopter Captain reported fuel quantity failures on a multi-leg patient flight which was later determined by Maintenance to be caused by contaminated fuel.

ACN: 1433814 (28 of 50)

Synopsis

Helicopter pilot reported that Maintenance personnel advised him to immediately take the aircraft out of service due to time sensitive parts that may have been overflowed.

ACN: 1431247 (29 of 50)

Synopsis

Air Ambulance pilot reported being chastised by a supervisor for canceling a patient flight enroute due to weather. He felt this pressure was directly in contradiction with the company policy of making conservative calls.

ACN: 1428314 (30 of 50)

Synopsis

Air taxi Captain reported that on takeoff from ZZZ when it was snowing he noticed a snow plow at the departure end of the runway.

ACN: 1425113 (31 of 50)

Synopsis

ZBW Controllers reported that an aircraft was descended below the Minimum IFR Altitude in error to get it below clouds to see the airport.

ACN: 1425045 *(32 of 50)*

Synopsis

Air ambulance helicopter pilot reported a failure to complete the flight risk assessment process due to iPad communication problems in a rural area.

ACN: 1421777 *(33 of 50)*

Synopsis

ZLA Controller and helicopter pilot reported of incorrect information which led to an airspace deviation. The Controller had advised the pilot that the restricted airspace was inactive, approved the flight through the airspace when the airspace was actually active.

ACN: 1421137 *(34 of 50)*

Synopsis

Helicopter pilot reported encountering icing conditions and landed at the nearest airport.

ACN: 1408366 *(35 of 50)*

Synopsis

A TRACON Controller reported a departing aircraft in conflict with an overflight helicopter they were working.

ACN: 1405035 *(36 of 50)*

Synopsis

EC-130 pilot reported attempting to set down on a dolly with a tailwind, but hit a skid on the dolly and pulled the collective to ascend. Sensing what the pilot thought could be dynamic rollover developing, he landed the helicopter. It was determined that a skid had caught on the dolly.

ACN: 1399837 *(37 of 50)*

Synopsis

Helicopter Captain reported encountering IMC conditions during a night VFR ambulance flight. Pilot reported a turn to return to VMC and mentioned that wearing Night Vision Goggles can make it difficult to detect reduced visibility conditions.

ACN: 1398441 *(38 of 50)*

Synopsis

A Maintenance Technician reported that during track and balance on a EC-135 helicopter, a main rotor blade was needed. They upgraded the existing blade per a Service Bulletin.

ACN: 1396857 *(39 of 50)*

Synopsis

PA28R pilot reported a NMAC with a medical helicopter while setting up for a flight maneuver.

ACN: 1396205 *(40 of 50)*

Synopsis

Air taxi Captain reported experiencing a NMAC with a C172 on approach to the non-Towered AAO airport.

ACN: 1392986 *(41 of 50)*

Synopsis

ZLC Controller reported observing an aircraft at 10,000 feet in a MVA area designated 11,000 feet.

ACN: 1390677 *(42 of 50)*

Synopsis

Air carrier flight crew described the confusion resulting from the First Officer mistakenly confirming aircraft established on a VOR radial, instead stating the aircraft heading which confused ATC.

ACN: 1381828 *(43 of 50)*

Synopsis

A helicopter pilot reported difficulty maintaining the FAR required altitude above terrain due to a lowering weather ceiling and rising terrain.

ACN: 1375426 *(44 of 50)*

Synopsis

C90 Captain reported being awakened from sleep to fly a medevac flight but not comprehending the assignment due to fatigue. When informed that the flight is ready to depart he quickly jumped in the aircraft without checking NOTAMs. After landing he learned that the airport was closed for runway resurfacing.

ACN: 1372997 *(45 of 50)*

Synopsis

Air ambulance flight crew landing at RLD reported a near collision with another aircraft taking off on an intersecting runway. The other aircraft reportedly was not communicating on CTAF frequency.

ACN: 1368320 *(46 of 50)*

Synopsis

An Air Traffic Controller Trainee reported failing to take sufficient action to keep a VFR aircraft away from an IFR aircraft executing an approach to an airport. The Trainee Controller mistakenly believed he could not vector the VFR aircraft below the MVA.

ACN: 1364396 *(47 of 50)*

Synopsis

CHS Tower Controller reported of a problem with traffic into the airport. The pattern traffic was working until the reporter was given a point out on a Lifeguard aircraft which caused the pattern to be disrupted and caused a wake turbulence problem.

ACN: 1361710 *(48 of 50)*

Synopsis

Medevac helicopter pilot reported being advised of a UAV which was operating in the vicinity of his proposed flight path. This information caused him to be distracted which resulted in his non-compliance with company risk assessment procedures.

ACN: 1359784 *(49 of 50)*

Synopsis

An EMS helicopter pilot reported hearing an iPad notification sound which he thought indicated Dispatch's mission approval after his risk assessment. In fact, Dispatch wanted to discuss weather. A distinctive Dispatch approval notification "ding" was discussed as a solution.

ACN: 1356741 *(50 of 50)*

Synopsis

An EC-135 EMS pilot landed for patient pickup, but because the patient had expired, the flight returned to base. The pilot started his takeoff with an engine in idle, but landed immediately, returned the engine to fly and departed. Upon arrival he discovered a CAD FADEC #1 "ENGINE EXCEED" alert so the aircraft was removed from service.

Report Narratives

Time / Day

Date : 201802
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
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
Airspace.Class C : ZZZ

Aircraft : 2

Reference : Y
Aircraft Operator : Air Taxi
Make Model Name : Helicopter
Operating Under FAR Part : Part 135
Mission : Ambulance
Flight Phase : Landing

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function.Flight Crew : Captain
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1525835
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Airspace Violation : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Observer
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

After being cleared to land a helicopter requested to hover taxi for a south bound departure. Tower said "cleared to taxi hold short of Runway 7 for landing traffic." We were short final. The helicopter then told Tower we need a south bound departure ASAP. At 200-100 ft during landing the tower said helicopter do you have landing traffic in sight? He said yes then Tower cleared him to cross our runway. We were all shocked when the helicopter crossed when we were 100-flare. It is my opinion that if we had to do a go-around that could have been a potential air hazard. After landing I phoned the tower and asked if I could come up and say hi. The tower said sure come on up. When I got into the tower the tower guys were really cool and I politely said I noticed you cleared the heli to cross when we were on short final. The tower guy said yeah. He said he had you in sight and normally doesn't go that way. I said I understand it was a medical emergency. "Medavac" well we are not used to that so I just wanted to come up and say hi. It was a medical helicopter that requested priority. Maybe wait [until] we landed to clear the helicopter across the runway.

Synopsis

Air carrier Captain reported that while in the flare to land a helicopter was cleared to cross their runway.

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Altitude.AGL.Single Value : 0

Environment

Light : Night

Aircraft

Reference : X

Make Model Name : Eurocopter AS 350/355/EC130 - Astar/Twinstar/Ecureuil

Crew Size.Number Of Crew : 1

Mission : Ambulance

Maintenance Status.Maintenance Type : Scheduled Maintenance

Maintenance Status.Maintenance Items Involved : Installation

Component

Aircraft Component : Collective Control

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person : Company

Function.Maintenance : Technician

Qualification.Maintenance : Powerplant

Qualification.Maintenance : Airframe

Experience.Maintenance.Technician : 16

ASRS Report Number.Accession Number : 1523945

Human Factors : Situational Awareness

Human Factors : Fatigue

Human Factors : Training / Qualification

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Maintenance

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Detector.Person : Maintenance

When Detected : Pre-flight

Result.General : Maintenance Action

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Manuals

Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

One problem was the pilot did not put on the collective lock, the aircraft lifted again and had a hard landing seconds later.

I had removed the dual controls and installed them again, and then removed them again.

This was not familiar to me, I had been to a school for EC130's, but this was the first time working on an EC130 by myself. I found I only used part of the electronic manual and not all of it, because of my unfamiliarity with it. I missed the part of balancing the controls by putting the one end of the balancing spring in another position. I thought I had finished the maintenance properly. I found out later I did not via the tech rep. The spring tension/position may have been a factor in the aircraft becoming airborne and then landing again hard.

I see where I could have done a better job, but I had difficulty with both the tech manual site and electronic tech manuals due to my inexperience. I also had asked my company bosses for more training before the helicopter arrived. I was also working at night and was tired. Just from being up at night. I usually work days.

Synopsis

A Helicopter Maintenance Technician reported that the balancing spring for the dual controls was not in the proper position.

Time / Day

Date : 201802
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 10000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Snow
Weather Elements / Visibility : Icing
Weather Elements / Visibility : Turbulence
Weather Elements / Visibility.Visibility : 1
Light : Daylight
Ceiling.Single Value : 800

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Super King Air 200
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Flight Phase : Initial Approach
Route In Use : Vectors
Airspace.Class B : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Other / Unknown
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 5500
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 1600
ASRS Report Number.Accession Number : 1520126
Human Factors : Communication Breakdown
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Other

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
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
Primary Problem : Human Factors

Narrative: 1

Inbound to [the airport] from the southeast, east side of the mountains I had some difficulty receiving ATIS. We were occasionally experiencing moderate turbulence, with continuous light turbulence accompanied by a trace of mixed ice. On RV (Radar Vectors) after passing the mountains from east to west, I was instructed to descend to 11,000 ft. Just before leveling off ATC queried me, if I was leveling 11,000 ft, I replied affirmative. At this point I was near intercept of the LDA LOC. The Controller responded immediately, "cleared 10,000 feet, altimeter 29.55". I immediately arrested my descent, and corrected my altimeter to the lower and correct setting of 29.55. This Controller did an incredible and prompt job at correcting me, for which I am extremely grateful.

Earlier on when I had received ATIS I had misheard what the altimeter setting was even after several attempts to hear ATIS. I had set an incorrect and much higher pressure value in my altimeter. Ultimately causing myself to believe the aircraft was much higher that it was in reality.

I should have been more diligent to receive the correct altimeter setting, and certainly I could have simply queried ATC what the current altimeter setting was in order to confirm, which I will do in the future. I had never made this mistake in hard IFR while at the critical phase of an initial approach segment until last night. I will be continually vigilant of having an accurate altimeter settings.

Synopsis

BE20 pilot reported descending below cleared altitude inbound because he had the wrong altimeter setting after misunderstanding ATIS.

Time / Day

Date : 201801

Environment

Flight Conditions : VMC

Light : Night

Ceiling : CLR

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : MBB-BK 117 All Series

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Landing

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Maintenance Status.Maintenance Items Involved : Inspection

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1514838

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Flight Crew

Were Passengers Involved In Event : Y

When Detected : In-flight

Result.Flight Crew : Diverted

Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

Established radio contact with on-ground first responders at 5 nm out from scene asking for Landing Zone (LZ) information. The first responders relayed that the LZ will be in the

middle of State highway X, with wires on the south side and north side and some wires crossing the highway at the east end of the LZ area which a police cruiser will be directly under for ID purposes. We as a crew discussed and noted that traffic was still moving on the highway. The moving traffic allowed us to utilize Crew Resource Management (CRM) while conducting two high reconnaissance to identify the obstacles and talk about them. Once we received a radio update from the ground crews that traffic was stopped we commenced our low reconnaissance and approach to the LZ. Winds were negligible and not a factor for landing, so I chose to land to the western heading of the LZ on the highway with all lights to our backs due to numerous car lights on and around the East end of the LZ. I did not want to be blinded under the Night Vision Goggles (NVGs) in the most critical stages of landing when clearance could be an issue. Trying to remain focused and visually aware of distances as we entered the approach phase of landing.

As we descended to the LZ, all three of us continued our discussion of the obstacles with the power lines on the south side of the road, power lines on the north side of the road and trees on the north side of the road, and the power line to the east of the LZ. As we descended and got closer to the road and wires, my flight nurse asked if we can slide right a little to give a bit more separation from the south side wires. I said okay and as I shifted the helicopter to the right simultaneously the main rotor blades made contact with tree branch(s) on the north side of the road/right side of helicopter. All three crewmembers acknowledged tree branches were being hit, what seemed lightly, since I did not feel any feedback in the BK117 flight controls and did not notice any rotor droop. I stopped the descent 20-30 feet above the ground with the idea of avoiding catastrophic damage to the blades from contacting the bigger/thicker branches at the bottom of the tree and raised collective to move helicopter up and away from the designated LZ for a clear field 50 yards to the south of the designated LZ. We climbed up and flew a mini/low reconnaissance circle around to the adjacent field of the designated LZ. We openly talked about any wires or obstacles in the field prior to landing in the field. Also, contacted the first responders that we will be cancelling the flight due to mechanical issues of the helicopter before landing into the field.

Landed helicopter safely down in the field and commenced shutdown procedures. During shutdown, we discussed what happened and talked about the medical crew going by ground with the first responders to aid if needed. Exited the helicopter, called Company Communications. Crew did their walk around while I made the two calls. After my calls, I conducted my post flight walk around looking for blade damage or any other problems. I did not notice any physical or structural damage and just wipe/smear marks in the dirt in the yellow blade tip area from the branch(s) contacting the blades. Logged the blade contact in the logbook and waited for maintenance to conduct inspections.

Synopsis

BK-117 pilot reported that after the main rotor contacted tree branches during a landing attempt, the helicopter was repositioned to land in a nearby field.

Time / Day

Date : 201801

Place

Altitude.AGL.Single Value : 40

Environment

Flight Conditions : VMC

Work Environment Factor : Poor Lighting

Light : Night

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : A119 All Series

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Takeoff

Component

Aircraft Component : Electronic Flt Bag (EFB)

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1514837

Human Factors : Other / Unknown

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

Were Passengers Involved In Event : N

When Detected : In-flight

Result.Flight Crew : Returned To Departure Airport

Result.Aircraft : Equipment Problem Dissipated

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

The medical crew and I accepted a call for a hospital transport.... I was waiting for an approved flight risk assessment while installing my Night Vision Goggles (NVGs) standing next to the pilot seat. After the flight risk was approved, I showed it to one of my medical crew and announced green. I placed the iPad on the floor leaned against the center console while securing my logbook, clipboard, and handheld radio. The medical crew and I ensured the aircraft was unplugged and ready to be moved. The aircraft was pulled out of the hangar, with both of the medical crew as wing walkers, and was placed in its designated position faced into the wind. I completed my walk-around and announced that the aircraft was ready for flight. I climbed in the aircraft and went through my checklist to start the aircraft without issue. The aircraft was safe and ready for flight when I announced to [Company] Communication Center my intentions. I picked the aircraft up after receiving the all clear from the crew. We then cleared the cart, the tail, and the sky before initiating a takeoff.

During my power pull and at an altitude of approximately 40 feet, I felt the cyclic bind while putting in forward left pressure. This caused the aircraft to start a right drift. The crew asked me if I saw the tied down fixed aircraft wing that we were drifting towards and I announced that I have a control malfunction causing me to drift right. We continued to gain altitude and bank to the right as I was rapidly trying to identify the issue and keep the crew calm by announcing my mental process. I announced to [Company] Communication Center that we had a potential hydraulics malfunction. The bank continued and we started to lose altitude because of it. As we were approaching the taxiway, I was able to free the controls and slow the aircraft down.

