ACN: 2307177 *(1 of 220)*

Time / Day

Date : 202511
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
Ceiling.Single Value : 25000

Aircraft

Reference : X
Aircraft Operator : Personal
Make Model Name : Amateur/Home Built/Experimental
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Landing
Route In Use : Visual Approach
Route In Use : Direct

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 3575
Experience.Flight Crew.Last 90 Days : 73
Experience.Flight Crew.Type : 185
ASRS Report Number.Accession Number : 2307177
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Object
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Regained Aircraft Control
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

I purchased a new CarbonCub FX3 and was bringing it home. I hired a CFI to help me with familiarization of the Garmin instrument panel and flying the new airplane, since I did not have much recent tailwheel experience. I flew from on the airlines with the plan to depart ZZZ1 on Day 0, enroute to ZZZ, where the CFI would take the airlines back on Day 1, and I fly solo. This is the 5th airplane I have owned, and I currently also own a C182. I did a week of tailwheel training in, and a week of flying CarbonCub in the back country with another instructor. A maintenance issue caused me to leave it with repairs being just completed the day before I arrived to bring it home. I was not yet fully comfortable with the radios and my tailwheel landings were not yet consistently good. The CFI I flew with was unavailable but gave me the name of a local CFI, who said they had 400 hours CarbonCub time, whom I then hired and we set a date for us to make the trip. Upon arrival in ZZZ2, the local CFI said they had just finished 3 trips in 4 days ferrying C182s from, was concerned about weather that would be following us a day or 2 after our destinations along our route, and was wanted to be back in ZZZ2 by Day 2 to prepare for recurrent training for their charter job, which was scheduled Day 3. They suggested we do an hour or so of landings at ZZZ2 and then have me fly solo for the rest of the trip. I told them that I had hired them to get me to ZZZ, and they agreed that they would meet their commitment. We departed ZZZ2 on the morning of Day 0 for a 3.2 hour flight to ZZZ3, where we stopped for fuel & lunch, then continued 1.8 hours for an overnight stop at ZZZ4. We departed ZZZ4 Day 1 just after XA:30, stopped for fuel at ZZZ5, 2.7 hours flight time. The CFI pretty much sat in the rear seat looking at their phone. They were not providing input or instruction for the majority of the 2nd day of flying. They did not help with fueling after landing at ZZZ5 and instead went directly into the FBO building, and was relaxing in the rear seat, on their phone, with their feet up and crossed on the doorway of the Cub when I returned after a bathroom stop at the FBO. We departed ZZZ5 XD:38am, landed ZZZ6, taxied back without shutting down, and departed for ZZZ, on the South side of the Class B, XE:17. ZZZ6 had low visibility due to smoke from nearby prescribed burned. I had not previously flown in ZZZ, and we planned to fly the VFR flyway and/or a Class B Clearance, though we did not brief the route or ensure that the correct data was in the iPad or panel radios prior to takeoff at ZZZ6 or ZZZ5. I am very comfortable using Foreflight on my iPad, while the CFI was encouraging me to ignore the iPad and only use the panel Garmin G3X Touch **MFD**, GPS and autopilot, which I am still learning how to use. They were not completely familiar with the particular radio setup and was unable to talk me through loading flight plans from their phone in the rear seat to the panel radios. We flew through ZZZ with a Class B Clearance via the Flyway. I had been doing radio communication until inside ZZZ Class B, then had them take over radios since ZZZ was very busy, I was not familiar with the airspace or names of waypoints, and they were familiar. ZZZ was still a bit hazy from the prescribed fire burns further north, but ATIS at our destination of ZZZ on the South side of the area did not report reduced visibility. We departed Class B airspace and was cleared to land Rwy XX R by ZZZ Tower. Winds were light - 290/3. After touchdown I over-corrected with the rudders during deceleration on the runway and exited the left side of the runway, coming to stop in the dirt between Rwy XX L and XX R at XF:22. I asked the CFI if they had touched the controls, specifically if they had tried to help with the rudders, during my excursion and they said that they had only gotten on the control stick to try to bring up the wing. ZZZ Tower asked if we needed assistance, I declined, and after a short time sitting between the runway XX R and XX L, I taxied back across Rwy XX R to exit on Taxiway 1, then parked and shut down. Shortly after we parked, I was told that I had hit a runway light about 800 ft. down the runway. The CFI was quickly out of the airplane looking at damage to my plane and texting, at least to my mechanic, photos of my plane before discussing anything with me. Then they walked away to a nearby building. When they returned, they said that they would send me an invoice and would discuss things later. I told them I wasn't happy that they spent the day looking at their phone, they replied that I had told them that I didn't want their help and started yelling. I told them that this wasn't the time or place and this should continue at another time. They left ZZZ airport within about a half an hour of landing. The next morning, Day 3, the CFI texted to apologize for "blowing up" at me the day before and requested payment for time and expenses, which I sent to them on Day 5. Luckily, no one was hurt and the airplane is not totaled or terribly damaged. The airplane has damage to the right wingtip but does not appear that the spar is bent. The Director of Maintenance at the shop I parked in front of was very helpful. The damage to the wing was not so severe that it would be defined as an Accident and would be deemed an Incident. Coming into the trip, I knew my tailwheel landings were not consistently good, I was still learning how to operate the radios, I was unfamiliar with flying in the mountains and in that area of the country, and had not flown that airplane in 2 months, so I sought help. I ended up with someone whom I think was too young and inexperienced to provide adequate help. I chose the wrong flight instructor to accompany me. I think the primary cause of my ground loop was too much rudder inputs after touchdown - that I had not yet mastered consistently good tailwheel landings in this airplane. This was only my 5th landing in 2 days and 9.5 hours of flight time, after not flying this, or another, tailwheel plane for 2 months. A significant contributing factor was allowing myself to be frustrated with the CFI, who had their head down looking at their phone anytime I looked back at them during the previous several hours of flying time that day. We had not briefed the flight into the very busy Class B airspace and I was frustrated that I was so behind enough in communications that I asked them to take over the radios. They told me the morning that we left ZZZ2 that they were tired from previous days of flying, and I had the strong impression that they did not want to be on this trip, which I also think was a contributing factor - that they were tired, watching the clock, thinking about other stuff, and didn't want to be on this trip. I also think that they were young and fairly inexperienced, but this is another assumption. In the end, I hired the wrong person, who was unable to help me.

Synopsis

Carbon Cub pilot reported exiting the runway edge during landing. Aircraft continued to parking.

ACN: 2307162 *(2 of 220)*

Time / Day

Date : 202511
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : COS.Airport
State Reference : CO
Relative Position.Angle.Radial : 180
Relative Position.Distance.Nautical Miles : 20
Altitude.MSL.Single Value : 7650

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Cruise

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 567
Experience.Flight Crew.Last 90 Days : 120
Experience.Flight Crew.Type : 438
ASRS Report Number.Accession Number : 2307162
Human Factors : Communication Breakdown
Human Factors : Distraction
Human Factors : Training / Qualification
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

A student and I filed an IFR flight plan from ZZZ – ZZZ2. We had filed ZZZ COS ZZZZZ ZZZ1 ZZZ2. When we called ZZZ ground to pick up our clearance the controller asked us if we wanted to land in COS and then continue on our IFR flight plan to ZZZ2 (stop and go). We confirmed, yes, and he said he had to modify our flight plan and would give us our clearance shortly. This flight was to complete a lesson in our training which required a long cross-country flight with landings at least

three locations which three different types of instrument approaches (hence why we were asking for a landing at COS). After finishing the runup we contacted ground again and he issued our clearance which was the ZZZZZ1 departure and then as filed. We took off with no issue, and was directed over to COS Approach. Upon contacting them they asked if we wanted to fly (straight) back to ZZZ2 and we clarified saying we wanted an approach and landing at COS and then back to ZZZ2. The controller clarified and confirmed what we wanted and then asked for what approach we wanted into the Springs. We asked for the approach and they started vectoring us for that approach. We were established on the approach and they directed us to contact COS Tower so we did. They immediately cleared us for the option. The rest of the approach was uneventful and we came to a full stop on the runway. We stopped for a second or two and then added full power and took off. Once on the upwind we checked back in with COS tower and told them we'd like to continue our flight plan back to ZZZ2. Tower directed us to climb 9000 and left turn to a north heading. Then they asked if we wanted to fly VFR back to ZZZ2. That's when they told us our IFR flight plan had been closed and we were no longer in the system. There was confusion over why or how it got closed. It sounded like the voice changed between who cleared us to land and who we were talking to once we were in the air after the stop and go, and the controlled apologized and said something to the effect of he just got on. He said if we stay on the ground for too long the flight plan automatically closes. Reviewing our radar track, from the moment our wheels touched the ground to the moment we were airborne was less than 1 minute (including ground roll to come to a stop and ground roll to reach Vr). I told the controller over the radio we were barely on the ground for any period of time and we never left the runway. He was apologetic but couldn't help us with an IFR clearance or flight plan anymore since we were no longer in the system. At that point we had climbed to about 9,000 and were about 15 miles north of the COS airport. This is where I made a big mistake. We were now flying VFR and I knew we had the bravo ahead of us, I gave my student headings to fly northwest so we would head towards the designated Denver VFR flyway in case we couldn't get IFR on the way back home, but I also checked and the northbound altitude for the flyway is 7500. I told my student (who was under simulated instrument conditions) to descend and maintain 7500. However, I didn't double check the ground elevation for the area we were in. As we were approaching our altitude my student asked me if that was the altitude we wanted to be at, or if it was too low. I immediately checked the current field elevation which was listed at 7449 and told him to start climbing to 8500. We were at just under 7800 when we reversed the descent and started climbing. While we were descending I was distracted with pulling up the frequency for Flight Service and looking up what equipment codes our plane was equipped with. I have not flown in this specific area extensively and falsely assumed the ground elevation was similar to Denver (~5000 MSL). It was also very dark and no visible ground lights in the area to help distinguish terrain. I also did not have our **MFD** in terrain awareness mode which would have helped prevent this situation from happening. After starting the climb I was able to contact flight service and file a new IFR flight plan in the air with their assistance. I vectored my student towards the West side of the Denver bravo as we approached Denver airspace in case we weren't going to be able to open our IFR flight plan in time. We contacted Denver Approach and opened our flight plan at 8,000 ft just southwest of APA airport under the bravo shelf and continued home with no incident.

Synopsis

Single-engine piston instructor reported descending towards terrain at night. Flight climbed and continued to destination with no further incident.

ACN: 2304582 *(3 of 220)*

Time / Day

Date : 202511
Local Time Of Day : 1201-1800

Place

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

Environment

Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : FBO
Make Model Name : SR20
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Initial Approach
Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ
Make Model Name : M-7

Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Flight Phase : Final Approach
Airspace.Class D : ZZZ

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
ASRS Report Number.Accession Number : 2304582
Human Factors : Situational Awareness

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Trainee
Qualification.Flight Crew : Student
ASRS Report Number.Accession Number : 2304581
Human Factors : Situational Awareness

Person : 3

Location Of Person.Aircraft : X
Location In Aircraft : General Seating Area
Reporter Organization : Personal
Function.Flight Crew : Trainee
Qualification.Flight Crew : Student
ASRS Report Number.Accession Number : 2304580
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Other Person
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

My student was turning base to final at ZZZ and and was giving ample attention to executing that turn especially with parallel runway operations. When we started rolling out, another aircraft quickly turned base. They were flying right toward us and triggered the TCAS. My student leveled off as I was searching for traffic but as I glanced over at the PFD/**MFD**, I noticed the airspeed dropping to ~63kts. I immediately took control and in that instant ATC advised I take immediate action to avoid the traffic and sidestep to Rwy XXL. We completed a successful touch and go and experienced no further disruptions during the flight.

