Report Set Description.................................A sampling of reports concerning Emergency Medical Service (EMS) incidents.

Update Number.............................................22

Date of Update..........................March 30, 2022

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

Records within this Report Set have been screened to assure their relevance to the topic.
MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

Becky L. Hooey, Director
NASA Aviation Safety Reporting System
CAVEAT REGARDING USE OF ASRS DATA

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

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

One thing that can be known from ASRS data is that the number of reports received concerning specific event types represents the lower measure of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 2010 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 2010. With these statistical limitations in mind, we believe that the real power of ASRS data is the qualitative information contained in report narratives. The pilots, controllers, and others who report tell us about aviation safety incidents and situations in detail – explaining what happened, and more importantly, why it happened. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.
Report Synopses
ACN: 1851341 (1 of 50)

Synopsis
Pilot reported no oil pressure during two consecutive post maintenance engine runs and elected to forego any additional engine runs until maintenance could investigate.

ACN: 1849787 (2 of 50)

Synopsis
Denver Center Controllers reported Medevac flights requesting expedited routings and priority handling into APA are being denied by Denver TRACON.

ACN: 1846365 (3 of 50)

Synopsis
Denver Center Controller reported an ongoing problem with Denver TRACON not approving direct routing for a MEDEVAC aircraft, to help expedite the aircraft.

ACN: 1846356 (4 of 50)

Synopsis
Denver TRACON Controller reported a problem associated with Denver Center and how the two facilities work MEDEVAC aircraft.

ACN: 1841860 (5 of 50)

Synopsis
Air ambulance helicopter pilot reported that prior to engine start and while waiting to depart the hospital helipad, a critical ground conflict occurred when another helicopter attempted to land at the same location. The pilot eventually aborted the approach and entered holding. The reporter cited as contributing that dispatch had not notified the crew on the ground of the inbound helicopter.

ACN: 1839849 (6 of 50)

Synopsis
Captain reported that during a post maintenance engine run up the helicopter experienced excessive vibration and was shut down. It was discovered that the tail rotor blades had been installed backwards.

**ACN: 1815943 (7 of 50)**

**Synopsis**
Helicopter pilot on final approach into Class D airport took evasive action to avoid a collision with a UAS. The pilot notified ATC.

**ACN: 1815691 (8 of 50)**

**Synopsis**
Light aircraft pilot reported a runway incursion at HNL that resulted in a conflict with a departing aircraft that was able to climb safely above them.

**ACN: 1814160 (9 of 50)**

**Synopsis**
A Tower Local Controller who was monitoring the Radar Controller reported the Radar Controller could not get approval from Special Use Airspace range controllers for a medevac flight to fly through their airspace to avoid weather causing a delay for the time critical medevac aircraft.

**ACN: 1804752 (10 of 50)**

**Synopsis**
Pilot reported receiving a low-altitude alert from tower after descending below intermediate approach altitude.

**ACN: 1803841 (11 of 50)**

**Synopsis**
An Air Ambulance Helicopter pilot reported that their helicopters have been flying without current revisions to the Rotorcraft Flight Manual which had not been received by the company. The reporter stated revisions used to be available through software tools which are no longer available to pilots or maintenance technicians.
**ACN: 1802638 (12 of 50)**

**Synopsis**

EUG TRACON Controller reported an airborne conflict between an air carrier aircraft and a VFR helicopter. Controller suggested EUG should be a Class C airport requiring VFR aircraft to be in contact with ATC while crossing air carrier approach/departure paths.

**ACN: 1799047 (13 of 50)**

**Synopsis**

A Medevac pilot reported they set too low an altitude for the approach procedure and received a terrain warning alert.

**ACN: 1790830 (14 of 50)**

**Synopsis**

Tower Controller in Charge reported they observed a helicopter deviate from its assigned route and did not climb in accordance with SID climb requirements and flew below the Minimum Vectoring Altitude.

**ACN: 1790417 (15 of 50)**

**Synopsis**

Medical transport helicopter pilot reported inadvertent IMC caused unforecast mountain obscuration.

**ACN: 1784664 (16 of 50)**

**Synopsis**

Learjet-35 Captain reported a fumes event during climb resulting in a return to the departure airport.

**ACN: 1784603 (17 of 50)**

**Synopsis**

Learjet-35 Captain reported a cabin fumes event resulting in a return to the departure airport.
ACN: 1774772 (18 of 50)

Synopsis
Helicopter pilot reported not having the correct documents to transport a COVID-19 patient.

ACN: 1773033 (19 of 50)

Synopsis
Air Carrier Captain flying C90 aircraft reported landing below minimums.

ACN: 1771726 (20 of 50)

Synopsis
CRJ900 flight crew reported 200 ft. of separation with a helicopter on approach.

ACN: 1770930 (21 of 50)

Synopsis
Helicopter Captain reported flying with an overdue engine power check inspection. Reporter cited being distracted after being informed that the crew from the previous shift was COVID-19 positive.

ACN: 1770928 (22 of 50)

Synopsis
Helicopter Captain reported getting distracted and losing situational awareness resulting in a TFR incursion.

ACN: 1770762 (23 of 50)

Synopsis
Center Controller reported they issued an approach clearance with incorrect altitude restrictions that placed an aircraft below the Minimum IFR Altitude and activated the Center MSAW.
<table>
<thead>
<tr>
<th>ACN</th>
<th>(24 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
<td>A319 flight crew reported engine noise with an &quot;engine 2 stall&quot; message displayed as the aircraft began its descent.</td>
</tr>
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<tr>
<th>ACN</th>
<th>(25 of 50)</th>
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</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
<td>A Medevac Helicopter Pilot reported assigned vectors for final approach risks unstable approach and endangers patient care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN</th>
<th>(26 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
<td>Helicopter Pilot reported misgivings due to suspected unapproved procedures used to return an aircraft to service.</td>
</tr>
</tbody>
</table>

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<tr>
<th>ACN</th>
<th>(27 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
<td>Pilot reported a NAMC with another aircraft.</td>
</tr>
</tbody>
</table>

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<tr>
<th>ACN</th>
<th>(28 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
<td>TRACON Controller reported they had to issue a go around and diversion to another runway due to a disabled aircraft on their runway.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>ACN</th>
<th>(29 of 50)</th>
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</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
<td>Pilot reported landing without clearance and cited the COVID-19 environment as a contributing factor.</td>
</tr>
</tbody>
</table>
ACN: 1739476 (30 of 50)

Synopsis
Pilot reported misinterpreting MEL and applied the incorrect MEL after failures of the Attitude Indicator on the Primary Flight Display.

ACN: 1727666 (31 of 50)

Synopsis
Pilot reported an engine fire on approach, requiring an inflight engine shut down and divert.

ACN: 1725770 (32 of 50)

Synopsis
EC135 flight crew reported landing on a public road after encountering ice and snow that made VMC flight impossible.

ACN: 1720270 (33 of 50)

Synopsis
EC135 pilot reported that FOD became caught in rotor blades during landing.

ACN: 1713201 (34 of 50)

Synopsis
ECD-EC135 pilot reported canceling mission due to communication cable missing and unable to make workaround operable.

ACN: 1705174 (35 of 50)

Synopsis
Helicopter ambulance Captain reported an empty baby incubator caught fire while in flight.
ACN: 1702414 (36 of 50)

Synopsis
Helicopter pilot reported potential bed bug contamination on helicopter and crew.

ACN: 1682400 (37 of 50)

Synopsis
EC145 Medical crew member reported PIC failed to follow company policy, entered known IMC.

ACN: 1666727 (38 of 50)

Synopsis
SLC Controller reported aircraft below MVA due to a local traffic procedure and aircraft conflict.

ACN: 1650223 (39 of 50)

Synopsis
ORL Tower Controller reported an NMAC between a helicopter departing a hospital and traffic in the pattern.

ACN: 1643338 (40 of 50)

Synopsis
ZLC ARTCC Controller reported due to a communications error after de-combining sectors an aircraft was left on a heading too long and flew below the Minimum Vectoring Altitude.

ACN: 1638860 (41 of 50)

Synopsis
C170 pilot reported possible Class B violation while avoiding another aircraft.

ACN: 1618614 (42 of 50)
Synopsis
Air taxi helicopter pilot reported flying a leg without a legal Risk Analysis confirmation.

ACN: 1618252 (43 of 50)

Synopsis
Air ambulance pilot reported a near midair collision with a crop duster near Paris, Texas.

ACN: 1616172 (44 of 50)

Synopsis
Maintenance reported they removed vinyl wrap to accomplish fuselage skin repair.

ACN: 1610808 (45 of 50)

Synopsis
Tower Controller reported rushing to clear the runway of vehicles for landing traffic while training.

ACN: 1602828 (46 of 50)

Synopsis
Air ambulance pilot reported landing at the wrong airport due to task saturation.

ACN: 1591945 (47 of 50)

Synopsis
Air taxi pilot reported passing out during the flight in a single pilot operation.

ACN: 1586971 (48 of 50)

Synopsis
Helicopter pilot reported after maintenance work was performed, the mechanics failed to complete all required testing to return aircraft to an airworthy condition.
Synopsis

Houston Center Controller and an Air Taxi reported a NMAC with an aircraft not communicating with ATC.

Synopsis

PC12 Captain reported failing to reject takeoff after realizing yaw and stabilizer trim were both out of range.
Report Narratives
ACN: 1851341 (1 of 50)

Time / Day
Date: 202110
Local Time Of Day: 0001-0600

Environment
Flight Conditions: VMC
Light: Night

Aircraft
Reference: X
ATC / Advisory.Ground: ZZZ
Aircraft Operator: Corporate
Make Model Name: Bell Helicopter 407
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 121
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: Inspection
Maintenance Status. Maintenance Items Involved: Installation
Maintenance Status. Maintenance Items Involved: Testing
Maintenance Status. Maintenance Items Involved: Work Cards

Component
Aircraft Component: Powerplant Lubrication System
Aircraft Reference: X
Problem: Malfunctioning

Person
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: Rotorcraft
Qualification. Flight Crew: Multiengine
Qualification. Flight Crew: Instrument
Qualification. Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number. Accession Number: 1851341
Human Factors: Confusion
Human Factors: Human-Machine Interface
Human Factors: Time Pressure
Human Factors: Training / Qualification
Human Factors: Workload
Human Factors: Communication Breakdown
Communication Breakdown. Party 1: Flight Crew  
Communication Breakdown. Party 2: Maintenance

**Events**

Anomaly. Aircraft Equipment Problem: Critical  
Anomaly. Deviation / Discrepancy - Procedural: Maintenance  
Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy  
Detector. Person: Flight Crew  
Were Passengers Involved in Event: N  
When Detected: Aircraft In Service At Gate  
Result. General: Maintenance Action

**Assessments**

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

**Narrative: 1**

After a transport lasting from approximately XA00-XH30, the med crew and I returned to base and were informed that we would be out of service for maintenance. At this time, I placed the helicopter in the hanger, debriefed with the crew, and returned to my office to complete the manifest. At approximately XI30 I approached the aircraft to check in on the maintenance with Name1 and Name. I inquired about the filter, asking Name if that was the filter that was sent in to be weighed and he answered "Yes". I observed Name show Name1 the replacement of the O rings for the filter housing and filter. I then returned to my office. At approximately XJ00 Name1 came to my office and stated maintenance was complete, requesting me to complete a maintenance ground run up leak check, to which I agreed. Name1 informed me that he did an auto pilot visual check and removed three panels. At this time, he showed me the panels (the first was located underneath the aircraft attached to the ELT antenna, the second was under the pilot’s seat, and the third panel was located in the baggage compartment) I assessed each panel to ensure they were secured properly (which they were). He also informed me they completed the 150-hour oil filter change, together we assessed the filter location and confirmed it was installed and securely tightened. I was informed by Name1 that there may be some residual oil trapped in the heat shield that could potentially leak out. I noticed Name using the Honeywell computer and asked Name1 what he was doing. I was told by Name1 that he was clearing a maintenance light that was induced by prematurely engaging the power before a sensor wire was plugged in. I was also informed that once this was cleared, we would be able to do the run up. I confirmed with Name1 that we just needed to do a run up for a leak check and was told yes just for the leak check. I proceeded to complete my walk around, both engine cowlings were open at this time. I visually inspected each side of the engine for items such as rags and tools as well as loose nuts and bolts. I went to step on the right side step and removed a rag, then I looked into the right transmission cowling and upper deck where nothing abnormal was discovered. I stepped down, moved the ladder away from the aircraft, walked around the tail boom and continued to visually inspect cowlings and fasteners. On the left side I retrieved the step stool to look in the engine cowling that was open as well as the left side transmission cowling, continuing to inspect and nothing abnormal was discovered. I got off the step stool and placed it to the side. At this time, I noticed Name was speaking on the phone regarding the Honeywell computer, which he was still working on. I was notified it would take a few more minutes before I could transport the aircraft outside for the run up. I walked into Name2’s office to
inform them that I would be doing a maintenance run up, also inquiring if there was night shift pilot coverage, to which I was told there was not. I returned to the hanger to find Name was done with the computer. I assisted Name1 with placement of the heliporter under the aircraft and proceeded to transport the aircraft outside. Name remained in the hanger. I removed the heliporter from under the aircraft and placed it in front of the hanger door. At this time, I completed another walk around check around the aircraft inspecting for abnormalities, with exception of the opened cowlings for leak check inspection nothing was out of the ordinary. I spoke with Name1 and asked him how he wished to perform the run up, he informed me he would like a normal startup, once ready take it to 100 percent and run it for approximately ten minutes, if there were any leaks or abnormalities, he would immediately give me the cutoff signal to shut down the helicopter. I entered the aircraft as Name1 retrieved his hearing protection, once he returned, he stated he was ready and clear to start. I placed my helmet on and fastened my belts. Per prestart and startup checklists I started the helicopter. Engine ignition at approximately 12 percent Ng, MGT temperature rise normal, voltage normal, blades turning by approximately 18 percent, transmission and oil pressure gauge with pressure increase, and no lights were observed. Start completed with starter light out and approximately 62 percent Ng. Start checklist completed, alternator on, FADEC reset, no lights observed, gauges in the green. I proceeded to roll up throttle while observing the torque gauge increasing abnormally slow. I rolled throttle back down to idle then rolled it back up observing the torque gauge to once again increase abnormally slow, simultaneously the low engine oil pressure light illuminated. When assessing the oil pressure gauge, I saw zero oil pressure and rolled throttle off, engaged rotor break below 40 percent, turned off generator, and turned off the battery. Once the aircraft was shut down, I informed Name1 what had occurred. While I exited the aircraft, Name1 went to get Name from the maintenance hanger. I returned to the helicopter hanger, where I waited for Name and Name1 to join with their assessment of the findings and plan for diagnosing the problem. Approximately five minutes later both Name and Name1 returned to the helicopter with their ladder, tools and oil. I observed Name adding oil and consulted with Name1 regarding what they felt the problem was. Name1 stated there was approximately two quarts of oil noted in the reservoir and there may be some air in the line, the plan was to add more oil then proceed to complete another ground run. Once Name was finished adding oil he informed me that he was ready for the ground run. I went to the oil reservoir and assessed the oil level as well as ensured the cap was secured. I discussed with Name1 the plan for the ground run, and was informed that we would proceed like the prior ground run, keeping a close eye on the oil pressure. I completed another walk around the aircraft ensuring all rags, tools and equipment were removed before entering the helicopter. Per prestart and startup checklists I started the helicopter with Name1 next to me. Engine ignition at approximately 12 percent Ng, MGT temperature rise normal, voltage normal, blades turning by approximately 18 percent, zero indication of oil pressure increase, and transmission oil pressure was increasing. Focusing my attention on the oil pressure gauge I allowed the Ng to increase approximately another 20 percent, with zero indication of oil pressure increase. At this point Name1 instructed me to shut down the aircraft, I rolled throttle off, engaged rotor break, and turned battery off. I exited the aircraft and went to the helicopter hanger. In the hanger I spoke with Name and Name1, inquiring what they thought the problem may be. I was informed by Name that they may have to bleed the lines out, although he has never had to do this before. Both Name and Name1 went to the Maintenance hanger. It was now approximately XJ50, I returned to the office where I gathered my stuff to complete my shift. Approximately five minutes later Name entered the office and I asked if he would like me to return the aircraft to the hanger. He informed me that he would like it returned to the hanger and the aircraft would be out of service for the night as he was awaiting more information from John regarding the next steps for maintenance of the aircraft. I returned the aircraft to the hanger using the heliporter,
securing it for the night, and completed my shift as there was no Relief Pilot for the night shift to report off to.