I performed a precautionary run-on landing although I did not feel any continued indication of a problem. While doing so the medical crew announced to Communication that we were aborting the flight and that they smelled smoke. I attributed the smell to the run-on landing. While stopped I started to trouble shoot the malfunction by isolating each hydraulic servo. While feeling out the controls I reached down and saw that the iPad had wedged itself between the center console and the cyclic impeding my ability to move the cyclic left. I announced to Communication center what happened and briefed the crew to my tremendous mistake.

I am horribly embarrassed by this event as my haste to get the aircraft out of the hangar could have led to a catastrophic situation. In hindsight I can see the exact moment where I would normally ensure the iPad is free and away from the controls but moved on to the next item on the agenda. Because it was night, I did not notice the iPad when I entered the aircraft and again missed another opportunity to correct its placement. In the future, I will always place the iPad in the same secured location and perform a check prior to start-up ensuring that the controls are visually unobstructed from potential hazards.

Synopsis

A119 pilot reported that an iPad was inadvertently left between the center console and the cyclic temporarily restricted lateral movement of the cyclic.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZSE.ARTCC

State Reference : WA

Altitude.MSL.Single Value : 6300

Aircraft

Reference : X

ATC / Advisory.Center : ZSE

Aircraft Operator : Air Taxi

Make Model Name : PC-12

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Descent

Person : 1

Reference : 1

Location Of Person.Facility : ZSE.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1512163

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2

Location Of Person.Facility : ZSE.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1512158

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Airspace Violation : All Types

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Anomaly.Inflight Event / Encounter : CFTT / CFIT

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

Assessments

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

Narrative: 1

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

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

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

Time / Day

Date : 201801

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : A300

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Final Approach

Airspace.Class B : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Mission : Ambulance

Flight Phase : Climb

Airspace.Class B : ZZZ

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1510232

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 : 1509549
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

On ILS Tower advised we would have helicopter traffic. We had the traffic in sight, however, he was climbing through our altitude as we were on short final. We received a traffic alert from TCAS and maintained visual contact. Tower questioned the traffic to make sure he would maintain visual separation with us. He then began to climb, as our paths eventually crossed with him being only 200 feet above us as we passed directly beneath him. We had very little lateral separation. I was prepared to execute a resolution advisory if needed. We landed safely without any other incident.

ATC coordinated traffic far too close and to pass only 200 feet above us while we were on final approach. He requested that the helicopter pilot maintain visual separation, but he was too close and greatly reduced the margin for safety. Helicopter traffic should not be cleared into the approach corridor, especially when they are just above the approach path, which would have prevented us from doing a standard go-around if a resolution advisory would have been needed. It would have been a descending resolution with us being less than 1,000 feet AGL.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Airbus A300 flight crew reported that during descent they received a Traffic Alert and came within 200 feet of a helicopter.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Haze / Smoke

Weather Elements / Visibility : Rain

Light : Daylight

Ceiling.Single Value : 1000

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Bell Helicopter 407

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Cruise

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1507993

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : VFR In IMC

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Air Traffic Control : Issued New Clearance

Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Scene call request with local EMS, Day VFR. Evaluated weather prior to acceptance of the flight and determined the weather enroute to the planned receiving facility, 46 miles away, would be a 1000 ft to 1200 ft ceiling with 10 miles visibility and the weather in the vicinity of the destination would be 1500 ft with 10 miles visibility. This weather planning was based on ASOS stations along the route and local weather forecasts.

Departed the base and landed at the scene location 4 miles away. While waiting on the crew and patient, double checked the weather for any changes. None were noted; weather was holding as originally planned. Departed the scene location southeast bound on course for the receiving hospital. Enroute the ceiling was holding as predicted, however the visibility began to reduce slightly due to pockets of haze and mist. Deviated my route of flight to the west to avoid the pockets of haze. I kept the crew advised of the situation and told them that even though we had to make a slight change to the route due to decreasing visibility the weather was still looking good to continue. 20 miles from our destination, the ceiling and visibility dramatically decreased as I inadvertently entered into one of the pockets of haze and now fog. All of my initial options (land, divert, return) for the deteriorating weather procedure quickly were eliminated so I decided the safest option was IMC.

I notified my crew of what I was doing as I began my climb, squawked 7700 and [advised ATC] to determine what my options were. I elected to execute the ILS into ZZZ. Just inside the final approach fix I broke out VFR, canceled IFR with tower and proceeded to the destination hospital uneventfully.

Take a closer look at evaluating the winter weather and how quickly it can change. Make the no -go decision sooner, be more conservative with weather particularly when flying a VFR only machine.

Synopsis

BHT-407 Captain reported entering IMC in a VFR only aircraft.

Time / Day

Date : 201712

Local Time Of Day : 0001-0600

Place

Locale Reference.ATC Facility : EUG.Tower

State Reference : OR

Environment

Flight Conditions : IMC

Aircraft

Reference : X

ATC / Advisory.TRACON : EUG

Aircraft Operator : Air Taxi

Make Model Name : Small Aircraft, Low Wing, 2 Eng, Retractable Gear

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

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

Flight Phase : Final Approach

Airspace.Class D : EUG

Person

Reference : 1

Location Of Person.Facility : EUG.Tower

Reporter Organization : Government

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1501457

Human Factors : Communication Breakdown

Human Factors : Training / Qualification

Human Factors : Human-Machine Interface

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Other

Events

Anomaly.ATC Issue : All Types

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Air Traffic Control : Provided Assistance

Assessments

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

Contributing Factors / Situations : Company Policy

Primary Problem : Company Policy

Narrative: 1

Aircraft X was being vectored for the ILS. Tower lighting panel for airport lights was out of service due to a power outage the day before. The airport management decided, in their infinite wisdom, to just have ATC call their representative to have them change the airport lighting when needed. The night airport management person on duty was not properly trained in how to use the lighting panel, and with the visibility dropping rapidly, the runway lights needed to be on step 5. Airport management was unable to turn the lights up to step 5 with the visibility dropping to less than 1/4SM. Their electrician called the tower, and was extremely unhelpful and obstructive. Luckily the medevac was able to land safely.

Airport management and their electrician are NOT reliable when it comes to having control of airport lighting. They are not properly trained, and when weather moves in like this, they cannot be relied upon to make the changes to the airport lighting in a timely manner. This cannot go on [further] while we wait for a new lighting panel to be acquired and installed. It extremely unsafe.

Synopsis

Eugene air traffic control Tower operator reported Tower lighting panel out of service, hindering IFR operations.

Time / Day

Date : 201711

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : PHX.Tower

State Reference : AZ

Altitude.AGL.Single Value : 0

Environment

Light : Night

Aircraft

Reference : X

ATC / Advisory.Tower : PHX

Aircraft Operator : Air Taxi

Make Model Name : Commander 900

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Takeoff

Route In Use : None

Person

Reference : 1

Location Of Person.Facility : PHX.Tower

Reporter Organization : Government

Function.Air Traffic Control : Local

Function.Air Traffic Control : Ground

Function.Air Traffic Control : Flight Data / Clearance Delivery

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 5

ASRS Report Number.Accession Number : 1497370

Human Factors : Situational Awareness

Human Factors : Confusion

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Clearance

Anomaly.Ground Incursion : Runway

Detector.Person : Air Traffic Control

When Detected : In-flight

Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Airport

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

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

Narrative: 1

I was working the Local South, Ground South, and Clearance Delivery positions during the midnight shift when Aircraft X called for taxi to Runway 7L. I issued taxi instructions to the runway and ensured the instructions were followed. When Aircraft X was approaching the runway I coordinated the release with the Local North controller and I proceeded to clear Aircraft X for takeoff on Runway 7L. I had another unfamiliar aircraft on the frequency as well that was given taxi instructions to runway 7L which diverted my attention from the departing aircraft. When I turned to ensure the second aircraft was not going to encroach on the active runway Aircraft X turned onto the closed runway, Runway 7R, and slowly started takeoff roll. The Local North controller and I noticed the aircraft had turned onto the wrong runway and was beginning to depart. I attempted to get the aircraft to stop and cancelled the takeoff but the aircraft had switched to the departure frequency and did not comply. Aircraft X departed safely.

I am not sure why the aircraft departed an unlit runway or if the X that depicts Runway 7R side of the closed runway was even in place because the runway had just recently closed. In this case the X on the Runway 25L side of the runway was definitely in place because we were still west flow when the runway closed. Runway 7R/25L is almost always closed for the midnight shifts and I believe having a standard crossing point at an intersection would be a great help and will increase safety as well. When runway 7R/25L is closed the taxi instructions to and from the runways can be challenging even for veteran pilots especially at night. When the dayshift comes in for the morning one of the first things many of us do is get taxiway intersections for Runway 7L, as crossing points if possible to be more efficient and safer. I understand that there will be times when this is not possible depending on what is being worked on during the midnight shift but I know most of the time it can be done. I believe this will exponentially help safety and minimize complexity for all pilots especially at night.

Synopsis

PHX Tower Controller reported an aircraft departed on a closed runway.

Time / Day

Date : 201709
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 700

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : EC135
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : VFR
Mission : Ambulance
Flight Phase : Final Approach
Route In Use : None
Airspace.Class E : ZZZ

Aircraft : 2

ATC / Advisory.CTAF : ZZZ
Make Model Name : Robinson R44
Crew Size.Number Of Crew : 1
Airspace.Class E : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
ASRS Report Number.Accession Number : 1483884

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew

Miss Distance.Horizontal : 500
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

Near Mid-Air between Helicopter Air Ambulance EC135 with patient aboard and a General Aviation R44.

South bound EC135 at 80 knots descending through 700 feet AGL was setting up for landing at a hospital when it encountered an opposite direction Robinson R44 in a head on closing situation. The Pilot in Command (PIC) had just announced "one minute out, secure the cabin for arrival," when he saw a R44 roughly 100 feet below and just to the left at the near 12 o'clock position. Lateral separation was estimated at 100 to 200 yards. The PIC announced helicopter traffic at 12 o'clock and verbalized turning right and climbing. Both aircraft banked right. The EC135 climbed as it turned right in what both medical crew described as a "firm maneuver." Medical Crew Member seated in the left aft facing seat stated: "That was close!" He then proceeded to provide advisories on the R44's position, altitude and direction of travel. The R44 cleared low to the left and was seen departing the area to the east. PIC had made up to three advisory calls arriving into the area on CTAF as the EC135 flew from the north to the south descending. No other aircraft announced they were in the area. EC135 had pulse light, strobe light, anti-collision light and position lights illuminated. The EC135's ADS-B and TCAS were fully operational and showed no traffic nor gave any traffic alerts. As a matter of practice the PIC sets up the GARMIN 650/750 with the 650 on the traffic screen and the 750 on the map screen. Both of these screens would have shown a contact had the R44 been using a transponder. Following the course deviation and climb to avoid the R44, the EC135 PIC made up to two additional advisory calls on the CTAF. No radio traffic was heard from the R44. The EC135's radios were tuned to the company VHF frequency and [local airport] CTAF.

The aircraft made an uneventful landing at the hospital. ATCC was contacted as well as required company report filed. PIC had the aircraft was illuminated with every available light, ADS-B and TCAS were operational and traffic calls on the local airport frequency were being made. All the technology available was being used yet it came down to an active scan. Keeping your head on a swivel, ultimately allows for a successful "see and avoid".

Unfortunately, not all General Aviation monitor the local CTAF nor use a transponder as they are not required to in Class G. Hazardous Attitude: "If it's not required. I'm not doing it." Glad this attitude is the exception in the aviation community with the majority talking, squawking and illuminating.

Synopsis

Air Ambulance pilot reported experiencing a near mid-air collision with an opposite direction aircraft while setting up for landing at a hospital. Both aircraft took evasive action by banking right.

Time / Day

Date : 201709

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 10000

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Other

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Landing

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 : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1483761

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Executed Go Around / Missed Approach

Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Airspace Structure

Contributing Factors / Situations : Environment - Non Weather Related

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

Narrative: 1

We received a scene call request to [the] County. Air communication told me that the LZ (Landing Zone) was at the intersection of two highways. Before reaching the coordinates, I realized that the call was in the mountains at 10,000 FT MSL and not in the city. This made me a little uncomfortable having never performed this kind of off-airport landing before. I made a slow pass at 500 FT AGL over the LZ. After checking for obstacles, I determined that the terrain had a slope steep enough that I needed to land facing upslope to protect the tail rotor. I continued my reconnaissance pass with a plan to turn around and approach the LZ facing up-slope.

As soon as I turned, I saw that I was very close to the LZ. This caught me by surprise because I have done this type of tear-drop turn several times since I started in this industry. I quickly reconnaissance figured the helicopter for a standard steep approach. The helicopter seemed twitchy but I decided this was due to mountain turbulence. As I continued my descent, a horn sounded. My first thought was a low rotor RPM issue so I gently lowered the collective and applied back pressure on the cyclic. When I glanced at the NR (Rotor RPM) gauge, it read 400RPM. The horn stopped so I continued my descent. The horn sounded again and I found that I had run out of right pedal. At that time, I finally realized my mistake. I had not performed a wind check on my reconnaissance pass. I was in a tail wind situation and running out of available power.

As I was already turning to the left, I let this continue until I had turned 180 degrees. I maintained slight forward movement throughout the turn. At the completion of the turn, I had plenty of tail rotor authority and the FLI (First Limit Indicator) was below the yellow arc. I gently initiated forward movement to attain ETL (Effective Translational Lift). I followed the valley until I had sufficient velocity (V_y) to climb out. At that point, I told my crew that I was not attempting another landing at the crash site. With the ground crew begging us over the radio to land, we decided to find another landing zone. We found a huge field at the bottom of [the] hill and landed there. The medical crew grabbed their gear and found a ride up to the crash site. The remainder of the mission was completed without issue.

As a crew, we have extensively debriefed this flight and determined the following issues:

- 1) My crew and I were uncomfortable with the scene but did not say so to each other.
- 2) I did not perform a high reconnaissance
- 3) I did not properly perform a low reconnaissance.
- 4) I did not follow my personal scene-call procedures. Usually I am talking myself through the procedure, calling out all items on the list. I also require verbal consent to start the approach as a "NO" at 500 FT AGL is easier to abort than an "OH NO" at 50 FT
- 5) I allowed a bad situation to develop further than I should have
- 6) Since my initial training, I have not re-familiarized myself with the different audio warnings
- 7) I have little experience in mountain flying and less training. Flying over the ridges to various local hospitals was no training for landing in a mountain valley.

During the debrief, we came up with the following solutions:

- 1) Follow the FAA and GOM (General Operations Manual) directives. The rules are there for a reason
- 2) The crew needs to speak up when they are not comfortable. The crew felt the approach was rushed but said nothing

- 3) At the first sign that something is amiss (the first horn), abort the approach.
- 4) Complete a mountain flying course. I am signed up for an online course through IAT.GOV. However, actual mountain flying training would be appreciated.