Narrative: 2

While on approach to runway XXR, our aircraft was following the assigned traffic as instructed by ATC. The pilot of aircraft Y appeared to have mistakenly followed our aircraft instead of his designated traffic and initiated an early turn onto final, resulting in a potential conflict with our flight path. A traffic alert was received. As the pilot flying, I immediately discontinued the descent to increase vertical separation. Shortly thereafter, the backseater visually acquired Aircraft Y just below our right wing. The instructor pilot promptly took control, applied full power, and initiated a climb followed by a left turn to avoid the conflicting traffic. During this maneuver, the tower instructed us to change from runway XXR to XXL. The conflict was resolved without further incident. Only during post-flight debrief and subsequent review of flight radar data, it became apparent to me

that the proximity between the two aircraft had been closer than initially perceived in flight. No injuries or aircraft damage occurred.

Narrative: 3

Was backseating flight. Turned final RWY XXR number 2 as instructed by ATC. Saw TCAS caution. Looked outside for traffic.Spotted Aircraft Y right side & below us. Called out traffic. Instructor took controls & flew immediate evasive maneuver. ATC instructed us to turn left 10° same time.Freq. & rwy change to XXL

Synopsis

A student pilot, their instructor, and an observer passenger reported a NMAC with another aircraft turning on to final below them.

ACN: 2299409 *(4 of 220)*

Time / Day

Date : 202510
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Make Model Name : Skyhawk 172/Cutlass 172
Operating Under FAR Part : Part 91
Mission : Training
Flight Phase : Initial Climb
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ
Make Model Name : Cessna Citation Sovereign (C680)
Flight Phase : Initial Climb
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
ASRS Report Number.Accession Number : 2299409
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Primary Problem : Human Factors

Narrative: 1

My student and I were taking off from runway XX at ZZZ, at approximately XA:09, just after ZZZ tower ceased operations for the day. My student and I made the radio call on CTAF to announce our intentions and depart to the NE, heading to ZZZ1. After we took off, a Cessna Citation announced their intentions to take the runway and I didn't think much of it at the time, but during our climb out they called to ask which way were were turning, I confirmed to the NE, they asked again which way we were turning, and I confirmed we intended to make a left turn to the NE. We were still in our initial climb out on rnwy heading when the citation made their departure call and caught up to us. Flew straight out towards us as I watched traffic alert on our **MFD** (Multi-function Flight Display) alert us to traffic within 200ft. I took the flight controls and turned the aircraft left, turned my head to look out the window and saw the citation abeam us upon reaching TPA (Traffic Pattern Altitude) and it turned right towards the southwest. Once it turned, it disappeared off the **MFD** and we could not find any trace of the plane afterwards on flight tracking/filed departures, had to listen to recordings to find and confirm the tail number of the aircraft. All of this happened within the span of a minute, per the recording time stamps.

Synopsis

C172 Flight Instructor reported a NMAC during initial climb.

ACN: 2296739 *(5 of 220)*

Time / Day

Date : 202510
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Relative Position.Angle.Radial : 070
Relative Position.Distance.Nautical Miles : 12
Altitude.MSL.Single Value : 5500

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Night
Ceiling.Single Value : 9999

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class C : ZZZ

Component : 1

Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Failed

Component : 2

Aircraft Component : Air/Ground Communication
Aircraft Reference : X
Problem : Failed

Component : 3

Aircraft Component : GPS & Other Satellite Navigation
Aircraft Reference : X
Problem : Failed

Component : 4

Aircraft Component : PFD
Aircraft Reference : X
Problem : Failed

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 134
Experience.Flight Crew.Last 90 Days : 25
Experience.Flight Crew.Type : 134
ASRS Report Number.Accession Number : 2296739
Human Factors : Workload
Human Factors : Troubleshooting

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.Flight Crew : Diverted
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While enroute to ZZZ, approximately 12 miles east of ZZZ1, the aircraft lost **MFD** (Multi-function Flight Display), COM 2, GPS and Autopilot. I requested vectors to ZZZ2 in efforts to land and troubleshoot. While on a 240 heading with instructions to descend to 3,500 I began to smell electrical smoke in the cockpit. Upon recognizing the danger I advised ATC, and diverted to ZZZ1. On right base to land Runway XX into ZZZ1 the interior and panel lights dimmed and the flap motor made a grinding noise when engaged. Landing was uneventful, normal taxi and shut down.

Synopsis

C172 pilot reported several systems failures and smoke in the cockpit during cruise and diverted to a nearby airport.

ACN: 2294686 *(6 of 220)*

Time / Day

Date : 202510
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MCE.Airport
State Reference : CA
Relative Position.Distance.Nautical Miles : 3
Altitude.MSL.Single Value : 1500

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : MCE
Aircraft Operator : Personal

Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Final Approach
Airspace.Class E : MCE

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1
Flight Phase : Final Approach
Airspace.Class E : MCE

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 : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 207.1
Experience.Flight Crew.Last 90 Days : 62.9
Experience.Flight Crew.Type : 207.1
ASRS Report Number.Accession Number : 2294686
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Airspace Violation : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 75
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

While on a straight in final about 3 miles out for Runway 30 at Merced (MCE), another aircraft called "turning base" and turned right in front of me. I went around immediately and offset to the right side of the runway so I could keep them in sight and stay clear. After the go around, I told traffic on CTAF that I was extending my upwind. I stayed on upwind longer than usual and climbed to about 400 feet above pattern altitude because the other pilot hadn't been responding to any of my calls and I wasn't sure what they were going to do next. On my **MFD** I saw them departing and climbing behind me at roughly my same altitude, and it looked like they were converging on me. To stay clear I turned right and started descending. While I was maneuvering, I realized the Class D airspace northeast of Merced was nearby. I double checked my position on the **MFD**, made sure I was below and clear of her, then turned left to stay away from the Delta boundary. It's possible I briefly touched the edge of that airspace while avoiding them. I realize how important it is to stay flexible, communicate clearly, and maintain full awareness of traffic and nearby airspace, especially when I notice that another pilot isn't following normal pattern procedures.

Synopsis

General aviation pilot reported a NMAC on final approach caused by an aircraft that turned in front of them. Pilot performed a go-around and the same aircraft then caused another NMAC.

ACN: 2294317 *(7 of 220)*

Time / Day

Date : 202510

Place

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

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Fractional
Make Model Name : EMB-505 / Phenom 300
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Ferry / Re-Positioning
Flight Phase : Cruise
Airspace.Class A : ZZZ

Component

Aircraft Component : AC Generator/Alternator
Aircraft Reference : X
Problem : Failed

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Fractional
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 2294317
Human Factors : Distraction
Human Factors : Human-Machine Interface
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Diverted
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued New Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

A few minutes after reaching FL430 on our way from ZZZ to ZZZ1, we received "GEN 1 OFF BUS" and "SHED (Shedding) BUS OFF" CAS messages. My PIC ran the QRH checklist and completed the required action items. I pulled up the electrical schematic on my right-side PFD (Primary Flight Display) and saw that GEN 1 was reading very low and was not functioning normally, if at all. As my PIC completed the procedure and it was clear the generator had not reset, I told him I would take the controls if he wanted to contact the company to discuss possible diversion options, which he agreed was a good idea. Within seconds, we lost PFD 2 and the **MFD** (Multi-function Flight Display), and the left seat pilot's (LP) PFD displayed a long list of warning and caution CAS messages and flags across the screen. After a few seconds of "reaction time" to assess the situation and get our bearings, the PIC motioned for me to start a descent. Around this time, it became clear we could no longer hear each other. I yelled at him to put his mask on, and after doing so, he took the controls since he was the only one able to hear ATC—my audio panel (AUDIO PNL (Panel) 2 FAIL) was among the many systems that had failed. I squawked XXXX on the LP's Garmin Touch Controller (GTC) before beginning what I felt were the most critical QRH checklists. There

were pages of CAS messages to scroll through. During this time, we had to communicate by briefly removing our oxygen masks and yelling commands, checklist information, findings, what ATC was telling him, along with other pertinent details. To make matters worse, the cockpit windows fogged over completely, making it impossible to see outside during our descent. Cabin altitude was well over 20,000 feet—I'm not sure how high it ultimately got, but a photo I took of the LP PFD during our descent to capture a photo of the CAS messages - that we thought a maintenance might find helpful later - shows a cabin altitude of 21,000 feet while we were passing through FL220. The temperature change and fogged windows also caused our iPad suction mounts to fall, adding to the confusion and chaos in the cockpit as I was running checklists. I was using the paper QRH, and when the EFB mount fell, it became tangled in the oxygen line, taking a moment to free. Once I removed it, I was able to regain use of my EFB and began gathering information on ZZZ2, as it was clear—based on our position and ATC guidance—that it was our best diversion option due to proximity, runway length, and available emergency services. During our descent I noticed the airspeed and altitude indications seeming to be "twitching" would be the best way I can think to describe it, they were jumping around sporadically, granted small fluctuations but fluctuations nonetheless. This briefly made me question the accuracy of the information that they displayed. This abnormal indication subsided at some point in our descent. We transferred control several times throughout the remainder of the flight as my PIC needed to focus on specific tasks or take short break from the heavy control pressures since all trims systems had failed at cruise altitude. Upon reaching 10,000 feet, we removed our masks. The PIC requested a few delayed vectors so we could continue running checklists, verifying numbers and calculations, and assessing what systems were functional, what systems weren't, and how to mitigate potential threats during the approach and landing. I performed and completed landing distance calculations, confirming we had ample runway for our situation and landing configuration. I programmed our landing speeds for a no-flap landing and double-checked my calculations to ensure no errors. We elected to extend the gear early on an extended final to verify proper operation—even though we had no CAS indications of gear issues—since it was clear more systems were inoperative than functioning. Once we completed the most critical checklists and calculations, we requested vectors for the ILS XXL approach. We were IMC for part of the approach until breaking out below the cloud layer on final. During portions of the vectoring and most of the approach, my PIC asked me to manage the throttles to maintain target speeds due to the heavy control pressures. He resumed throttle control around a 2–3 mile final and he was stable by or before the "500 STABLE" callout. The landing was uneventful, and the brakes functioned normally, though we had briefed the use of emergency braking if necessary. Again, no CAS message indicated a brake issue, but we remained cautious given the number of failed systems. After landing, we received a "LG WOW SYS FAIL" CAS message. Taxi to FBO was uneventful. Before shutdown, we also received a "FUEL PUMP 2 FAIL" CAS message. We did not restart the batteries after shutdown. The cabin passenger oxygen masks were all hanging down. We secured the aircraft, closed all windows and put up the cockpit sunshades, we left the exterior panels unlocked for the maintenance techs per instructions from company, and we left the main cabin door unlocked but stickered.

Synopsis

EMB-505 First Officer reported receiving "GEN 1 OFF BUS" and "SHED BUS OFF" messages at cruise which led to cascading failures including cabin pressurization and some autoflight displays. Crew diverted and landed normally.