**Synopsis**

Pilot reported no oil pressure during two consecutive post maintenance engine runs and elected to forego any additional engine runs until maintenance could investigate.
ACN: 1849787

Time / Day

Date: 202110
Local Time Of Day: 0601-1200

Place

Locale Reference. ATC Facility: ZDV.ARTCC
State Reference: CO
Altitude. MSL. Single Value: 19000

Aircraft: 1

Reference: X
ATC / Advisory. Center: ZDV
Aircraft Operator: Air Taxi
Make Model Name: Small Transport
Crew Size. Number Of Crew: 2
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Cruise
Airspace. Class A: ZDV

Aircraft: 2

Reference: Y
ATC / Advisory. Center: ZDV
Aircraft Operator: Air Taxi
Make Model Name: Small Transport
Crew Size. Number Of Crew: 2
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Cruise
Route In Use: Direct
Airspace. Class A: ZDV

Person: 1

Location Of Person. Aircraft: X
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
ASRS Report Number. Accession Number: 1849787
Human Factors: Time Pressure
Human Factors: Other / Unknown

Person: 2

Location Of Person. Aircraft: X
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) : 14
ASRS Report Number.Accession Number : 1849789
Human Factors : Time Pressure
Human Factors : Troubleshooting
Human Factors : Other / Unknown

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

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

Narrative: 1
Aircraft X came off CAG VFR requesting an IFR clearance. After radar Identifying the aircraft, I gave them routing as filed which was CAG direct APA (which is inside of D01 (Denver TRACON) airspace). I advised the pilot that I would probably have to give them routing which would be LARKS.LARKS2.APA. I then verified with the pilot whether or not they were considered a Critical Medevac or not. The pilot verified that they had a patient on board and needed priority handling and wanted to stay direct to their destination. I then proceeded to call D01 west departures who would be the affected TRACON sector if the Medevac were to go direct and gave the information that the pilot gave me to that controller, and while on the line with the controller who multiple times told me he wanted to approve the expeditious routing responded that the Supervisor was walking by and said no to the Approval request that I was trying for this Critical Medevac. As I returned back to give the routing to the Pilot, they asked me if there was any way they could keep direct to help the patient, and I responded that it was up to D01 and they said full routing. The Pilot acknowledged, and then referenced his patient that they would try to keep them stable for the longer flight. This has been an ongoing problem that the controllers at D01 are unable to decide for themselves whether it is in their own good judgment or not to allow these Medevac flights more direct routing. On multiple occasions the receiving controller has indicated that they want to help these air ambulances, but now it appears they are threatened with possible disciplinary action if they allow more direct routing, even if there is no impact to their traffic. This is not the first critical that has been denied, and eventually there will be a death on one of these flights because they were rerouted and not given the priority that they needed, and the minutes that they could have saved with more direct routing could be all that it takes to save a life on these flights. I suggest that the receiving controllers should be the ones deciding if it is in their best judgment for the safe and expeditious flow of both their traffic and the proposed routing of these Medevacs rather than someone who is not working the sector.

Narrative: 2
Aircraft Y was handed to me direct APA. I requested approval for direct with Denver TRACON. Was told unable. Informed the pilot they would have to be put on routing unless they had extenuating circumstances. Pilot informed me they were a "critical" flight. I again requested approval with TRACON with new critical information. Was told to put aircraft on
Letter of Agreement routing. Opted not to declare an emergency for the pilot, delayed a critical Medevac flight by putting it on a longer route. Within the last month or so, Denver TRACON has been enabling almost all Medevacs requested direct APA. There has not been an explanation as to why this is happening. I feel we are risking real human lives by delaying these Medevacs in flight. I do not feel like I am behaving safely by rerouting these aircraft onto longer routes, especially when the pilot of the aircraft describes the flight as critical. I recommend that either: TRACON stop blanket denying direct routes, Denver Enroute be encouraged to declare emergencies for these pilots when the controller deems it advisable or someone explain why this change has been made, and why Medevacs are better off flying longer routes.

Synopsis

Denver Center Controllers reported Medevac flights requesting expedited routings and priority handling into APA are being denied by Denver TRACON.
ACN: 1846365 (3 of 50)

**Time / Day**
- Date: 202110
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference: ATC Facility: ZDV ARTCC
- State Reference: CO

**Aircraft**
- Reference: X
- ATC Advisory Center: ZDV
- Make Model Name: Small Transport, Low Wing, 2 Turboprop Eng
- Crew Size: Number Of Crew: 2
- Flight Plan: IFR
- Mission: Ambulance
- Flight Phase: Descent
- Airspace: Class A: ZDV

**Person**
- 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): 15
- ASRS Report Number: Accession Number: 1846365
- Human Factors: Communication Breakdown
- Human Factors: Confusion
- Human Factors: Distraction
- Human Factors: Situational Awareness
- Human Factors: Training / Qualification
- Human Factors: Troubleshooting
- Human Factors: Workload
- Human Factors: Time Pressure
- Communication Breakdown: Party 1: ATC
- Communication Breakdown: Party 2: ATC

**Events**
- Anomaly: ATC Issue: All Types
- Anomaly: Deviation - Track / Heading: All Types
- Anomaly: Deviation / Discrepancy - Procedural: Clearance
- Detector: Person: Air Traffic Control
- When Detected: In-flight
- Result: Air Traffic Control: Provided Assistance

**Assessments**
- Contributing Factors / Situations: Environment - Non Weather Related
- Contributing Factors / Situations: Human Factors
- Contributing Factors / Situations: Procedure
- Primary Problem: Procedure
Narrative: 1

I was training a D-side trainee at the time. Aircraft X filed ZZZ...APA. 20 minutes prior to entering the airspace of Denver Approach, my trainee APREQed the Medevac direct APA (entering their airspace near the arrival fix TBARR) for Medevac status and to avoid weather over LOA routing. We were told "unable for now" and that they'd call us back. A few minutes later, someone called back and said that the request is denied. We were told to put them over LOA routing. His words were quick and mumbled, so I asked him to repeat that he wanted us to put the Medevac over longer routing. He said that he wanted the aircraft over LOA routing and then he said something about us "signing" the LOA document that requires this routing for aircraft. I said that this is why we are calling for an APREQ. That person had already hung up the line by this point. He never gave his initials. There were NO other aircraft inbound over the northwest arrival gate and no competing aircraft over the LOA routing. The closest DEN arrival was going to be approximately 8 minutes away from TBARR when Aircraft X entered their airspace, with no other Denver terminal aircraft arriving from the northwest. There were moderately low ceilings in the area along with rain, so I imagine that the skydive aircraft at LMO weren't even going up (if that's a worry for them). This is a systemic issue. Denials on direct routing for Medevac aircraft are occurring multiple times a day. Not allowing priority for Medevac aircraft is against the 7110.65. It is also contrary to the compassion of most humans. We (not me personally) have spoken with several pilots and they are filing Medevac status for flights only when they need it. The controllers at Denver Center have been informed that the management at Denver Approach have told their controllers to not accept any direct routing on Medevac flights. We have actually had a controller state over the recorded line that he would "get in trouble" for approving direct. It is unacceptable for an air traffic facility to have a vendetta against another facility and, subsequently, put people's lives in danger. And it is even more outrageous that people in the role of management are forcing the workforce to potentially endanger people. I could go on and on about how wrong and upsetting these incidents are for us. I can imagine that many reports are being submitted. Something needs to be done.

Synopsis

Denver Center Controller reported an ongoing problem with Denver TRACON not approving direct routing for a MEDEVAC aircraft, to help expedite the aircraft.
**Time / Day**
- Date: 202110
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference
- ATC Facility: D01.TRACON
- State Reference: CO

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: D01
- Make Model Name: Light Transport, Low Wing, 2 Turbojet Eng
- Crew Size.Number Of Crew: 2
- Flight Plan: IFR
- Mission: Ambulance
- Flight Phase: Descent
- Airspace.Class E: ZDV

**Person**
- Location Of Person.Aircraft: X
- Reporter Organization: Government
- Function.Air Traffic Control: Other / Unknown
- Qualification.Air Traffic Control: Fully Certified
- Experience.Air Traffic Control.Time Certified In Pos 1 (yrs): 7
- ASRS Report Number.Accession Number: 1846356
- Human Factors: Communication Breakdown
- Human Factors: Confusion
- Human Factors: Situational Awareness
- Human Factors: Training / Qualification
- Human Factors: Workload
- Human Factors: Time Pressure
- Communication Breakdown.Party 1: ATC
- Communication Breakdown.Party 2: ATC

**Events**
- Anomaly.ATC Issue: All Types
- Anomaly.Deviation - Track / Heading: All Types
- Anomaly.Deviation / Discrepancy - Procedural: Clearance
- Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
- Detector.Person: Air Traffic Control
- When Detected: In-flight
- Result.Air Traffic Control: Separated Traffic
- Result.Air Traffic Control: Provided Assistance

**Assessments**
- Contributing Factors / Situations: Human Factors
- Contributing Factors / Situations: Procedure
- Primary Problem: Procedure
Narrative: 1

Aircraft X was a MEDEVAC aircraft arriving APA. ZDV initiated a "Medical Emergency" for this aircraft to try to force this aircraft direct to APA. Sector 27 at ZDV coordinated a "medical emergency" with DR4 without passing any pertinent information either to DR4 or via the phone to the supervisor. Aircraft X checked in with DR4, and the controller asked for more information regarding the emergency, and were informed by the pilot of Aircraft X that they weren't a medical emergency, however there was another actual Medical emergency on the previous frequency (Aircraft Y arriving DEN). ZDV regularly misapplies the intent of priority handling of MEDEVAC aircraft to allow the aircraft to proceed direct destination, and out of the traffic management initiatives involved at the destination airport. We aren't sure whether the Sector 27 controller confused the two medical aircraft, or they were willfully disregarding LOA procedures and TMI's. We have discussed MEDEVAC handling at length with ZDV and stated that their interpretation of what priority handling means is different in a terminal environment that it may be in a center environment. Often times, the best place for ALL aircraft, including MEDEVAC is on the appropriate STARS or LOA arrival routings. This allows D01 to more effectively and expeditiously handle all traffic in the terminal environment. This allows for a safer product for all traffic, and often provides MEDEVAC aircraft more expeditious service than direct destination.

Synopsis

Denver TRACON Controller reported a problem associated with Denver Center and how the two facilities work MEDEVAC aircraft.
ACN: 1841860 (5 of 50)

Time / Day
Date: 202109
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Angle.Radial: 090
Relative Position.Distance.Nautical Miles: 2
Altitude.AGL.Single Value: 100

Environment
Flight Conditions: VMC
Weather Elements / Visibility: Turbulence
Light: Night

Aircraft: 1
Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: MBB-BK 117 All Series
Operating Under FAR Part: Part 135
Flight Plan: None
Mission: Ambulance
Flight Phase: Parked
Route In Use: Visual Approach

Aircraft: 2
Reference: Y
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: EC135
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 135
Flight Plan: None
Mission: Ambulance
Flight Phase: Final Approach
Route In Use: Visual Approach
Airspace.Class E: ZZZ

Person
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
Experience.Flight Crew.Total: 3500
I was the PIC of the BK117, shutdown on top of the ZZZ helipad. I began my overnight shift at XA:00 that evening. After delivering a patient to the hospital, I was awaiting the medical crew’s return from delivering the patient to the hospital. Two of the medical crew had returned to the helicopter to configure the medical equipment for the return flight to our home base of ZZZ1. As I was waiting for the crew to finish, I noticed an approaching helicopter from the southeast direction. It has been confirmed this helicopter is operated by Company X. I checked my company pilot phone to see if I had missed a call from our organic dispatch/communications (comm) center alerting me to an incoming Air Ambulance. This is common practice amongst the dispatch/communication centers of Air Ambulance companies in order to alert pilots of incoming aircraft in order to vacate the helipad and reposition to either an airborne holding area or to a ground holding area at ZZZ2. I did not have a missed call so I called [my company] comm center to inquire about the helicopter approaching and now in a downwind leg (south to north) to the helipad. [They] had no knowledge of the approaching helicopter. This is the first breakdown in the chain of events and the primary contributing factor. The Company X dispatch failed to alert [my] communications center of the inbound aircraft to the ZZZ Helipad. Additional contributing factor: a helipad camera exists at the hospital entrance doors adjacent to the helipad always focused on the helipad. Typically, ZZZ hospital Security personnel monitor the helipad camera when helicopters are inbound and/or shutdown on the helipad. Reportedly, the ZZZ Hospital Security team was not alerted to the inbound H135 Air Ambulance. During my phone call to [my company] comm center, the H135 continued it's approach from downwind to base leg and to final approach. It became quite apparent that the PIC did not see the helicopter shutdown on the pad. As the helicopter continued the approach, I began to quickly move from the helipad to the catwalk connecting the pad to the hospital and yelled at the two medical crew-members to get off the helipad. The H135 continued it's final approach for landing as the medical crew also quickly vacated the helipad. [My company] comm center phone calls are recorded, without exception for this phone call. The urgency in my voice alerting the medical crew can clearly be heard on the recording as I believed our safety was compromised. The H135 began a wave-off
maneuver at approximately 300 meters north of the helipad and 50-75 above helipad elevation (100 feet AGL). As the H135 continued its wave-off, the PIC side-stepped to the east to avoid low overflight of my shutdown helicopter on the helipad. The H135 PIC continued the wave-off over the adjacent hospital building and established an airborne holding area to the southeast. It is unknown if the H135 PIC was aided with Night Vision Goggles (NVGs) at this point in the evening. Official sunset had occurred at approximately XA:15 that evening and end of evening civil or nautical twilight had not yet occurred. I also do not know the typical procedures for this specific PIC or operator concerning NVG practices flying into/out of metropolitan areas. In my experience, I remain aided when landing to metropolitan hospital helipads as an aid to identifying hazards that I may not be able to visually acquire unaided. An additional unknown element is whether or not ZZZ2 ATC tower advised the H135 PIC of the presence of a helicopter shutdown on the ZZZ Hospital helipad. In my experience, the ZZZ2 Tower frequently advises me if a helicopter is on the helipad after my initial Tower check-in. I do know, however, that there was communication between the H135 PIC and the ZZZ2 Tower at some point during the incident. Upon powering on my avionics during my start sequence, I overheard the H135 PIC communicating with the ZZZ2 Tower of my presence on the helipad. Finally, though this appears to be a communication breakdown in normal operating procedures, I believe this incident could have been avoided even with the multiple occurrences of communication breakdown if the helipad had Pilot Controlled Lighting (PCL) available for incoming Air Ambulance Helicopters. Currently, the lighting system is only controlled by a rheostat (timing only, not intensity) from inside the hospital on the helipad floor leading to the helipad.

**Synopsis**

Air ambulance helicopter pilot reported that prior to engine start and while waiting to depart the hospital helipad, a critical ground conflict occurred when another helicopter attempted to land at the same location. The pilot eventually aborted the approach and entered holding. The reporter cited as contributing that dispatch had not notified the crew on the ground of the inbound helicopter.
ACN: 1839849 (6 of 50)

**Time / Day**
- Date: 202109
- Local Time Of Day: 1201-1800

**Environment**
- Flight Conditions: VMC
- Light: Daylight

**Aircraft**
- Reference: X
- ATC / Advisory.Ramp: ZZZ
- Aircraft Operator: Corporate
- Make Model Name: Airbus Undifferentiated UAS
- Operating Under FAR Part: Part 91
- Mission: Ambulance
- Flight Phase: Parked
- Maintenance Status.Maintenance Deferred: N
- Maintenance Status.Records Complete: N
- Maintenance Status.Released For Service: N
- Maintenance Status.Required / Correct Doc On Board: N
- Maintenance Status.Maintenance Type: Scheduled Maintenance
- Maintenance Status.Maintenance Items Involved: Inspection
- Maintenance Status.Maintenance Items Involved: Installation
- Maintenance Status.Maintenance Items Involved: Testing
- Maintenance Status.Maintenance Items Involved: Work Cards

**Component**
- Aircraft Component: Tail Rotor Blade
- Aircraft Reference: X
- Problem: Improperly Operated

**Person**
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Corporate
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Rotorcraft
- ASRS Report Number.Accession Number: 1839849
- Human Factors: Situational Awareness
- Human Factors: Troubleshooting
- Human Factors: Communication Breakdown
- Human Factors: Confusion
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: Maintenance
Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Maintenance
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : Routine Inspection
Result.General : Maintenance Action
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Overcame Equipment Problem
Result.Aircraft : Aircraft Damaged

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

Narrative: 1
Maintenance did a tail rotor inspection that morning, and needed me to do the run up to check the balance afterwards. They had done an RII (Required Inspection Item) inspection on the work. I did my preflight walk around and looked at the cowlings, latches, tape, wires, and track and balance equipment. I climbed in and started it up, running engine #1 up to idle. Since it was a track and balance, I expected it to not be a normal feeling tail rotor, but this was more vibrations than I would have expected. The maintainer said to shut it down and not even start the other engine. We shut the helicopter down, and used the brake to stop the blades. Upon inspection, one of the tail rotor blades had been installed facing the wrong direction In the future, I will do more than a normal preflight walk-around following maintenance even if it had an RII. I knew the blades had come off, I held the blade while he was on the ladder. Why I didn't look at the directional of the rotors when I looked at them, I don't know aside from complacency and reliance on the RII. To ensure this won't happen again, I will be sure to verify all aspects of the work that was done with verbal confirmation with the maintainer present.

Synopsis
Captain reported that during a post maintenance engine run up the helicopter experienced excessive vibration and was shut down. It was discovered that the tail rotor blades had been installed backwards.
**Time / Day**

Date : 202106
Local Time Of Day : 1201-1800

**Place**
Locale Reference.ATC Facility : OSU.Tower
State Reference : OH
Relative Position.Angle.Radial : 090
Relative Position.Distance.Nautical Miles : .25
Altitude.AGL.Single Value : 600

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

**Aircraft : 1**
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 : Final Approach
Route In Use : Visual Approach
Airspace.Class D : OSU

**Aircraft : 2**
Reference : Y
Make Model Name : UAV: Unpiloted Aerial Vehicle
Airspace.Class D : OSU
Flying In / Near / Over (UAS) : Airport / Aerodrome / Heliport
Flying In / Near / Over (UAS) : Aircraft / UAS
Number of UAS Being Controlled (UAS).Number of UAS : 1

**Person**
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Single Pilot
Function.Flight Crew : Captain
Qualification.Flight Crew : Rotorcraft
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 6700
Experience.Flight Crew.Last 90 Days : 25
Experience.Flight Crew.Type : 1100
Events
Anomaly.Airspace Violation : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Diverted
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification

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

Narrative: 1
Was on final approach into OSU landing to runway 27L. On final at less than .25 NM from end of runway, encountered a drone approximately 1 foot X 1 foot at same altitude and had to veer to right to avoid strike. As soon as I realized what it was, I contacted tower and notified them of location and all data that I could pass on incident.