Synopsis

A helicopter pilot reported that they were unable to land on a highway intersection due to a tailwind and irregular landing zone.

Time / Day

Date : 201709

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : S46.TRACON

State Reference : WA

Altitude.MSL.Single Value : 2100

Environment

Flight Conditions : VMC

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : S46

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 : Ambulance

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class D : BFI

Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : S46

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Route In Use : None

Airspace.Class E : BFI

Person

Reference : 1

Location Of Person.Facility : S46.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) : 2.75

ASRS Report Number.Accession Number : 1483007

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Detector.Automation : Aircraft RA
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

I was working sectors combined. Aircraft X was inbound on the visual approach. I was preoccupied with a preceding VFR aircraft who I had been attempting to contact for about 10-15 miles. As such, I was late in issuing traffic to Aircraft X on a VFR target northbound crossing the final approach course at an indicated altitude of 1800 feet. Aircraft X got the traffic in sight as I cancelled their visual approach clearance and issued a climb. I subsequently re-cleared Aircraft X for the visual approach and they landed without further incident.

While the pilot made no specific mention of it, I believe they responded to a TCAS-RA. A review of the FALCON radar replay illustrated that Aircraft X climbed 200 feet (from 2100 to 2300 feet) between my initial traffic advisory and my traffic alert. Thankfully, in this instance, there was no conflicting traffic above Aircraft X landing at an adjacent airport. Had there been conflicting traffic, the resulting climb of Aircraft X would have likely resulted in a loss of separation whether the climb resulted from my instruction or a TCAS-RA.

My preoccupation with the preceding traffic who was no longer responding to me is an important illustration of how close the encounters in this portion of our airspace can get with very little time, or airspace, to react and recover. Had my landline coordination with Tower been a couple of seconds later, or taken a couple of seconds longer, I may have missed the traffic advisory entirely and only reacted to the aural alert from the CA.

Another important aspect of this scenario is that Aircraft X was already cleared for the Visual Approach, but had retained altitude and not started a descent yet. I would not have considered it unexpected if Aircraft X had descended more by this point on the Visual Approach. That said, it was fortunate that the pilot did not because if Aircraft X had chosen to descend sooner, or more swiftly, it may have been a more significant event.

Something needs to change. The VFR aircraft are transiting a very narrow, busy corridor of airspace and are doing so without any communication with ATC. It is simply unsafe. The VFR aircraft in this area at the very least need to be in communication with ATC so that we can assign, as necessary, altitude restrictions ensuring the safety of all the aircraft involved. The solution(s) are not hard and while they are potentially more restrictive to VFR aircraft the bottom line is that what happens day in and day out in that airspace as it exists and operates now will eventually result in a very bad accident.

Synopsis

S46 TRACON Controller reported canceling a Visual Approach clearance to avoid VFR traffic that was not in communication with ATC.

Time / Day

Date : 201709
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 100

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Helicopter
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Mission : Ambulance
Flight Phase : Climb
Airspace.Class G : ZZZ

Aircraft : 2

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Rotorcraft
ASRS Report Number.Accession Number : 1482595
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 25

When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Near midair [with] a small drone flying one block east of the hospital. Our aircraft was on initial climb out at approximately 65 knots and was climbing from helipad to 2200 MSL. Elevation [at] time of near miss was probably 100-150 feet above helipad which is approximately 1250 MSL. The primary departure path from this helipad is standardized due to close noise sensitive areas and must be protected from drone activities and intrusions due to high flight volume around the hospital. We had to look up through the rotors to keep it in sight as it passed directly over the aircraft by about 25-50 feet. We saw it at the last second and had no time to react.

Ground all private drones. They are going to cause a mishap with a manned aircraft, the regulations for their operation do not provide helicopters with a margin of safety that is acceptable to flight crews who cannot see them because they are too small. The drones also do not have lights or markings that aid in their visual acquisition. They also do not register on TCAS or other radar systems. Alternately, "no drone" fly zones within 1 NM of all hospital helipads.

Synopsis

Helicopter pilot reported a NMAC with a UAV shortly after takeoff from a hospital.

Time / Day

Date : 201709
Local Time Of Day : 0001-0600

Place

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

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Night
Ceiling.Single Value : 11000

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Super King Air 200
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Flight Phase : Landing
Route In Use : Direct

Component

Aircraft Component : Main Gear
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Single Pilot
Function.Flight Attendant : Other / Unknown
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 8500
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 1000
ASRS Report Number.Accession Number : 1479349
Human Factors : Distraction
Human Factors : Human-Machine Interface
Human Factors : Confusion

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Landed in Emergency Condition
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

After completing a normal flight within normal operating procedures, during the visual approach all indications were "NORMAL": Landing gear 3 GREEN/NO RED, No gear warning horn. Flaps FULL.

Upon a normal landing in ZZZ on Runway XX, both mains touched ground but before the nose wheel came down I noticed the aircraft's left side settle more than normal as if a gust pushed it down, I heard the gear horn and proceeded to execute a go around. While executing the go around maneuver I noted that the flaps would not retract when selected and the gear showed an "unsafe light" in the handle when retracted.

I [advised] ATC and asked for holding instructions. I entered a holding pattern within close proximity to the airport to diagnose the situation. The flaps were stuck in the FULL DOWN position and gear horn would not silence. I reviewed the Landing Gear abnormal/emergency procedures then attempted a normal gear extension (electrically with gear handle before attempting a manual extension) which only was able to extend the nose gear. I then completed the checklist for the manual gear extension procedure and was only able to get green lights on the nose and Right main. From the execution of the go around with Flaps stuck in the FULL DOWN position the GEAR WARNING horn was audible and would not silence: which is a normal function of the gear system. I then executed a low approach so ground personnel could inspect and see if the left main was in fact down or still in the wheel well. After the low approach no one was able to see anything due to the darkness from the ground, so I was cleared to land on Runway XX and I did a second low approach and was told by ground personnel that the left gear looked to be down so I made a visual pattern to land back on Runway XX. I communicated with the medics on board regarding the potential gear issue and briefed them on emergency landing procedures. As soon as I touched down the left main landing gear collapsed. On landing rollout I maintained center line as best as I could and shut both engines down and gang barred the master/electrical switches. We performed an uneventful egress through the aft air stair door.

Synopsis

BE200 pilot reported landing after unsuccessful attempts to fully extend the gear resulting in left landing gear collapse on landing.

Time / Day

Date : 201708

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : BKL.Airport

State Reference : OH

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : BKL

Aircraft Operator : Corporate

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Taxi

Aircraft : 2

Reference : Y

Aircraft Operator : Air Taxi

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Taxi

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1477762

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Ground Conflict, Less Severe
Detector.Person : Flight Crew
When Detected : Taxi
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

BKL Airport - Conditions were VMC, runway in use was 24R. Runway 24L was NOTAM'd closed. There was several other NOTAM'd taxiway closures.

Called BKL Ground for taxi clearance and was cleared to taxi from on Golf Taxiway to Bravo Taxiway cross Runway 24L on Bravo hold short of 24R. I taxied as instructed. I heard Aircraft Y call for taxi clearance on frequency after me and believe they were given a similar taxi clearance, except they were supposed to hold short of Runway 24L on Bravo Taxiway.

After that transmission I believe I was crossing Runway 24L and had switched to Tower frequency which was manned by the same Ground Controller too. I believe I heard BKL Tower clear an airplane to land Runway 24R. I think Tower talked to the Aircraft Y again. Tower then talked to me about back expediting our taxiing on Runway 24R to Hotel Taxiway to allow for Aircraft Y to get out ahead of me. I was instructed to still hold short of Runway 24R. I believe another airplane called Tower asking for taxiing instructions I believe, I do not remember the specifics. Tower then cleared me to back taxi on Runway 24R to Hotel intersection and to expedite the taxi. I remember completing a quick scan of the runway and it looked clear. Thinking back now, the angle of the taxiway to the runway was about 45 degrees due to the configuration of my aircraft's front A pillar position it might have been of contributing factor to me not seeing the airplane on short final until I was actually turning onto Runway 24R. The airplane radioed that it was executing a go around, Tower then also instructed the airplane to execute a go around too. Tower then apologized and said he would work in the airplane to land after I had completed my back taxi on Runway 24R. I cleared Runway 24R at Hotel intersection. The airplane landed shortly after me on runway 24R and taxied off. Tower then cleared the aircraft Y to back taxi runway 24R from intersection Bravo. I held short of Runway 24R on Hotel taxiway. Tower cleared the Aircraft Y for takeoff Runway 24R at the Foxtrot intersection. I was cleared for takeoff Runway 24R after several minute wait for IFR separation for Approach Control. Nothing further was said to me about the go around incident.

Synopsis

Pilot of a turbojet reported issues with Tower managing aircraft separation at an airport with multiple closures of taxiways and one runway.

Time / Day

Date : 201707

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZDV.ARTCC

State Reference : CO

Altitude.MSL.Single Value : 21000

Aircraft

Reference : X

ATC / Advisory.Center : ZDV

Make Model Name : Small Transport

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class A : ZDV

Person

Reference : 1

Location Of Person.Facility : ZDV.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10.5

ASRS Report Number.Accession Number : 1467662

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

Result.General : Flight Cancelled / Delayed

Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Airspace Structure

Contributing Factors / Situations : Procedure

Primary Problem : Company Policy

Narrative: 1

A Medevac aircraft was flying, initially on a direct route, level at 21,000 feet. Because of weather along the route of flight, the Radar controller rerouted Aircraft X direct [to destination]. I called the TRACON at least 15 minutes prior to the aircraft estimated at the

TRACON boundary to coordinate this priority routing at 16,000 feet. The controller denied my request without stating a reason or issuing an alternative (such as a higher altitude for possible traffic or a request for control). After a pause, I asked for a suggestion as to how to get the Medevac routing to [their destination]. The controller's response was to take the aircraft north or south over the arrival routing, which we were forced to do.

We turned the aircraft to the northeast and issued the STAR. This routing added many miles and several minutes to the aircraft's flight. As Aircraft X approached our boundary with Denver Approach, only one aircraft departed out the west departure gate. Only one aircraft could have been a factor with the inbound medevac.

Denying some sort of priority to a medevac flight is inconceivable! Especially in an instance of extremely low traffic flow and complexity. Every single controller at the TRACON should be capable of providing priority services and separation to aircraft requesting it, especially when it could involve someone's health. My recommendation is that the controllers at the TRACON be held accountable for their actions or inactions. Rerouting a Medevac as in this instance (and this is certainly not the first time this has occurred) does not meet our requirement of expeditious handling of aircraft.

A possible tool to prevent unnecessary rerouting of Medevac aircraft would be to add/change the Letter Of Agreement with Denver Approach. Medevac flights and other aircraft requesting priority (such as emergencies) should not need TRACON approval, but coordinated in advance. If the receiving controller cannot take an aircraft on requested routing, then an alternate routing or altitude should be suggested/coordinated/assigned that does not take the aircraft on an extreme course change away from their destination airport.

Synopsis

ZDV Controller reported the D01 TRACON Controller would not allow an expedited routing for a Medevac Lifeguard aircraft.

Time / Day

Date : 201707

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZOB.ARTCC

State Reference : OH

Altitude.MSL.Single Value : 29000

Environment

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZOB

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZOB

Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZOB

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZOB

Aircraft : 3

Reference : Z

ATC / Advisory.Center : ZOB

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class A : ZOB

Aircraft : 4

Reference : A
ATC / Advisory.Center : ZOB
Aircraft Operator : Air Taxi
Make Model Name : Light Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class A : ZOB

Aircraft : 5

Reference : B
ATC / Advisory.Center : ZOB
Aircraft Operator : Air Carrier
Make Model Name : Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class A : ZOB

Person

Reference : 1
Location Of Person.Facility : ZOB.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 3
ASRS Report Number.Accession Number : 1466557
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Distraction
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events

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

Assessments

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

Narrative: 1

The Blue Ridge Controller called and informed me I was shutoff for BWI/IAD/DCA arrivals and that TMU said I should have been rerouting them. I had no knowledge of this and asked my Supervisor for clarification. My Supervisor asked TMU. TMU informed my Supervisor BWI/IAD/DCA had been shutoff. My Supervisor and I were both shocked to learn of this information from the receiving sector without prior notice from TMU. I was extremely dismayed at the obvious breakdown in communication.

I immediately had trepidation about what to do with all my BWI/IAD/DCA arrivals. Meanwhile, Aircraft X and Aircraft Y, six miles in trail, were in pending hand off status to the Blue Ridge Sector. Additionally, Aircraft Z was approximately five minutes in trail. All three were BWI arrivals. My panic was relieved when the Blue Ridge Controller said he would accept Aircraft X and Aircraft Y. Then, having to ignore shout line calls from adjacent sectors, my focus shifted to Aircraft Z, at which time I informed the pilot to slow and plan for holding or a possible reroute. After conferring with my Supervisor about how this happened and how I would proceed, I was able to reestablish my scan and get back to other priorities like point outs, hand offs, and coordination.

This period of inattention and distraction could've been avoided. During the fray I switched Aircraft A communications without a hand off, which could've lead to an airspace violation. And, I delayed about four minutes to answer an Appleton Sector point out on Aircraft B, causing the aircraft to fly into moderate precipitation and potentially endangering the passengers and crew. After more coordination with the Blue Ridge Controller, they accepted Aircraft Z. Aircraft X, Aircraft Y and Aircraft Z all exited my airspace via LUNDY, the normal route, but were quickly vectored by the Blue Ridge Controller. I imagine this created extra workload for the Blue Ridge Controller and unnecessarily put all three aircraft in a proximity to weather conditions that were undesirable. There was a failure to provide the necessary service to all the flights impacted: Aircraft X, Aircraft Y, Aircraft Z, Aircraft A and Aircraft B. Despite low volume, a highly complex and dangerous situation was created, which was unnecessary and avoidable.

I believe there was a breakdown in the prompt communication of holding/rerouting/route-shutoff. Known weather was affecting the area for hours leading to this event. The potential for holding/rerouting/shutoff should have been anticipated. I recommend contacting the sector and/or area supervisor immediately with specific call signs of which aircraft will be accepted, and which will have to hold. The same goes for when a reroute is necessary, even if a route hasn't been established yet; at least give the controller/sector team as much time as possible to prepare. This notification will also aid the supervisor in adding staffing resources quicker.

Synopsis

ZOB Center Controller reported having to go into no notice holding and the problems that followed.

Time / Day

Date : 201707
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : Mixed
Weather Elements / Visibility : Thunderstorm
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 5000

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : King Air C90 E90
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Nav In Use : GPS
Flight Phase : Cruise
Airspace.Class E : ZZZ

Component

Aircraft Component : Weather Radar
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 2700
Experience.Flight Crew.Last 90 Days : 35
Experience.Flight Crew.Type : 80
ASRS Report Number.Accession Number : 1465594
Human Factors : Situational Awareness

Events

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

Assessments

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

Narrative: 1

The event occurred during cruise on a medical transport. Flight conditions were in and out small storm buildups and intermittent IMC/VMC. Upon exiting an area of IMC a very large buildup/thunderstorm appeared in front of me in very close proximity. I had no time available to request deviation from my course to avoid the hazard. I immediately turned approximately 30 degrees right of course to avoid the possible storm cell.