ACN: 2293204 *(8 of 220)*

Time / Day

Date : 202510
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Angle.Radial : 270
Relative Position.Distance.Nautical Miles : 10
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC
Weather Elements / Visibility.Visibility : 2
Light : Daylight
Ceiling.Single Value : 1100

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : FBO
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Cruise
Route In Use : Vectors

Component : 1

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

Component : 2

Aircraft Component : GPS & Other Satellite Navigation
Aircraft Reference : X
Problem : Failed

Component : 3

Aircraft Component : Communication Systems
Aircraft Reference : X
Problem : Failed

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 2105
Experience.Flight Crew.Last 90 Days : 151
Experience.Flight Crew.Type : 906
ASRS Report Number.Accession Number : 2293204
Human Factors : Human-Machine Interface
Human Factors : Troubleshooting
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Trainee
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 196.1
Experience.Flight Crew.Last 90 Days : 48.9
Experience.Flight Crew.Type : 124.1
ASRS Report Number.Accession Number : 2293559

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Diverted
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While conducting a instrument training flight in IMC conditions an electrical failure was experienced. Nothing abnormal was noted on pre-flight and run-up of the aircraft, alternator appeared to be producing proper power during run-up. A normal ifr departure was made while receiving radar vectors to the ZZZ VORTAC. Shortly after a frequency change the primary navigation display (**MFD**) fully shut off, thus causing loss of GPS navigation, communications on COM 1 and use of any nav equipment. Troubling shooting was attempted and it was revealed that there was a full alternator failure. Due to the lack of

any navigation equipment and we were in, IMC XXXX was programed into the transponder. Contact was attempted through COM 2 however it would either not transmit at all and when it would transmit it was too broken to hear. We could still hear through com 2 and communications with ATC was made through using the Ident. function. a hole in the overcast layer was spotted and the decision was made to exit IMC to return to ZZZ VFR which we knew was in VFR conditions. Once established in VMC we continued to ZZZ, rather then ZZZ1 due to IFR conditions at ZZZ1. A uneventful landing was made upon reaching ZZZ, emergency serviced had been dispatched and it was communicated to them that there were no injuries or damages. The aircraft will be grounded until cause of the failure has been identified and resolved.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

PA-28 Flight Instructor with student reported electrical failure in cruise in IMC. Flight exited IMC, diverted and landed.

ACN: 2289061 *(9 of 220)*

Time / Day

Date : 202509
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Angle.Radial : 075
Relative Position.Distance.Nautical Miles : 4.5
Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 6
Light : Dusk
Ceiling.Single Value : 5000

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : FBO
Make Model Name : DA40 Diamond Star
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Ferry / Re-Positioning
Flight Phase : Cruise
Flight Phase : Landing
Route In Use : Visual Approach
Route In Use : Direct
Airspace.Class D : ZZZ

Component

Aircraft Component : AC Generator/Alternator
Aircraft Reference : X
Problem : Failed

Person

Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 2048.5
Experience.Flight Crew.Last 90 Days : 99.1
Experience.Flight Crew.Type : 11.9
ASRS Report Number.Accession Number : 2289061
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed As Precaution

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

The training flight was 2.5 hours. I left ZZZ1 to return to ZZZ. I flew at 2000 feet because I planned to contact ZZZ to approach from the South below the ZZZ2 Class C Airspace. As I flew toward ZZZ I got a Low Voltage warning. I pressed the Engine button on the G1000 Multi Function Display to check the instruments. After reviewing them I realized the fuel quantity gauges indicated the same fuel quantity, 15 gallons and 15 gallons, since the beginning of the flight. The battery voltage reduced from 24 volts to 19.5 volts. I attempted to contact ZZZ Tower on XXX.X as the **MFD** (Multi-Function Display) showed data warnings and red X's on all the instruments while the map feature on the left screen went blank. My radios quickly became inoperative. I changed my heading to avoid the ZZZ Class D Airspace while I turned off the Master Switch to stop draining the battery in an attempt to get one last radio call out before entering the airspace. I followed Visual Navigation Aids to fly from the South of ZZZ to a visual checkpoint that is 10 miles Northeast of ZZZ. I began holding over the checkpoint as I sent text messages to my Chief Flight Instructor and the Flight School Owner to inform them I had no instruments or radios due to a battery or alternator failure. The DA 40 has a back-up Attitude Indicator, Airspeed Indicator, Altimeter, and Magnetic Compass available with an electrical failure. Fuel flow, fuel quantity, oil pressure, oil temperature, and CHT (Cylinder Head Temperature) readings were not available with the data warning message. I had a brief phone call with the flight school owner to let him know I was requesting priority handling and asked him to contact ZZZ Tower. Due to the loud feedback over the radio caused by the avionics failure, I could not hear his response. My position over the checkpoint made the closest airport ZZZ. I turned on the Master Switch and made a call to ZZZ Tower on XXX.X and requested priority handling. The G1000 showed data warnings over the map page and the **MFD** showed red X's over the instruments. I tried to input XXXX into the Transponder and hit Enter. The system failure made it difficult to determine if the Transponder input was accepted or if the radio call was received. I flew over Interstate X for the Visual Navigation Aid to enter a Right Base for Runway XX at 2000 feet to fly above the pattern altitude for ZZZ and to stay below the Class C Airspace of ZZZ2. I overflew the field wagging my wings while looking at ZZZ Tower for Light Signals. I did not see any other aircraft in the haze so I entered the pattern and executed a No Flap Landing. The cause was an alternator failure. The G1000 demands a significant amount of power and the battery drained quickly during my return flight. After the battery voltage went below 19.5 volts the system failed. I was unable to monitor any instruments for Manifold Pressure, Tachometer, Oil Pressure, Oil Temperature, Cylinder Head Temperature, Fuel Pressure, Fuel Quantity, Ammeter, or Voltmeter. I only had the Pitot Static Airspeed Indicator and Altimeter, the Magnetic Compass, and the back up Attitude Indicator. To prevent any such incident from occurring again I purchased a portable comm radio. The lack of communication limited my options. I calculated fuel consumption during an unusual situation with excessive radio feedback and aircraft performance uncertainty. The proper radio calls would have allowed for communication for proper separation and aircraft avoidance from the Tower of ZZZ.

Synopsis

DA40 pilot reported an alternator failure that failed their Garmin 1000 resulted in the pilot's loss of radio and transponder ability to communicate.

ACN: 2287915 *(10 of 220)*

Time / Day

Date : 202509
Local Time Of Day : 0001-0600

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 600

Environment

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

Aircraft : 1

Reference : X
Aircraft Operator : FBO
Make Model Name : SR20

Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Initial Approach
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Cessna Aircraft Undifferentiated or Other Model
Flight Plan : VFR
Flight Phase : Cruise
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
ASRS Report Number.Accession Number : 2287915
Human Factors : Time Pressure
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 150
Miss Distance.Vertical : 150
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

While upwind at ZZZ, SP (Student Pilot) was demonstrating a normal takeoff, slight crosswind was present. Around 500-600ft, SP pointed to traffic maybe 100-150ft above us cutting through the upwind/crosswind probably at or below TPA (Traffic Pattern Altitude). It was a Cessna. They had no ADS-B and made no calls on ZZZ [UNICOM] or ZZZ1 [UNICOM] freq. SP pitched down to avoid them and myself as well as the backseat pilot kept eyes on the Cessna as they departed over the runway toward Location X. We watched them climb and descend a bit over the mountains but eventually lost sight. We heard a call on our way back to ZZZ1 reporting their position over Location X requesting to land at ZZZ1 and they notified tower they had no ADS-B, which is why we suspect it could be them. It didn't make sense for them to be flying at or below TPA over a private field nor that low along the mountains especially with no ADS-B. That is also within the 30 NM B-ring for xpdr (Transponder) from ZZZ2, which seems unusual. We learned to always be eyes outside on every leg of the traffic pattern and not to rely solely on the **MFD** (Multi-function Flight Display) or iPad for traffic advisories in situations like this.

Synopsis

A Flight Instructor reported a NMAC during initial climb from a non-towered airport.

ACN: 2282562 *(11 of 220)*

Time / Day

Date : 202509

Place

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

Relative Position.Distance.Nautical Miles : 2.4
Altitude.MSL.Single Value : 600

Environment

Flight Conditions : VMC
Weather Elements / Visibility : Haze / Smoke
Weather Elements / Visibility.Visibility : 7
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1
Flight Plan : VFR
Airspace.Class E : ZZZ

Person

Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 312
Experience.Flight Crew.Last 90 Days : 30
Experience.Flight Crew.Type : 280
ASRS Report Number.Accession Number : 2282562
Human Factors : Communication Breakdown
Human Factors : Confusion
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Had announced myself on CTAF for the straight in on Runway XX. Aircraft on the downwind asked how far I was, I stated 5 miles. At approximately 2.4 from Runway XX, aircraft appear in front of me from my left and entered final on an unstable approach. I reduced power and increased flaps to give spacing. They continued down to the runway, and as I was approaching the aircraft was still on the ground. In order to prevent a runway incursion, I called for the go around and

announced on the CTAF. I started to proceed on runway heading starting my climb. As I was climbing, I noticed on the **MFD** (Multi-Function Flight Display) that the aircraft was performing a touch and go climbing right underneath me. In order to make sure that they didn't climb into me, I evaded by contacting CTAF and calling early crosswind Runway XX. There as I was completing my turn, I saw there was another aircraft starting to enter the downwind from the north I did not initially notice it as it blended in with the haze. I was approximately 800 MSL and went under them and headed towards the water towers to give spacing for the aircraft as I was doing that, I'm not sure if it was the same aircraft or a different aircraft that was coming on the downwind from the north, so instead of making the standard right hand tear drop into the downwind, I performed a left 180 and got in between the aircraft staggered to the west a little bit from standard pattern. I then called CTAF and announced that I will be extending my downwind for Runway XX in order to give spacing to the aircraft landing. After this, I safely landed the aircraft and pulled off the runway and secured the aircraft. I think this is a case of lack of situational awareness on the aircraft that came in front of me and then performed a touch and go. For me too it was reactionary for me to turn towards the pattern downwind as I didn't have time to consider whether or not I could depart to the east as time was a factor. Looking back at the event, I kind of wish that I spent the 5 seconds to check if the east was clear, however I am still concerned that this may have caused an incident if I did not react quickly enough.

Synopsis

A pilot on final approach to a non-towered airport reported an NMAC when they initiated a go-around and preceding traffic made a touch and go and climbed into their path.

ACN: 2280163 *(12 of 220)*

Time / Day

Date : 202508
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Angle.Radial : 120
Relative Position.Distance.Nautical Miles : .5
Altitude.MSL.Single Value : 1600

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : FBO
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Landing
Route In Use : Visual Approach
Airspace.Class D : ZZZ

Aircraft : 2

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

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 177

Experience.Flight Crew.Last 90 Days : 33
Experience.Flight Crew.Type : 174
ASRS Report Number.Accession Number : 2280163
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 200
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 : Human Factors
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Staffing
Primary Problem : Ambiguous

Narrative: 1

While on the left downwind for Runway XX at ZZZ, I was told to extend downwind for landing traffic on Runway XY, which was a private jet. At the same time, another flight school aircraft was on short final for Runway XX. As I was abeam the Runway XY approach end in the downwind, I noticed that the private jet was coming close to me, and I sped up so that I could increase the separation. Upon looking at the **MFD** (Multi-function Flight Display) and Foreflight, I noticed the private jet was about .1 miles away from me and 100-200 feet below me. I realized that if both aircraft were to land, there would be a collision or very near miss where Runways XX and XY intersect. Before I could key up and advise the Tower of what I was seeing, they instructed the Runway XX landing traffic to go around and turn right into a right downwind for Runway XX. It sounded like there was a trainee on the Tower frequency because a second voice would key up at times and change or reiterate instructions.