Synopsis
Helicopter pilot on final approach into Class D airport took evasive action to avoid a collision with a UAS. The pilot notified ATC.
Time / Day
Date: 202106
Local Time Of Day: 1801-2400

Place
Locale Reference.ATC Facility: HNL.Tower
State Reference: HI

Environment
Weather Elements / Visibility: Visibility: 10

Aircraft : 1
Reference: X
ATC / Advisory.Tower: HNL
Aircraft Operator: Personal
Make Model Name: Small Aircraft, High Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Taxi

Aircraft : 2
Reference: Y
ATC / Advisory.Tower: HNL
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew: 2
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Takeoff / Launch
Airspace.Class B: HNL

Person
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 317.3
Experience.Flight Crew.Last 90 Days: 30
Experience.Flight Crew.Type: 317.3
ASRS Report Number.Accession Number: 1815691
Human Factors: Situational Awareness

Events
Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
Miss Distance.Vertical : 30
When Detected : Taxi
Result.General : None Reported / Taken

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

Narrative: 1

[We] departed HNL for a training flight. This was both a biannual flight review and a night currency flight to be shared between us. It was an uneventful flight with training completed as needed. Upon returning to HNL and accordance with the Approach Controllers, we held over Ford Island for sequencing. We were then given clearance to land on Runway 8L. The landing was uneventful. Taxi instructions were then given to us - turn right on taxiway G, left on B, right on E, and hold short of Runway 4L, the left seat pilot read back the instructions verbatim and confirmed the hold short instructions. We began to taxi, and then I took the the flight controls midway down Bravo. The intersection of taxiway B and E is listed as Hotspot 3 on the HNL Airport Diagram. Before we arrived at E, Tower made another call to confirm the hold short instructions and they were read back correctly, again from the left seat pilot. As we made the turn from B to E, we did not see the Runway 4L hold short lines and unknowingly taxied onto an active runway. This near 30 feet horizontal runway incursion put us directly in front of a departing [aircraft]. The [aircraft] was at rotation speed when they spotted us in front of them and [they] were able to lift off and bank the airplane to the right, overflying us. I had control of the aircraft from the right seat at the time, but the responsibilities between the two of us were unclear and controls were exchanged on the ground, but radio were handled from the other pilot. Also adding to the confusion was a lack of experience and recency with night operations in general, night operations at HNL, never having landed on runway 8L or taxied from 8L - I only had one other night flight at HNL X months prior. All of these factors contributed significantly to this inadvertent runway incursion and near miss.

Synopsis
Light aircraft pilot reported a runway incursion at HNL that resulted in a conflict with a departing aircraft that was able to climb safely above them.
**Time / Day**
Date: 202106
Local Time Of Day: 1201-1800

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

**Environment**
Flight Conditions: Marginal
Weather Elements / Visibility: Thunderstorm
Light: Daylight

**Aircraft : 1**
Reference: X
ATC / Advisory.TRACON: ZZZ
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: Final Approach
Route In Use: None
Airspace. Class E: ZZZ

**Aircraft : 2**
Reference: Y
ATC / Advisory.TRACON: ZZZ
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Mission: Ambulance
Flight Phase: Cruise
Airspace. Class E: ZZZ

**Person**
Location Of Person. Facility: ZZZ.TWR
Reporter Organization: Government
Function. Air Traffic Control: Local
Qualification. Air Traffic Control: Fully Certified
Experience. Air Traffic Control. Time Certified In Pos 1 (yrs): 3
ASRS Report Number. Accession Number: 1814160
Human Factors: Communication Breakdown
Human Factors: Time Pressure
Human Factors: Workload
Human Factors: Troubleshooting
Communication Breakdown. Party1: ATC
Communication Breakdown. Party2: ATC

**Events**
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Result.General : Flight Cancelled / Delayed
Result.General : Physical Injury / Incapacitation
Result.Air Traffic Control : Provided Assistance

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

Narrative: 1
I was listening to radar north from the Local control position due to weather surrounding the airport and seeing a medevac holding. There were 2 medevacs at the same time one with a heart transplant patient on-board (Aircraft X) and the other with the heart transplant team (Aircraft Y). Restricted Areas were hot Surface to 20,000 feet and the only clear air weather was in the Restricted Areas. I heard the Radar Controller coordinating with Center repeatedly about getting a hold of range control to try to get Aircraft Y through so they didn't have to divert because the ambulance was already waiting at ZZZ. Center stated good luck coordinating with range control because they had been trying and range control was refusing to allow the Medevac through. Aircraft X was trapped north of the line of weather and unable to get to ZZZ in a timely manner. The unwillingness of range control to stop ground training to allow the Medevacs through during 2 life critical flights caused unnecessary delay to the heart transplant patient and transplant team. Procedures should be put in place for coordination to recall the airspace due to weather, emergencies, or operational need. I've been numerous other locations where the above conditions warranted recall of Special Use Airspace for safety of flight however here there is extreme disparity between the Army's use of the Restricted Airspace and the FAA's need/ability to recall said airspace.

Synopsis
A Tower Local Controller who was monitoring the Radar Controller reported the Radar Controller could not get approval from Special Use Airspace range controllers for a medevac flight to fly through their airspace to avoid weather causing a delay for the time critical medevac aircraft.
ACN: 1804752 (10 of 50)

Time / Day
Date: 202105
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: MYF.Airport
State Reference: CA
Altitude.MSL.Single Value: 2000

Environment
Flight Conditions: Marginal
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.Tower: MYF
ATC / Advisory.TRACON: SCT
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: Ambulance
Nav In Use: GPS
Flight Phase: Final Approach
Route In Use.STAR: MYF RNAV28R
Airspace.Class B: SAN
Airspace.Class D: MYF

Aircraft: 2
Reference: Y
ATC / Advisory.Tower: MYF
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Flight Phase: Landing
Airspace.Class D: MYF

Component
Aircraft Component: Autopilot
Aircraft Reference: X
Problem: Malfunctioning

Person
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
Qualification: Flight Crew: Instrument
ASRS Report Number: Accession Number: 1804752
Human Factors: Situational Awareness
Human Factors: Distraction
Human Factors: Confusion

Events
Anomaly. Aircraft Equipment Problem: Less Severe
Anomaly. Conflict: Ground Conflict, Less Severe
Anomaly. Deviation - Altitude: Excursion From Assigned Altitude
Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly. Deviation / Discrepancy - Procedural: Clearance
Anomaly. Inflight Event / Encounter: CFTT / CFIT
Detector. Person: Air Traffic Control
Result. Flight Crew: Executed Go Around / Missed Approach
Result. Air Traffic Control: Issued New Clearance

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

Narrative: 1
MYF RNAV28R approach, circle to land 23. On final approach between fixes NESTY and PENNY aircraft descended to 2,000 feet prior to 2,500, the descent minimum at PENNY. MYF tower controller issued altitude alert and I corrected back to 2,500 feet. Continued approach and airport was visual, above minimums. Circed to 23, tower was trying to clear previous arrived aircraft off runway and I had to execute a missed approach. Tower stated to execute missed approach procedures. I looked at chart and it was to fly straight to 3,000. Raised gear and flaps and climbed to 3,000 feet. At 1,000 feet I engaged autopilot and contacted approach on a new frequency. Autopilot was having the aircraft descend and I disengaged autopilot and it was seemed to be still engaged and I struggled with controls to climb again. Departure control commanded that I climb to 3,000 and I stated that I seemed to be having trim issues as I was fighting to climb. I continued to the headings that were issued by Approach and returned for another approach without further incident. Suggest not using the autopilot until all desired settings are set, and review of missed approach procedures for circling approaches since they are not the same as depicted on the missed approach plate.

Synopsis
Pilot reported receiving a low-altitude alert from tower after descending below intermediate approach altitude.
ACN: 1803841 (11 of 50)

Time / Day
Date: 202104
Local Time Of Day: 1801-2400

Place
Altitude.AGL.Single Value: 0

Environment
Light: Daylight

Aircraft
Reference: X
Aircraft Operator: Corporate
Make Model Name: EC135
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 135
Mission: Ambulance
Flight Phase: Parked

Person
Location Of Person: Hangar / Base
Reporter Organization: Corporate
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 4500
Experience.Flight Crew.Last 90 Days: 45
Experience.Flight Crew.Type: 650
ASRS Report Number.Accession Number: 1803841
Human Factors: Communication Breakdown
Human Factors: Confusion
Human Factors: Situational Awareness
Human Factors: Distraction
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Other

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Other / Unknown
Anomaly.Deviation / Discrepancy - Procedural: FAR
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Detector.Person: Maintenance
Detector.Person: Flight Crew
When Detected: Pre-flight

Assessments
Contributing Factors / Situations: Company Policy
Contributing Factors / Situations: Human Factors
Contributing Factors / Situations: Software and Automation
Contributing Factors / Situations : Manuals
Primary Problem : Manuals

**Narrative: 1**

During an aircraft inspection, mechanics discovered that there were three Rotorcraft Flight Manual (RFM) revisions that had not been inserted into the aircraft RFM. It was further discovered that two of the missing revisions should have been put into the aircraft prior to our base receiving this aircraft. This aircraft was put into service at our base on Month X, 2020 so the RFM was not current for us since that date. The Pilot in Command (PIC) is responsible to ensure that a current RFM is on board the aircraft so all four PIC’s did not do that when we received the aircraft and the aircraft was flown for almost 7 months. When we did discover that the revisions were missing, we were able to get the revisions emailed to us from an Airbus Tech Representative and they have since been inserted into the aircraft. After doing some research on why these revisions were not inserted, I feel there are larger issues that contributed to this. Pilots used to have access to software so the RFM revision status could be checked. We no longer have access to [the] software to the best of my knowledge. Base mechanics used to have access to it so they could determine revision status and make insertions when it came up as a part of their inspections. They no longer have access to the best of my knowledge. Are revisions available on TIPI (Technical Information Publication on Internet)? Do base pilots and/or mechanics have access to TIPI. Should TIPI be covered more thoroughly in ground school? I do not believe that the newer pilots to our base know what TIPI is. When we received this aircraft in Month 2020, there was no address update for the new aircraft location made to Company or Airbus. I do not know who is responsible to make this address change. That address update request has now been made. When I have done revision updates in the past for other aircraft, the revisions were always mailed to the base and inserted. Without the correct address update, we did not receive revisions in the mail. Where were the revisions mailed prior to our base receiving the aircraft? Were they mailed to another base where the aircraft was located. Was there an attempt made to make the insertions then and/or forward the revisions to our base?

**Synopsis**

An Air Ambulance Helicopter pilot reported that their helicopters have been flying without current revisions to the Rotorcraft Flight Manual which had not been received by the company. The reporter stated revisions used to be available through software tools which are no longer available to pilots or maintenance technicians.
**ACN: 1802638 (12 of 50)**

**Time / Day**
- Date: 202104
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference.Airport: EUG.Airport
- State Reference: OR
- Altitude.MSL.Single Value: 2000

**Aircraft : 1**
- Reference: X
- ATC / Advisory.TRACON: EUG
- Aircraft Operator: Air Carrier
- Make Model Name: Commercial Fixed Wing
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Descent
- Route In Use.Other
- Airspace.Class D: EUG

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.TRACON: EUG
- Aircraft Operator.Other
- Make Model Name: Heli
- copter
- Crew Size.Number Of Crew: 2
- Flight Plan: VFR
- Mission: Ambulance
- Flight Phase: Cruise
- Route In Use: None
- Airspace.Class D: EUG

**Person**
- Reporter Organization: Government
- Function.Air Traffic Control: Approach
- Qualification.Air Traffic Control: Fully Certified
- Experience.Air Traffic Control.Time Certified In Pos 1 (yrs): 5
- ASRS Report Number.Accession Number: 1802638
- Human Factors: Situational Awareness

**Events**
- Anomaly.Airspace Violation: All Types
- Anomaly.ATC Issue: All Types
- Anomaly.Conflict: Airborne Conflict
- Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
- Detector.Person: Air Traffic Control
- Miss Distance.Vertical: 500
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued Advisory / Alert

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

Narrative: 1
Aircraft X was inbound on the RNAV Runway 34L approach. After they switched to my frequency, I issued traffic at their 10 o'clock and 10 NM eastbound. I was not talking to the VFR traffic that was crossing the approach path for Runways 34L and 34R. The traffic (Aircraft Y) called me up when they were about 2 NM from Aircraft X on a converging path and lower altitude. Aircraft Y was about 1 NM south of the EUG Class D. While they were about 500 feet below Aircraft X, and said they had Aircraft X in sight, it seemed to have the potential to cause an RA for the descent of Aircraft X. Aircraft X later called Aircraft Y in sight and passed 500 feet above them. Had the timing or weather been slightly worse, the situation could be much more dangerous. EUG should have a Class C airspace for the purpose of requiring VFR aircraft to be in contact with ATC while crossing the approach and departure paths at conflicting altitudes.

Synopsis
EUG TRACON Controller reported an airborne conflict between an air carrier aircraft and a VFR helicopter. Controller suggested EUG should be a Class C airport requiring VFR aircraft to be in contact with ATC while crossing air carrier approach/departure paths.
ACN: 1799047 (13 of 50)

Time / Day
Date: 202104
Local Time Of Day: 1801-2400

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Relative Position.Distance.Nautical Miles: 10
Altitude.MSL.Single Value: 10000

Environment
Flight Conditions: IMC
Weather Elements / Visibility.Visibility: 10
Light: Daylight
Ceiling.Single Value: 2700

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
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: Initial Approach
Route In Use: Direct

Person
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Contracted Service
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Total: 8500
Experience.Flight Crew.Last 90 Days: 67
Experience.Flight Crew.Type: 1500
ASRS Report Number.Accession Number: 1799047
Human Factors: Situational Awareness
Human Factors: Human-Machine Interface

Events
Anomaly.Deviation - Altitude: Overshoot
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: Clearance
Assessments

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

Narrative: 1

I was told to cross ZZZZZ at or above 12,300 feet and I was cleared for the RNAV (GPS) Approach. As I was descending past ZZZZZ I set my altitude at 10,000 feet. I should have set 11,800 feet per the approach chart, which is the altitude between ZZZZZ and ZZZZZ1. After ZZZZZ1 it is 10,000 feet until ZZZZZ2. About 10 to 15 miles from ZZZZZ1, Approach asked me to report ZZZZZ1. This seemed like an odd request, so I looked at the chart to make sure where ZZZZZ1 was and realized the error in altitude. As I started to initiate a climb, the TAWS (Terrain Alert Warning) activated and I got the terrain warning. The rest of the approach was normal after that. I think that I had 11,800 [ft.] set before ZZZZZ because the altitude I was descending from and my rate of descent was going to have me cross ZZZZZ well above 12,300 [ft.]. Then after crossing ZZZZZ I set 10,000 [ft.] because I was mentally one step ahead of where I actually was. While I was being proactive and efficient, I did not double check and confirm where I was on the approach. While I wasn't fatigued or distracted, I think complacency played a role due to the nice weather and the length of the flight.

Synopsis

A Medevac pilot reported they set too low an altitude for the approach procedure and received a terrain warning alert.
Time / Day
Date: 202102
Local Time Of Day: 1801-2400

Place
Locale Reference. ATC Facility: SFO. Tower
State Reference: CA

Environment
Flight Conditions: IMC

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

Person
Location Of Person. Aircraft: X
Location Of Person. Facility: SFO. TWR
Reporter Organization: Government
Function. Air Traffic Control: Flight Data / Clearance Delivery
Function. Air Traffic Control: Supervisor / CIC
Qualification. Air Traffic Control: Fully Certified
Experience. Air Traffic Control. Time Certified In Pos 1 (yrs): 21
ASRS Report Number. Accession Number: 1790830
Human Factors: Distraction
Human Factors: Situational Awareness
Human Factors: Confusion

Events
Anomaly. ATC Issue: All Types
Anomaly. Deviation - Track / Heading: All Types
Anomaly. Deviation / Discrepancy - Procedural: Clearance
Anomaly. Inflight Event / Encounter: Weather / Turbulence
Anomaly. Inflight Event / Encounter: CFTT / CFIT
Detector. Person: Air Traffic Control
When Detected: In-flight

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

**Narrative: 1**

Aircraft X called Local Control for departure IFR. The aircraft was cleared via the SID and this was reiterated at Local Control when they were released. With their release, Local Control also advised them to remain north of the runway for an aircraft rolling out as well as the next arrival. The aircraft departed and was transferred to TRACON. I observed an unsafe proximity to terrain as this aircraft was climbing from 800 ft. to 900 ft. on the update when it grabbed my attention. The aircraft was approximately 3 miles northwest of the airport and approaching the hillside. I called over to the coordinator for the two departure sectors and brought their attention to the aircraft and asked if they check on them. This seemed to startle the coordinator who said they would check. About twenty seconds later the Low Altitude Alert went off showing 1,100 ft. and I can only assume Aircraft X was IMC as I could not see them out of the window. Still progressing towards the hillside. The aircraft then began to turn to the west and away from the hillside. The coordinator called back, which goes directly to Local Control, and said the pilot understood they were to remain north of the course. Local Control explained what they had told the aircraft and all was back to normal. With the wind we were having they would have drifted north a little anyway, but this was a lot of drifting, so this statement made sense. Around this time, the Supervisor came back, as I was starting an incident report. I called TRACON Supervisor and asked if they were filing anything on this event. They said no because there is no climb gradient on the SID. But there is and I do not believe this aircraft was meeting it. I left it at that and said I was filing a report. When I filled out the report I entered 800 ft. for the required and observed altitudes because that was the first altitude I saw. The pilot should have understood what was issued and to not overfly the runway. I do not know if this would be considered a Pilot Deviation, but I have a hunch it was: The vector SID has a required climb gradient. They were near that, but I do not believe they were legally meeting it and off course.