Contributing to this was the XM weather and radar did not accurately depict what I was about to fly into. Had I selected a different altitude I may have been able to see and avoid the area much earlier. My inaction created a situation where I had to deviate from my assigned route.

Synopsis

King Air 90 pilot reported deviating without clearance for a thunderstorm that suddenly appeared on the nose during transition from IMC to VMC. XM weather and the aircraft radar did not show the buildup.

Time / Day

Date : 201707

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Marginal

Light : Dusk

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : EC135

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Cruise

Airspace.Class E : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Rotorcraft

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1461306

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : VFR In IMC

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

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

Narrative: 1

While enroute back to base from an interfacility transport the crew decision was to abort the flight and return to airport. While executing the 180 degree left turn, aircraft began to enter a low cloud along the ridge line. Pilot decided that continuing the turn could possibly result in an IMC encounter while in a left hand bank. Prior to entering obscuration pilot leveled the aircraft and accepted the IMC event. Pilot announced IMC to crew and proceeded with the IMC emergency procedures for IMC event. Medic in left seat assisted pilot with the IMC cards and approach plates. Upon reaching a VFR on top altitude pilot elected to level off and be prepared to set up for the RNAV approach to base airport. During this time, Pilot, once aircraft control was well established (NON IFR aircraft/No Auto Pilot or HELISAS or MFDs), attempted contact with ATC. Pilot was unable to clearly receive ATC so pilot made call in the blind. Shortly after Pilot was able to receive ATC. Aircraft was configured for IFR flight and approach to base selected and activated. Pilot was following GPS guidance for the RNAV approach about the same time ATC provided heading and other clearance aircraft entered VMC conditions in vicinity of airport. Pilot notified ATC of encountering VMC conditions, and descended within VMC and flew VFR to airport. Upon landing crew debriefed the event and discussed anything we could have done better or improved upon as well as those things we did well. Operations was aware at all times of the status of the flight.

Make the decision to abort as early as possible, do not hesitate.

Synopsis

EC135 helicopter pilot reported entering IMC on a return to base from a transport flight, requested assistance from ATC, and was able to descend on an RNAV approach to VMC and landed successfully.

Time / Day

Date : 201705

Local Time Of Day : 0601-1200

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Cruise

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 : Captain

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1453177

Human Factors : Communication Breakdown

Human Factors : Training / Qualification

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Hazardous Material Violation

Detector.Person : Flight Crew

Were Passengers Involved In Event : Y

When Detected : In-flight

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

During patient transport, hospital staff advised crew that patient had been burned in a butane explosion and was possibly cooking methamphetamine. I was advised by the medical crew that the patient was decontaminated by hospital staff. After flight, aircraft, equipment and personnel were further decontaminated. At no time did the crew smell or believe contaminant was still present. The decontamination after the flight was done out of

an exercise of caution and not [because] of any chemical discovery. After the flight, during a clinical review of the medical patient record, the Medical Director further interviewed the crew and determined that a complete decontamination was most likely not completed. This leads me to believe that there is a possibility that Hazardous Material may have been on the patient during transport.

Synopsis

Air ambulance helicopter pilot reported that a patient, possibly injured while cooking methamphetamine, may not have been properly decontaminated prior to transport.

Time / Day

Date : 201705
Local Time Of Day : 1201-1800

Place

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

Environment

Light : Daylight

Aircraft

Reference : X
Aircraft Operator : Air Taxi
Make Model Name : AS 355 Twinstar
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Mission : Ambulance
Flight Phase : Parked
Maintenance Status.Maintenance Deferred : Y
Maintenance Status.Records Complete : N
Maintenance Status.Released For Service : Y
Maintenance Status.Required / Correct Doc On Board : N
Maintenance Status.Maintenance Type : Unscheduled Maintenance
Maintenance Status.Maintenance Items Involved : Testing
Maintenance Status.Maintenance Items Involved : Inspection

Component

Aircraft Component : Airspeed Indicator
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person : Hangar / Base
Reporter Organization : Air Taxi
Function.Maintenance : Lead Technician
Qualification.Maintenance : Inspection Authority
Experience.Maintenance.Lead Technician : 20
ASRS Report Number.Accession Number : 1452718
Human Factors : Troubleshooting

Events

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

Detector.Person : Maintenance
When Detected : Routine Inspection
Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Company Policy
Contributing Factors / Situations : Incorrect / Not Installed / Unavailable Part
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

During a 91.411/.413 test, it was found the aircraft airspeed indicator (ASI) was faulty with a major case leak. A technician took a repaired ASI unit from the parts room and installed it. The aircraft was then put back in service with no work order or log entry of the instrument change. Later that day, a pilot informed me that the airspeed range markings were incorrect. I verified this and removed the aircraft from service. Our chief pilot, Director of Maintenance (DOM) and operations were informed that the aircraft was out of service. A replacement part was then ordered by the DOM. The aircraft remained out of service for the duration of the week. Upon my return [8 days later], I noticed the aircraft's flight record container was missing from the maintenance shop. I then found the airspeed indicator with the wrong range markings on a technician's tool box. The old faulty airspeed indicator had been reinstalled and the aircraft was back in service. There was no work order or log entry for any of the above maintenance including any post installation system checks. The aircraft is currently in service with a faulty airspeed indicator.

This action does not follow procedures in the repair station manual for proper return to service record completion, replacement of faulty components and does not comply with established FAR part 43 and manufactures system leakage limits. The aircraft is a light twin helicopter and is used as a part 135 passenger transport/air ambulance. Management seems indifferent to the possibility of a certificate suspension and fines due to improper service and maintenance records.

Synopsis

Maintenance Technician reported an AS355 helicopter airspeed indicator was replaced with an incorrect unit. The original faulty indicator was reinstalled and the aircraft returned to service without documentation.

Time / Day

Date : 201705

Local Time Of Day : 1201-1800

Place

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : Marginal

Light : Daylight

Ceiling.Single Value : 1800

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : SA 365 Dauphin 2

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : None

Mission : Ambulance

Flight Phase : Landing

Airspace.Class G : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1451748

Human Factors : Situational Awareness

Events

Anomaly.Ground Event / Encounter : Vehicle

Detector.Person : Other Person

When Detected.Other

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

We arrived prior to the required show time and set up for our high recon, and during that high recon I noted a white van blocking the drive to the helipad on the north end, and a white pickup truck blocking drive to helipad on the south end, additionally there is the standard large emergency generator located NW of helipad. Wind was predominantly out

of the SE, but shifting with the counter clockwise motion of the weather pattern. I continued around to set up for a steep approach from the NW to the SE to take advantage of the wind. Rate of closure was slow, and descent rate was our 200 ft FPM. From my perspective, approach was normal. At the bottom, with shifting winds and ingestion of aircraft's own rotor wash, there was the standard yaw back and forth. I finished DFL (Daily Flight Log) and started new line on DFL with all the items I could pre-fill out (weight and balance, start, pilot, and number on board as well as departure point) in case we were called out for a medical flight. I then put log book up. Meantime crew had gotten out, put wheel chocks down, and were trying to figure out what we were supposed to do. If memory serves me, we had some staff come up to ask questions about the aircraft, and I was talking to one staff member when a security guard came up, so I walked over to him and he told me something to the effect "You know you hit the van" to which I was taken aback and said something like no, I felt nothing - did I damage the van? He replied, something to the effect of we don't care about the van. This all occurred approximately 10 or 15 minutes after we had been on the ground. I told him I would look at the aircraft. I failed to mention [I] had already done my post flight walk around and had not noted anything out of the ordinary after I finally got out of the aircraft. I immediately went back to the back of the aircraft and re looked at the tail section and the tail stinger. I noted no indication of a strike. The van was all white and, since we are predominately black, I looked at it to see if I could see any indication that I had hit it and could not note any marks that would have given me that indication. So here was my quandary, what to do next. I could see no physical evidence of a having hit the van on either the aircraft or the van. Do I call a mechanic? I kept going back to look at tail, tail stinger, wheels of aircraft, etc. I could not see anything. My thought process turned to treating like a bird strike for non-moving portions of aircraft and clearing it for RTS (Return to Service). My rationale was I felt this individual who approached may have thought it appeared that I hit the vehicle from his angle or perspective, and I did not feel during the approach, nor see any indication that there was in fact, contact. The following day, I accepted an IFR Flight. Once back, Mechanic noted lens cover for aft tail light broken on A Check. He showed me. When replacing with new cover, he noted small chip in lower right underneath portion of tail cone along with a rub mark above that. Repairs were made.

Synopsis

AS-365 Captain reported contact with a van on landing at a hospital helipad.

Time / Day

Date : 201705

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : MLI.Airport

State Reference : IL

Altitude.AGL.Single Value : 500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 10000

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : MLI

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Initial Climb

Route In Use : Direct

Airspace.Class C : MLI

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : MLI

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Airspace.Class C : MLI

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Rotorcraft

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 6200
Experience.Flight Crew.Last 90 Days : 45
Experience.Flight Crew.Type : 850
ASRS Report Number.Accession Number : 1448460
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Miss Distance.Vertical : 300
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

While taking off from a helipad and climbing to 400 to 500 feet AGL, I contacted Quad City Approach and received a new squawk code when the aircraft TCAS alert went off. As I was responding to Quad City Approach I saw an airliner fly above us. I was advised by Quad City the airliner passed over us by 300 feet. I estimate we were approximately 1100 to 1200 feet MSL when we had the airliner fly 300 feet above our helicopter.

Radio contact with Quad City approach when taking off from the helipad is best if we can get a little altitude. It is not normally in the approach path of aircraft coming into MLI so it has never been a safety issue to contact ATC shortly after liftoff. The airliner must have been on Quad City tower frequency and I was on Quad City Approach frequency.

Synopsis

Helicopter pilot reported a NMAC with an airliner in the vicinity of MLI airport.

Time / Day

Date : 201705

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 20000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Learjet 35

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Descent

Route In Use.STAR : ZZZ

Airspace.Class A : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1445516

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Troubleshooting

Human Factors : Workload

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Altitude : Undershoot

Anomaly.Deviation - Altitude : Crossing Restriction Not Met

Anomaly.Deviation - Speed : All Types

Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

We were flying the arrival into ZZZ. The weather was great at ZZZ and they were doing the ILS runway 31R or visual runway 31L. My FO had just listened to the ATIS and had only written down that they were doing the ILS to runway 31R. The ATIS was very long and had a lot of information in it due to the construction going on at the field and he failed to get all of the information. I was listening to it as well and had heard that they were also doing the visual approach to runway 31L so I asked him why he didn't write that down. He said "Oh, I thought they were saying something else, but I couldn't understand it" and just shrugged it off. I told the FO that we would do the visual approach to runway 31L and he acknowledged that.

I was flying and had the autopilot on. Throughout our flight ATC had asked us a few times if we could fly faster and we were instructed to maintain 300 knots or greater for the arrival. We had previously crossed ZZZZZ at the published altitude (FL230) and were waiting for the controller to tell us to descend for ZZZZZ1. He was really busy on the radio and finally told us to cross ZZZZZ1 at FL190 and 250 knots 16 miles before ZZZZZ1. I started down and established my rate to meet the crossing restriction and speed. Shortly after doing so the FO proceeded to set up the ILS runway 31R into the NAV's and GPS. While doing this the normal navigation page with the DME and other pertinent flight info was not being displayed. I didn't realize what he was doing, as he didn't ask if I wanted the ILS set up, until he was messing with the GPS and I asked what he was doing. He said he was putting the ILS points into the GPS for the approach and then I asked him why and he just sat there with an "I don't know" look on his face. I reiterated that we were going to do the visual approach to runway 31L as the weather was good for it and the runway was better for where we were going on the field. After getting him back up to speed where I thought he already was the plane started turning (following the GPS) to go to ZZZZ1 and I looked at the altimeter and saw we were descending through FL200 at a slower rate of descent than I had originally set and we're still as 300 knots. I quickly turned off the autopilot and deployed the spoilers to descend faster and to slow the plane down. While I was doing this (still 700' high and 280 knots) ATC told us to go to the next frequency. By the time the FO checked in with the next controller we were already at FL190 and 250 knots. Aside from the FO trying to grasp all of what had just happened, the rest of the flight was uneventful.

Many factors come together to contribute to the error-

1. ATC's request to fly faster and the late clearance down to the crossing/speed restriction.
2. The FO not getting all of the ATIS information and not realizing the importance of getting clarification if they don't understand something being said.
3. Miscommunication between me and the FO about what runway and approach we were using.
4. The FO's failure to inform me of what he was doing when configuring the NAV's and GPS for an approach we already discussed that we were not doing.

5. Not noticing that the plane's rate of descent had slowed down after initially setting it.
6. Letting the FO's actions distract me from flying the airplane.

Ways in which I can prevent this type of error in the future-

1. Tell ATC that we are unable to make the crossing/speed restriction so that we aren't rushed and have more time to get down. We could also request lower ourselves as sometimes ATC forgets about you and you should query them.
2. Stress the importance of getting all of the information and that if they don't understand something to ask the other person for help and/or clarification.
3. Not accepting an acknowledgement of something as understanding and to ask them to repeat it back to make sure that effective communication has taken place.
4. Making sure that the FO's keep the other person in the loop and that they should ask the person flying if they want an approach set up and if they may change anything before they just go ahead and do it.
5. Remembering that the plane's rate of descent slows down after initially setting it and expecting that I'll have to adjust the nose down more to maintain the desired descent rate.
6. Not allowing my attention to be diverted to actions that are not pertinent to the current task at hand and waiting for a reduced workload, more appropriate, time to address them.

Synopsis

LR-35 Captain reported displeasure with the way his First Officer managed his duties during arrival. The result was a missed crossing restriction at a higher than cleared speed.

Time / Day

Date : 201704

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : SLC.Tower

State Reference : UT

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : Marginal

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : SLC

Aircraft Operator : Air Taxi

Make Model Name : Small Transport

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Cargo / Freight

Flight Phase : Initial Climb

Route In Use : Visual Approach

Airspace.Class B : SLC

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : SLC

Aircraft Operator : Air Taxi

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Initial Climb

Route In Use : VFR Route

Airspace.Class B : SLC

Person

Reference : 1

Location Of Person.Facility : SLC.Tower

Reporter Organization : Government

Function.Air Traffic Control : Local

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1440232

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Separated Traffic

Assessments

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

Narrative: 1

The wind had shifted to a 40 plus knot crosswind from the west and everyone was going around. With the volume of go arounds there was a lot of coordination between the Tower Controllers, Tower supervisor, and TRACON to try to figure out where to put everyone. The Supervisor advised me to have all my go arounds on a 160 heading climbing to 9000 feet. I then put Aircraft X on a 160 heading on about a 1 mile final to runway 16L as he was going around at that point. The Local Controller working runway 17 had Aircraft Y go around and I later found out they canceled their IFR to try to land Runway 32. Another aircraft's tag was on top of Aircraft X's tag and I didn't immediately observe Aircraft X drifting east toward higher MVAs (Minimum Vectoring Altitude). Aircraft Y then went around trying to land runway 32 head on towards Aircraft X. Once I saw Aircraft Y wasn't landing on Runway 32 and I saw Aircraft X had drifted east I immediately turned Aircraft X back to the west.