Synopsis

Single pilot reported an NMAC requiring evasive action and suspected there was a trainee in the tower at the time.

ACN: 2276345 *(13 of 220)*

Time / Day

Date : 202508
Local Time Of Day : 1201-1800

Place

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

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Air Taxi
Make Model Name : EMB-505 / Phenom 300
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Climb
Airspace.Class B : ZZZ

Component : 1

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

Component : 2

Aircraft Component : Pressurization System
Aircraft Reference : X
Problem : Malfunctioning

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 2276345
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

After a short level off at 13000, we initiated a climb and at around 13500 and the **MFD** (Multi-function Flight Display) and right PFD (Primary Flight Display) went black, an ELEC EMERGENCY CAS was displayed and the cabin altitude began to climb rapidly. In this condition, there is no intercom or radio available to the right seat so all communications were made aloud. The FO (First Officer) was flying and leveled the aircraft off at 14000. We ran the ELEC EMERGENCY QRC and the cabin altitude continued to climb so I donned my mask. As I was donning my mask the passenger came up the cockpit to as if there was a problem and I issued a command to return to their seat and put their seatbelt on. Once my mask was on, a short transfer of controls took place to allow the FO to don his mask and then continue flying because the Autopilot was not available. Priority handling was requested with a return to ZZZ as it was the closest airport with services. A turn direct to the airport and a descent was issued. Because communications were very difficult with masks on, we leveled at 8000 removed our masks and began to run the ELEC EMERGENCY QRH. Both generators were able to be restarted and clear the ELEC EMERGENCY CAS. We were now able to communicate via the intercom. There were two remaining amber CAS messages: PTRM NRM FAIL and SWPS FAULT. Both QRHs were accomplished and backup trim was used. The performance additions were calculated for the SWPS FAULT and a landing performance assessment was completed. Vectors were given for visual approach to Runway XXL where we had a normal landing a taxied to the FBO.

Synopsis

Embraer Captain reported while climbing experiencing multiple electrical system CAS messages and cabin pressure issue resulting in the Captain returning the flight to the departure airport where they landed safely.

ACN: 2271904 *(14 of 220)*

Time / Day

Date : 202508
Local Time Of Day : 1201-1800

Place

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

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Fractional
Make Model Name : EMB-505 / Phenom 300
Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Flight Phase : Climb
Airspace.Class E : ZZZ

Component : 1

Aircraft Component : Autopilot
Aircraft Reference : X
Problem : Failed

Component : 2

Aircraft Component : Autoflight Yaw Damper
Aircraft Reference : X
Problem : Failed

Component : 3

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

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Fractional
Function.Flight Crew : Captain
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 2271904
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Diverted
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

During climb out of ZZZ around 16000' PFD2 (Primary Flight Display), **MFD** (Multi-function Flight Display) and GTC (Garmin Touch Screen) 2 went black with an ELEC EMER (Emergency) CAS (Crew Alerting System) red message displayed followed by many other CAS fail messages. AP (Autopilot)/YD (Yam Dampener) fail annunciated I then took controls and assessed the left panel switch positions. All switches were in appropriate positions. Due to comm2 and right side intercom being shed I took ATC communications and established communication with my copilot and announced to run the appropriate QRH. I requested a lower altitude with ATC due to pressurization considerations and shortly after receiving a lower altitude, requested priority handling feeling unsure if the ELEC EMER would clear. After reaching 10000' the copilot, in the QRH, requested both gens switches to be placed OFF then Auto. After accomplishing this the ELEC EMER CAS cleared. The AP remained unusable and the Normal pitch trim remained failed. During our descent, we both agreed on ZZZ1 as our deviation airport. The Copilot informed the owner of the diversion and attempted to contact company twice however failed to get through. We set up for approach into ZZZ1 and landed uneventfully.

Synopsis

EMB-505 Captain reported multiple electronic alerts and failures during climb which resulted in expeditious handling to a diversion airport.

ACN: 2267793 *(15 of 220)*

Time / Day

Date : 202507
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 3000

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : FBO
Make Model Name : DA40 Diamond Star
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Nav In Use.Localizer/Glideslope/ILS : RNAV XY
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : FBO
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Mission : Training
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 715
Experience.Flight Crew.Last 90 Days : 279
Experience.Flight Crew.Type : 580
ASRS Report Number.Accession Number : 2267793
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Vertical : 400
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

While instructing an instrument student we were shooting the RNAVXX circling to land XY Approach into ZZZ. While in the procedure turn another plane departed runway XY making the call "departing XY setting up for RNAV XX". I had my student continue the approach thinking departing traffic would depart to either Right or Left to get "set up" for approach. However they continued straight out flying direct to ZZZZZ, while my student is continuing to make calls. I had instructed the student to make calls more often (15NM,12NM,10NM) while excessive I wanted departing traffic to know where we were at on the approach. When I saw departing plane continuing direct to ZZZZZ. I asked on CTAF if he was planning on over flying us. After not hearing a response. I believe they made one but was stepped on by other aircraft. **MFD** (Multi-function Flight Display) gave off traffic alert and I took controls and diverted to the right. At time of diversion **MFD** said traffic was +04 above. I made call that I was diverting to the right of final approach course and vectored student back on final approach course. Talked to departing pilot he said that his **MFD** showed +10 he as well made a call after my diversion call saying he was "1000 above and I should've continued approach. Both pilots and airplanes are from the same flight school both pilots have talked to maintenance for ADSB altitude on the **MFD** being so conflicting. As a flight instructor I could've had my student divert earlier as to avoid any potential collision.

Synopsis

Flight Instructor reported a NMAC at a non-towered airport during approach.

ACN: 2265197 *(16 of 220)*

Time / Day

Date : 202507
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : SQL.Airport
State Reference : CA
Altitude.MSL.Single Value : 800

Environment

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

Aircraft : 1

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

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : SQL
Aircraft Operator : Corporate
Make Model Name : Helicopter
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Airspace.Class D : SQL

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 1017

Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 700
ASRS Report Number.Accession Number : 2265197
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

The pattern at SQL was super busy, but I do not want to give Tower an excuse. There were supposedly 8 planes in the pattern when the event occurred. My student was climbing out of SQL to join the traffic pattern. In our crosswind to downwind turn all of the sudden I look at our Multi-function Flight Display (**MFD**) and notice an aircraft same altitude less than a mile away. They're holding our altitude at 800 ft right for the pattern. I was not told any traffic was following, or any traffic alert warning from our Tower at this time. I immediately began to climb as we were on converging paths. I climb to about 1,100 and see the helicopter that we were not made aware of at all flying right underneath our aircraft at about 900 feet so only 200 feet below us. I later called Tower on their land line to see what happened. They said supposedly the helicopter was non english speaking and had stopped responding to them. If that was happening, I would've at least liked a traffic avoidance call. They were so worried about extending everyones downwind with so many people in the pattern they didn't notice the two aircraft same flight level flying right at one another. "Having a busy pattern" is no excuse. The Tower is supposed to provide separation services for us in their delta and had I not taken the controls from my student and climbed as an evasive action I don't think today would've had the same result. This is concerning that our Tower was unable to provide safe guidance or separation from two aircrafTS taking off and one remaining in the pattern, that had been in the pattern for the previous 30 min. Also, helicopters typically make left traffic at our airport, so not being made aware of a non standard helicopter making right traffic would've been helpful.

Synopsis

Single engine Flight Instructor reported taking evasive action to avoid pattern traffic that ATC failed to separate resulted in a NMAC.

ACN: 2262251 *(17 of 220)*

Time / Day

Date : 202507
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : SLC.Airport
State Reference : UT
Altitude.MSL.Single Value : 7000

Environment

Ceiling : CLR

Aircraft

Reference : X
ATC / Advisory.TRACON : S46
Aircraft Operator : Corporate
Make Model Name : Light Transport
Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Route In Use : Direct
Route In Use : Vectors
Airspace.Class B : SLC

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Flight Instructor
Qualification.Other
Experience.Flight Crew.Total : 2300
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 600
ASRS Report Number.Accession Number : 2262251
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

I was cleared for the Fairfield Nine departure out of SLC, avionics systems checked that waypoints were in and FMS was showing the proper direction of flight before takeoff. I initially climbed the 160 heading, as prescribed in the departure. Salt lake departure then cleared me direct FFU. I put in direct to that waypoint as I normally always do, after FFU was entered direct the CDI needle showed I should turn left approximately 040 heading to the north. Unfortunately I proceeded to do what was shown instead of contacting ATC for confirmation. ATC shortly thereafter had me accelerate my climb for terrain. ATC received a terrain warning, hence the need for a climb; as there is high terrain near SLC to the east. However, my TAWS never went off warning me unfortunately. Shortly after I was put on a heading of approximately 230, I then went to the FMS and tried getting "direct" to waypoints on the departure and at one point to the destination (ZZZ). The CDI never showed the proper direction of flight; however my proline 21 box did show the proper heading to the waypoints I wanted. I remember before taxiing "initializing" the position of my aircraft and not receiving any warnings before takeoff. However, I may have initialized ZZZ as the position instead of SLC. I say this because as we kept getting closer to ZZZ (our destination) our distance on the **MFD** (Multi-Function Flight Display) was increasing when it should've been decreasing. Along with after trying to initialize a position in flight a yellow "CHK POS" appeared. Also an hour into our flight the PFD (Primary Flight Display) 2 went into "ATT/HDG (Heading) Aligning" which then turned off the autopilot, I hand flew for approximately 20 minutes and it came back online. I reported this to ATC while it was happening. There were numerous mistakes made, obviously I shouldn't have made the turn to the north, and clarify with ATC, I'm also wondering if the proper initialization ever happened. There were other issues that were happening with the avionics in flight to which I'm Unclear if it had to do with me possibly not giving the proper initialization or a separate issue all together.

Synopsis

Light Transport aircraft Captain reported a track heading deviation during takeoff from SLC airport resulted in a CFTT event.