**Synopsis**

Tower Controller in Charge reported they observed a helicopter deviate from its assigned route and did not climb in accordance with SID climb requirements and flew below the Minimum Vectoring Altitude.
ACN: 1790417 (15 of 50)

Time / Day
Date: 202102
Local Time Of Day: 0001-0600

Place
Locale Reference.ATC Facility: ZLA.ARTCC
State Reference: CA
Altitude.MSL.Single Value: 8000

Environment
Flight Conditions: VMC
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: ZLA

Person
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Contracted Service
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Rotorcraft
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1790417
Human Factors: Time Pressure
Human Factors: Situational Awareness

Events
Anomaly.Inflight Event / Encounter: Weather / Turbulence
Anomaly.Inflight Event / Encounter: VFR In IMC
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Became Reoriented

Assessments
Contributing Factors / Situations: Company Policy
Contributing Factors / Situations: Human Factors
Contributing Factors / Situations : Weather
Primary Problem : Weather

**Narrative: 1**

When accepting the flight the Wx (Weather) report at base/sending hospital was 10 sm and clear. Wx at receiving hospital was 6 sm and clear. Although cameras showed haze down the mountain I was confident with the visibility reported and knew that the sun set made it look worse. Descending down the mountain the layer of haze did look more dense than forecasted and arrived at receiving hospital without issues. I checked all weather before return back to base and all were still reported the same. Now it was fully dark and cameras gave a clear view of the basin. I chose the return leg through ZZZ as this gives a good indication of visibility due to the lights up the mountain and all the way. Due to 0% moon there was no reference than the lights on the ground. I climbed to 8,000 ft. which provided proper clearance along that flight path. From ZZZ I could see the lights at the airport from about 10 sm. When I got to ZZZ1 valley the visibility rapidly decreased and within seconds we were IMC. I started my climb to about 9,000 ft. and because my crew did a fantastic job immediately giving me report on visibility left and right, I made a left turn which got us out of the clouds fairly quickly. My crew kept on briefing me their view/visibility on both sides which got us back on track on the north side of the lake. Here we could see the haze/fog/clouds spilling through and over the south mountain range. From that position we had a clear path to the airport and landed without further incident. Weather reporting in our area is spotty. We have wx reporting up in the mountain at the airport and down the mountain at two other locations. The weather 'out of control' factor here is the mountain ranges. There are several tools like cameras that supply information and you make your best judgment; but if the weather is very dynamic you can be caught by surprise like we did on this incident. The additional factor of 'no-moon illumination' added to the fact that we did not see the forecasted clouds rolling in. The 'in-control' weather factor here was that I could have been severely cautious and decline the flight on the haze shown on the cameras. Although I kept positive control over the aircraft when initiating IIMC [Inadvertent IMC] protocol I do want to mention that an autopilot would be a great tool in circumstances like this. When practicing the IIMC procedures in the SIM I am spoiled with the situational awareness and added 'second pilot' of the autopilot. Due to the fact that we are dealing with mountain obscuration and often weather that is not reported and can only be identified with visual cues, we should be first in line for a helicopter with these kind of capabilities.

**Synopsis**

Medical transport helicopter pilot reported inadvertent IMC caused unforecast mountain obscuration.
**Time / Day**

Date: 202011
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 400

**Environment**

Flight Conditions: VMC

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Corporate
Make Model Name: Learjet 35
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Climb
Flight Phase: Initial Climb
Airspace.Class D: ZZZ

**Person**

Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiflight
ASRS Report Number.Accession Number: 1784664
Human Factors: Workload
Human Factors: Situational Awareness

**Events**

Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Anomaly.Deviation / Discrepancy - Procedural: Weight And Balance
Anomaly.Deviation / Discrepancy - Procedural: Clearance
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: Maintenance Action
Result.General: Flight Cancelled / Delayed
Result.Flight Crew: Landed in Emergency Condition
Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
During initial climb out (400 or 500 ft.) we heard a call from Medical saying that 'something's burning'. I looked behind and noticed the cabin was beginning to fill with a smokey hazy layer. The temperature in the airplane had increased and now the smoke was reaching the cockpit. I reset both bleed air valves in case we had a stuck valve, but this did not change anything. I told FO (First Officer) to turn off all fans in case that is the cause. I looked back again and I could visible see the smoke rising out of the rear right wall panel. We stopped the climb at 2,500 ft., [advised ATC] and I made the decision to return back to ZZZ. I assumed control of the airplane and radios while FO completed checklist and set us up on the approach and calculated the weight of the airplane. He advised me that we were currently 500 lbs. overweight, I made the decision to still continue to the airport as I did not know the cause of the smoke and did not want to waste any time burning off extra fuel. We ultimately made a safe left base visual approach and landed 300 lbs. overweight. We were able to taxi into the ramp and shutdown and safely exited the airplane. We followed checklist and [Company] SOP.

Synopsis
Learjet-35 Captain reported a fumes event during climb resulting in a return to the departure airport.
ACN: 1784603

Time / Day
Date: 201906
Local Time Of Day: 0601-1200

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

Environment
Flight Conditions: VMC

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Corporate
Make Model Name: Learjet 35
Crew Size. Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Climb
Flight Phase: Initial Climb
Airspace.Class E: ZZZ

Person
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number. Accession Number: 1784603
Human Factors: Situational Awareness

Events
Anomaly. Aircraft Equipment Problem: Less Severe
Anomaly. Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
Detector. Person: Flight Crew
When Detected: In-flight
Result. General: Flight Cancelled / Delayed
Result. Flight Crew: Landed As Precaution
Result. Flight Crew: Returned To Departure Airport
Result. Flight Crew: Requested ATC Assistance / Clarification
Result. Air Traffic Control: Provided Assistance

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

**Narrative: 1**

While on initial climb out, myself and the medical crew noticed a burning smell coming from the back of the cabin. I turned off all the blowers and A/C (Air Conditioning) thinking as these might have been the cause, continuing to fly for some more time, it was evident that the smell hadn't gone away. I made the decision to turn back to ZZZ and swap planes. We did not need to dump fuel, and landed under max landing weight.

**Synopsis**

Learjet-35 Captain reported a cabin fumes event resulting in a return to the departure airport.
Time / Day
Date: 202012
Local Time Of Day: 0001-0600

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

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: Parked

Person
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: 1774772
Human Factors: Time Pressure
Human Factors: Other / Unknown
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Other

Events
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Flight Crew
Result.General: None Reported / Taken

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

Narrative: 1
Upon landing on first leg of flight to pick up [a] COVID-19 patient from sending facility I realized I had not received the approved paperwork. After shutting down the aircraft, I immediately sent the manifest and risk for approval. I then called Operations to explain and get into compliance. Once in compliance I called my Supervisor.
Synopsis

Helicopter pilot reported not having the correct documents to transport a COVID-19 patient.
ACN: 1773033 (19 of 50)

Time / Day
Date: 202011
Local Time Of Day: 0001-0600

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

Environment
Flight Conditions: IMC
Weather Elements / Visibility: Fog
Weather Elements / Visibility.Single Value: 1
Light: Night
Ceiling.Single Value: 400
RVR.Single Value: 2400

Aircraft
Reference: X
ATC / Advisory.TRACON: 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
Flight Phase: Landing
Route In Use: Direct
Airspace.Class C: ZZZ

Person
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Total: 3500
Experience.Flight Crew.Last 90 Days: 100
ASRS Report Number.Accession Number: 1773033
Human Factors: Physiological - Other
Human Factors: Situational Awareness
Human Factors: Time Pressure
Human Factors: Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Other

Events
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Result.General : None Reported / Taken

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

Narrative: 1
During a Medevac flight to ZZZ1 from ZZZ I initiated an approach with less than the required RVR to do so. Our return flight had been delayed by 4 hours because the patient was very difficult to stabilize. I had checked the weather before departing ZZZ and it was above the minimums that were required for the approach. While enroute to ZZZ1, I acquired the ATIS and found that visibility had decreased to 1/8 mile. The situation at the two nearest options that would allow me to get the hospital was the same. I chose to go to ZZZ2 because it was near enough that we could get the patient to ZZZ1 and the automated weather was well above minimums for the approach. After two attempts at landing in ZZZ2, I realized that the weather was worse than reported there. While I had been maneuvering I was monitoring the conditions at ZZZ1 and they seemed to vary minute by minute. I decided to divert to ZZZ3 since the medic told me we had no time to waste with another approach as he was running low on medication for the patient. When I requested the change to ZZZ3, the controller asked me if I wanted to attempt an approach to ZZZ1. After two go around and working on my fifth backup plan, I was desperate to get the plane on the ground and the patient to the hospital. I accepted the clearance and started the approach. I saw the runway lights at 400 ft AGL and the runway at 200 ft AGL. I decided to land. As I was rolling out I noticed that ground visibility was very low and I realized I had landed with less than the required 2400 RVR that I was supposed to have. Contributing factors: I had the weather and forecast from when I left ZZZ1 6 hours prior printed out. I should have reviewed the forecast more thoroughly rather than just checking present conditions before returning to ZZZ1. I did not realize that night that I was getting sick. During the climb out I was queasy and I attributed this to a lack of horizon at night. The next day I had full flu like symptoms that precluded me from working. What I would do differently: I should have asked the medical team where they wanted to go if ZZZ1 did not work out. If I had that we could have all been prepared to go to a different hospital if the ZZZ1 airport did not work.

Synopsis
Air Carrier Captain flying C90 aircraft reported landing below minimums.
**ACN: 1771726** (20 of 50)

**Time / Day**
- Date: 202011
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference: ATC Facility: ZZZ.Tower
- State Reference: US
- Altitude: MSL. Single Value: 1200

**Environment**
- Flight Conditions: VMC
- Light: Night

**Aircraft : 1**
- Reference: X
- ATC / Advisory: Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: Regional Jet 900 (CRJ900)
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Final Approach
- Airspace: Class B: ZZZ

**Aircraft : 2**
- Reference: Y
- ATC / Advisory: Tower: MEM
- Make Model Name: Helicopter
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Mission: Ambulance
- Flight Phase: Takeoff / Launch
- Route In Use: VFR Route
- Airspace: Class B: MEM

**Person : 1**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function: Flight Crew: Captain
- Function: Flight Crew: Pilot Not Flying
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Qualification: Flight Crew: Instrument
- Qualification: Flight Crew: Multiengine
- Experience: Flight Crew: Last 90 Days: 37
- ASRS Report Number: Accession Number: 1771726
- Human Factors: Distraction
After a diversion to our planned alternate we had a routine enroute and descent phase. We contacted Tower on about a 10 mile final. We were approximately 5 miles in trail of a B737, and we heard them check in as well. I overheard tower tell them about a Medevac helicopter who was operating to the east of the airport and transiting to the west. Once we were on about a 5 mile final, tower provided us with a traffic call for the same helicopter. The first call we received was traffic at our 10 o’clock and about three miles, and that the traffic had us in sight and was maintaining visual separation. Due to the lights of the city, I did not see the traffic, and it was not yet showing up on our TCAS.

Inside of a 4 mile final, at approximately 1200 ft. we received a Traffic Alert for the traffic. On TCAS it showed him at 200 ft. above us and inside a mile. I immediately saw the traffic.
visually and told the first officer that I had the traffic in sight. Based on the traffic's track and altitude, I very quickly suspected that we might receive an RA. I instructed the first officer to go slightly below the glide slope to increase our separation. Very shortly after that, at 1050 ft. we received a "DESCEND DESCEND" TCAS Resolution Alert. The First Officer followed the TCAS guidance and I informed ATC. Due to the switch at 1000 ft. to Traffic Alert only we never received a clear of conflict, but we were able to visually identify that we were clear of conflict at about 800 ft. We were one dot low on the glide slope but correcting and all other approach criteria were stable so I quickly asked the First Officer if he felt stable. He responded that he did, so we agreed that we were okay to continue the approach. At our closest point, the helicopter was directly above us and approximately 200 ft. above, leading to a significantly reduced margin of separation.

This event was caused by several factors. The helicopter pilot had us in sight and was maintaining visual separation, but in our opinion, the separation provided was not adequate. I was not able to visually identify the traffic until the Traffic Alert occurred, and at that point there was very little we could do to avoid a loss of separation. I do not believe we should have been sequenced by air traffic control to pass directly underneath the medevac's flight path. After landing I communicated my concerns to tower and he said that once the helicopter reported maintaining Visual Separation, he had no further responsibility to separate us. If that is correct, I believe it is a fundamentally unsafe procedure. In this event it led to us receiving a descending RA at 1000 ft. leaving us with very little maneuvering room. I should have made more of an effort to find the traffic prior to receiving a Traffic Alert, but with the city lights it was difficult. This was at the end of a very high workload, 3 hour blocked flight with significant weather, holding, a diversion, and fuel considerations.

I believe that this type of event could have been prevented with better planning from air traffic control. There was clearly a difference in expectations between the helicopter pilot and us, and the helicopter pilot may have been comfortable with 200 ft. of separation, but we were not.

**Narrative: 2**

We diverted due to weather. On final approach we received a TCAS Resolution Alert due to a medical helicopter crossing the final approach. I was Pilot Flying for the approach. When we received the Traffic Alert, I initially assumed it was an aircraft on a parallel approach. The Pilot Monitoring reported the aircraft in sight. The helicopter had also reported us in sight. Only moments before the Resolution Alert did I realize the aircraft was going to cross directly in front. We received a descending Resolution Alert. I complied with the Resolution Alert. The helicopter passed approximately 200 ft. above. I don't recall ever hearing a clear of conflict call. We descended below 1000 ft. and the TCAS went into Traffic Alert Only mode.

A medical helicopter was crossing approximately 3 mile final at approximately 1200 ft. while we were on approach. I was manually flying a challenging approach due to high winds and did not recognize the threat until a few seconds before the Resolution Alert.

**Synopsis**

CRJ900 flight crew reported 200 ft. of separation with a helicopter on approach.
**ACN: 1770930**  (21 of 50)

**Time / Day**
- Date: 202011

**Place**
- Altitude.AGL.Single Value: 0

**Environment**
- Flight Conditions: VMC
- Light: Dusk

**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: None
- Mission: Ambulance
- Flight Phase: Parked
- Route In Use: None

**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)
- ASRS Report Number.Accession Number: 1770930
- Human Factors: Distraction
- Human Factors: Situational Awareness
- Human Factors: Workload

**Events**
- Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
- Anomaly.Deviation / Discrepancy - Procedural: Maintenance
- Detector.Person: Flight Crew
- When Detected: Pre-flight
- Result.General: None Reported / Taken

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

**Narrative: 1**
I looked at the short term due list just as I got a flight request within minutes of starting my shift. Seen that the power check was over 4 hours out. I looked at this on the computer screen and didn't print out a new copy like I do every day at the start of my shift. Just after our second flight we got a call that our crew from the last shift was COVID-19 Positive. I got the third flight just after this for another team and was trying to figure out if I was at risk and what about the team. Do I go, don't go. Put on all PPE or just a mask. I just forgot about the power check getting close with the two flights in the bag and looking at a long trip. After the last flight I was XX minutes over the engine power check.

After XX years, of this type of flying, this is my first time over flying inspection. Only as good as your last flight. I always print out my fresh list at the start of my shift. I didn't stop and take the time to print off a new one. Looking at the list on the screen is not as good, it's hard to read and easy to miss things. If doing lots of flights make sure you go back and recheck the list and times. I forgot about the inspection and didn't recheck my numbers. Don't rush when you get a call, things get missed or forgot. Print out your lists every time don't just read off the computer screen. Use a hi-lighter marker to mark things getting close. 3-5 hours out from due time is the time to call your maintenance department on the phone and start working a plan.

**Synopsis**

Helicopter Captain reported flying with an overdue engine power check inspection. Reporter cited being distracted after being informed that the crew from the previous shift was COVID-19 positive.
ACN: 1770928

Time / Day
Date: 202010
Local Time Of Day: 0001-0600

Environment
Flight Conditions: VMC
Light: Night

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Helicopter
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 135
Flight Plan: None
Mission: Ambulance
Flight Phase: Landing
Flight Phase: Cruise
Airspace.TFR: 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: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1770928
Human Factors: Distraction
Human Factors: Situational Awareness
Human Factors: Time Pressure

Events
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Air Traffic Control
When Detected.Other
Result.General: None Reported / Taken

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

Narrative: 1
I flew into the boundary and landed with a patient during a TFR without notifying ZZZ TRACON of my departure or route. I was fully aware of the TFR. I read the NOTAM. I had the phone number for ZZZ TRACON on speed dial. I received the notification for the flight via phone and text. The extenuating circumstance that I let allow me to lose situational awareness was when the office told me that this patient was COVID positive. I started concerning myself with securing the proper PPE and the steps necessary to complete the flight. I missed a crucial step of notifying TRACON.

I have been thinking about this since the moment that I was notified. I have flown during many TFRs. On a personal level what I can do is take the time and create printed reminders all around the office. I had briefed the crew to help, however; they were fairly new and were concerned with critical patient care. It is of course my responsibility to make sure all steps are completed before, during and after the flight.

**Synopsis**

Helicopter Captain reported getting distracted and losing situational awareness resulting in a TFR incursion.
Time / Day
Date: 202011
Local Time Of Day: 0601-1200

Place
Locale Reference, ATC Facility: ZDV.ARTCC
State Reference: CO
Altitude, MSL, Single Value: 10000

Environment
Light: Night

Aircraft
Reference: X
ATC / Advisory, Center: ZDV
Aircraft Operator: Air Taxi
Make Model Name: Small Transport, Low Wing, 2 Turbojet Eng
Crew Size, Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Ambulance
Nav In Use: FMS Or FMC
Flight Phase: Final Approach
Route In Use, Other
Airspace, Class E: 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): 6
ASRS Report Number, Accession Number: 1770762
Human Factors: Situational Awareness
Human Factors: Training / Qualification
Human Factors: Confusion

Events
Anomaly, ATC Issue: All Types
Anomaly, Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly, Deviation / Discrepancy - Procedural: Clearance
Anomaly, Inflight Event / Encounter: CFTT / CFIT
Detector, Automation: Air Traffic Control
Detector, Person: Air Traffic Control
When Detected: In-flight

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

**Narrative: 1**

While working the mid shift, I had Aircraft X inbound to an airport. They requested direct to an IAF for the ILS Approach. I had the approach plate pulled up on our display, issued direct to the fix and gave the aircraft approach clearance with a restriction to cross a fix at or above 10,000 ft. The fix is in a 10,000 ft. Minimum IFR Altitude (MIA) so that cleared the terrain. I missed on the approach that the fix has an altitude of 13,000 ft. in an MIA of 10,000 ft., the next fix has an altitude of 12,000 ft. in an MIA of 11,000 ft., and then the next fix has a crossing altitude of 8,200 ft. in a MIA of 9,000 ft. I misinterpreted the information on the approach plate and crossed the aircraft at 10,000 ft. to initiate the approach which was not a safe altitude according to the approach plate or my MIAs as the aircraft descended to 10,000 ft. and proceeded to enter an 11,000 ft. MIA. I believe at this point I had the aircraft switched over to CTAF or shortly after I had the MSAW (Minimum Safe Altitude Warning) alert flashing 11,000 ft. It did not occur to me to double check that the crossing restriction was ok, seeing as how I had cleared the aircraft on the approach.