With all of the coordination going on some things were being missed. I should have known that with the current winds a 160 heading was going to be more southeasterly. In trying to come up with a plan with the other controllers and supervisor I didn't see it right away. I initially did not know what Aircraft Y was doing when they turned back to the airport at my traffic. This weather event was forecasted and we were aware of what was going to happen but did not staff another person to act as a Cab Coordinator. That would have been really helpful. In the future I will have aircraft track the final approach course or fly their present heading initially to try to avoid them drifting in one direction.

Synopsis

SLC Local Controller reported a strong wind shift caused go-arounds of two aircraft into conflicting courses.

Time / Day

Date : 201704

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Marginal

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Operating Under FAR Part : Part 121

Mission : Ambulance

Flight Phase : Cruise

Component

Aircraft Component : Fuel Quantity-Pressure Indication

Aircraft Reference : X

Problem : Malfunctioning

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 : Captain

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1439512

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Inflight Event / Encounter : Fuel Issue

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Maintenance Action

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Equipment / Tooling

Contributing Factors / Situations : Human Factors

Primary Problem : Equipment / Tooling

Narrative: 1

My crew had started the mission via ground ambulance. I accepted the flight and needed to put on fuel prior to departing for the mission so I would have enough fuel to complete the mission. Prior to this I had [the aircraft] topped off for the flight back to base. Once landing at base, the aircraft did not fly again until Friday night when I accepted this mission. Upon accepting the mission I repositioned to the fuel farm to put on fuel. At this time I put on 51 Gallons Jet A fuel and then departed.

Just over halfway into the flight I got a Master Caution indicating a Fuel Quantity Degrade and the Main fuel Tank was fluctuating by 50 to 100 KG's. At this point in the flight I was the closest to the hospital and continued to land there. When I went to turn final I received another Master Caution light indicating that I had a Fuel Quantity Failure on the Main tank and proceeded to land.

Upon landing I called the on duty Mechanic and pulled out the MEL book to see if we could MEL it. The mechanic then called his supervisor and was given the go ahead to MEL the aircraft. The plan was for me to drop the patient off and then stop to top off fuel and then fly to ZZZ to have the aircraft fixed. On the patient flight my number 2 supply tank went offline about 5 min from the pad. Just before landing the number 1 supply tank indication also went away. I landed and dropped the patient and then flew to the fuel stop and landed. Called the Mechanic and told him what happened and then they decided to come to check the aircraft. While draining the fuel from the aircraft found water and other large debris in the fuel. The fuel was also cloudy and very brown in color.

Synopsis

Helicopter Captain reported fuel quantity failures on a multi-leg patient flight which was later determined by Maintenance to be caused by contaminated fuel.

Time / Day

Date : 201703

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Dawn

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Agusta Undifferentiated or Other Model

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Parked

Maintenance Status.Maintenance Type : Unscheduled Maintenance

Component

Aircraft Component : Tail Rotor Drive System

Aircraft Reference : X

Person

Reference : 1

Location Of Person.Aircraft : X

Reporter Organization : Air Taxi

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Captain

ASRS Report Number.Accession Number : 1433814

Events

Anomaly.Aircraft Equipment Problem : Critical

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : Maintenance

Detector.Person : Maintenance

When Detected : Routine Inspection

Result.General : Maintenance Action

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

Tail Rotor assembly was replaced on Aircraft X with a freshly rebuilt assy. Entry number 5 on maintenance worksheet log page entered and signed off by local mechanics. After pulling a short term due list the tail rotor TT straps indicated they had minimal time left on them. I and the day pilot both questioned the remaining time to both mechanics and was reassured that there was a glitch in software and there was adequate time remaining. The previous short term due list had hand written "CW" indicating the inspections were complied with. This was also reflected as signed off with an RII sign off, in Form XXXX in the maintenance log. We were informed that software was the issue on clearing the inspection item off of the short term due list. This was again questioned the following day by myself and pilot, we were reassured that the issue was in software. This questioning continued for three days at XA:36 I received a call from Mr. X to immediately take the aircraft out of service. He then explained to me that there was an issue with the TT straps and the likelihood that they had been overflowed.

All log book paperwork and maintenance entries appeared in order and the continued reassurance by both mechanics, one the area lead mechanic, we continued to perform our duties and fly dispatched flights.

To have a better maintenance tracking procedure especially when using swapped aircraft components.

Synopsis

Helicopter pilot reported that Maintenance personnel advised him to immediately take the aircraft out of service due to time sensitive parts that may have been overflowed.

Time / Day

Date : 201703

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Thunderstorm

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Cruise

Airspace.Class E : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Rotorcraft

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1431247

Human Factors : Situational Awareness

Human Factors : Time Pressure

Events

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Flight Cancelled / Delayed

Result.Flight Crew : Diverted

Result.Flight Crew : Landed As Precaution

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

Our base is located approximately 42 miles NW of the pickup point, which made us fly there, pick up the patient and a third rider, and fly to ZZZ. The weather sensors at our location as well as at pick up point and ZZZ were reporting VFR conditions. The radar showed areas of small pockets of convective activities 40-50 miles south and west of our base but the TAF reported that those cells would not be a factor until [after our flight], so I decided we could conduct the mission safely and accepted it.

We departed from our base and started flying southeast towards pick up point. We noticed there was an unusual amount of haze in the air, to the point where our visibility was diminished to about 4 to 5 miles to the SE and north. There were a few clouds at about 2000 ft in altitude, although they were reported at 2800 ft by nearby aerodromes. As we were flying, the medical crew members looked back towards the northwest, where the flight was scheduled to take us and noticed that with the setting sun the visibility was diminished even further. We estimated the visibility was down to about 2.5 to 3 miles to the NW. The crew members mentioned that we probably need to assess the weather further and not to make patient contact because it looked like we were not going to be able to make it from pick up point to ZZZ. I decided to divert the flight to the nearest airport (our home airport where we could shelter the aircraft in the event of storms or maintenance). We informed our dispatch that we were diverting and landing at the airport instead of the hospital. Upon landing we assessed the weather further and noticed that the storm cells to the south and west have developed further and they appear to be posing a threat for our flight to ZZZ by the time we departed after picking up the patient. I called our dispatch and notified them that we were going to have to abort the flight request due to the weather rapidly deteriorating. Our dispatch acknowledges and told me to hang tight at the airport and that she was going to contact our Supervisor to see if the medical crew members can take the patient by ground instead. I notified dispatch that the weather in ZZZ was not conducive for the flight but we could make it to our base before the weather turned bad without a problem. She proceeded to tell me that Supervisor, Mr. X wanted us to not take off and return to our base because "if the weather is bad enough to abort, then we couldn't takeoff and make it back to base". I explain to dispatch that the weather in ZZZ was turning bad but we could make it to our base with no issues. By this point she put me on hold and connected me via three-way with Mr. Y (on-call Supervisor) who was collocated with Mr. X our medical director. Mr. Y was simply relaying what Mr. X was telling him. Mindful that we are at our home airport and both Mr. X and Mr. Y are inside the building a few hundred feet away. As I am on the phone on a three-way call, I see both Mr. X and Mr. Y exit the building and decided to go talk to them face-to-face. Mr. X was visibly upset at the situation. I attempted to explain my rationale behind making the decision to abort to the airport and he could not "understand why is the weather bad enough to not take the call but it was good to fly back to our base". I explained to him that the weather in ZZZ was turning bad and I could make it to our base with the current weather conditions. He went on to questioning my judgment call to abort the flight due to weather in the first place and furthermore questioned my ability to be able to fly back to base and continued to say "he didn't feel comfortable having his medical crew members fly back with me". This is the same person who had dispatch call another base in our program to see if "another pilot could complete the transfer" (shopping for another for weather). I told him I understood where he stands and told him that I would leave the aircraft at the airport and catch a taxi back to our base.

By making us hold on the ground because he thought the weather was bad when I was explaining to him that it was not, he took operational control of the aircraft. This type of pressure is directly in contradiction with [company] policy of making conservative calls. I also feel my ability to manage risk, make the most conservative call and act as the PIC in the aircraft were questioned by a person who does not necessarily understand weather

and how it can affect any given flight. There have been other instances where pilots and medical crew members feel pressured to fly by this same person and it is to the point where I don't feel like I want to come to work and deal with situations like this.

At this point in time I am feeling that Mr. X put direct pressure on the crew members to make this particular flight even though I tried to explain the reasoning behind the weather call. This type of direct and indirect pressure to fly is the type of behavior that can lead to a major accident because crew members feel that they must go on a flight just because we do not want to upset an individual who wants to micromanage every little detail within this program.

Medical managers need to understand the difficult decisions aircrew members make, whether it is on the ground or in the air, due to weather or any safety issues or concern is what the crew members are trained to do and are the main reason why we get hired. To question air crew members on why they make certain decisions while in the air is something we should never have to explain if the call is legitimate. This type of pressure to fly, whether is direct or indirect is the type of behavior that can lead to a major accident and needs to be remedied [as soon as possible].

Synopsis

Air Ambulance pilot reported being chastised by a supervisor for canceling a patient flight enroute due to weather. He felt this pressure was directly in contradiction with the company policy of making conservative calls.

Time / Day

Date : 201702

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Snow

Weather Elements / Visibility.Visibility : 1.5

Ceiling.Single Value : 2300

Aircraft

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Light Transport

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Takeoff

Route In Use : Direct

Airspace.Class G : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 6600

Experience.Flight Crew.Last 90 Days : 65

Experience.Flight Crew.Type : 1800

ASRS Report Number.Accession Number : 1428314

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 : Published Material / Policy

Anomaly.Ground Event / Encounter : Vehicle
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

After working hard with dispatch and coordinating with a hospital, I was repositioning from ZZZ to pick up a critical patient in ZZZ1 to fly to ZZZ2. There was a lot of emphasis to get airborne and en route as fast as possible to meet an ETA. Taxing out it was snowing and we had 1 1/2 miles of visibility and a 2300 feet ceiling and 2 inches of light snow on the runway. After announcing that I was taxing out and later announcing on Unicom that I was taking the runway I heard no reply over Unicom/CTAF. We had blowing snow and a 6051 foot runway, after putting the throttles up and rapidly approaching V1, I saw a set of head lights from a snow plow that had just turned around at the end of the runway I made a quick call telling him to hold his position with no reply. The plow driver saw me and pulled over. He had entered the runway mid field and I could not see him due to the snow he was kicking up and the fact that the county snow plow lacked good lighting. I lifted off mid field using a soft field technique to avoid any plowed rows of snow. I accelerated and comfortably flew over the snow plow who was waiting at the end of the runway. There were no NOTAMs for snow removal and I wouldn't think they would be out plowing for such a small amount of snow. I believe after I taxied out past our hangar the plow past behind me at a 90 deg angle on a taxi way that meets the runway mid field he then headed away from me so we both had our backs to each other. I did not want to become contaminated with snow on the wings so emphases was to go. Looking down the runway I thought I saw a set of tire tracks on the runway from the night pilot who stated he drove the runway.

I feel if the plow had a radio with the CTAF frequency available and was making calls this would not have had happened. The county looks at this airport like it is just another duty to clear another section of concrete of snow. We have a base located at ZZZ and county is trying to plow the runway more often due to the high amount of flights that we are doing out of this uncontrolled airport. If there was a training program in place for plow drivers or if we had some company personnel watching the runway with a radio or I just elected to have higher personal weather minimums this would not have happened, an active NOTAM would have helped too.

Synopsis

Air taxi Captain reported that on takeoff from ZZZ when it was snowing he noticed a snow plow at the departure end of the runway.

Time / Day

Date : 201702

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZBW.ARTCC

State Reference : NH

Altitude.MSL.Single Value : 3100

Environment

Flight Conditions : IMC

Weather Elements / Visibility : Icing

Aircraft

Reference : X

ATC / Advisory.Center : ZBW

Aircraft Operator : Air Taxi

Make Model Name : Light Transport

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Descent

Route In Use : Vectors

Route In Use : Visual Approach

Airspace.Class E : ZBW

Person : 1

Reference : 1

Location Of Person.Facility : ZBW.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Function.Air Traffic Control : Departure

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1425113

Human Factors : Distraction

Human Factors : Situational Awareness

Person : 2

Reference : 2

Location Of Person.Facility : ZBW.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Handoff / Assist

Qualification.Air Traffic Control : Fully Certified

ASRS Report Number.Accession Number : 1425123

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Confusion

Person : 3

Reference : 3
Location Of Person.Facility : ZBW.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Supervisor / CIC
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 5
ASRS Report Number.Accession Number : 1425110
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Confusion

Events

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

Assessments

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

Narrative: 1

Aircraft X was trying to land at CYES (an uncontrolled airport without an instrument approach). I descended him to 050 for arrival. I advised him of moderate rime icing in the vicinity from a PQI departure with the altitudes and temperature. I advised him that no weather was available for CYES and offered him the FVE weather since it was the closest airport. I provided him the FVE special observation and advised him to contact FSS for the current NOTAMS. He advised that his intentions were to land at CYES visually and advised that his plan was to fly the RNAV approach into FVE via the IAF if he was unable to get the field in sight. He asked for a lower altitude to get ground contact.

I descended him to 031 which is the Minimum IFR Altitude (MIA) around PQI. Montreal center called to get an updated departure time for Aircraft X and advised that they were blocking the airspace for him. By this time the complexity of the sectors was rapidly increasing due to weather and increased traffic. I provided Aircraft X with the updated weather at FVE and asked his intentions. He wanted to continue and try to get the field in sight. The PQI departure that had reported moderate rime icing was now reporting severe icing and requesting a climb to avoid.

I called the Controller in Charge (CIC) over to report the severe icing while getting further reports from [the PQI departure]. A D side was provided at this time and while they were

being briefed, I noticed that Aircraft X had entered the 035 MIA. I told Aircraft X that if he didn't have the field in sight that he needed to climb to 035. He advised that he did not have the field and was climbing. He stated that he couldn't get the field in sight and wanted to fly the RNAV for FVE. He was issued a right turn to 110 to avoid a higher MVA. While this was occurring, a BGR departure (which I leveled at 100 due to a BGR arrival at 110) reported moderate rime icing at 100. This report was passed to an ALTRAV that was entering the sector that was also landing BGR. I asked the CIC to split the sectors due to complexity and Surry Sector was split off.

Any time that an aircraft is going to enter uncontrolled airspace an MSAW alert goes off due to the fact that the MIA is listed as 128. An MSAW alert would be expected and would be looked over. I recommend that there be an instrument approach into CYES.