ACN: 2254809 *(18 of 220)*

Time / Day

Date : 202506
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : HRU.Airport
State Reference : KS
Altitude.MSL.Single Value : 2300

Environment

Weather Elements / Visibility.Visibility : 10
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : HRU
Aircraft Operator : FBO
Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Initial Approach
Airspace.Class E : HRU

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : HRU
Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear
Operating Under FAR Part : Part 91
Flight Plan : None
Flight Phase : Initial Approach
Airspace.Class E : HRU

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Flight Instructor
ASRS Report Number.Accession Number : 2254809
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 250
Miss Distance.Vertical : 250
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

My student and I were conducting landing practice at HRU. We made radio calls throughout our traffic pattern practice, as well as initially upon entry to the airport. Based on the windsock at the airport when we arrived, we chose to use Runway 35 (HRU has no METAR). We landed twice at the airport with no incidents and were on our third touch-and-go upwind of Runway 35 when I spotted traffic. I took the controls from my student and took evasive action to offset to the right of incoming traffic. I made a call on the radio that I was offsetting to the right for traffic. The other traffic made no response. I queried the other aircraft if they could hear us and if they had heard any of our prior radio calls. No response. I called and asked if traffic in the pattern had made any calls prior to entering the airport. The other aircraft responded and said they had made a

4 mile final call. Neither my student nor I had heard this call. We had been listening to traffic calls from other aircraft on the shared frequency at other airports. Later, another pilot who had been in the traffic pattern at K78 (airport north of HRU that shares the same frequency) said that he had heard my traffic pattern calls at HRU without any issue. The other pilot who nearly collided with us made no effort to deviate from their final approach course into HRU despite the near miss. They made radio calls after landing, one to state that they were taxiing clear of the runway and then another that they were taxiing to park. These two calls, in addition to their response to me about having made a four mile radio call, were the only three calls I heard from the pilot. I did not catch the full tail number of the pilot and my student and I decided to leave the airport. Because our near-collision was so close, I could see into the other plane and it appeared that there had only been one person in the left seat. The other plane had no ADS-B out and I was unable to find any record of traffic at the airport besides myself on FlightRadar or FlightAware. There was also no indication of the other aircraft on our Multi-function Flight Display (**MFD**) or traffic map, or on either my student or mine's iPads. We did have a TCAS alert in our plane, which only sounded after I had already spotted the plane and taken evasive action. My student and I were able to dodge the other plane due to the evasive action I took to turn us to the right. Had I not done so, it is highly likely that we would have collided fully head-on or at least by clipping wings. The other plane should have also turned to the right upon our near-miss, but they continued straight into the airport and had only responded after 3 inquiries to them on frequency. Based on winds, which were relatively calm, either runway would have been equally possible. However, the other plane also should have deferred to existing traffic patterns/runway in use as my student and I had been in the pattern for the last 10 minutes and had made radio calls on each leg.

Synopsis

Light aircraft Flight Instructor reported experiencing an NMAC with another light aircraft in the pattern at HRU airport.

ACN: 2245431 *(19 of 220)*

Time / Day

Date : 202505
Local Time Of Day : 0601-1200

Place

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

Environment

Weather Elements / Visibility : Cloudy
Weather Elements / Visibility.Visibility : 2
Ceiling.Single Value : 300

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Skylane 182/RG Turbo Skylane/RG
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Takeoff / Launch
Route In Use : Vectors
Airspace.Class D : ZZZ

Component

Aircraft Component : Throttle/Power Lever
Aircraft Reference : X
Problem : Improperly Operated

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 : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 1980
Experience.Flight Crew.Last 90 Days : 15
Experience.Flight Crew.Type : 490

ASRS Report Number.Accession Number : 2245431
Human Factors : Situational Awareness
Human Factors : Troubleshooting
Human Factors : Human-Machine Interface

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Air Traffic Control
Detector.Person : Air Traffic Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

As I was ascending after takeoff from ZZZ I was complying with departure instructions (turn right to 290 degrees after reaching 800 feet). Around 400 feet MSL I turned on the AP (Autopilot) which had been set to Heading and turned right to 290 degrees from the runway heading. I looked at the PFD (Primary Flight Display) and kept my scan going; I noticed that the flight director was telling me to point the nose below the horizon and then that my speed was only 75 knots. These two things were incomprehensible. I confirmed in the status bar that the FL was on and set to 90 knots. Then out the window I saw a tree and knew everything was wrong. I needed to ascend quickly; I reached for the throttle and saw it had completely retarded. It immediately struck me that the "throttle control friction lock" was loosened and I concluded that during the maintenance the mechanic loosened the lock. I pushed the throttle in and tightened the lock. I noticed the AP was off and put it back on. I was again in control of the plane. Then I heard ATC calling me and giving me a heading. I was able to comply. They asked me if I was OK; I said yes. Before I reached ZZZ VOR they gave me a number to call. I was glad I wasn't dead and had no trouble making the call. The pilot deviation I was told was due to the fact that a Citation Jet that was landing was told to go missed due to my position. Later in the flight cruising along at 7000 feet approaching ZZZ1 on my way to ZZZ2, I realized someone had pushed the red reversion button which made the **MFD** (Multi-Function Display) just a copy of the PFD. I pushed the red reversion button once more and the **MFD** came back on normally. Maintenance was done on the plane the prior week - putting on new tires, a new gasket for the crankshaft and a new alternator; I had not flown the plane after the maintenance was completed on Day 0. Before I taxied out and also as I waited to take off I noticed things "wrong" with the **MFD** (it was not displaying what it normally did). I assumed maintenance had set it differently. I believed I could return it to the prior setting when I got back on the ground and had the full G1000 manual to look at (I did look at the abbreviated book in the plane). I was on an IFR flight. I had fully prepared; earlier I created my own checklist. Low ceilings at ZZZ worried me. I had taken off with similar ceilings years ago only to find out, when I landed, that an experienced pilot and college classmate took off from ZZZ two hours before me, and had crashed. Information shows I started going off course at XA:39:50 and descending at XA:40:06. I descended from 950 feet to 675 feet by XA:41:10 when I started ascending again. When I ascended I regained control of the plane and within seconds thereafter the AP was back on, set to heading. It was not until XA:41:58 however that I fully complied with the heading direction I was given by ATC (on the first heading I turned right instead of left as directed; I quickly noticed my error and corrected it). By XA:42:30 I was on the 180 heading I was given and climbing to 7000 feet.

Synopsis

C182 pilot reported a temporary loss of aircraft control and flight toward terrain during initial climb due to a loosened throttle control friction lock which resulted in the throttle moving to idle position.

ACN: 2243078 *(20 of 220)*

Time / Day

Date : 202505
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : HHR.Airport
State Reference : CA
Relative Position.Angle.Radial : 075

Relative Position.Distance.Nautical Miles : 1
Altitude.AGL.Single Value : 700

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Tower : HHR
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Final Approach
Route In Use : Visual Approach
Airspace.Class D : HHR

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : HHR
Make Model Name : Helicopter
Crew Size.Number Of Crew : 1
Airspace.Class D : HHR

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 4000
ASRS Report Number.Accession Number : 2243078
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Miss Distance.Horizontal : 300
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

While descending on approximately 1 mile final into HHR, ATC was attempting to make radio contact with Aircraft Y? (later, HHR ATC informed that So Cal had lost comms with Aircraft Y. Aircraft Y was flying opposite direction (eastbound) and in direct opposition to final approach Runway 25 at HHR. After hearing ATC attempt to communicate with Aircraft Y, I observed traffic with TIS (ADSB in) on Multi-function Flight Display (**MFD**) within 300' of our current alt/and within 300-400'horizontally. The pilot in command (PIC) took evasive action climbing and turning simultaneously to avoid collision. We were forced to go around and flew runway heading Runway 25 and joined left downwind. The controller was saturated and was working both frequencies so I assumed was solo in Tower. Lessons learned that were shared with pilot flying were not to get complacent even on short final at a towered airport.

Synopsis

General aviation instructor pilot reported a near miss with another aircraft while on final approach when ATC had difficulty communicating with the other aircraft. The instructor maneuvered to avoid the other aircraft, performed a go around, and re-entered the traffic pattern.

ACN: 2239753 *(21 of 220)*

Time / Day

Date : 202504
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Distance.Nautical Miles : 10
Altitude.MSL.Single Value : 3000

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Cruise
Route In Use : None
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 1
Flight Phase : Cruise
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 1099
Experience.Flight Crew.Last 90 Days : 75.5
Experience.Flight Crew.Type : 198.9
ASRS Report Number.Accession Number : 2239753
Human Factors : Confusion
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

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

Detector.Automation : Aircraft TA
Miss Distance.Vertical : 500
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

This report concerns a dual instructional flight conducted in Aircraft X with one student. We departed ZZZ at approximately XA30 and proceeded to the Practice Area, which begins approximately 10 to 15 NM southeast of the airport. Once in the area, we climbed to 3,000 feet MSL and began working on performance maneuvers. At various points, we climbed as high as approximately 3,700 feet MSL. I cannot recall the exact maneuver we had just completed, but sometime between XB30 and XB50, we transitioned into power-on and power-off stalls near the town. As my student initiated the first stall, our ADS-B IN traffic alert system issued a "TRAFFIC" alert. I looked outside and saw nothing, then checked the **MFD** and noticed a traffic icon below and slightly behind us. I had my student recover early from the stall so I could evaluate the situation. The traffic icon disappeared shortly after, which partially supported my suspicion that it was another GPS "ghost." We have experienced ghosting in these aircraft before during steep turns, but this happened while setting up for a stall. I mentioned this to my student and noted that the situation felt different. To see if it was a GPS issue specific to our location, I had her climb and reposition us slightly away from the area. The idea was to see if a change in location would clear up any anomalies. Once repositioned, I had her attempt a second stall. As she began the setup, the ADS-B traffic again appeared, gave an alert, and disappeared. This did not fit the ghosting behavior we've seen in the past. We received another close-range alert during the maneuver. I had her recover again, and at that point, I began seriously questioning whether we were dealing with ghosting or an actual aircraft. I contacted ZZZ Approach on XXX.XX and requested flight following. I asked if they saw any traffic in our area, and they said they did not see anything at that moment. Just after she said that, the aircraft climbed high enough just off our right side that I made visual contact. We visually acquired the aircraft at our 3 o'clock. It appeared to be a white, low-wing airplane, moving fast and close enough that we could see it fairly clearly, but not so close laterally that I could tell whether it was single- or twin-engine. That was the moment I took control of the aircraft. A short time after that, the controller said the aircraft had popped up on their radar, but the signal appeared to be intermittent. They suspected a malfunctioning transponder. My student and I both began to feel uneasy. We realized the alerts we had been getting may have been actual near misses. The aircraft passed quickly out of view, but the speed and proximity were enough to rattle us. ZZZ ATC later reported it was moving at approximately 160 knots. I became concerned that the aircraft was trying to come up under us or was unaware of our presence. I performed a chandelle to gain altitude and turn away. At some point during this exchange, I told ATC that the aircraft appeared to be within 50 to 100 feet of us in altitude at times. Looking back, I now realize I misinterpreted what I saw. The ADS-B showed "-5," which I stated as "probably 50 feet," but in hindsight I know that meant the traffic was 500 feet below us. In the time following, I began relocating us toward the local practice areas. I accidentally referred to it as the other area when speaking with ATC, but our intention was to shift to a different part of the local practice airspace. My memory of exact timing and altitude is a bit unclear at this point. The events were unfolding quickly, and I was focused on avoiding the threat. At one point, I saw either the aircraft itself or its ADS-B return again. It seemed to be close to our altitude and possibly next to us. From that point forward, we also began receiving additional advisories from ATC regarding the aircraft's location, including times when it was near us and when it appeared to be following us. Thinking quickly, I performed a forward slip to gain both lateral and vertical separation, descending and increasing speed to get out of the area. We felt safer afterward, but both my student and I were visibly shaking. We agreed that we were no longer "IMSAFE" and decided to terminate the lesson and return to ZZZ to land. ZZZ Approach asked for our intentions, and I advised them that we were inbound to ZZZ. They warned us that the same aircraft still appeared to be trailing us near Location A. ZZZ Approach then canceled our flight following so we could transition to CTAF. After making my initial call to ZZZ traffic, I heard another voice respond. I thought I heard them mention "RV," which I interpreted as the aircraft type. I asked if they had just been over Location A. I do not recall saying that I was in contact with ATC, but I do remember telling them directly, "You guys need to contact ZZZ ATC." The pilot then asked if we wanted them to break off and said they did not mean to scare us. I responded, "Too late for that, sir." That was not a professional comment on my part, and I regret saying it. The aircraft then departed the area, heading east of the airport and did not attempt to enter the pattern. After landing, I spoke with my Chief Flight Instructor and later contacted ZZZ ATC. I thought I was speaking to the same controller from the flight, but it was actually the ATC manager. She asked for the details and explained that radar coverage did not begin until we established flight following, so the first several alerts and possible near misses would not show on their records. She suggested the other aircraft may have been practicing ground reference maneuvers and that it could have been coincidence we were in the same place. That made me pause. It is possible this was all an unfortunate set of coincidences. If so, I do not want to wrongly accuse another pilot. I hesitated to file this report for that reason. But I still find it hard to believe this was all unintentional. I continue to wonder: - How did the other pilot not see us or avoid us during multiple close passes? - Why did they appear to follow us back toward the airport? - If they were returning to land, why did they break off and fly away once I called them out over the radio? If this truly was a case of bad timing, poor equipment, and shared airspace, then it is a textbook example of the Swiss Cheese Model. Two similar aircraft in the same practice area, different frequencies, one with a possible transponder failure, one relying on ADS-B, a rattled student and flight instructor, and increasing uncertainty. But if the other pilot was intentionally flying close to us, then the situation is much more serious. In hindsight, I made my own mistakes. I hesitated too long, hoping it was just a GPS issue. I let fear and emotion creep into my judgment. I also could have made a CTAF position call sooner, before reaching out to ATC. Listening back to the audio, I noticed that my radio calls came across more casual than they should have been. I believe this was due to nerves at the time. I did not speak the way a professional pilot should over the radio during most of the flight. In my experience, I regularly