It is not often that we clear aircraft for the ILS from over that fix due to the fact that Approach works the airspace throughout the day and most of the aircraft arriving at this airport on the midshift come from the east, which we usually give them the arc for the approach. We have other approaches in our airspace that have an approach altitude higher than the terrain. This was an assumption on my part that the altitude was ok for the approach. This is not a system wide issue, but a lack of thoroughly reviewing the approach plate on my part to ensure altitudes given are safe for the approach and above the terrain.

**Synopsis**

Center Controller reported they issued an approach clearance with incorrect altitude restrictions that placed an aircraft below the Minimum IFR Altitude and activated the Center MSAW.
**ACN: 1765954** (24 of 50)

**Time / Day**
- Date: 202010
- Local Time Of Day: 0001-0600

**Place**
- Locale Reference: ATC Facility: ZZZ.ARTCC
- State Reference: US
- Altitude.MSL.Single Value: 38000

**Aircraft**
- Reference: X
- ATC / Advisory.Center: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: A319
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Ambulance
- Flight Phase: Descent

**Component**
- Aircraft Component: Turbine Engine
- Aircraft Reference: X
- Problem: Malfunctioning

**Person: 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Pilot Not Flying
- Function.Flight Crew: First Officer
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
- ASRS Report Number.Accession Number: 1765954
- Human Factors: Troubleshooting

**Person: 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Captain
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number : 1766299
Human Factors : Troubleshooting

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Result.General : Maintenance Action
Result.Flight Crew : Overcame Equipment Problem
Result.Aircraft : Equipment Problem Dissipated
Result.Aircraft : Aircraft Damaged

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
Beginning the descent into ZZZ at 38,000 ft., "open descent" was selected. As the power came back to approaching idle there was a thump, followed by another louder thump. The master caution alerted and an ECAM (Electronic Centralized Aircraft Monitor) displayed showing ENG 2 STALL. As soon as we began to apply the procedure, the ECAM cleared itself. No other abnormal engine indications were noted.

Narrative: 2
Approaching ZZZ, Center had us at 38,000 ft. and slightly past our top of descent. When cleared lower with the autopilot and auto thrust engaged, I selected "open descent" to start down. Almost immediately, as the thrust was coming back to idle, I heard a muffled sound that was unusual, and felt a small movement of the aircraft, similar to a jet bridge lightly bumping the airplane. As I was processing in my mind what it was, it happened again, accompanied by a master caution light and an ENG 2 STALL on the ECAM (Electronic Centralized Aircraft Monitor). Right after I saw the ECAM, it went away. Now the engines were stable at idle, and all engine instruments looked normal. Shortly thereafter, we received an ACARS Maintenance message, confirming what we saw. We turned on engine anti-ice for descent though clouds, and discussed what we saw, felt and heard. We continued into ZZZ and discussed considerations in case the engine stalled again, but really thought it was a transient, isolated event. We didn't experience any further abnormalities the rest of the way in, and wrote up the event upon arrival and called Maintenance to inform them. After following up with Maintenance the next day, I learned they had found damage in the high pressure compressor section of the #2 engine.

We had no indications, before or after, of any engine issues. I think there was an AML entry a few days earlier concerning the #2 engine, but it seems to me, it was a reverser issue. Since we were kept high, we were in an idle descent until we were on final approach. It was less than 25 minutes from the compressor stall until landing. I'm curious about the damage. Was it a result of the stall or possibly pre-existing which resulted in the compressor stall?

I do not think you can prevent events like this from happening 100 percent of the time. These GE engines are normally very reliable, and if the damage occurred prior to or immediately after the stall, I am even more impressed with them. We didn't notice any abnormal indications or vibrations, outside of the two stalls within a few seconds of each other.
Synopsis

A319 flight crew reported engine noise with an "engine 2 stall" message displayed as the aircraft began its descent.
**ACN: 1763676 (25 of 50)**

**Time / Day**
- Date: 202009
- Local Time Of Day: 0001-0600

**Place**
- Locale Reference: Airport: ZZZ.Airport
- State Reference: US

**Environment**
- Flight Conditions: IMC
- Light: Dawn

**Aircraft**
- Reference: X
- Make Model Name: Helicopter
- Flight Plan: IFR
- Mission: Ambulance
- Flight Phase: Initial Approach

**Person**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Function: Flight Crew: Pilot Flying
- Function: Flight Crew: Captain
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Qualification: Flight Crew: Rotorcraft
- Qualification: Flight Crew: Instrument
- ASRS Report Number: Accession Number: 1763676

**Events**
- Anomaly: ATC Issue: All Types
- Anomaly: Deviation / Discrepancy - Procedural: Other / Unknown
- Detector: Person: Flight Crew
- When Detected: In-flight
- Result: Flight Crew: Requested ATC Assistance / Clarification

**Assessments**
- Contributing Factors / Situations: Airspace Structure
- Contributing Factors / Situations: Chart Or Publication
- Contributing Factors / Situations: Procedure
- Primary Problem: Procedure

**Narrative: 1**

I did two flights both returning from the north. IFR route to ZZZ vectors to ILS Runway XXR with the heading toward ZZZZZ about 150 degrees at 5500 ft. As I recall on both approaches at about 3 miles from ZZZZ, coming from the north, on a heading of 150 I was assigned a 180 heading and 4000 ft. Inside of 3 miles I was assigned 250 heading and
descent to 3800 ft., maintain 3800 ft. until established, then cleared for the approach.

Because the turn is originating so close to ZZZZ, the aircraft has to turn more than 100 degrees to intercept the final approach course. This puts the aircraft in a roll AOB (Angle of Bank) of at least 30 degrees. This is a steep AOB for a Medevac flight, the crews are typically working on the patient. The turn also puts us inside ZZZZ, before ZZZZ3.

This vector also puts us above the glide slope, from 4000 ft. to the glide path the aircraft needs to descend 400 ft. in less than a minute and continue that descent at 500 fpm to be on glide path. This puts the aircraft at almost a 1000 fpm descent just to get to the glide slope and then adjust to 500 fpm to continue on course and on glide slope all occurring within about 2 minutes. The distance from ZZZZ to the final approach fix is 4.3 miles and the aircraft would need to descend from 4000 ft. to 2500 ft. at 90 kts. in about 3 minutes. My point, it is aggressive and in my opinion not necessary to put us in that position. As a general rule glide slope should not be intercepted from above. This type of profile forces us to slow down and have a rapid rate of descent, this can cause an unstable approach.

This vector profile is a recurring trend for TRACON controllers. I have addressed this many times with the supervisors and directly with the controllers as its occurring. Controllers have cited there is a MVA (Minimum Vectoring Altitude) in that area and they can't get us lower or there is "a lot of traffic". I am well aware of the MVA and TERPS (Terminal Instrument Approach Procedures). What I don't understand is why can't the controllers vector us at 4000 ft. and closer to ZZZZ2, or between ZZZZ and ZZZZ2, before turning us onto the localizer and glide slope? There is a feeder route on the initial approach from ZZZZ1 (Initial Approach Fix) to ZZZZ2 at 4200 ft. This is in the sector that we are arriving from the north, but the controllers will not use the higher altitude and vector closer to ZZZZ2 before turning us onto the localizer. Also the initial approach segment between ZZZZ2 and ZZZZ goes from 4200 ft. to 3600 ft., yet the controllers never put us at 3600 ft. prior to ZZZZ within the TERP of the approach. Filing a flight plan to ZZZZ1 or ZZZZ2 IAP has no effect, controllers just disregard and vector as stated.

Synopsis

A Medevac Helicopter Pilot reported assigned vectors for final approach risks unstable approach and endangers patient care.
ACN: 1756021  (26 of 50)

Time / Day
  Date : 201909
  Local Time Of Day : 0001-0600

Place
  Altitude.AGL.Single Value : 0

Environment
  Flight Conditions : VMC
  Light : Night

Aircraft
  Reference : X
  Aircraft Operator : Corporate
  Make Model Name : EC135
  Crew Size.Number Of Crew : 1
  Operating Under FAR Part : Part 135
  Flight Plan : IFR
  Mission : Ambulance
  Flight Phase : Parked
  Route In Use : Vectors
  Maintenance Status.Maintenance Deferred : N
  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 : Main Rotor Vibration Monitor Indicator
  Aircraft Reference : X
  Problem : Malfunctioning

Person
  Reference : 1
  Location Of Person.Aircraft : X
  Location In Aircraft : Flight Deck
  Reporter Organization.Other
  Function.Flight Crew : Captain
  Function.Flight Crew : Pilot Flying
  Qualification.Flight Crew : Commercial
  Qualification.Flight Crew : Instrument
  ASRS Report Number.Accession Number : 1756021
  Human Factors : Confusion
  Human Factors : Time Pressure
  Human Factors : Training / Qualification
  Human Factors : Workload
  Human Factors : Communication Breakdown
Communication Breakdown. Party 1: Flight Crew
Communication Breakdown. Party 2: Maintenance

Events
Anomaly. Aircraft Equipment Problem: Less Severe
Anomaly. Deviation / Discrepancy - Procedural: FAR
Anomaly. Deviation / Discrepancy - Procedural: Maintenance
Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy
Detector. Person: Flight Crew
When Detected: Aircraft In Service At Gate
When Detected: Pre-flight
Result. General: Maintenance Action
Result. General: Release Refused / Aircraft Not Accepted

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

Narrative: 1

Crew was dispatched for [a flight]. An Eng Chip CT Caution precluded launch and flight was cancelled. PIC called on-duty Mechanic to inform him of the maintenance issue. The Mechanic asked me to pull the Eng Chip CT circuit breaker to see if it would extinguish the light. Upon returning to acft and turning on the battery, I noticed the light was extinguished. However, I also noticed a Red Fault light with the letters "LMT" adjacent to it. I turned the page selector to the maintenance page and saw that the limit exceeded showed a code of "MMEXC 0061". I called the mechanic back and let him know that the ENG CHIP CT had resolved itself, but now there was a Mast Moment Exceeded Fault. He informed me he was enroute to take a look at it. [Later,] Mechanic texted me and told me he was at the base. I walked out to the aircraft and noticed the mechanic was sitting in the pilot seat and that the battery was on. As I climbed into the co-pilot seat, the Mechanic said he didn't see the red fault light and LMT light on the CDS I had told him about earlier. I explained that it was there and asked him when and why he cleared the fault. He mumbled that he didn't clear the fault and he never saw it. I then let him know that I had taken a picture of the fault and showed it to him. He asked me to send him the photo and I did. After researching the fault code, the Mechanic explained that he would have to disassemble the rotor head and inspect the bearings, mast and other components and that he'd have to remove the seal. He also explained that the aircraft would be out of service for at least 24hrs because after reassembling everything, the sealant would need 24hrs to cure. I then briefed the medical crew, called operations and apprised them of the situation.

A few hours later, the Mechanic approached me and told me he spoke with his supervisor and other maintenance personnel and that it was agreed upon that he could just complete an external visual inspection of the mast, blade cuffs and other components and that would be sufficient, since the Mechanic believed that it was "probably moisture" that caused an erroneous fault indication. I respectfully disagreed since this particular aircraft recently had a new second-generation seal installed and there were no subsequent erroneous Mast Moment indications. The Mechanic said he already completed the required
suggested visual inspection and it was "good to go".

Later in the morning, the on-coming pilot approached me and asked to see the fault on the CDS. I told him that the Mechanic already cleared the fault but he could still see the MMEXC 0061 code on the maintenance page. After seeing the exceedance code, the pilot then mentioned that he now probably looks a bit suspicious since he had asked me at shift change the evening prior, "how does the T1 record exceedances?", a fact that didn't register with me when I saw the fault code later in my shift. The pilot also mentioned that it was possible that he could have inadvertently displaced the cyclic while on the ground but honestly didn't recall seeing or hearing anything unusual. I told him if there was an exceedance, that it wasn't a huge issue and that the required inspection had to be done and if nothing is found, we'd back in service.

In the middle of this conversation with the on-coming Pilot, the Mechanic approached us and said that he spoke with the Maintenance supervisor and other leadership, and that all were in agreement that it was probably moisture which caused the erroneous exceedance and that he only needed to conduct an external visual inspection of the blade cuffs, and other components. He said that if a "true exceedance" occurred, that there would be visual damage to the inside portion of the blade cuffs. I respectfully disagreed but told him that if the Maintenance supervisors were all in agreement with the plan of action then that was their decision.

The Mechanic kept asking the other Pilot and I, how we "felt" about the aircraft and the procedure he proposed. I explained that I didn't "feel" there was anything unsafe with the aircraft, but if a maintenance action was supposed to be completed, then it should be done. He then asserted that the maintenance team all agreed that the visual inspection he performed was appropriate. I then departed the base.

On the way home, I contacted the Aviation Service Manager (ASM) to inform him of what happened and told him that the Mechanic said he agreed with the maintenance plan. The ASM denied saying that he was good with any specific plan but that he said to conduct whatever the required inspection was.

I sent the on-duty Pilot and the Mechanic a message letting them know that my official stance is that we don't "know" if moisture was the culprit for the Mast Moment exceedance and that I didn't think it wise to not follow maintenance action procedures based on our "feelings" or beliefs that it could be this or that. I said I felt it best to err on the side of caution and proper maintenance procedures rather than guessing.

The Mechanic then called me in a very heated tone and asked me what my concerns were. I explained that my concerns were that 1. We don't know if moisture caused an erroneous exceedance. 2. The on-duty Pilot asked how exceedances were recorded at shift change the day prior, and admitted at least there was a possibility one could have occurred. 3. The Mechanic stated that there have been no erroneous Mast Moment "moisture" issues since the new '2nd generation' seal was recently installed. 4. And finally that he (the Mechanic) cleared the fault before I came out to the aircraft and told me he didn't see the fault.

At this point, he vehemently denied clearing the fault upon arrival. I told him he cleared it before I climbed in the aircraft. He denied it again and claimed he didn't clear it until he returned to the base from the Base. I reminded him that he cleared it prior to that and said he didn't see what I was talking about, at which point I told him I took a picture of the fault and that he had asked me to send him the picture, which occurred at XA:39. He
then began yelling, telling me he wasn't going to argue with me about what time he cleared the fault. Additionally, he said he wasn't going to sit there and let me question his work ethic. I then reminded him of the multiple times I've called him while he was on call and he complained that this wasn't his base or his aircraft. He said that he was hired to work at his base and nowhere in his contract does it say he was to work at the other bases and that he's "tired of fixing (expletive) that the on-duty Pilot breaks".

In a hostile tone, he kept asking me what I wanted him to do. Did I want him to take the aircraft out of service or keep it in service? He said he needed an answer from me ASAP because he had another aircraft to deal with that was stuck in ZZZ. He said that he was the only mechanic available and that he'd have to complete the required inspection "taking everything apart" by himself and that if I wanted him to take the aircraft out of service, that he would look like a [expletive] because he already completed the write-up and put the aircraft back in service. I explained that I wasn't worried about how he looked, I was only concerned that the proper maintenance action was completed, the aircraft was in an airworthy state, and the entire crew was safe. He then received an incoming call and our call ended. It was discovered that the Mechanic wrote up the fault, and corresponding corrective maintenance action as completed. However, it was found that he did not complete the required correction action per the [maintenance manual].

Four separate flights totally 3.3hrs were completed after the Mechanic signed off the Maintenance Logbook indicating the required inspection was completed.

I believe the Mechanic knowingly misrepresented the circumstances surrounding the maintenance event in order to avoid having to complete the required maintenance action per the manual.

To reiterate, Mechanics and Pilots the importance of following maintenance procedures by the book. To not base maintenance actions on feelings or assumptions but to ensure maintenance is done as required.

**Synopsis**

Helicopter Pilot reported misgivings due to suspected unapproved procedures used to return an aircraft to service.
ACN: 1747574 (27 of 50)

Time / Day
Date: 202006
Local Time Of Day: 1201-1800

Place
Locale Reference, ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude, MSL, Single Value: 1000

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

Aircraft: 1
Reference: X
ATC / Advisory, CTAF: ZZZ
Aircraft Operator: Corporate
Make Model Name: Jet/Long Ranger/206
Crew Size, Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: VFR
Mission: Ambulance
Flight Phase: Cruise
Route In Use: Direct
Airspace, Class G: ZZZ

Aircraft: 2
Reference: Y
Make Model Name: Helicopter

Person
Reference: 1
Location Of Person, Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function, Flight Crew: Single Pilot
Function, Flight Crew: Pilot Flying
Function, Flight Crew: Captain
Qualification, Flight Crew: Commercial
Qualification, Flight Crew: Flight Instructor
Qualification, Flight Crew: Instrument
Qualification, Flight Crew: Multiengine
ASRS Report Number, Accession Number: 1747574
Human Factors: Communication Breakdown
Communication Breakdown, Party 1: Flight Crew
Communication Breakdown, Party 2: Flight Crew
Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft Terrain Warning
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

I was flying a direct route from our base in ZZZ to pick-up a patient at the hospital in ZZZ1. I was at 1,000 feet MSL with autopilot engaged. I had noticed that there was another aircraft on TCAS about 10 NM from me but did not have a visual. Their direction indicated that they were east of us and flying west (we were headed in a generally southern heading). At 5 NM I alerted my crew that there was an aircraft out around the 10-11 o'clock position and that I did not have them in sight yet. There was no response on frequency (a general helicopter frequency for avoidance and awareness). We did finally get a visual confirmation at approximately 1 mile or so of separation (with them at our 10 o'clock position) and it appeared that we had converging vectors. Still, nothing on the radio and they did appear to be maneuvering to avoid us. Turning would not have been sufficient to separate the aircraft so I began a rapid climb (over 500 FPM) and the aircraft passed directly underneath us with about 300 feet or so of vertical separation (we were rapidly climbing past 1,300 feet MSL). Afterwards we still got no communication or acknowledgment from the other aircraft.