Narrative: 2

I was returning from my break and began running the list to see which Certified Professional Controller (CPC) was ready for a break. The CIC at the time asked me to open up 15/16 D-Side, to assist the radar controller, because there was weather and icing in the Surry sector. As I was opening up the D-side, and getting myself caught up on the traffic situation, the radar controller announced to me that he had mistakenly descended an aircraft below the MIA at 031 in a 035 feet shelf. The aircraft call sign was Aircraft X and it was inbound to CYES, which is an airport in uncontrolled airspace just outside our airspace. The weather conditions were very IFR at CYES. I am not sure why the radar controller descended the aircraft below the MIA, since it happened right as I was sitting down. I am thinking that he was trying to use the TAA [Terminal Arrival Area] for the RNAV 32 approach into the neighboring airport FVE in hopes that the aircraft would get CYES in sight and be able to proceed visually. Unfortunately, I do not know further details about how or why the aircraft was below the MIA. The radar controller was actively working with the CIC to remedy the situation at the time, and then the CIC quickly split the sectors as the next controller was walking into the control room right at that time.

There is a lot of ambiguity surrounding aircraft landing at CYES, since it is in uncontrolled airspace and is in Canada. There are no instrument approaches going into that airport, so many times controllers are able to successfully use the approach into FVE to get the aircraft to get CYES in sight. Unfortunately, there is no other way to allow the aircraft to descend below 035 without using that to be able to get low enough to get the airport in sight. It would be very helpful to have an airway that went from PQI to YYY VOR that would allow an aircraft to descend below the 035 MIA, or better yet, an instrument approach going into CYES airport.

Narrative: 3

I was working the CIC position for Area D performing a request for a controller when I walked by sector 15/16 and noticed an aircraft that appeared to be flying below the MIA at 3100 feet. I asked the controller working the position what they were doing with that aircraft. The reply from them did not seem the safest answer. Upon further discussion with them it was decided to climb the aircraft back up to the MIA of 3500 feet. I asked the controller to fill out a report and reported it to the Operations Manager In Charge (OMIC).

Synopsis

ZBW Controllers reported that an aircraft was descended below the Minimum IFR Altitude in error to get it below clouds to see the airport.

Time / Day

Date : 201702
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Night
Ceiling.Single Value : 4000

Aircraft

Reference : X
Aircraft Operator : Air Taxi
Make Model Name : Helicopter
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : VFR
Mission : Ambulance
Flight Phase : Parked
Route In Use : Direct

Component

Aircraft Component : Other Documentation
Aircraft Reference : X
Problem : Improperly Operated

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Rotorcraft
Experience.Flight Crew.Last 90 Days : 30
Experience.Flight Crew.Type : 5500
ASRS Report Number.Accession Number : 1425045
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Ground Personnel

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : Pre-flight

Result.Flight Crew : Became Reoriented

Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

Captain for air ambulance was on a training flight and had put his EMS base on a 15 minute delay in case the base received a call from dispatch. Captain submitted a risk assessment for the training flight and checked the box for 'accepts change to mission'. 5 minutes after departing on training flight, base received an air ambulance operation; pilot returned to base, picked up crew and departed. Upon landing at the community hospital, the Captain attempted to complete a new risk assessment, but could not get the iPad tablet to have connectivity (rural area). Med crew came out of ER with patient, Captain started aircraft and flew to trauma center. Captain forgot to attempt to complete the risk assessment at that location. Entire crew flew back to base and the Captain filled out a risk assessment for the entire patient flight upon return to base. It has been determined that the Captain did not intend to circumnavigate the risk process and acted in good faith. The Captain received counseling from his immediate supervisor on how to appropriately handle this type of situation if it happens again.

Synopsis

Air ambulance helicopter pilot reported a failure to complete the flight risk assessment process due to iPad communication problems in a rural area.

Time / Day

Date : 201702

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZLA.ARTCC

State Reference : CA

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZLA

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Cruise

Route In Use : None

Airspace.Special Use : R2510

Aircraft : 2

Aircraft Operator : Military

Make Model Name : Fighter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Tactical

Flight Phase : Cruise

Airspace.Special Use : R2510

Person : 1

Reference : 1

Location Of Person.Facility : ZLA.ARTCC

Reporter Organization : Government

Function.Air Traffic Control : Enroute

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 18

ASRS Report Number.Accession Number : 1421777

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Distraction

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Communication Breakdown.Party2 : ATC

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Rotorcraft
Experience.Flight Crew.Total : 3500
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 300
ASRS Report Number.Accession Number : 1422236
Human Factors : Confusion
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.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

Aircraft X called me and asked if restricted area R2510 was active. On my display it was showing inactive. I told the pilot it was inactive and quickly glanced at the time it was to change and told him that as well.

It turns out, whoever was responsible for updating the restricted areas made a mistake so it was showing cold when in fact it was hot. The pilot called in to the front desk to complain about being "buzzed" by fighter jets when transiting the airspace.

When I looked back over my left shoulder to find the time the restricted area was to change, I should have taken a closer look. I would have realized that the board was accurate. It showed the restricted area active, but I didn't look that far. I only looked at the time it was to change. I should have paid closer attention. Although the restricted area should have been displayed as active on my display I could have prevented the incident with a little more awareness.

Narrative: 2

40 nm west of BWC, I contacted LA Center on Freq. to determine whether R-2510 was "hot or cold". I was then told by the Controller that R-2510 was in fact "cold/inactive". I was then approved to enter the restricted airspace eastbound to [my] destination. Middle of the airspace (15nm east of BWC), I noted a formation of 4 fighter jet aircraft performing aerobatics with smoke. Upon the jets finishing their maneuver I elected to climb in altitude to about 3000MSL to provide more vertical separation. I then contacted LA Center to confirm again that the airspace was "cold", he replied that it was indeed "cold/inactive". During this time, one of the four fighter jets approached the helo to recon/ident our aircraft. I reported the event to the controller, where he then contacted resources on his end to further confirm the status of R-2510. The LA Center controller came back and stated "there are schedule conflicts in the system and the airspace has gone hot/active, but was cold when I was cleared through." The controller then provided me with a supervisor number where I followed up after landing. It was determined that the pilot was not at fault since he was cleared through the "thought-to-be" inactive zone.

Synopsis

ZLA Controller and helicopter pilot reported of incorrect information which led to an airspace deviation. The Controller had advised the pilot that the restricted airspace was inactive, approved the flight through the airspace when the airspace was actually active.

Time / Day

Date : 201701

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Marginal

Weather Elements / Visibility : Icing

Light : Night

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : EC135

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Cruise

Airspace.Class E : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Rotorcraft

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1421137

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : FAR

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Landed As Precaution

Result.Flight Crew : Diverted

Assessments

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

Narrative: 1

I was on a medical mission with patient on board. The forecast had shown low visibility along the route but nothing lower than four miles. There were several small snow flurries reported in the surrounding area but none along the route. I had checked the TAF [for the airports involved] as well as METARS along the route of flight. I had mentioned to my crew that we would have to stay extra vigilant with regards to low visibility on the flight. I was under NVGs on the flight and after taking off from the referring hospital I referenced the visibility to be greater than ten miles. About twenty five minutes into the flight I began to notice the visibility to be decreasing. I stated to my crew that we had low visibility ahead but was still approximately four miles (referenced by local airfield with lighted beacon and GPS distance). Shortly after the visibility in front was less, while out of my peripheral I could see much greater visibility. I scanned right, then left and estimated a four mile difference in visibility. I thought it may be the windscreen fogging up so I turned on the heating/demist. After a short time it had still not improved. It was at this time I thought something was wrong and flipped my goggles up and turned my lip light on. Instantly I noticed my windscreen was covered in ice! I immediately notified my crew and started a descent while making a radio call to the local airfield of my intent to emergency descend and land. Crew was able to see clearly out of side windows and was vigilantly looking for obstacles. We made a safe landing and notified dispatch via satellite phone. I set the aircraft to idle and placed the friction on the controls to exit. Once outside I noticed the ice on the windscreen was slushy as if starting to melt. I cleared the windscreen and returned to the cockpit. I did not notice any other icing at this time.

Once inside we initiated protocol to get the patient to proper care. Dispatch was still looking for a facility to take the patient when I happened to look out my right window and noticed a hospital less than a mile away. We found the hospital in our local landing zone guide and relayed the info to dispatch. Arrangements were made with that hospital and we were requested to re position to their helipad if possible. We had been sitting at idle for about twenty minutes and ceilings were higher than previously per weather station. The area was well lit from ground lights and I was able to clearly see the hospital and the cloud levels. Conditions had changed enough so a decision was made to relocate to the hospital. Once landed on the pad, I assisted the crew down into the hospital.

I returned to the aircraft about an hour after landing and inspected the aircraft. It was at this time I noticed the icing on the blades. I contacted Operations to discuss the situation and possible relocation of the aircraft. The process of running the helicopter on the ground for a short time to try to loosen and shed the ice on the blades, then shutting down and inspecting the blades was discussed. It was stated that if there was no ice found and icing conditions did not exist I could possibly relocate the aircraft to the airfield. I checked in with the crew to get an update on future logistics then returned to the aircraft about forty minutes later. At this time I went to proceed with the ground run and noticed the conditions had worsened. The helicopter had accumulated more ice on the structure and the blades and I witnessed rain freezing on contact to the windscreen. I referenced conditions at the airfield once again to find conditions subject to freezing fog and drizzle.

I cannot say I have any suggestions on how to avoid flying into that situation. Of course hindsight is only great for learning from a situation but isn't present at the time of an event, but I would say I would not re position to the hospital without full shut down and complete post flight inspection if there was a chance to do it again. But at the time I used

the information available to me and deemed the weather to have improved enough to proceed to the hospital.

Synopsis

Helicopter pilot reported encountering icing conditions and landed at the nearest airport.

Time / Day

Date : 201612
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : Helicopter
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Ambulance
Flight Phase : Cruise
Route In Use : VFR Route
Airspace.Class C : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 1
Flight Plan : IFR
Flight Phase : Climb
Route In Use : Vectors

Person

Reference : 1
Location Of Person.Facility : ZZZ.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2.25
ASRS Report Number.Accession Number : 1408366
Human Factors : Training / Qualification

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
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 : Separated Traffic

Assessments

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

Narrative: 1

I was working arrival radar with light traffic. Local control was training. A medical helicopter called me northeast of the field and needed medevac-priority handling to the local hospital. I radar identified the aircraft and told the helicopter to maintain 2,000 feet for traffic in the traffic pattern at ZZZ. The direct route for this helicopter to get to the hospital would take him directly over the right downwind for Runway XY and directly over the departure end of Runway XY. Since this was a Medevac flight, I was not going to alter the route. Runway XY was the active runway at the time. When the helicopter was 15 miles to the northeast of ZZZ, I called tower and asked for a pointout to 2,000 feet to go to [a local] Hospital and stated that the helicopter was medevac-priority. The local control trainee approved the pointout.

Local control had two aircraft in the pattern at 1,500 feet for runway XY and my helicopter had both in sight. When the pattern traffic was no factor for my helicopter, I called Local Control to ask if I could descend my helicopter towards the hospital. It was then that I realized an IFR aircraft just departed Runway XY on runway heading and was directly below my helicopter. IFR aircraft depart ZZZ with an initial altitude of 3,000 feet. This IFR aircraft would be talking to another radar controller and not me. Local control ended up stopping the IFR aircraft, Aircraft Y, at 1,500 feet, well below the Minimum Vectoring Altitude for the area. The trainer on Local Control asked me to put the medevac helicopter on local's frequency so that they could solve the issue since this was all taking place right off the departure end of the runway. I made sure that my helicopter had the aircraft in sight and switched him to the tower frequency. I'm not exactly sure what local did to solve this issue.

A short time later I was in the break room and the trainee walked in and tried to explain what had happened. He told me that he had forgotten about the pointout. He had put the aircraft in question into position on the runway behind his pattern traffic and when he had the correct runway spacing, he gave it a take-off clearance. Throughout this whole time, the trainer did not stop the trainee and let the situation play out making this aircraft come within 500 feet of a medevac-priority helicopter that needed to descend.

Local control has the ability to turn datablocks yellow to signify a pointout (a memory aid). I do not know if this was performed. Maybe I called for a pointout too early? I could have waited a few more minutes when the helicopter was a few miles from tower's airspace and then maybe the trainee would not have forgotten about the helicopter. The trainer needed to pay more attention to what the trainee was doing.

Synopsis

A TRACON Controller reported a departing aircraft in conflict with an overflight helicopter they were working.

Time / Day

Date : 201611
Local Time Of Day : 1201-1800

Environment

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

Aircraft

Reference : X
Aircraft Operator : Air Taxi
Make Model Name : EC130
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Flight Phase : Landing

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Rotorcraft
ASRS Report Number.Accession Number : 1405035
Human Factors : Situational Awareness

Events

Anomaly.Ground Event / Encounter : Object
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Landed As Precaution

Assessments

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

Narrative: 1

Was returning to base after completing patient flight with strong winds. Our base has a very small pad and the dolly cannot be turned to face into the winds. I landed back at the base into the wind in the grassy area to the east of the pad/dolly so the medical crew could get out. I told them I was going to attempt to land on the dolly one time, then if it didn't feel right, I would land back to the grassy area. After the crew got out, I hovered over to the dolly and attempted to land with a tailwind. As I was about to touch down on the dolly, a wind gust caused the helicopter to yaw right about 20-30 degrees and descend. The skids hit the dolly and I immediately pulled in collective to stop the descent and to move back to the grassy area. However, as I pulled in collective, the helicopter felt like it was hung on something and began to feel like what I imagine dynamic rollover feels like. I lowered the collective to stop that from happening and shut down.

After looking at the helicopter, it appears that the right rear skid got hung in the gap in the middle of the dolly. That caused the dynamic rollover feeling. Another thing I noticed was the dolly had shifted several feet. I don't know when that happened, before the skids contacted the ground, or when the skids contacted the dolly.

Synopsis

EC-130 pilot reported attempting to set down on a dolly with a tailwind, but hit a skid on the dolly and pulled the collective to ascend. Sensing what the pilot thought could be dynamic rollover developing, he landed the helicopter. It was determined that a skid had caught on the dolly.

Time / Day

Date : 201611

Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : Mixed

Weather Elements / Visibility : Rain

Light : Night

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Cruise

Airspace.Class E : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1399837

Events

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : VFR In IMC

Detector.Person : Flight Crew

When Detected : In-flight

Assessments

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

I checked weather before departing sending facility. Weather at sending facility was OVC033 and 10SM. Weather at closest reporting station along route was FEW026 BKN041 and 10SM. I also checked the Helicopter Emergency Medical Services (HEMS) Tool and it

showed VFR weather conditions with some rain showers along the route. About 10 min from receiving hospital I encountered light to moderate rain showers and visibility between 6 and 7 NM. Because of the rain it was difficult to estimate the ceiling, but I thought I was more than 500 feet below the clouds. About 7NM west of [the hospital] I encountered Inadvertent IMC (IIMC). It happened extremely fast. I immediately transitioned to instruments. Once the aircraft was stable I initiated a turn to return to VMC. I maintained my cruising altitude as I turned. The Company IIMC Procedure calls for a climb to the MSA. The OAT indicated 3.5C and I did not want to risk climbing into icing conditions. I knew that my cruising altitude would keep me clear of all terrain and obstacles in the area, and I knew that there were VFR conditions behind me and to the North. Approximately 1-2 min later I returned to VMC.