fly in close proximity to other aircraft in structured and legal operations, such as during collegiate flight team events or while towing gliders, including in contest environments. I am not easily rattled by aircraft in my vicinity when I am aware of them. But this was different. The repeated, uncoordinated proximity and lack of awareness from the other aircraft surprised me and had a serious effect on both my student and me. Our ADS-B in and out were functioning properly. ZZZ ATC has radar logs from the time we were on flight following, and third-party sources like ADS-B Exchange may also have data. I hesitated to file this because I was unsure whether I was overreacting. But even if it turns out to be a chain of coincidences, I believe this incident should be reported. It is worth documenting for safety, training, and awareness purposes.

Synopsis

Flight Instructor with student reported several near misses with an aircraft that appeared to be maneuvering in the same area.

ACN: 2238857 *(22 of 220)*

Time / Day

Date : 202505
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Distance.Nautical Miles : 5.6
Altitude.MSL.Single Value : 1600

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ1
Aircraft Operator : FBO
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Final Approach
Route In Use : Vectors

Aircraft : 2

Reference : Y
Aircraft Operator : Personal
Make Model Name : J3 Cub
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Personal
Flight Phase : Cruise
Route In Use : None

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 600
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 530
ASRS Report Number.Accession Number : 2238857
Human Factors : Communication Breakdown
Human Factors : Workload
Human Factors : Time Pressure

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

Events

Anomaly.Airspace Violation : All Types
Anomaly.Conflict : NMAC
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 100
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

I was conducting a training flight for my Certified Flight Instructor-Instrument rating. I was pilot flying, my instructor was pilot monitoring. Using a view limiting device (VLD), we conducted several approaches at our home airport of ZZZ in aircraft C172. I was flying the approaches using the VLD, while my instructor scanned for other traffic. At approximately XA:34, we joined the localizer course for the ILS/LOC XXR approach at ZZZ behind another Cessna. We contacted ZZZ1 tower for transition approval to complete the approach as the Final Approach Fix is positioned within their airspace. ZZZ1 tower approved the transition, advising us of the previously seen Cessna traffic. We noticed another aircraft on our **MFD** that was crossing the approach course northbound, and ATC advised us of that traffic as well at 1,100ft. At approximately 15:36, as we were about to cross the Final Approach Fix at 1,600ft, we noticed that this aircraft (later identified as Aircraft Y), had entered ZZZ1 airspace, and had begun a very sharp climbing turn to the left and was climbing right at our aircraft. Even with my VLD, I was able to see the sunglasses of the pilot in that aircraft as they suddenly passed 100ft below us. My instructor and I did not have any time for evasive action as the aircraft's turn was sudden and unexpected. Afterwards, I took off the VLD and resumed the approach with my instructor and I both sharing duties for scanning of traffic. ZZZ1 approved frequency change to ZZZ advisory frequency shortly after. We tried contacting Aircraft Y on ZZZ frequency as they were in the immediate vicinity of the airport but were surprised to learn they had not been making any radio calls. The rest of the flight continued without further incident. I believe what caused the problem was Aircraft Y's inadvertent entry into controlled airspace, followed by an evasive turn to exit the Class D immediately, without scanning for other traffic and in doing so, putting themselves on a collision course with our aircraft. ZZZ is an uncontrolled field and while the use of radios is strongly encouraged, there are oftentimes occurrences where aircraft are not using them properly (if at all) and posing hazards to aircraft that are engaged in communication. What can be done to prevent future recurrences may include changing ZZZ to have its own Class D airspace or increasing pilots' awareness of airspace nearby. However it is difficult to determine what else may be accomplished to prevent future recurrences due to inability of determining what the other aircraft's intentions were in this event.

Synopsis

Cessna 172 Flight Instructor reported an NMAC event during training with a non-reporting aircraft. The unannounced aircraft exited the airspace and both aircraft continued safely.

ACN: 2238476 *(23 of 220)*

Time / Day

Date : 202505
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : DVT.Airport
State Reference : AZ

Environment

Light : Night

Aircraft

Reference : X
Aircraft Operator : FBO
Make Model Name : SR20
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Final Approach

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Single Pilot
Function.Flight Crew : Trainee
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Student
ASRS Report Number.Accession Number : 2238476
Human Factors : Situational Awareness

Events

Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Night solo flight. Flew to DVT, on first downwind, ATC cleared me to land. Started my left base turn without being aware of the hill that is on the approach side of runway 25L, overflew the hill by about 60-100 feet. Didn't realize I had done that until the second time in the pattern. The hill is not very visible, I had terrain aware on the **MFD** as well. Never got a terrain warning either. Once back at ZZZ, I checked my track log and confirmed I flew close to the hill. Could've been really bad if I started my base turn 3 seconds later. Suggestions: Writing this report to raise awareness for future students/instructors. Be aware that there is a hill that could be very hazardous at the end of the 25L downwind to base. Either start your base before or better yet, after the hills location.

Synopsis

Student pilot reported a CFIT event during night solo flight when they flew with 60-100 feet of terrain.

ACN: 2237667 *(24 of 220)*

Time / Day

Date : 202504
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Angle.Radial : 200
Relative Position.Distance.Nautical Miles : 1
Altitude.MSL.Single Value : 500

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : FBO
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Final Approach
Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1

Mission : Training
Airspace.Class G : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 120
Experience.Flight Crew.Last 90 Days : 40
Experience.Flight Crew.Type : 120
ASRS Report Number.Accession Number : 2237667
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 500
When Detected : In-flight

Assessments

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

Narrative: 1

I was doing the practice ILS XX under the hood into ZZZ. I believe the weather was reporting calm and during our approach my instructor and I had heard traffic saying runway 2 so we continued the approach. At my 10 mile I called low approach only, but after that I didn't say anything about low approaches. I made a 5 and 3 mile call and at the 1 mile I said touch and go since we decided to take the hood off and do a touch and go. That is when we received a traffic alert on our **MFD**, and we did our touch and go. After the flight, the other plane involved said we were kind of close, but not too close. During our touch and go the other plane on final said they were going to stay at pattern altitude so we turned left at 500MSL and departed, there were no traffic alerts for that. I personally never saw the plane, but the other instructor talked to us about it after the flight. I believe miscommunication was the main cause. If one of us had asked the other about what their intentions were, it could have been avoided.

Synopsis

PA28 pilot reported an NMAC event in the traffic pattern.

ACN: 2233495 *(25 of 220)*

Time / Day

Date : 202504
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Angle.Radial : 310
Relative Position.Distance.Nautical Miles : 2
Altitude.AGL.Single Value : 1000

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Mission : Training
Flight Phase : Climb
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : Corporate
Make Model Name : Air Tractor 502
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 137
Mission : Agriculture
Flight Phase : Initial Approach
Airspace.Class G : ZZZ

Aircraft : 3

Reference : Z
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : Corporate
Make Model Name : Air Tractor 802
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 137
Flight Plan : None
Mission : Agriculture
Route In Use : Visual Approach
Route In Use : Direct
Airspace.Class E : ZZZ

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 1100
Experience.Flight Crew.Last 90 Days : 130
Experience.Flight Crew.Type : 1000
ASRS Report Number.Accession Number : 2233495
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Person : 2

Location Of Person.Aircraft : Y
Location In Aircraft : Flight Deck
Reporter Organization : Contracted Service
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 2000
Experience.Flight Crew.Last 90 Days : 200
Experience.Flight Crew.Type : 750
ASRS Report Number.Accession Number : 2233496
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Person : 3

Location Of Person.Aircraft : Z
Location In Aircraft : Flight Deck

Reporter Organization : Contracted Service
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 6000
Experience.Flight Crew.Last 90 Days : 30
Experience.Flight Crew.Type : 3000
ASRS Report Number.Accession Number : 2233485

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
Miss Distance.Horizontal : 300
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

On Day 0 at approximately XA:00, two Air Tractors (Aircraft Y, Aircraft Z) were observed making erratic traffic pattern entries, not communicating, and possibly breaking right or way rules prescribed under FAR 91.115. I observed Aircraft Z after departing, enter a left downwind for Runway XX under company traffic, Aircraft A. Aircraft A had to deviate off descent path as Aircraft Z under them and entered a left base and then departed the area from that left base for Runway XX. At the same time, Aircraft Y was entering from the north on a dog leg left base for Runway XX at the same altitude. This further constricted Aircraft A's conflict resolution options. Aircraft A was able to continue to land and I observed Aircraft Y less than a mile behind and not communicating - they continued to land on Runway XX. My student and I continued our pattern for Runway XX. While I was established on final, another company Air Tractor (unsure of tail number) proceeded to line up and wait on Runway XX and departed - radio call was made. I continued to land - touch and go. At this time, Aircraft Y was holding short of Runway XX at 1. Immediately after departure, Aircraft Y proceeded to take Runway XX at 1 and departed behind me - no radio call made. I noticed on Multi-function Flight Display (**MFD**) traffic screen a target -02 and appeared to be below me and climbing. I attempted to contact Aircraft Y to ask for intentions twice - he replied to the second attempt saying "calm down, I'm trying to work". Aircraft Y then conducted a left crosswind 300 ft below me to exit the area to the north - no radio call.

Narrative: 2

During a Part 137 Ag operation we communicated our intentions and they were Okay with it. The problems were on the approaches, trying to get back in the pattern. To many student pilots in the pattern to where spacing became a problem. The student pilots stayed close traffic, not giving any way to the Airtractors. The plane I flew never had any runway incursions and never came close to any other airplanes. We've accommodated them by doing orbits, if needed, to try and help with the spacing. We also applied and got approved for a business license to operate out of there and pay daily fees for the Agricultural work that we have a deadline for to complete.