Synopsis

Pilot reported a NAMC with another aircraft.
**ACN: 1745673 (28 of 50)**

**Time / Day**
Date: 202006
Local Time Of Day: 0001-0600

**Place**
Locale Reference. ATC Facility: GTF.Tower
State Reference: MT
Altitude MSL. Single Value: 6000

**Environment**
Flight Conditions: VMC

**Aircraft**
Reference: X
ATC / Advisory. Tower: GTF
Aircraft Operator: Personal
Make Model Name: Cessna Citation Mustang (C510)
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Final Approach
Airspace. Class D: GTF

**Person**
Reference: 1
Location Of Person. Facility: GTF.TWR
Reporter Organization: Government
Function. Air Traffic Control: Approach
Qualification. Air Traffic Control: Fully Certified
Experience. Air Traffic Control. Time Certified In Pos 1 (yrs): 4
ASRS Report Number. Accession Number: 1745673
Human Factors: Workload
Human Factors: Time Pressure

**Events**
Anomaly. ATC Issue: All Types
Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly. Ground Event / Encounter: Ground Strike - Aircraft
Detector. Person: Air Traffic Control
When Detected: In-flight
Result. General: Flight Cancelled / Delayed
Result. Air Traffic Control: Issued New Clearance
Result. Air Traffic Control: Issued Advisory / Alert

**Assessments**
Contributing Factors / Situations: Aircraft
Primary Problem: Aircraft
**Narrative: 1**

A VFR aircraft ground looped on the runway. While Aircraft X was on final. The local controller who was also the Controller in Charge started the procedures for getting things taken care of. This caused the airport to close the runway and for me to cancel Aircraft X's approach. While he was on final I asked him if he could take a different runway which he replied that he could. I cleared him for the Visual Approach and was going to switch him to the tower when I noticed that the Local Controller was very busy taking care of everything that was going on. I coordinated my control of Aircraft X and cleared him to land on my frequency. A Ground controller would have been nice or maybe even a stand alone Controller in Charge.

**Synopsis**

TRACON Controller reported they had to issue a go around and diversion to another runway due to a disabled aircraft on their runway.
**Time / Day**

Date: 202005
Local Time Of Day: 1201-1800

**Place**

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

**Environment**

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

**Aircraft**

Reference: X
ATC / Advisory: Tower: ZZZ
Make Model Name: Small Aircraft
Crew Size: Number Of Crew: 1
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Landing
Route In Use: Vectors
Route In Use: Visual Approach

**Person**

Reference: 1
Location Of Person: Aircraft: X
Location In Aircraft: Flight Deck
Function: Flight Crew: Pilot Flying
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
ASRS Report Number: Accession Number: 1742152
Human Factors: Distraction
Communication Breakdown: Communication Breakdown: Party1: Flight Crew
Communication Breakdown: Party2: ATC

**Events**

Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Anomaly.Deviation / Discrepancy - Procedural: Landing Without Clearance
Anomaly.Ground Incursion: Runway
Detector.Person: Flight Crew
When Detected: Taxi
Result.General: None Reported / Taken
Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1
I was vectored for a visual approach to Runway X. When asked to contact Tower I switched frequencies, but forgot to contact the Tower and unfortunately landed without a clearance. During this time I was monitoring my medical crew in the back as we had a very sick passenger on board. This is not an excuse but with all the COVID-19 patients we've been flying the last few weeks I've just found myself a bit preoccupied with thoughts of bringing the virus home to my family and not knowing it. That being said, even with everything that is going on, as a professional we still need to pay attention to the task at hand and not get complacent. That truly is why this happened I feel. We get comfortable at our home environment, beautiful day and we forget the simple things that are a vital part of the operation. It's been fairly quiet at the airport except for a few passenger and air ambulance flights, so there was no infraction of airspace or anything that involved another aircraft but is still something that after years of flying I can't believe happened. Bottom line, we have to pay attention!

Synopsis
Pilot reported landing without clearance and cited the COVID-19 environment as a contributing factor.
Time / Day

Date : 202003
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2500

Environment

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

Aircraft

Reference : X
Aircraft Operator : Air Taxi
Make Model Name : Bell Helicopter 407
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : None
Mission : Ambulance
Flight Phase : Cruise
Route In Use : Direct

Component

Aircraft Component : PFD
Manufacturer : Chelton
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 : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 2360
Experience.Flight Crew.Last 90 Days : 25
Experience.Flight Crew.Type : 300
ASRS Report Number.Accession Number : 1739476

Events
Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : MEL / CDL
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : FLC Overrode Automation

Assessments

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

Narrative: 1

We have an old PFD/MFD system made by a brand named Chelton. We have had numerous minor failures or malfunctions with this system, mainly related to GPS navigation. Some of the other pilots at my base along with myself have brought this system up as a safety concern in the past to others in our company. Repairs have been attempted at least once, but these problems with the Cheltons persist. However, this flight was the first time I had seen the Attitude Indicator fail on the system.

There is no analog standby Attitude Indicator in our aircraft. Rather, the standby Attitude Indicator is displayed on the MFD screen directly below the PFD. This standby AI (Attitude Indicator) is displayed on the MFD by simply pressing a knob on the lower right-hand corner of that display. This standby Attitude Indicator was still functioning normally when the Primary one failed.

For part of our patient-loaded leg from ZZZ to ZZZ1, the AI on the PFD gave erroneous readings, showing the aircraft in approximately a 35 degree bank to the right when the aircraft was actually in straight and level flight, and giving an audible, "Attitude failure, attitude failure" warning. On our return leg after dropping off the patient, the PFD continuously and erratically cycled through 3 or 4 different displays, including: a correct indication of our attitude and upcoming terrain, the same right-hand bank attitude, a red "X" in the middle of the screen, and a display where the half of the screen above the horizon was brown instead of blue. Each display would show for 2 or 3 seconds, then go to a different display. This continued for the entire flight back. I did not find a way to stop the display from doing this. Along with the visual abnormality, the audible female voice saying, "Attitude failure, attitude failure" repeated continuously the whole flight back.

I did not put the item on MEL until the following day after ferrying the aircraft to ZZZ2 to be repaired. This was to prevent the aircraft from being grounded in ZZZ, away from ZZZ2 where repairs could be more readily carried out. Honestly this was partly because of knowing that the company would probably not like for me to have written it up then (I did inform the Chief Pilot of the situation upon return to ZZZ, however). It was also partly because, while I pretty much knew this item needed to be written up, I had misinterpreted the MEL when I had read it that night, not reading it carefully enough.

Synopsis
Pilot reported misinterpreting MEL and applied the incorrect MEL after failures of the Attitude Indicator on the Primary Flight Display.
**ACN: 1727666 (31 of 50)**

**Time / Day**
- Date: 202002
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference: ATC Facility: ZZZ. TRACON
- State Reference: US
- Altitude.AGL.Single Value: 500

**Environment**
- Flight Conditions: VMC
- Work Environment Factor: Poor Lighting
- 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
- Flight Plan: VFR
- Mission: Ambulance
- Flight Phase: Initial Approach
- Airspace.Class D: ZZZ

**Component**
- Aircraft Component: Turbine Engine
- Aircraft Reference: X
- Problem: Failed

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Taxi
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Captain
- ASRS Report Number.Accession Number: 1727666

**Events**
- Anomaly.Aircraft Equipment Problem: Critical
- Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
- Detector.Person: Flight Crew
- When Detected: In-flight
- Result.General: Flight Cancelled / Delayed
- Result.General: Maintenance Action
- Result.Flight Crew: Diverted
- Result.Flight Crew: Landed in Emergency Condition
Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

I turned final for the hospital helipad at 500 ft. AGL. I called final to STAT Radio and lowered the collective to approximately 45% TQ. As I lowered the collective I heard a loud grinding noise. At nearly the same time the crew asked what is that? I looked to the left side engine panel and saw the number 1 side filling up with cautions related to [the] engine such as oil pressure, temp etc. At nearly the same time I changed the aircraft attitude to gain airspeed and abort the landing. In moments the crew said they smelled smoke and they saw an orange glow on the left side. As I was turning away from the pad I reached over and shut off the engine. I established single engine ops and announced my intent to go to ZZZ Airport. During this time I was also watching for a fire warning indication illumination that might cause me to land sooner than ZZZ Airport. I asked the crew if they could still see an orange glow on the left side and they said no. I passed the Aircraft checklist back to the crew and asked them to read the portion on engine failure which they did. I continued my climb to clear the ridgelines between hospital and the airport. The crew asked if they should call STATCOM to have Aircraft Y repo to the airport to get the patient which I thought was a great idea. The radio operator had already thought of that and they were dispatching Aircraft Y. I briefed the crew on what we were going to do, a running landing to the airport. I asked the crew to ask the radio operator to dispatch fire trucks to the airport, in case I screwed up the landing or I had residual fire that I was not aware of. Before landing check completed I turned to land the parallel taxiway for Runway XX. As I was on base I changed my mind and decided to take the Runway XX. The parallel for Runway XX is not straight for very long and then it bends. At Night on night vision goggles, with patients I was not taking the chance. I added to the crew that we train for this all the time. A shallow approach to running landing is really a non event due to our training. On final I set up for the shallow approach. I allowed the aircraft to touchdown and come to a stop. Aircraft Y landed and transferred my crew and patient to Hospital. My shutdown of Number 2 engine was uneventful. The max TQ I remember seeing during the whole event was 101.5% Temperature outside was about -2C. The Mechanics showed up about 45 minutes later. Aircraft Y had been dispatched to recover the wheels and tow bar from Aircraft Z base. It took him about an hour to get back. Once he was there the mechanics put the wheels and tow bar on and cleared the runway. After I landed I called approach and told them that my aircraft was on the runway. OCS called the FSS to send out a NOTAM. Once the aircraft was off the runway I called Approach to tell them as such. I also called OCS to call the FSS. Inside the aircraft we worked as a team. The crew did a great job of providing patient care and providing information and checklist verification when I asked for it. The Radio Operator and the OCS were excellent. They were all about support without asking questions. Whatever we asked for they were on it.

Synopsis
Pilot reported an engine fire on approach, requiring an inflight engine shut down and divert.
ACN: 1725770

**Time / Day**
- Date: 202002
- Local Time Of Day: 1801-2400

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Icing
- Light: Night

**Aircraft**
- Reference: X
- Make Model Name: EC135
- Crew Size.Number Of Crew: 1
- Mission: Ambulance
- Flight Phase: Cruise

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Contracted Service
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Captain
- Qualification.Flight Crew: Commercial
- Qualification.Flight Crew: Rotorcraft
- ASRS Report Number.Accession Number: 1725770
- Human Factors: Situational Awareness

**Events**
- Anomaly.Inflight Event / Encounter: Weather / Turbulence
- Detector.Person: Flight Crew
- When Detected: In-flight
- Result.General: Flight Cancelled / Delayed
- Result.Flight Crew: Landed As Precaution

**Assessments**
- Contributing Factors / Situations: Human Factors
- Contributing Factors / Situations: Weather
- Primary Problem: Weather

**Narrative: 1**

Inter-hospital transfer. After pick-up and departure weather progressed two hours faster than originally forecast and crew experienced IMC conditions enroute. After coordination with Operations, initial divert was made and coordination for a tail-to-ground transfer approximately 10 minutes into flight as weather was still forecast to be VMC at [destination] for another hour and half. [We then] experienced unforecast icing and snow squall line rapidly approaching from the west that made further VMC flight not possible. After discussion with the crew the pilot identified the first safe point of landing and the
aircraft was safely landed onto an alternate unprepared zone, a snow-covered road. Aircraft was secured. Patient transfer was safely executed to complete remainder of the MEDEVAC with the aid of the Fire Dept. No injury to personnel, property, or the aircraft was incurred.

Synopsis

EC135 flight crew reported landing on a public road after encountering ice and snow that made VMC flight impossible.
**Time / Day**
Date: 202001  
Local Time Of Day: 0601-1200

**Place**
Altitude.AGL.Single Value: 0

**Environment**
Light: Daylight

**Aircraft**
Reference: X  
Make Model Name: EC135  
Crew Size.Number Of Crew: 1  
Mission: Ambulance  
Flight Phase: Takeoff / Launch

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

**Person**
Reference: 1  
Location Of Person.Aircraft: X  
Location In Aircraft: Flight Deck  
Function.Flight Crew: Pilot Flying  
Qualification.Flight Crew: Rotorcraft  
ASRS Report Number.Accession Number: 1720270  
Human Factors: Situational Awareness

**Events**
Anomaly.Aircraft Equipment Problem: Critical  
Detector.Person: Flight Crew  
When Detected.Other  
Result.Flight Crew: Overcame Equipment Problem

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

**Narrative: 1**
After landing at ZZZ and bringing the engines to idle I noticed a whishing sound coming from the main rotor system. There weren't any associated vibrations. The medical crew did their walk around and after getting in, the flight nurse also stated that she heard the same noise. I brought the engines to flight and the noise was still present but not as noticeable. Looking at the disc path plane revealed nothing. I raised the collective enough to get the nose to raise and almost immediately plastic sheeting was seen leaving the main rotor
system. I shut the helicopter down. Upon walk around plastic sheeting was observed on two of the main rotors, three of the fenestron blades, on the stator vanes of the fenestron and on the protective covering over the oil cooler intake. The helicopter was placed out of service and maintenance was notified. The mechanic inspected the aircraft and an operational check flight was completed. No damage was found. I never saw where the plastic entered the rotor system. There was a construction dumpster underneath the helipad that was only partially covered. There appeared to be a similar type of plastic in it.

Make sure that the helipad and surrounding area is free of FOD and that any sources of FOD are secured.

**Synopsis**

EC135 pilot reported that FOD became caught in rotor blades during landing.
**ACN: 1713201**

**Time / Day**
Date: 201912

**Place**
Altitude.AGL.Single Value: 0

**Environment**
Flight Conditions: VMC
Light: Night

**Aircraft**
Reference: X
Air Taxi
Make Model Name: Stratolifter (C-135 / 717)
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 135
Mission: Ambulance
Flight Phase: Parked
Route In Use: Direct

**Component**
Aircraft Component: Communication Systems
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
ASRS Report Number.Accession Number: 1713201
Human Factors: Troubleshooting
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Other
Communication Breakdown.Party2: Dispatch

**Events**
Anomaly.Aircraft Equipment Problem: Less Severe
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Detector.Person: Flight Crew
When Detected: Aircraft In Service At Gate
Result.General: Flight Cancelled / Delayed

**Assessments**
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Night interfacility flight: Aircraft was just procured as a spare the previous day. Unfortunately, the radio was not programmed for our area, unable to obtain required cable needed for programming. As a workaround we were to talk to our communicators on the portable using an adapter. I was told by those familiar with said workaround that I would be able to hear the person transmit and then hear the reply. After startup the flight plan was given by the flight medic and I realized I could not hear him or the reply. I was already skeptical of the process but when this occurred I made it clear that it was not adequate, the flight nurse in the back said he really didn't like it-- made decision to abort.

Aircraft came with a full load of equipment but not included was a cable which is used to program the radio- this is a spare aircraft so should be the most important piece of equipment included. Also, there was no effort program our aircraft with our usual Dispatcher, Flightwatch. So we could not talk to our Dispatcher and they could not track us. Workaround was to use portables to plug into the aircraft. We had no operating frequency for Aircom, our other Dispatcher, they could track us. Before the aborted flight Aircom had called and advised me that due to the problem that they would not be dispatching us. When we finally did get a flight assigned to us I could not get a risk approval because each agency thought the other was going to do it. Bottom line: all of this could have been avoided if the cable was included in the Aircraft. Mechanic says he has called around and can't find one. Also, it is important to have the Aircraft programmed into our area's sky connect so they can track us.

Synopsis

ECD-EC135 pilot reported canceling mission due to communication cable missing and unable to make workaround operable.
ACN: 1705174 (35 of 50)

Time / Day
Date: 201911
Local Time Of Day: 1801-2400

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

Environment
Flight Conditions: VMC
Light: Night

Aircraft
Reference: X
Aircraft Operator: Air Taxi
Make Model Name: Helicopter
Crew Size.Number Of Crew: 3
Operating Under FAR Part: Part 135
Flight Plan: VFR
Mission: Ambulance
Flight Phase: Cruise
Route In Use: Direct

Component
Aircraft Reference: X

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)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1705174

Events
Anomaly.Flight Deck / Cabin / Aircraft Event: Smoke / Fire / Fumes / Odor
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: Equipment / Tooling
Primary Problem: Equipment / Tooling

Narrative: 1

While en-route to pick-up a baby with the NICU team and the spare isolette/incubator, a pump on the isolette caught on fire in cruise flight. The Flight Medic was able to extinguish the fire with a bottle of water before the Flight Nurse was able to pass the Flight Medic the fire extinguisher. Hospital Communications were informed of the incident immediately. I performed a landing in a vacant lot. Fire and Police responded. The Medic Company responded and transported the NICU crew, with a different isolette, to the referring hospital and completed the transfer by ground. A base Mechanic also responded to the scene and conducted a thorough check of the aircraft. The defective isolette was removed from the aircraft and transported back for further inspection.