I marked the "Reduced Safety Standards" Box above because I did not maintain the safety standard of cloud clearance and visibility for the class of airspace I was in.

I was wearing Night Vision Goggles (NVGs) for the flight. It can be difficult to detect the extent of reduced visibility conditions while using NVGs. In the future I will periodically look under my goggles to help identify reduced visibility conditions in front of me. If I can identify the conditions sooner than I can deviate prior to entering the IMC.

One final note. The Altitude and Heading Reference System (AHRS) 1 and the Auto Pilot were MEL'd for this flight. This increased my workload. In the future, when items that increase my workload are MEL'd I will increase my personal limitations for Ceiling and Visibility.

Synopsis

Helicopter Captain reported encountering IMC conditions during a night VFR ambulance flight. Pilot reported a turn to return to VMC and mentioned that wearing Night Vision Goggles can make it difficult to detect reduced visibility conditions.

Time / Day

Date : 201610
Local Time Of Day : 0601-1200

Place

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

Aircraft

Reference : X
Aircraft Operator : Air Taxi
Make Model Name : EC135
Operating Under FAR Part : Part 135
Mission : Ambulance
Flight Phase : Parked
Maintenance Status.Maintenance Deferred : N
Maintenance Status.Records Complete : Y
Maintenance Status.Released For Service : Y
Maintenance Status.Required / Correct Doc On Board : Y
Maintenance Status.Maintenance Type : Scheduled Maintenance
Maintenance Status.Maintenance Items Involved : Installation

Component

Aircraft Component : Main Rotor Blade
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person : Company
Reporter Organization : Air Taxi
Function.Maintenance : Technician
Qualification.Maintenance : Airframe
Qualification.Maintenance : Powerplant
ASRS Report Number.Accession Number : 1398441
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Maintenance
When Detected : Routine Inspection
Result.General : Maintenance Action

Assessments

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

Narrative: 1

During Track and balance of Aircraft X, it was determined a Main Rotor (M/R) blade was needed. Mechanic I was working with and I removed blade and replaced with the same part number we removed. We finished track and balance and accumulated 0.3 flight time while completing the job. Upon return to the hangar to remove tracking equipment Quality Assurance (Mechanic) informed us that we installed the wrong Part Number.

We reviewed the paperwork from both blades and determined it was not an upgraded blade that was installed. To upgrade the blade a Service Bulletin needed complied with installing upgraded dampeners. We installed the upgraded dampeners on the blade in question and corrected paperwork to reflect the change to the blade. The aircraft was then placed back in service.

It was found that the removed blade was not properly identified, as per the Service Bulletin, to reflect it was an upgraded blade. The Service Bulletin states that a line will be drawn through the last two digits of the part number. In this case it would have been the number XY. Further, the number XZ will be written in permanent marker next to the lined out number. The removed blade did not have a line through the last two digits and the XZ was not legible.

Synopsis

A Maintenance Technician reported that during track and balance on a EC-135 helicopter, a main rotor blade was needed. They upgraded the existing blade per a Service Bulletin.

Time / Day

Date : 201610
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2300

Aircraft : 1

Reference : X
Aircraft Operator : Personal
Make Model Name : PA-28R Cherokee Arrow All Series
Flight Plan : None
Mission : Training
Flight Phase : Cruise
Route In Use.Other
Airspace.Class D : ZZZ
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Helicopter
Mission : Ambulance
Airspace.Class D : ZZZ
Airspace.Class E : ZZZ

Person

Reference : 1
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 275
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 20
ASRS Report Number.Accession Number : 1396857
Human Factors : Training / Qualification
Human Factors : Situational Awareness
Analyst Callback : Completed

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 250
Miss Distance.Vertical : 50
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Airspace Structure

Primary Problem : Airspace Structure

Narrative: 1

Near mid air collision.

Callback: 1

The reporter stated that he was in a practice area just outside of a class "D" airspace, with a flight instructor doing some training. They were setting up for some flight maneuvers when he saw a Medical Helicopter coming up on him on a collision course. He took evasive action to avoid hitting the helicopter. The reporter stated that he believes the helicopter pilot never saw them at all. The reporter also stated that there was never any communication with ATC or the helicopter pilot. He said he was aware of a helicopter in the area, but believed the helicopter was much farther north from their position.

Synopsis

PA28R pilot reported a NMAC with a medical helicopter while setting up for a flight maneuver.

Time / Day

Date : 201610
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : AAO.Airport
State Reference : KS
Relative Position.Distance.Nautical Miles : 8
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC
Light : Dusk

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : AAO
Aircraft Operator : Air Taxi
Make Model Name : Commercial Fixed Wing
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Nav In Use.Localizer/Glideslope/ILS : Runway 19
Flight Phase : Initial Approach
Route In Use : Vectors
Airspace.Class E : ICT

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : AAO
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Mission : Personal
Flight Phase : Initial Approach
Airspace.Class E : ICT

Person

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

Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 3200
Experience.Flight Crew.Last 90 Days : 30
Experience.Flight Crew.Type : 130
ASRS Report Number.Accession Number : 1396205
Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Vertical : 300
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

I was flying left seat as pilot in command with a second in command pilot in the right seat. We were on an IFR flight plan in VFR conditions and were receiving vectors from Wichita [TRACON] to intercept the ILS for Runway 19 AAO which was our final destination. After clearance to descend to 4000 and vectors to intercept the inbound course the controller advised traffic, a primary target at our location as I was turning and descending to intercept the localizer. Then the controller advised us to change to the advisory frequency. At that point I was turning inbound in the course and immediately stopped the descent while looking for the reported traffic. The SIC changed to the advisory frequency, and established radio contact with the pilot of the C172. As that pilot was advising us that our aircraft was passing overhead of his aircraft, I noticed the TCAS system display a target within 300 ft of our aircraft. The SIC radioed the pilot of the C172 we were on an active Medevac flight and asked if he would clear the area while we completed our approach and landing into AAO. He agreed and we were able to complete our approach and landing into AAO without further incident or delay. At the time of this incident the aircraft flight and navigation systems were operating properly to the best of my recollection.

In my opinion the controller should have had us remain on the [TRACON] frequency to assist us in remaining clear of that primary target.

Synopsis

Air taxi Captain reported experiencing a NMAC with a C172 on approach to the non-Towered AAO airport.

Time / Day

Date : 201610
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZLC.ARTCC
State Reference : UT
Altitude.MSL.Single Value : 10000

Environment

Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Center : ZLC
Aircraft Operator : Air Taxi
Make Model Name : Small Transport, Low Wing, 2 Turboprop Eng
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Flight Phase : Climb
Airspace.Class E : ZLC

Person

Reference : 1
Location Of Person.Facility : ZLC.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6
ASRS Report Number.Accession Number : 1392986
Human Factors : Situational Awareness
Human Factors : Human-Machine Interface

Events

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

Assessments

Contributing Factors / Situations : Airspace Structure

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

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

I took the sector over and didn't notice an aircraft level at 10000 feet that indicated in the data block a climb to 17000 feet and there was a loss of separation with terrain. The previous controller released Aircraft X to 10,000 feet. They removed the interim altitude of 10000 feet removed from the radar data block. Aircraft X checked on climbing to 10,000 feet. I plugged in for a position briefing. I took over the sector.

Aircraft X leveled at 10,000 feet while I was still "nesting" after signing on to position. The MSAW alert went off and the aircraft requested a higher altitude. I asked him what altitude he would like and then I realized he wasn't climbing and issued a climb to 17,000 feet as the aircraft entered an 11000 foot Minimum Vectoring Altitude. A low altitude alert was issued and pilot responded he had the terrain in sight. Don't remove interim altitude before issuing new altitude. Scan faster.

Synopsis

ZLC Controller reported observing an aircraft at 10,000 feet in a MVA area designated 11,000 feet.

Time / Day

Date : 201609

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 4000

Environment

Light : Night

Aircraft : 1

Reference : X

ATC / Advisory.Center : ZZZ

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 : Climb

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Flight Plan : IFR

Mission : Ambulance

Flight Phase : Climb

Airspace.Class E : ZZZ

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 : 1390677

Human Factors : Confusion

Human Factors : Situational Awareness

Human Factors : Workload

Human Factors : Communication Breakdown

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

Person : 2

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 : 1390679
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Other / Unknown
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
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

We requested a "hold for release IFR clearance", due to departing "IFR" traffic ahead of us. Our ATC clearance was to depart a specific runway, climb to 3000 feet, and turn left to a heading of 180. (Note: ATC radar was out of service). After given our "release for departure", we were then given further climb altitudes. During the early climb, ATC requested us to intercept a VOR radial. We were filed on an FMC route and needed to tune the VOR. The First Officer (FO) mistakenly told ATC we were established on the 160 radial. I mentioned to the FO that we were not yet established and that I would do a 140 degree heading intercept. The FO then told ATC that we were not established on the 160 radial and were heading to 140. Communication breakdown. ATC then said flying 140 climb to and maintain xx altitude. We understood this to mean climb to xx altitude and maintain 140 (an intercept heading would be a normal course of action and not need a revised altitude). When in radar contact we received further direct routing and our final altitude. On hand off he asked us to give center a call upon arrival.

Communication breakdown/confusing instructions.

Narrative: 2

Cleared, heading 180, climb 3,000 feet. Checked in with Center, cleared to 4,000 feet. Soon after, cleared to 9,000 feet. Medevac flight which departed before us was seen on TCAS 2,500 feet above us and 10-12 miles ahead at our 11 o'clock. Center asked us to intercept the 160 radial off of ZZZ. I mistakenly observed unreliable NDB needle on the 160 radial (it was 140 radial and bouncing), but quickly responded on the radio that we were already on the ZZZ 160 radial (in error). The Captain pointed out my mistake and as we discussed, center became concerned leveling us off and inquired about our 180 heading clearance from ZZZ Radio. More confusion followed for we didn't know if we should continue to intercept the 160 radial or return to 180 heading. Center has us come further right of course and continue climb. We never came closer to 5 miles of the medevac aircraft, yet 15-20 minutes later center gave us a phone number to contact citing a possible investigation into pilot navigation error/discrepancy. Following debrief and contact with center supervisor, we were told that a quality control check was being pursued.

Lack of good communication techniques with my Captain and ATC following poor situational awareness.

Synopsis

Air carrier flight crew described the confusion resulting from the First Officer mistakenly confirming aircraft established on a VOR radial, instead stating the aircraft heading which confused ATC.

Time / Day

Date : 201608

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 10

Altitude.MSL.Single Value : 6600

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility.Visibility : 20

Light : Night

Ceiling.Single Value : 2000

Aircraft

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class E : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 8700

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 184

ASRS Report Number.Accession Number : 1381828

Human Factors : Workload

Human Factors : Distraction

Events

Anomaly.Inflight Event / Encounter : Weather / Turbulence
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Automation : Aircraft TA
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory

Assessments

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

Narrative: 1

While returning to base from a patient transfer I encountered reduced ceilings enroute. The ceiling was consistent at about 2000 feet AGL. There was rising terrain ahead. I selected an altitude that would allow me to cross the high ground an equal distance from the terrain and the ceiling. The terrain was not level, as I crossed the apex of the pass the terrain alerting system in the aircraft announced minimums several times. My focus was outside the aircraft but when I did glance at the radar altitude I noted that I had gone below 500 feet AGL several times. This terrain crossing lasted a few minutes. I could have minimized the number of terrain alerts but chose to stay in a stable flight profile. The visibility was very good and the illumination from cultural lighting was more than sufficient to identify obstacles and prevent CFIT.

I am required to maintain 500 AGL at night per the FARs. My decision to stay an equal distance from the clouds and the terrain put me below minimums. I felt that the greatest risk during this portion of the flight was an Inadvertent IMC (IIMC) event. Based on the visibility and the illumination I felt that a lower altitude guaranteeing cloud clearance was the most conservative approach.

Landing the aircraft was always an option. What I did not want to do was climb the aircraft closer to the clouds to satisfy the system. The risk was an IIMC event, the terrain and obstacles were clearly illuminated.

Since Night Vision Goggles (NVG) are in such wide use today there should be a change that allows pilots to fly at lower altitudes with NVGs. We are able to reduce our weather minimums but not our in route minimum altitude.

Synopsis

A helicopter pilot reported difficulty maintaining the FAR required altitude above terrain due to a lowering weather ceiling and rising terrain.

Time / Day

Date : 201607

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ1.Airport

State Reference : US

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 12000

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : King Air C90 E90

Operating Under FAR Part : Part 135

Flight Plan : None

Mission : Ambulance

Flight Phase : Landing

Route In Use : Direct

Airspace.Class G : ZZZ1

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 6230

Experience.Flight Crew.Last 90 Days : 50

Experience.Flight Crew.Type : 750

ASRS Report Number.Accession Number : 1375426

Human Factors : Fatigue

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : FAR

Anomaly.Ground Incursion : Runway

Detector.Person : Flight Crew

When Detected : Aircraft In Service At Gate

Result.Flight Crew : Became Reoriented

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

My crew was dispatched from ZZZ to ZZZ1 at which point we were to pick up a patient in ZZZ1 and take them to a better care facility in ZZZ2. I was taking a safety nap when dispatch came in, because of sleep inertia I assumed that we were leaving from ZZZ to ZZZ2, which is our routine flight and because of this I took my time filing flight plans and even took a shower because our medics usually take about 30 minutes packaging the patient to bring them to the plane. One of the medics came in the crew quarters and ask if I was ready for departure, it was at this point that I realized that I had sleep inertia and had planned the flight completely wrong. I hurriedly exited the crew quarters and entered the plane, took off to ZZZ1 without checking NOTAMs. The Runway was NOTAMed closed for resurfacing, I did not notice the yellow X off the end of the runway because it was laying in weeds which blocked my view of it from a lateral angle. There were no workers or equipment present on the runway. I spoke with the Airport Manager and he gave me permission to depart ZZZ1.

Synopsis

C90 Captain reported being awakened from sleep to fly a medevac flight but not comprehending the assignment due to fatigue. When informed that the flight is ready to depart he quickly jumped in the aircraft without checking NOTAMs. After landing he learned that the airport was closed for runway resurfacing.