Narrative: 3

We were three ag aircraft conducting part 137 operations out of ZZZ airport. I was operating Aircraft Y fertilizing pine trees. There was instructors and students in the pattern from a university and also aircraft from a flight school while we were operating. At no time did I or the other ag aircraft have a near miss or runway incursions. We were courteous and gave everyone room to work out of there. Airport manager gave us notice that we've been complained about. I went to the flight school to speak with the manager to ask what we've done wrong, and how can we accommodate each-other. He assured me that there was nothing wrong with how we operated there. All three of us are sure that we did nothing wrong and had no close calls or near misses or runway incursions.

Synopsis

C172 Instructor and two Ag aircraft pilots reported an NMAC between each other at a non-towered airport. C712 Instructor also reported a runway incursion between conflicting traffic landing behind their company traffic on the same runway.

ACN: 2230129 *(26 of 220)*

Time / Day

Date : 202504
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : N90.TRACON
State Reference : NY
Altitude.MSL.Single Value : 1600

Environment

Flight Conditions : IMC
Light : Daylight
Ceiling.Single Value : 500

Aircraft

Reference : X
ATC / Advisory.TRACON : N90
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 91
Flight Plan : IFR
Mission : Ferry / Re-Positioning
Flight Phase : Initial Approach
Route In Use : Vectors
Airspace.Class D : FRG

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : First Officer
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 4554
Experience.Flight Crew.Type : 1495
ASRS Report Number.Accession Number : 2230129
Human Factors : Situational Awareness

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 10300
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 2300
ASRS Report Number.Accession Number : 2230560
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Situational Awareness

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

During the approach phase of our flight to FRG we were issued the RNAV19 approach into FRG. ATC instructed us to "descend to 1600 feet, turn to heading 220 to join the final approach course. Maintain 1600 until established. Cleared the RNAV19 at FRG" As the PM I read back the instructions to ATC. The Captain was the PF and initiated the turn but turned too far. The heading we rolled out on would not intercept the final approach course. As I was about to state a correction, ATC advised us we were east of course and to fly heading 240 to re-intercept. I read back the instructions and we turned to heading 240 at the same time the PF initiated a descent to 1400'. The PF seemed to lose situational awareness momentarily. I immediately advised the PF to return to 1600' and that we could not descend yet as we were not established on the final approach course. Once established we crossed the FAF the PF set a descent rate that caused us to go below the glideslope. I repeatedly stated to correct after no correction was made by the PF, I was about to initiate a go-around but we picked up the runway lights and re-established a normal approach and landed uneventfully.

Narrative: 2

I was PIC/PF of a flight to FRG. I think it is safe to say that our crew, which consisted of myself, the Second In Command (SIC)/PM, and a Mechanic sitting in the jump seat, were on edge, as immediately prior to flying this leg we conducted a return to service flight after unscheduled maintenance. This flight was conducted in VFR conditions, followed by the flight in IFR conditions, without landing in between. Just a few days prior, this same PIC/SIC/aircraft combination had a complete electrical failure which also resulted in a cabin depressurization. This required the Crew to put on oxygen masks and fly an ILS approach in a "crippled" airplane to an airport which we had not planned to visit. Contract Maintenance determined that a generator replacement would "solve the problem." Our mechanic had reviewed the maintenance with the contractors, and was comfortable with potentially returning the aircraft to service after this "fix." The plan was for him to ride in the flight deck jump seat, while I kept the electrical synoptic up on the PF (left) side Multi-function Flight Display (**MFD**) for the entire flight. This would not allow for me to do my usual scans, to include flipping through ALL of the system synoptics, TCAS, etc., but this was required for all of us to feel comfortable with the aircraft return to service. In general, the return to service checks and subsequent return of the aircraft were satisfactory, with the Mechanic taking occasional pictures of the electrical synoptic throughout the flight, monitoring voltages and amperages off of all the generators. We of course spoke at some length about the electrical system, and noted that the spread in amperages across the engine driven generators appeared a bit wider than we would expect, but that in general the electrical system appeared to be functioning properly. The flight proceeded in a generally normal fashion, keeping in mind everything I have stated above. We expected the RNAV 19 into FRG. Since we were approaching from the west, we had the IAF "BLINZ" programmed into the FMS. If we had been approaching from the east, we would have had IAF "ZOSAB" programmed in. We were then "thrown a curveball" by New York Approach, which instead kept us high, vectored us over the top of the New York Class B, and then descended us down over the Atlantic, south of Long Island. When they eventually turned us north, we were effectively on the extended center line of our intended landing runway, but 20 miles away and on the opposite side from the approach. I wondered out loud if they intended to put us on a right or a left downwind. In the end, they wound up vectoring us on to a relatively tight left downwind, well inside of ZOSAB. We had been above the clouds to this point, descending into them as we configured and descended on the downwind. IAF "BLINZ" (on the west side) and IAF "ZOSAB" (on the east side) both feed into IF "DEBYE." Outside of DEBYE the minimum altitude is 2000 feet. DEBYE feeds into the FAF "MOIRE," which is to be crossed at no less than 1500 feet. I conducted the approach briefing based on the normal/full approach. I told the SIC to expect to set the Altitude Selector (ASEL) "to the ground" after we passed MOIRE, and that I would use the autopilot to conduct the approach. The SIC's only question was what rate of descent I planned to use while in vertical speed mode, and I replied that I would start out at 700 FPM and adjust from there. We had previously discussed the benefits and hazards of the "dive-and-drive" method of flying an RNAV approach as opposed to the "constant descent angle" method, without ever clearly defining which method is the best. That being said, our aircraft does not have an approved VNAV capability, although it does present a Vertical Path Indicator (VPI) "for reference only," which does provide some situational awareness relating to glide path and descent slope. I could argue that Approach Control "set us up for failure" by turning us on to a left base and having us descend to 1600 feet, vectoring us to intercept the final approach course between DEBYE and MOIRE while in the clouds, but I was confident that we had enough positional awareness to "make it work." When cleared for the approach we had some "wobble" as we transitioned from Heading Mode to LNAV Mode, prompting Approach Control to issue another heading (and thus more Mode changes) to make sure we got on the approach course outside of MOIRE. Add in the "dive and drive" versus "constant descent angle" debate (do we stay at 1600 or descend NOW to 1500?) and you can see how some confusion could be added to the process. We crossed MOIRE and I initiated a 700 FPM descent. We stayed below the VPI while remaining above the MDA, so in the end it was a "hybrid" approach. SIC took the initiative to announce "I am setting the ASEL for the Missed Approach altitude" and did so. We had intermittent ground contact out the side windows, and then broke out of the overcast above the MDA and a bit below the normal glide path. I shallowed the descent and made a normal visual landing. What could I have done differently? More clarity in my briefings would help. Go into more detail about how I plan to fly the approach, specify EXACTLY when I plan to descend to minimum altitudes, and how I plan to use the VPI as a reference. I could also not ALLOW Approach Control to "set me up for failure." Instead of accepting vectors onto final and an intercept of the final approach course between the IF and the FAF, I could have said "unable" and requested to fly the entire approach, ideally from the IAF. In retrospect, this would have made things easier, we could have better compensated for the fact that I had the Electrical Synoptic on my side as opposed to my regular instrument set-up, and would have given us more TIME to analyze what was happening, instead of "compressing" everything into a much shorter period of time by getting established IMMEDIATELY outside the FAF. If nothing else, I could have directed my SIC/PM to "extend the line" in the FMS from the FAF to the IF, so that I would have a "hard target" to get aligned with outside the FAF, as opposed to using mental gymnastics and a combination of Heading and LNAV modes to try to intercept an imaginary line based on "positional awareness."

Synopsis

Corporate jet flight crew reported descending below the glide slope on approach to FRG when a complex approach procedure added confusion to their approach descent planning.

ACN: 2222564 *(27 of 220)*

Time / Day

Date : 202503
Local Time Of Day : 0001-0600

Place

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

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Fractional
Make Model Name : Citation Latitude (C680A)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Mission : Ferry / Re-Positioning
Flight Phase : Initial Approach
Airspace.Class D : ZZZ

Component

Aircraft Component : Indicating and Warning - Landing Gear
Aircraft Reference : X
Problem : Malfunctioning

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Fractional
Function.Flight Crew : Captain
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 2222564
Human Factors : Distraction
Human Factors : Human-Machine Interface
Human Factors : Troubleshooting
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.No Specific Anomaly Occurred : Unwanted Situation
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Diverted
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Landed in Emergency Condition
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

This report is being filed to point out a possible problem with the CE680A and probably the CE680 landing gear warning system where I believe both type aircraft share the same logic circuits and similar audible warning systems. The following incident occurred during a ferry flight from ZZZ1 – ZZZ where we received an unsafe gear indication during the approach phase at ZZZ. The flight took place aboard Aircraft X from ZZZ1 – ZZZ with a follow-on divert to the long/wide Runway XX at