Synopsis

Helicopter ambulance Captain reported an empty baby incubator caught fire while in flight.
**Time / Day**
- Date: 201911
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US

**Environment**
- Flight Conditions: VMC
- Light: Dusk

**Aircraft**
- Reference: X
- ATC / Advisory.Center: ZZZ
- Aircraft Operator: Air Taxi
- Make Model Name: Helicopter
- Crew Size: Number Of Crew: 1
- Operating Under FAR Part: Part 135
- Mission: Ambulance
- Flight Phase: Takeoff / Launch
- 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: Rotorcraft
- Qualification.Flight Crew: Commercial
- ASRS Report Number.Accession Number: 1702414
- Human Factors: Communication Breakdown
- Human Factors: Confusion

**Events**
- Anomaly.Flight Deck / Cabin / Aircraft Event: Other / Unknown
- Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
- Anomaly.Inflight Event / Encounter: Other / Unknown
- Detector.Person: Flight Crew
  - When Detected: In-flight

**Assessments**
Narrative: 1

Our crew accepted an inter-facility flight to [a] hospital. Upon arriving, a Nurse advised the crew the patient "has a bed bug problem and they found multiple bed bugs on the patient and in his clothes." Prior to making contact with the patient, our crew discussed the bed bug situation and decided it was in our best interest to not fly the patient. I called our Area Manager and advised him of our situation and told him our crew did not feel comfortable transferring the patient for the risk of contamination of the aircraft, the crew, and the receiving facility. At this time [the Area Manager] advised me to standby and he was "getting the Medical Director involved."

[The Area Manager] called me a few minutes later advising me the Medical Director he spoke with approved the transport as long as we placed the patient in a cocoon with a hair bonnet. I disagreed with [the Area Manager] that this was inadequate protection from bed bugs and we still stood a chance at becoming contaminated. During the conversation I voiced my concerns for the "risks involved in transporting a patient with bed bugs and the risk of our base potentially being out of service for a long period of time for decontamination of the crew and the aircraft." Again, [the Area Manager] told us we need to complete the flight and told me he was going to "contact [the Chief Pilot] if I thought there were risks involved in completing the flight and I was refusing." I then advised [the Area Manager] that I didn't see a need to contact [the Chief Pilot] as it wasn't a safety of flight issue as much as it was a medical/contamination issue. The crew then went inside and made patient contact. While the crew went bedside, I contacted our Mechanic and advised him of our situation and asked what steps are involved in decontaminating our aircraft after transport. [The Mechanic] strongly advised us not to take the patient via helicopter due to the amount of time our aircraft will be out of service for cleaning/replacement of the seat belts. After the medical crew went bedside, they determined the patient was stable and non-emergent and offered to go with a ground crew instead of contaminating our aircraft.

Once again, I called [the Area Manager] and asked if ground transport was an option so our aircraft wouldn't become contaminated and advised him of what our Mechanic said. [The Area Manager] once again told us "the patient needs to be transported via helicopter, not a ground unit." After being pressured to fly this patient, we completed the flight following [the Area Manager's] orders and transported the patient to [the] hospital. After unloading the patient at [the hospital], the Medic and myself noticed several bed bugs on the sled. We returned to base and began to decontaminate ourselves and our aircraft. All the restraints on the sled had to be removed by a Mechanic and washed, putting our base out of service for an extended amount of time. Pressure to fly should not occur from upper management about a hazardous situation. The Nurse/Medic offered to travel with ground transport to ensure the safety of our crew, helicopter, and receiving facility. After the flight occurred, [the Company] should have a procedure in place to deal with bed bugs as the crew does not have proper tools/equipment to decontaminate the aircraft after this type of flight.

Synopsis
Helicopter pilot reported potential bed bug contamination on helicopter and crew.
ACN: 1682400 (37 of 50)

Time / Day
Date: 201909
Local Time Of Day: 1801-2400

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

Environment
Flight Conditions: Marginal
Weather Elements / Visibility: Fog
Weather Elements / Visibility: Thunderstorm
Light: Night

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: EC145
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 135
Flight Plan: VFR
Mission: Ambulance
Flight Phase: Initial Approach
Flight Phase: Cruise
Airspace.Class E: ZZZ
Cabin Lighting: Low
Number Of Seats.Number: 6
Passengers On Board.Number: 1
Crew Size Flight Attendant.Number Of Crew: 3

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Cabin Jumpseat
Reporter Organization: Air Taxi
Function.Other.Other
Qualification.Other
Experience.Flight Attendant.Total: 2
Experience.Flight Attendant.Airline Total: 2
Experience.Flight Attendant.Number Of Acft Qualified On: 2
Experience.Flight Attendant.Type: 90
ASRS Report Number.Accession Number: 1682400
Human Factors: Time Pressure
Human Factors: Training / Qualification
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Other
Analyst Callback: Attempted
Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : VFR In IMC
Detector.Person : Other Person
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

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

Narrative: 1

Before our departure at [Hospital 1], during [Hospital 1] to [Hospital 2] leg of the mission, we had been advised by the pilot in charge (PIC) that there was a storm building to the west. The medical crew agreed in the ambulance at [Hospital 1] that, if needed, the next best place to land outside of ZZZ would be ZZZ1. This plan was communicated to the PIC during transport. The PIC relayed this plan to Dispatch. During this time three other pilots had turned down flight due to building convective activity in the area and along the coast to the north. During transport, the PIC contacted Dispatch regarding the weather as he stated the radar in the aircraft was on a delay. Dispatch's transmission back to the aircraft was difficult to understand and the PIC advised that he was cleared to continue to [Hospital 2]. The med crew advised the PIC that we were okay with landing at ZZZ1 if needed as there was transportation already there. The PIC advised he did not believe this would be necessary. Outside of ZZZ, the med crew could see the storm to the west of the hospital una"d. Prior to short final, the med crew asked if the lightning seen within the storm was far enough away to safely land on the upper pad at [Hospital 2]. Crew called ahead to [ambulance communications] and asked that the on-duty med crew supervisor standby on the lower pad with an ambulance ready to transport the patient to the ED [Emergency Department]. The PIC advised this would not be necessary. While on short final, both crew members witnessed lightning strikes to the west of the airfield. The PIC landed on the upper pad at [Hospital 2] and the med crew members offloaded the patient without further incident and continued into the hospital. [Supervisor] was made aware of the incident once the crew cleared the call. [Supervisor] advised that the lightning strike that the crew members had witnessed he also witnessed. The supervisor advised that according to local weather reports the lightning strike was 4.4 miles away from the hospital. Following the call, the med crew restocked the aircraft with the plan to be available for calls to the northwest as the storm cell had moved over ZZZ2. PIC performed a walk around and got in to start the aircraft to return to base ZZZ3. I then advised the PIC that I did not feel comfortable with the thunderstorm over ZZZ2. I stated I would either wait until the storm dissipated to fly back or would drive back separate. The PIC state that he would wait until the med crew felt comfortable with flying back and got out of the aircraft. About thirty minutes later, the crew returned to the aircraft, all members performed a walk around and set out to depart to ZZZ3. At this time all reporting stations along the route between [Hospital 2] and ZZZ3 were reporting VFR conditions. Just outside of ZZZ, med crew noted that it was foggy, but the ground lights were still visible. The PIC advised that this was okay as he could see under go"gles. The fog continued to thicken, and I was unable to see stars in the back of the aircraft. I then started to lose ground lights in the back of the aircraft while una"d. Around ZZZ4, I asked if the PIC...
needed to file for IIMC. The PIC said no. As the aircraft crossed Hwy XX, the fog enveloped the aircraft into a complete white-out. The PIC advised that he would climb and contacted Dispatch. PIC contacted Dispatch, declared an in-flight emergency and asked to continue back to ZZZ3 under IIMC. Dispatch granted IFR clearance. [Ambulance communications] notified by PIC of change. The rest of the flight was completed without an aviation incident. During the descent, PIC advised that he did not want to declare IIMC because he is not allowed to pick up IFR clearances during transport unless he declares an in-flight emergency. PIC advised that only a select few pilots are allowed to pick up clearances while in the air and he is not one of them. Upon arrival at ZZZ3, I called [ambulance communications] and briefly advised the air comm-spec of what happened. The air comm-spec asked during this conversation that it be passed along to the PIC that he needs to call [ambulance communications] at the beginning of shift so that the flight manifest was up to date with current crew members (as this was not the case). After hanging up with [ambulance communications], this request was relayed to the PIC. Upon reviewing the mission, it was noted that no weather PAIP [Post Accident/Incident Plan] was activated by [ambulance communication]. It should also be noted that other med crew members have had other operational incidents with this same PIC. These med crew members have reported these incidents to [company's] aviation manager, the base aviation supervisor, and [company] medical operations manager, and have received no follow up.

Synopsis

EC145 Medical crew member reported PIC failed to follow company policy, entered known IMC.
ACN: 1666727

**Time / Day**
- Date: 201907
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference
- ATC Facility: SLC.Tower
- State Reference: UT
- Altitude.MSL.Single Value: 7500

**Environment**
- Flight Conditions: VMC

**Aircraft : 1**
- Reference: X
- 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: Descent
- Route In Use: Visual Approach
- Airspace.Class B: SLC

**Aircraft : 2**
- Reference: Y
- Make Model Name: Cessna Citation Undifferentiated or Other Model
- Flight Phase: Final Approach

**Person**
- Reference: 1
- Location Of Person.Facility: SLC.TRACON
- Reporter Organization: Government
- Function.Air Traffic Control: Local
- Qualification.Air Traffic Control: Fully Certified
- Experience.Air Traffic Control.Time Certified In Pos 1 (yrs): 11
- ASRS Report Number.Accession Number: 1666727
- Human Factors: Communication Breakdown
- Communication Breakdown.Party1: ATC
- Communication Breakdown.Party2: ATC

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

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

Narrative: 1
Working Local East, TRACON called the SUP and coordinated an east downwind for Aircraft X. It is uncommon to do it because the Aircraft X is usually IFR and pretty high which this one was. The Aircraft X checked on at around 9-10K MSL. I had traffic at 055 and I think 060 north and south over I15 which is between the Aircraft X and the airport. I had to stop the descent of Aircraft X take him over the traffic at 060 and then clear him to land. Well then TRACON put a guy [Aircraft Y] in the final to 35 and one on final to 34R. Now we have an inbound from the east who has to stay high to avoid traffic and miss an aircraft on final to a runway that is before the one he is supposed to land on. TRACON called at the last minute and said hey we moved that guy over meaning the Aircraft Y on 35 and that they had moved him to 34R. Too late at that point, the Aircraft X had stayed too high [because] he didn't see the traffic and there was no way to get him down and avoid the traffic on the final and over the freeway. I had already been forced to route Aircraft X north over the freeway and put him back in a downwind to descend. I'm sure because Aircraft X was IFR and below the MVA that I was wrong although I don't know what else I could have done. Normally when we use the over the top procedure which is a procedure we use that has an east downwind TRACON is not allowed to use the final to 35 for this exact reason. I think the restriction should be any time they coordinate an east downwind they can't assign 35 to others just like they can't in over the top.

Synopsis
SLC Controller reported aircraft below MVA due to a local traffic procedure and aircraft conflict.
ACN: 1650223 (39 of 50)

Time / Day
Date: 201905
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ORL.Airport
State Reference: FL
Altitude.MSL.Single Value: 600

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Tower: ORL
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: None
Airspace.Class D: ORL

Person
Reference: 1
Location Of Person.Facility: ORL.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): 1
ASRS Report Number.Accession Number: 1650223
Human Factors: Situational Awareness

Events
Anomaly.ATC Issue: All Types
Anomaly.Conflict: NMAC
Detector.Person: Air Traffic Control
When Detected: In-flight
Result.Air Traffic Control: Issued Advisory / Alert

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

**Narrative: 1**

Aircraft X called for departure from a medical center and I told the aircraft departure would be at its own risk, use caution. Then I gave the winds, altimeter and to proceed on course. The helicopter departed and flew west into the wind then north. I was issuing a traffic to the helicopter because I saw another helicopter as a potential conflict. But before I finished the traffic I noticed a Skyhawk on downwind turn base over the helicopter at 900 feet and the helicopter was at 600 feet. So I told the helicopter about the Skyhawk and the helicopter mentioned that the traffic was too close. We should have procedures for helicopters entering and exiting the medical center on special routes to de-conflict with pattern traffic.

**Synopsis**

ORL Tower Controller reported an NMAC between a helicopter departing a hospital and traffic in the pattern.
**Time / Day**

Date: 201905
Local Time Of Day: 0001-0600

**Place**

Locale Reference: ATC Facility: ZLC.ARTCC
State Reference: UT
Altitude.MSL.Single Value: 9000

**Aircraft**

Reference: X
ATC / Advisory.Center: ZLC
Aircraft Operator: Air Taxi
Make Model Name: Super King Air 200
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Descent
Route In Use: Vectors
Airspace.Class E: ZLC

**Person**

Reference: 1
Location Of Person.Facility: ZLC.ARTCC
Reporter Organization: Government
Function.Air Traffic Control: Instructor
Function.Air Traffic Control: Enroute
Qualification.Air Traffic Control: Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs): 7.0
ASRS Report Number. Accession Number: 1643338
Human Factors: Communication Breakdown
Human Factors: Confusion
Human Factors: Training / Qualification
Human Factors: Situational Awareness
Communication Breakdown.Party1: ATC
Communication Breakdown.Party2: ATC

**Events**

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

**Assessments**

Contributing Factors / Situations: Airspace Structure
Contributing Factors / Situations: Company Policy
Contributing Factors / Situations: Human Factors
Primary Problem: Human Factors
**Narrative: 1**

The aircraft was planning the RNAV Approach. We had just split the sector and there was confusion as to which frequency the aircraft was on. The aircraft was close to the Initial Approach Fix and asked for lower. We assigned 9,000 feet and turned them 30 degrees right to give an appropriate intercept angle. We left the aircraft on the heading just a minute too long. We climbed the aircraft to 10,000 feet for terrain and turned them back to the fix, but while the aircraft was turning they got into a 10,000 feet terrain box while at 9,500 feet. A low altitude alert was then issued. On the job training was in progress.

**Synopsis**

ZLC ARTCC Controller reported due to a communications error after de-combining sectors an aircraft was left on a heading too long and flew below the Minimum Vectoring Altitude.
Time / Day

Date : 201904
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : FUL.Airport
State Reference : CA
Relative Position.Angle.Radial : 290
Relative Position.Distance.Nautical Miles : 3
Altitude.AGL.Single Value : 2400

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Tower : FUL
Aircraft Operator : Personal
Make Model Name : Cessna 170
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Personal
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class D : FUL

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : FUL
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Mission : Ambulance
Airspace.Class D : FUL

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 6801
Experience.Flight Crew.Last 90 Days : 25
Experience.Flight Crew.Type : 5300
ASRS Report Number.Accession Number : 1638860
Human Factors : Situational Awareness
Human Factors : Time Pressure
Human Factors : Distraction

Events
Anomaly.Airspace Violation : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 500
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert

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

Narrative: 1
While flying to ZZZ, the FUL Tower said to either climb or descend to avoid a medfly aircraft at my then altitude of 2,000 feet MSL. I would soon be passing over hills so I chose to climb to avoid the medfly aircraft. I leveled off for a few seconds at 2,400 MSL as I saw the medfly below and reported it to FUL Tower and descended.

I noticed that I was under the south east corner of the LAX class B. I decided to report this as I usually stay at 2,000 MSL in this area and I do not know what the computers said my altitude was. If there was any intrusion into class B it was inadvertent due to towers request I avoid the other aircraft and my eyes were out the window looking for the other aircraft. I had my ForeFlight display on my mini but was looking for the actual aircraft.

Synopsis
C170 pilot reported possible Class B violation while avoiding another aircraft.
ACN: 1618614 (42 of 50)

Time / Day
Date: 201902
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Angle.Radial: 014
Altitude.AGL.Single Value: 500

Environment
Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 10
Light: Night
Ceiling.Single Value: 9500

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: Takeoff / Launch
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: Pilot Flying
Qualification.Flight Crew: Rotorcraft
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 3655
Experience.Flight Crew.Last 90 Days: 33
Experience.Flight Crew.Type: 301
ASRS Report Number.Accession Number: 1618614
Human Factors: Time Pressure
Human Factors: Human-Machine Interface
Human Factors: Situational Awareness

Events
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person : Ground Personnel
When Detected : Pre-flight

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

Narrative: 1

A standby call came in to the base. [Another] pilot and I discussed whether he would take the call or I would take the call. We decided that I would take the call. I acknowledged the call and gave my information and proceeded to build my crew and RA (Risk Analysis). I thought I submitted my RA. Like always, I wrote my Card number and RA number on my knee board. I then went and got ready for the flight. I was getting ready and waiting to see whether the call was going to be a go flight. The medical crew and I thought we heard our RA acknowledged. We were advised that this was now a go flight. The medical crew and I gathered our stuff and headed to the aircraft. We did our walk around and proceeded with startup. Prior to lifting we went through our pre-lift checklist. I was asked if the RA was acknowledged so as I always do. I checked the cell phone to see if the RA acknowledged text was there and it was. Therefore we preceded to take off and head to the hospital. Once I landed Company called and said they didn’t have an RA. I immediately looked at the phone and it was the [other] pilot’s RA that was acknowledged and not mine. So I logged in only to notice that I had saved my RA as a draft and not submitted it, so I submitted the RA and preceded with the flight once the patient was loaded.

Synopsis

Air taxi helicopter pilot reported flying a leg without a legal Risk Analysis confirmation.
ACN: 1618252 (43 of 50)

Time / Day
Date: 201902
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: PRX.Airport
State Reference: TX
Relative Position.Angle.Radial: 090
Relative Position.Distance.Nautical Miles: 7
Altitude.MSL.Single Value: 2000

Environment
Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 10
Light: Daylight
Ceiling.Single Value: 12000

Aircraft: 1
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: Cruise
Route In Use: Direct

Aircraft: 2
Reference: Y
Make Model Name: Commercial Fixed Wing
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 137
Flight Plan: None
Mission: Agriculture
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: Single Pilot
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Total: 3100
Experience.Flight Crew.Last 90 Days: 80
Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 150
Were Passengers Involved In Event : Y
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

While returning from a patient transfer at 2,000 feet MSL (1,500 AGL) both myself and the nurse identified a crop duster (white in color) at 1 O-Clock less than 1/8 mile. The visibility was 10 plus miles and clear of clouds with light haze. I entered a hard right turn to avoid a collision passing to the right side of the crop duster within 50 yards or less. The crop duster never changed direction or banked he remained on the same course. After recovering from the hard right turn, both crew members acknowledged they did not get the tail number of the plane. I checked my TCAS with no traffic indicated. Continued flight to base with no further issues.