Time / Day

Date : 201607

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : RLD.Airport

State Reference : WA

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Dusk

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : RLD

Aircraft Operator : Air Taxi

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Landing

Route In Use : Visual Approach

Aircraft : 2

Reference : Y

Aircraft Operator : Personal

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Takeoff

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 6500

Experience.Flight Crew.Last 90 Days : 50

Experience.Flight Crew.Type : 500

ASRS Report Number.Accession Number : 1372997

Human Factors : Situational Awareness
Analyst Callback : Attempted

Person : 2

Reference : 2
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 4900
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 2000
ASRS Report Number.Accession Number : 1372992
Human Factors : Situational Awareness
Analyst Callback : Attempted

Events

Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 75
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We were landing on runway 19 [which is] shorter and narrower than average. We had reported the airport in sight about 15 miles out on an IFR flight plan and received the visual. Runway 19 is the calm wind runway and also the runway with the least amount of slope. The winds were calm and the time of day was sunset. At about 8 miles out we canceled IFR and switched over to advisory frequency. The PNF made radio calls on CTAF. I was flying and concentrating rather intently on Vref and the proper angle to be flown for a short field landing. I touched down about 1,000 feet down the runway and almost immediately spotted a small airplane moving at a high rate of speed from my right to my left on runway 8. The closure rate was very fast and I applied pressure on the right rudder to veer as safely as possible to my right and miss the small aircraft. We missed each other by about 75 feet right at the intersecting point of the two runways. Left rudder was briskly applied to correct the airplane back to the center of the runway. More radio calls were made after we observed the airplane continue his takeoff run and return for a landing. No answers were received. The sun was setting on our right side and obscured the view of the approach end of runway 8.

Corrective Action: Our industry has progressed far too much in the last 25 years to not

require a radio for all aircraft that use the terminal area of a specific size of airport. This particular airport has multiple approaches and is located within 5 miles of a class D airport.

Narrative: 2

I believe the contributing factors to this near collision were crossing runways at an uncontrolled airport, the sun obstructing our view to the west, and an aircraft that was not making position reports on CTAF. In my opinion, in the technological age in which we live, all aircraft should be mandated to have an operational radio and to participate in position reports on CTAF at non controlled airports, especially with instrument approaches. Had the other pilot been on the radio, this event would never have happened.

Synopsis

Air ambulance flight crew landing at RLD reported a near collision with another aircraft taking off on an intersecting runway. The other aircraft reportedly was not communicating on CTAF frequency.

Time / Day

Date : 201606

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : GEG.TRACON

State Reference : WA

Altitude.MSL.Single Value : 3500

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : GEG

Aircraft Operator : Air Taxi

Make Model Name : Small Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Climb

Route In Use : Vectors

Airspace.Class D : SFF

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : GEG

Aircraft Operator : Air Carrier

Make Model Name : Medium Large Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use.Other

Airspace.Class C : GEG

Person

Reference : 1

Location Of Person.Facility : GEG.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Departure

Function.Air Traffic Control : Trainee

Qualification.Air Traffic Control : Developmental

ASRS Report Number.Accession Number : 1368320

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

I am currently a CPC-IT (Controller In Training) and was training on radar. I had just taken the position from a previous controller and saw that Aircraft X was departing off SFF on a heading of 300 restricted at or below 3500 feet (this is a built in procedure for VFR aircraft coming off SFF). I was briefed that Aircraft Y was cleared on the RNAV Z RWY 21 approach and had been switched to the tower. I recognized that the two aircraft were going to be a conflict and was trying to formulate a solution. Aircraft Y was descending out of approximately 4500 feet when Aircraft X checked on level at 3500 feet. At this point the two aircraft were pointed right at each other approximately 3 miles apart. I knew aircraft on the RNAV Z RWY 21 approach were allowed to descend to 3500 which is the exact altitude that Aircraft X was restricted at. When Aircraft X checked on I told him altitude your discretion and to proceed on course, followed by a traffic call. My initial plan was to have Aircraft X climb above the descending Aircraft Y, then issue a northerly heading if necessary. My instructor keyed over me at that point, gave a traffic alert and told Aircraft X to fly northbound. The tower then called saying Aircraft Y was responding to a TCAS alert and was coming back to radar for resequencing. Aircraft X continued on course below Aircraft Y and the session continued without further incident.

Foremost, it was poor control judgment on my part to not issue an immediate turn to Aircraft X and to think that an altitude swap alone was going to resolve the situation. I was slow to see how quickly the situation was developing and should have been quicker to react. However, I do think that the letter of agreement (LOA) pertaining to automatic VFR releases between SFF and GEG is flawed. The procedure calls for all VFR aircraft whose departure routes will take them towards GEG Class C surface area to either fly heading 300 at or below 3500 feet or remain south of the interstate at or below 3500 feet. My two main concerns with this procedure relate to aircraft separation and vectors below the minimum vectoring altitude. VFR aircraft departing SFF on a heading of 300 at or below 3500 points them directly at GEG's final. Typically aircraft on the visual approach to RWY 21 and other approach procedures pass over these VFR aircraft at 4000. However, outside of issuing an immediate control instruction to avoid a conflict, there is no ensured separation with this procedure. This lack of separation can also happen with VFR aircraft departing south of the interstate at or below 3500 feet. It is especially concerning to me that aircraft on the RNAV Z RWY 21 approach can descend to 3500 feet on the base turn, the exact altitude that a VFR aircraft coming off of SFF can be at.

I also think the LOA is contradictory to the 7110.65 relating to vectors below the MVA (Minimum Vectoring Altitude). In the 7110.65 per 5-6-1 it makes it very clear that a VFR aircraft cannot be assigned a heading and altitude below the MVA (with certain exceptions that either don't apply in this case or have not been made clear to me). All of our MVAs in the area are above 3500 ft MSL which make me unsure of how this LOA is meeting the 7110.65 requirement.

This incident definitely drove home the point that imminent traffic situations can develop very quickly and at any time. In future situations I will take more evasive action and be more vigilant to avoid making a similar mistake. I think departing VFR aircraft either to the NE or SE would be a better procedure for SFF. However, I know there is higher terrain east of SFF so this might not be possible. The other idea would be for SFF to call for VFR releases. I definitely think this procedure should be revisited to avoid conflicts with future aircraft.

Synopsis

An Air Traffic Controller Trainee reported failing to take sufficient action to keep a VFR aircraft away from an IFR aircraft executing an approach to an airport. The Trainee Controller mistakenly believed he could not vector the VFR aircraft below the MVA.

Time / Day

Date : 201606
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : CHS.Tower
State Reference : SC

Aircraft : 1

Reference : X
ATC / Advisory.Tower : CHS
Aircraft Operator : Military
Make Model Name : Military Transport
Flight Plan : IFR
Flight Phase : Final Approach
Airspace.Class C : CHS

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : CHS
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Flight Plan : VFR
Flight Phase : Initial Approach
Route In Use : None
Airspace.Class C : CHS

Aircraft : 3

Reference : Z
ATC / Advisory.Tower : CHS
Aircraft Operator : Air Taxi
Make Model Name : Helicopter
Operating Under FAR Part : Part 135
Flight Plan : IFR
Mission : Ambulance
Flight Phase : Cruise
Airspace.Class C : CHS

Person

Reference : 1
Location Of Person.Facility : CHS.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 9.6
ASRS Report Number.Accession Number : 1364396
Human Factors : Distraction
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

TRACON called to coordinate the request of Aircraft X to fly TACAN 03, circle overhead ("the entire airfield") to Runway 33, then entry into the Tower pattern. I was given "your control in the tower pattern" from TRACON. The data tag conflicted with the information from verbal coordination, so I reattempted coordination with TRACON to verify the situation. The Front Line Manager (FLM) called on the telephone to straighten that out and to give me other airfield information. West radar then called and restated the situation, "Aircraft X, TACAN RY03, circle 33 with the overfly. Aircraft Y will be straight in to follow Aircraft X". Aircraft X was shipped to me at about 7 NM final RY03 and stated the request to overfly the airport for RY33. Clearance was issued. When Aircraft X was short final, she requested to enter initial on the missed approach. I told her that we will be able to accommodate that request. When Aircraft X was over the intersection, Aircraft Y checked onto my frequency straight into RY33 (10 NM final). I asked if he had Aircraft X in sight and the answer was no. While I started to go through my options, I asked again if Aircraft Y had the Aircraft X in sight, turning onto the downwind for RY33. He said yes. I then instructed Aircraft Y to "Maneuver as necessary to follow Aircraft X, caution wake turbulence for Aircraft X, RY33 cleared to land". When Aircraft X was turning base I issued the same instructions (360, "s" turns, whatever he needed).

When Aircraft X went around, I adjusted the data block of the Aircraft X to reflect initial RY03, full stop in accordance with CHS7110. I then adjusted the flight paths of Aircraft Y and a corporate jet to make a hole for Aircraft X. After Aircraft X entered initial RY03, TRACON called for a point out on Aircraft Z, a helicopter to a local hospital. I asked if the helicopter was a lifeguard (priority) since he was enroute to a hospital and the data tag failed to reflect that information. The answer was yes. I approved the point out and fixed the data tag for West Radar/TRACON. I was watching to see how the situation was working between Aircraft X and the helicopter, and between Aircraft X and the gap that I had built with the RY33 arrivals. I saw that Aircraft X would be descending onto the helicopter, losing wake turbulence separation, so I asked Aircraft X to go around and reenter initial. She complied. She flew out bound 5-7 NM to reenter when West Radar called to ask what she was doing, I told him. An aircraft was over Aircraft X at 3000 for RY03. West radar resequenced the arrival onto RY33 and I fixed that data tag.

Synopsis

CHS Tower Controller reported of a problem with traffic into the airport. The pattern traffic was working until the reporter was given a point out on a Lifeguard aircraft which caused the pattern to be disrupted and caused a wake turbulence problem.

Time / Day

Date : 201606

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Thunderstorm

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Taxi

Make Model Name : EC135

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Mission : Ambulance

Flight Phase : Climb

Airspace.Class B : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Rotorcraft

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

ASRS Report Number.Accession Number : 1361710

Human Factors : Distraction

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Airspace Structure

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Received a flight request at about XA:30. I built the risk assessment on the iPad and didn't push send because I was waiting for our com center to send the flight to ZZZ. I went and talked with the flight crew to make sure that they would be comfortable with the thunderstorms out west and go over the risk assessment with them. They ended up being fine with the flight and I accepted it at XA:35. As I was walking through the com center I was told that there was a drone operating in one of the parking lots next to helipad and that the com center was going to call to have them stop operations. This was the biggest distraction for me. I knew nothing about any scheduled drone activity. When I lifted off I called the control tower and asked if they had been informed that there was a drone operating in their airspace. They also were unaware of the drone. The control tower said they would call the state police. Once I was clear of the hospital and no longer worried about the drone I realized I forgot to push send on the iPad for my risk assessment and wait for approval. I had my com center call and let them know. [Control] told them I would need to call in. Once I landed at the scene I shut down and called. [Control] got the flight approved and we finished the flight.

The only thing I would say is maybe have my com center ask if I have sent in my risk assessment when I'm walking out the door. But this is not their responsibility and the fault is mine 100%. I got distracted and forgot to push send and wait for the approval from [Control].

Synopsis

Medevac helicopter pilot reported being advised of a UAV which was operating in the vicinity of his proposed flight path. This information caused him to be distracted which resulted in his non-compliance with company risk assessment procedures.

Time / Day

Date : 201605

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Ceiling.Single Value : 2900

Aircraft

Reference : X

Aircraft Operator : Air Taxi

Make Model Name : Bell Helicopter Textron Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 135

Flight Plan : VFR

Mission : Ambulance

Flight Phase : Parked

Flight Phase : Descent

Component

Aircraft Component : Tablet

Aircraft Reference : X

Problem : Design

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Taxi

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Rotorcraft

ASRS Report Number.Accession Number : 1359784

Human Factors : Communication Breakdown

Human Factors : Distraction

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Dispatch

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Detector.Person : Dispatch
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

I put my risk [assessment] in and went about preparing for flight, I went up to the aircraft, did my walk around, came in to the cockpit, the iPad dinged like it does with every flight when OCC (Operations Control Center) approves it. I looked quickly at the screen and with the glare thought it was approved, it turned out OCC had not approved the mission but pinged me back to discuss the weather front to my west. I was aware of the front but in the time I had gone up to the helipad it had made a significant update on radar and moved closer. I took off with what I thought was an approved brief instead it was a call from OCC. I let dispatch know I was landing assured and they said call from OCC. When I did we discussed that the tone for approval and every notification is the same and the IT department was working on a change so it would be different. Flight was completed with no problems.

I discussed it with the OCC personnel and a change to the approval ding on the iPad and other notifications is already in the works. Additionally I will discuss this with my base pilots and at the upcoming safety meeting to help make other pilots aware of the possible results of submitting a risk and specifically looking and ensuring the mission is approved not call OCC.

Synopsis

An EMS helicopter pilot reported hearing an iPad notification sound which he thought indicated Dispatch's mission approval after his risk assessment. In fact, Dispatch wanted to discuss weather. A distinctive Dispatch approval notification "ding" was discussed as a solution.

Time / Day

Date : 201605
Local Time Of Day : 1801-2400

Place

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

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
Aircraft Operator : Air Taxi
Make Model Name : EC135
Mission : Ambulance
Flight Phase : Initial Climb

Component

Aircraft Component : Turbine Engine
Aircraft Reference : X
Problem : Improperly Operated

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Commercial
ASRS Report Number.Accession Number : 1356741
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Ground Personnel

Events

Anomaly.Deviation - Procedural : FAR
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Were Passengers Involved In Event : Y

When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Rejected Takeoff
Result.Flight Crew : Took Evasive Action
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

Last night of my shift, landed for patient pickup at XA:56 with flight nurses on board. Upon landing, the nurses notified me that they had just been contacted by EMS on the VHF radio and that the patient had expired and we were no longer needed. Everyone remained seated and belted as we discussed that we hadn't heard anything yet from Operations and about how best to contact them. The crew members tried and were able to receive them on the ground and confirmed cancellation. This all took place quickly. I confirmed with crew that they were ready to lift and began to pull pitch when I noticed the Yellow Caution Light start to flash. Having just reached a low hover, I saw that only one engine was in fly and set the aircraft back down. I then realized that as a matter of habit, I must have begun to shut down on landing and only placed engine #2 in idle as we were being notified of cancellation.

After full skids down there were no caution, warning lights or exceedances. I returned engine #2 to fly, and stopped to verify that there was no exceedance. I verified caution panel and instruments and continued with departure and return flight. After landing at base, upon placing engines in idle and after shut down, there were no exceedances on caution advisory display.

After fueling the aircraft at base I had the master battery on to check fuel level and decided to double check the CAD. After start up, FADEC #1 illuminated an "Engine Exceed" light on the number one engine. The discrepancy was noted in the aircraft log book, duty mechanic responded and aircraft was placed out of service with dispatch. The aircraft being flown was our backup EC-135.

Obviously, I am solely at fault for not exercising better situational awareness. This situation could have been avoided if I had not interrupted the process of going from flight to idle, something I don't think I have ever done before, and then re-initiated a complete pre-takeoff check.

Synopsis

An EC-135 EMS pilot landed for patient pickup, but because the patient had expired, the flight returned to base. The pilot started his takeoff with an engine in idle, but landed immediately, returned the engine to fly and departed. Upon arrival he discovered a CAD FADEC #1 "ENGINE EXCEED" alert so the aircraft was removed from service.