Synopsis

Air ambulance pilot reported a near midair collision with a crop duster near Paris, Texas.
Narrative: 1

[We] received aircraft from another [Aircraft Operator] company and had a Vinyl Wrap installed in [Aircraft Operator Name] paint scheme/colors instead of it getting painted. My involvement in this acceptance inspection/repair of [the aircraft] was to assist with a structural repair on the aft RH fuselage skin at an estimated FS [Number]. I removed the Vinyl wrap in the repair area to perform/install approved repair by [Company Name] Product Support Engineering.

Our FAA Certification Management Team (CMT) cannot say that it is a violation of the
regulations to have vinyl wrap on an aircraft, but also can't say it's not either. My upper management in [Aircraft Operator Name] decided to remove all the Vinyl Wrap on [the aircraft] and have all mechanics associated with the inspection/repair of [the aircraft] to submit a NASA report.

**Synopsis**

Maintenance reported they removed vinyl wrap to accomplish fuselage skin repair.
**ACN: 1610808 (45 of 50)**

**Time / Day**

Date: 201901
Local Time Of Day: 0601-1200

**Place**

Locale Reference.ATC Facility: ZZZ.Tower
State Reference: US
Altitude.AGL.Single Value: 0

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
Make Model Name: Cessna Citation Mustang (C510)
Crew Size.Number Of Crew: 2
Flight Plan: IFR
Mission: Ambulance
Flight Phase: Final Approach
Route In Use.Other
Airspace.Class D: ZZZ

**Person**

Reference: 1
Location Of Person.Facility: ZZZ.Tower
Reporter Organization: Government
Function.Air Traffic Control: Local
Function.Air Traffic Control: Trainee
Function.Air Traffic Control: Ground
Qualification.Air Traffic Control: Developmental
ASRS Report Number.Accession Number: 1610808
Human Factors: Communication Breakdown
Human Factors: Human-Machine Interface
Human Factors: Situational Awareness
Human Factors: Training / Qualification
Communication Breakdown.Party1: ATC
Communication Breakdown.Party2: ATC

**Events**

Anomaly.ATC Issue: All Types
Anomaly.Conflict: Ground Conflict, Less Severe
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Detector.Person: Air Traffic Control
When Detected: In-flight

**Assessments**

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

**Narrative: 1**
I was training Local and Ground combined. Airport was IFR with snow removal in progress. OS [Operational Supervisor] handed me an updated list of NOTAMS for field conditions. An opposite direction arrival to Runway 21 was coordinated and approved by me. Aircraft X was approximately 20 miles north of the field. I concentrated on updating the IDS-4 [Information Display System] and did not check the radar scope as I should have. I am still learning to adapt to IDS-4 requirements of my new facility. No one in the tower pointed out to me the position of the inbound aircraft. Aircraft X checked in on a 6 mile final. I had to scramble to get vehicles off of the runway. Aircraft X really should have been sent around. Personnel in the tower at the time. OS on CIC. Training on TRCAB. Controller monitoring between me and TRCAB. OJTI plugged in with me. Total persons including myself 6. This situation was allowed to develop to prove a point to me. While I do allow conditions to develop so trainees can learn, with the weather and vehicles on the runway, this was too dangerous of a situation to allow this to happen. I do take responsibility for not checking the radar, but at the minimum the supervisor should have said something to keep the operation safe. Stress the importance of tower team concept. Describe when it is appropriate to allow situations to develop and when it is not. This should be included in some type of training such as recurrent training.

**Synopsis**

Tower Controller reported rushing to clear the runway of vehicles for landing traffic while training.
**ACN: 1602828 (46 of 50)**

**Time / Day**

Date: 201812  
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: ZZZ.Airport  
State Reference: US  
Altitude.MSL.Single Value: 400

**Environment**

Flight Conditions: VMC  
Weather Elements / Visibility: Turbulence  
Weather Elements / Visibility. Visibility: 10  
Light: Night

**Aircraft**

Reference: X  
ATC / Advisory.Tower: ZZZ  
Aircraft Operator: Air Taxi  
Make Model Name: Small Transport  
Crew Size.Number Of Crew: 1  
Operating Under FAR Part: Part 135  
Flight Plan: VFR  
Mission: Ambulance  
Flight Phase: Landing  
Route In Use: Direct  
Airspace.Class D: ZZZ

**Person**

Reference: 1  
Location Of Person.Aircraft: X  
Location In Aircraft: Flight Deck  
Reporter Organization: Air Taxi  
Function.Flight Crew: Pilot Flying  
Function.Flight Crew: Single Pilot  
Qualification.Flight Crew: Instrument  
Qualification.Flight Crew: Flight Instructor  
Qualification.Flight Crew: Multiengine  
Qualification.Flight Crew: Air Transport Pilot (ATP)  
Experience.Flight Crew.Total: 6500  
Experience.Flight Crew.Last 90 Days: 66  
Experience.Flight Crew.Type: 497  
ASRS Report Number.Accession Number: 1602828  
Human Factors: Workload  
Human Factors: Situational Awareness  
Human Factors: Confusion  
Human Factors: Distraction

**Events**
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Landing Without Clearance
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Became Reoriented

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

Narrative: 1

On the flight from to ZZZ. We were on descent to 11,000 feet when ZZZ Center said they had a relay from company for a flight from ZZZ1 to ZZZ2. I asked Center to stand by while I try to get weather. I was able to check weather and determine that the weather looked good, briefed my crew, also briefed that once we got on the ground that I would do an updated weather check since conditions over the [area] were changing fast.

Center cleared us to ZZZ1 they then handed us off to Approach; they cleared us to 6,000 feet then to 4,000 feet. I got the ZZZ1 airport in sight. Approach cleared us for the visual approach.

I listened to the automated weather in ZZZ1 again and the winds had changed and this was confirmed when I checked in with ZZZ1 Tower. They were 140 degrees at 25kts gusting 37kts. The active runway was Runway 20. I advised Tower that was past our crosswind allowed.

I cancelled IFR and requested to hold in visual conditions at 4,000 feet while I call Dispatch. I tried 3 times to call Dispatch on the VHF radio but didn't get a reply. We decided to abort ZZZ1 and head for ZZZ. I notified ZZZ1 Tower of our intentions. They told us to contact Approach.

I contacted Approach and advised them of our intentions and climbed to 4,500 feet and reprogrammed the FMS and checked weather at ZZZ. I saw traffic on the TCAS at our 8 to 9 o'clock position and at that time, Dispatch contacted me on the VHF radio. They wanted to confirm that we were aborting.

I confirmed that we were aborting and heading to ZZZ. At that time, the call from Dispatch stepped on radio transmissions from Approach concerning the traffic. I verified with the crew if I missed a radio call or not. No calls were missed.

Approach gave me updated weather for ZZZ and asked if I intended to use Runway 26. I said I did plan to use Runway 26 if it didn't conflict with any traffic. Approach said it didn't and that to please stay on the current heading since there was a Citation to my south and maneuvering for Runway 30.

I continued at 4,500 feet until I had the ZZZ airport in sight. FMS showed I was 14 miles from ZZZ and I had it insight. I told Approach I was maneuvering for runway 26 and asked to change to the local traffic frequency. Approach approved me through the Class D
airspace and to switch frequency. I switched frequency and made the appropriate radio calls.

I configured the airplane for landing. I started to notice that the winds were different than advertised but chalked it up to changing conditions. The winds were within limitations. I performed a normal flaps 30 landing. On roll out, I noticed things were not as expected. I realized I landed at ZZZ3.

I got off the runway as soon as I could. I came to a stop after clearing the runway. Did the After Landing Checklist. Pulled up the chart for ZZZ3 on the FMS. Called Ground Control. They said to state intentions. I said if it was possible, I would like to continue to ZZZ. They asked what runway I would like. I requested Runway 30. They cleared me to taxi to Runway 30. I got the ATIS and reprogrammed to FMS.

I briefed my crew. We decided I was still safe to fly us over to ZZZ. I switched to Tower frequency and told Tower I was ready to take off. They cleared me to take off runway 30 and did my Line Up Checklist. I then took off and headed straight to ZZZ. I switched to the local traffic frequency when advised by Tower.

I got updated weather. Made the appropriate radio calls. I landed on Runway 26 in ZZZ. I taxied clear of the runway and did the After Landing Checklist. Taxied to the ramp and shut down the airplane did the Shutdown Checklist.

Human Performance Considerations: Night time with light to moderate turbulence. Changing destinations in a short period of time, multiple communications happening at once or in a close time frame [from] ATC, crew, and Company.

I should have requested a IFR clearance back to ZZZ, instead of remaining VFR. I started the flight IFR and should've ended it IFR. When I was getting task saturated, I should have requested a hold until I had everything sorted and not task saturated.

I could've then accomplished the RNAV approach and circled to runway 1 or 26 at ZZZ. I could've asked my crew to handle the communication with company and turn that audio off. Once the problem was discovered and I landed at ZZZ3, I should have requested to taxi to the FBO instead of requesting to continue to ZZZ.

Synopsis

Air ambulance pilot reported landing at the wrong airport due to task saturation.
ACN: 1591945 (47 of 50)

Time / Day
   Date: 201811
   Local Time Of Day: 0601-1200

Place
   Locale Reference.ATC Facility: ZLC.ARTCC
   State Reference: UT
   Relative Position.Angle.Radial: 064
   Relative Position.Distance.Nautical Miles: 85

Environment
   Flight Conditions: VMC
   Light: Night

Aircraft
   Reference: X
   ATC / Advisory.Center: ZLC
   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: Cruise
   Route In Use: Direct
   Airspace.Class A: ZLC
   Airspace.Class E: GTF

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
   Function.Flight Crew: Single Pilot
   Qualification.Flight Crew: Commercial
   Qualification.Flight Crew: Multiengine
   Qualification.Flight Crew: Instrument
   Experience.Flight Crew.Total: 2343.4
   Experience.Flight Crew.Last 90 Days: 92.5
   Experience.Flight Crew.Type: 521.1
   ASRS Report Number.Accession Number: 1591945
   Human Factors: Physiological - Other
   Human Factors: Situational Awareness
   Human Factors: Distraction

Events
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness / Injury
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Diverted

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

Narrative: 1
After experiencing some abdominal discomfort and diarrhea I decided I was still feeling well enough to depart and climb to 23000 feet. After leveling off with the auto pilot engaged I started feeling sick and asked for a sick sack. At that time, according to the flight nurses onboard, I passed out for 30-45 seconds and woke up again. I diverted to another airport that was close and VFR and landed safely.

Synopsis
Air taxi pilot reported passing out during the flight in a single pilot operation.
ACN: 1586971 (48 of 50)

**Time / Day**
Date: 201810

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

**Environment**
Flight Conditions: IMC
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
Flight Plan: None
Mission: Ambulance
Flight Phase: Parked

**Component**
Aircraft Component: Pitot-Static System
Reference: X
Problem: Improperly Operated

**Person**
Reference: 1
Location Of Person: Hangar / Base
Reporter Organization: Air Taxi
Function: Flight Crew: Pilot Flying
Function: Flight Crew: Captain
ASRS Report Number: Accession Number: 1586971
Human Factors: Confusion
Human Factors: Troubleshooting
Human Factors: Communication Breakdown
Communication Breakdown: Party1: Maintenance
Communication Breakdown: Party2: Flight Crew

**Events**
Anomaly: Aircraft Equipment Problem: Critical
Anomaly: Deviation / Discrepancy - Procedural: Published Material / Policy
Detector: Person: Flight Crew
Result: General: Maintenance Action

**Assessments**
Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Manuals
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

**Narrative: 1**

After returning to work from my scheduled time off, I was informed by the Base Maintenance Personnel that the pitot tubes on the aircraft had been replaced. I did inquire if the system required another 24 month re-certification, or if some other type of check was necessary. I was given a brief explanation of the process, and that the Maintenance personnel had performed the required inspection. The inspection was annotated in the logbook, and signed off as completed, and operational.

In a later discussion with another pilot the next morning, with an extensive background in aircraft maintenance, he expressed doubts that the checks reached the level required for this type of repair work. After our conversation, I became concerned because the aircraft had been flown, and decided to follow up with Maintenance on what was necessary to satisfy the pitot system inspection criteria. Again, I was told it was checked as required, operational, and signed off as serviceable.

I still had serious reservations, and informed the mechanics that the aircraft was grounded until everyone was satisfied with the specific requirements. The Maintenance staff indicated that they would do additional research, and get back with me. A short time later, the mechanics acknowledged that they did not read far enough into the Maintenance Manual, and that all the required checks had not been performed. The mechanics had to obtain a specific piece of test equipment necessary to properly complete the inspection, and are in the process of testing the system.

Flight crew are not familiar enough with the specifics of each inspection, and rely on Maintenance to familiar with the necessary criteria. Additionally, advanced planning would provide the opportunity to have the necessary test equipment on-hand.

**Synopsis**

Helicopter pilot reported after maintenance work was performed, the mechanics failed to complete all required testing to return aircraft to an airworthy condition.
**ACN: 1582920 (49 of 50)**

**Time / Day**
- Date: 201810
- Local Time Of Day: 0001-0600

**Place**
- Locale Reference: ATC Facility: ZHU.ARTCC
- State Reference: TX
- Altitude. MSL. Single Value: 3000

**Aircraft: 1**
- Reference: X
- ATC / Advisory. Center: ZHU
- 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: Final Approach
- Route In Use. Other
- Airspace. Class D: LRD

**Aircraft: 2**
- Reference: Y
- Make Model Name: Helicopter
- Flight Plan: VFR
- Flight Phase: Climb
- Route In Use: None
- Airspace. Class D: LRD

**Person: 1**
- Reference: 1
- Location Of Person. Facility: ZHU.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): 8
- ASRS Report Number. Accession Number: 1582920
- Human Factors: Situational Awareness
- Human Factors: Human-Machine Interface

**Person: 2**
- Reference: 2
- Location Of Person. Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Taxi
- Function. Flight Crew: Captain
- Function. Flight Crew: Single Pilot
- Qualification. Flight Crew: Multiengine
Qualification. Flight Crew : Commercial
Qualification. Flight Crew : Instrument
Experience. Flight Crew. Total : 1760
Experience. Flight Crew. Last 90 Days : 56
Experience. Flight Crew. Type : 56
ASRS Report Number. Accession Number : 1583840
Human Factors : Situational Awareness

Events
Anomaly. Conflict : NMAC
Detector. Person : Air Traffic Control
Detector. Person : Flight Crew
When Detected : In-flight
Result. Flight Crew : Took Evasive Action
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 : Human Factors

Narrative: 1
Aircraft X was inbound to Laredo airport direct IAF OVOS on the RNAV 18R at LRD. The aircraft was cleared to maintain 030 ft until established and cleared for the approach. About 5 miles from OVOS, my trainee saw traffic with a beacon XXXX maneuvering in the area of OVOS at 018 and called traffic to Aircraft X. He said targets appear likely to merge. At that point the XXXX code turned [towards] Aircraft X and climb to 031. I then canceled the approach clearance of Aircraft X and turned the aircraft 30 degrees right and issued a traffic alert. Aircraft X then called the unknown Aircraft Y in sight, and said that it was a close one.

At that point I asked Aircraft X if they were time critical, and when learning they were not, I extended the aircraft vectors to make sure the unknown code XXXX would not be an issue again. Laredo tower was not in communication with Aircraft Y, and when he finally did go to Laredo to land, I had the tower give that aircraft our phone number to call. Aircraft X company called the supervisor and told him that Aircraft Y was less than 200 ft from him same altitude, and that the pilot didn't see Aircraft Y until he started the turn and barked away from it.

I strongly insist that if there are border aircraft near or in the vicinity of LRD, that they monitor the frequency and let us know they are there. That way this situation won't happen.

Narrative: 2
I was cleared direct JINSA on the RNAV 18R approach. I was 3 miles from the fix when Houston Center gave me a traffic advisory for an unknown target 1500 ft below me. I was looking for traffic but never got them in sight visually. I did have them on the TCAS system. Then Center advised me they were climbing rapidly toward my current altitude. I was then told that we were on a collision course and to make an immediate right-hand
turn 30 degrees. Half-way through the turn is where I noticed the aircraft off my wingtip on the left side 300 ft or closer.

Synopsis

Houston Center Controller and an Air Taxi reported a NMAC with an aircraft not communicating with ATC.
**ACN: 1582403 (50 of 50)**

**Time / Day**

Date: 201803
Local Time Of Day: 0601-1200

**Place**

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

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory.CTAF: ZZZ
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: Takeoff / Launch
Route In Use: Direct
Airspace.Class G: ZZZ

**Component : 1**

Aircraft Component: Rudder Trim System
Aircraft Reference: X
Problem: Improperly Operated

**Component : 2**

Aircraft Component: Aileron Trim System
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
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 2310
Experience: Flight Crew. Type: 487
ASRS Report Number: Accession Number: 1582403
Human Factors: Human-Machine Interface

Events
Anomaly. Aircraft Equipment Problem: Less Severe
Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy
Detector. Person: Flight Crew
When Detected: In-flight
Result. Flight Crew: Overcame Equipment Problem

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

Narrative: 1
After testing the autopilot the yaw trim was full right and stabilizer trim was half down, both out of takeoff range. I missed seeing them out of trim even though I "looked but didn't see." I took off with it out of trim and didn't abort the takeoff even though I had to have a significant amount of rudder input, which I should have had if I used the "abort unless everything is okay" mindset. I adjusted the trim after takeoff and continued the flight. I could have caught it either at the checklist or aborted takeoff point of the flight, but didn't.

Synopsis
PC12 Captain reported failing to reject takeoff after realizing yaw and stabilizer trim were both out of range.