ZZZ2 in reasonably descent IMC conditions. I'd like to give a shout-out to our Company safety and training departments for their many years of productive and results oriented recurrent briefings on various safety incidents and the proper ways to bring those to safe conclusions, and a special shout-out to trainers for all of the fine preparation they've given all of the Company's aircrews over the years. I honestly felt comfortable and well prepared for the situation I experienced. This incident occurred during a non-revenue flight. I was acting as PF and was occupying the right seat. On approach to ZZZ RNAV Runway XY around XA:10, during gear extension a few miles prior to ZZZZZ we received a CAS message GEAR DISAGREE L with a yellow X on the left gear indicator of the Multi-Function Flight Display (**MFD**). We elected to stop descent prior to FAF, execute the missed approach, climbing back to 4,000. While PM worked the QRH for the associated CAS, I requested a climb to 6,000 since there was no turbulence at that altitude. ATC also began vectoring us prior to reaching MAP holding point. PM was directed to the EMER / Abnormal Section N1 – Gear Will Not Extend which he completed, but resulted in no change to our gear condition. Yes, the RED Alternate Gear Extension Handle was pulled at that time. Once we determined we had a more serious problem we requested a climb to 11,000 in anticipation that PIC (PM) would need to make a call to Chief Pilot (internet does not work below 10k and this Latitude is not SATCOM equipped). We [requested priority handling] with ATC around this time. Initially ATC began vectoring us toward ZZZ3 since it was our filed alternate, but after some discussion PM and I elected to begin heading to ZZZ2. PIC (PM) called Chief Pilot to discuss, while I flew aircraft and obtained weather for ZZZ2 (140/13, 5 SM 010 BKN, 12/11, 29.97). PIC told me later that Chief Pilot wanted weather to divert to ZZZ4, but both he and I agreed ZZZ2 was a much better option (long/wide runway, Airport Rescue and Firefighting (ARFF) available, wouldn't shut down a busy airport. We asked ATC to phone ZZZ2 Tower to have ARFF roll Fire Rescue and have FBO provide a tug since we would be stopping on the runway. We then flew an RNAV Runway XX approach to a 200-foot Height Above Touchdown (HAT) passing over the runway so Operations / Tower could confirm our gear configuration. During approach as flaps were brought to full the "LANDING GEAR, LANDING GEAR" audible warning began to sound continuously to the point it became distracting and difficult to hear radio. We elected to retract flaps to 2 (less than 24°) and fly Vref +20 to silence audible warning, but began receiving it again below 500 feet AGL per Cessna's Gear Warning Annunciation System detecting that not all landing gear were down. Warnings continued all during the low approach and did not extinguish until above 500 feet AGL during the go-around / missed approach. Tower told us they could see all 3 landing gear down, but we continued along the lines that the left main might not be fully LOCKED. ATC cleared us back to ZZZZZ1 for the second approach for full stop landing. During that time PM and I reviewed QRC for Ground Evacuation. We also discussed the gear warning problem and began to look for a Circuit Breaker (CB) that could be pulled to keep it silent. In the end we elected to not pull any CBs since there was no QRH procedure calling for one and doing so may put us in a worse situation. To mitigate the gear warning problem, we agreed to fly the final approach segment at flaps 2, Vref +20 until 500 AGL then put flaps to full and suffer through the continuous gear warnings from that point forward. With flaps full, and wind gusts on final of +/- 10 knots, I elected to keep Vref+10 until 100 feet then gradually pull throttles to idle as I approached the 1000 feet markers. I Initially wanted to land on or near 1000 feet but the gusts + extra speed resulted in a longer touchdown which was fine since we had [a lot] of runway to work with (by design). I felt it best to touch down softly on the right main first then slowly bring the left down in case it was unlocked, which is also why we chose Runway XX for the direction of crosswind for the wing-low method of landing. Landing and roll-out was normal since left gear was actually down and locked. I transferred controls to PIC (left seat) and he brought aircraft to a stop on the runway using speed brakes, Thrust Reversers (TRs), and minimal braking. We completed a normal engine shutdown with APU. The "LANDING GEAR, LANDING GEAR" aural warnings continued, making it difficult to hear ATC radio calls. I exited aircraft to tell Fire Chief all was OK and that the [priority handling] could be cancelled, and to remind them a tug would be needed. I then completed a quick postflight walkaround. When coming to the left main gear I ducked into the gear well to see if there was anything obviously wrong with the gear (brakes were barely used during landing and not hot). I pressed on the GEAR UPLOCK micro switch which is visible just behind the gear uplock assembly. Upon entry to the cockpit the LANDING GEAR warning was no longer sounding and all gear indicated 3 green. The PIC confirmed that it had silenced 30 seconds earlier around the time I had pressed the uplock micro switch. We still elected to have the aircraft towed to the service center. We debriefed maintenance about the discovery of the uplock micro switch silencing the gear warnings and bringing the gear indication back to normal. He indicated this was the most probable cause of our problem. On the subject of the landing gear warning system. In my opinion this needs to be addressed by Cessna to implement some type of silencing mechanism (CB most likely) that can be pulled to silence the warnings for situations like this. The pulling of this breaker would be an added step to the QRH. The constant blaring of "Landing Gear, Landing Gear" is very distracting and could lead to some other link in a chain of events that could lead to an actual accident and possible loss of life. Something like a missed go-around call, or Tower telling crew the aircraft or brakes are on fire or something similar could be missed when clear communications break down. As you can see from the above explanation, the actual [event] and the accompanying extra work was not really that difficult, but the distraction caused by the unrelenting squawking coming from the landing gear unsafe indication was such a distraction on the first approach and low pass that it caused us to contemplate attempting a fix (pulling a CB) just to make our situation more tenable and less uncomfortable. After some discussion, thoughtful contemplation and more than 40 years of combined cockpit experience we chose to not go down that path for fear of introducing an unexpected future problem. Will this be the same result with another crew? Maybe not. Pilots like to fix things and this was a thing needing fixing at that moment. This is also not the first time the "Landing Gear, Landing Gear" warnings have caused a distraction for me. Back 2 years ago I filed an event report for ZZZ5 and ZZZ6 which both occurred on the same day, where telecom transmissions in the area interfered with our radio altimeter causing it to jump to 0 feet AGL setting off the landing gear warning system (RAD ALT below 500 feet AGL gear not down) which blared "Landing Gear, Landing Gear" and interfered with our ability to hear Approach / Tower radio calls until the point we put the landing gear down to silence the alerts (yeah, and you have to remember to disconnect the autothrottles before they go into landing RETARD mode). These audio alerts are quite loud, distracting and compete with ATC radio audio, which really is a good thing if one forgets to drop the landing gear prior to landing. But what if the situation warrants the opposite? The need for silencing the landing gear warnings when appropriate. I can understand if Cessna comes back with a response that they do not wish to make any changes to the system. OK, but a NOTE, CAUTION, or WARNING needs to be placed in the Gear Will Not Extend QHR, alerting the crew to the instances when the warnings will sound and possible audio mitigation strategies when this occurs. Also a note that the audio alerts will continue even after landing and engine shutdown. I personally would like to see a Gear Audio Warning (CB) placed on one or both CB panels that could be pulled when directed by a checklist. I'm not asking for a switch or a silence button, because I don't think it appropriate that a gear warning silencer should be that easy nor that convenient. A CB has that certain "don't go there unless directed" kind of thought process, but it's at least available when

appropriately needed. NOTE: I flew the Sovereign for 10 years prior to cross training into the Latitude, thus the above reference that both aircraft most likely share the same problem.

Synopsis

C680A Captain reported receiving an unsafe gear indication and the subsequent audible warning system that kept blaring during approach was distracting and made communication with ATC difficult. The flight crew proceeded to divert and safely landed.

ACN: 2222359 *(28 of 220)*

Time / Day

Date : 202503
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 30
Light : Daylight
Ceiling.Single Value : 20000

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : Government
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Landing
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ
Make Model Name : Cessna Single Piston Undifferentiated or Other Model
Crew Size.Number Of Crew : 1
Flight Phase : Landing
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Government
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Sea
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Glider
Experience.Flight Crew.Total : 21000
Experience.Flight Crew.Last 90 Days : 50
Experience.Flight Crew.Type : 2000
ASRS Report Number.Accession Number : 2222359
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Flight Crew
Miss Distance.Horizontal : 300
Miss Distance.Vertical : 0
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

I was the CFI on board with 2 CFI students in the pattern at ZZZ on runway XX with one of our company aircraft doing patterns as well. We heard another aircraft call CTAF reporting 10 miles northeast inbound. That pilot (Aircraft Y) then reported that he was going to overfly the field at 4,000' to enter a left downwind runway XX. I saw the aircraft on our ADSB and that he was descending just north of the airport while we were taking off after a touch and go. I attempted to visually locate the aircraft while we were on the crosswind leg and turning downwind, but we were in a high-wing aircraft in a left turn so we could not see in the direction he was coming from. Shortly after entering the downwind leg I noticed on ADSB an aircraft at our altitude at our exact location. None of us (myself or 2 students) could see the aircraft visually and I then zoomed in on the **MFD** (Multi-function Flight Display) to see exactly where the other aircraft was. It was immediately behind us at the same altitude. The student flying continued to fly with myself and the student in the back seat looked back to try to find the other aircraft. We spotted it exactly at our altitude approx. 200-300' behind us. We accelerated (it was a similar type of aircraft that we were in) and I then got on the radio and asked that pilot if he had us in sight. He replied that he did. Despite the very close separation, I did not feel that evasive action was necessary due to all the factors involved. He made a full stop, after which I professionally advised him that in the future he should not descend to pattern altitude while overflying the airport and then make a left turn into the pattern, but instead should overfly above pattern altitude past the pattern and make a teardrop entry on the 45 to a downwind/

Synopsis

C172S Flight Instructor reported conflict aircraft made a non standard traffic pattern entry that resulted in a NMAC.

ACN: 2222274 *(29 of 220)*

Time / Day

Date : 202003
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : TVC.Airport
State Reference : MI
Relative Position.Distance.Nautical Miles : 0.5
Altitude.MSL.Single Value : 1000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.Tower : TVC
Aircraft Operator : FBO
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 : Initial Approach
Route In Use : Visual Approach
Airspace.Class D : TVC

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : TVC
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Flight Phase : Initial Approach
Airspace.Class D : TVC

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 1143.5
Experience.Flight Crew.Last 90 Days : 81.2
Experience.Flight Crew.Type : 1124.5
ASRS Report Number.Accession Number : 2222274
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 1700
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

While making right traffic at TVC for Runway 36 in Aircraft X, I had a near collision with Aircraft Y. Pattern was busy already. I was told to follow aircraft that had extended their upwind. We followed that traffic and made our right crosswind turn. While in the crosswind, the Tower told Aircraft Y to follow the traffic ahead of them in the right crosswind. Aircraft Y confirmed that they had the traffic in sight. Tower then confirmed with Aircraft Y that it was the traffic in the crosswind turn not the traffic in the downwind and Aircraft Y again confirmed that they had me in sight. We made our turn into the right downwind. After rolling out of our turn we got a traffic alert. I looked at the **MFD** (Multi-function Flight Display) to confirm where this traffic was. At that time I saw that Aircraft Y had turned right crosswind into us and that they were 100 feet above us. I then took control from the student and immediately descended to 500 feet AGL in the right downwind of Runway 36. Then I told the Tower that I was descending. The Tower Controller confirmed that they saw Aircraft Y cut us off. Aircraft Y then continued to make right traffic above us. Aircraft Y asked if they should make a left 360 turn to follow us. Tower told them to continue in the downwind. After this continued for a few seconds I asked tower if I should make a left 360 turn to follow Aircraft Y and Tower told me to continue in the downwind. After that I accelerated to gain distance between myself and Aircraft Y and eventually was able to gain enough distance to comfortably climb back up to a reasonable altitude for where I was at the time. Had I not taken action I believe that this near miss could have very easily been an in air collision.

Synopsis

General aviation instructor pilot reported a near miss with another aircraft in the traffic pattern. The instructor pilot took the controls and maneuvered away from the other aircraft when they did not follow the traffic sequence instructions from ATC.

ACN: 2218048 *(30 of 220)*

Time / Day

Date : 202503
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 737

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : FBO
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Initial Approach
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ
Make Model Name : Cirrus Aircraft Undifferentiated
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Flight Phase : Initial Approach
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
ASRS Report Number.Accession Number : 2218048
Human Factors : Workload
Human Factors : Training / Qualification

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

After completing a practice approach to runway XX in ZZZ with a plan to circle XY another airplane became a conflict. The wind was favoring runway XY. The approach was broken off about 4nm south of the airport to enter the left downwind as there was an airplane departing runway XY. As we entered the left downwind the aircraft on departure made a radio call that they had us in sight and were going to follow us in the left downwind for runway XY. This aircraft was a Cirrus. Our altitude was at the circling altitude for the approach, which is 1360 msl which is 737 agl. In the downwind leg we received a traffic alert from the G1000. The **MFD** indicated traffic at our 6 o'clock position at the same altitude. We immediately began looking for the traffic but did not see them. A few seconds later I noticed the Cirrus executing a climbing right turn I presume to avoid hitting us. They joined a wide left downwind. The aircraft was within a couple hundred feet of our position when I saw the Cirrus performing this maneuver. We continued the circling maneuver and on short final executed a go-around, which was the briefed plan for the training exercise. The Cirrus joined a wide left base and continued the pattern after we performed the go-around. Our flight continued without any further conflict.

Synopsis

A Flight Instructor on downwind leg to a non-towered airport reported a NMAC with another aircraft on downwind which took evasive action.

ACN: 2216444 *(31 of 220)*

Time / Day

Date : 202502
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 1700

Environment

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

Aircraft : 1

Reference : X
Aircraft Operator : FBO
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Route In Use : None
Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y
Aircraft Operator : Military
Make Model Name : Sikorsky Helicopter Undifferentiated or Other Model
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Phase : Cruise
Airspace.Class G : ZZZ

Person

Location Of Person.Aircraft : X
Function.Flight Crew : Pilot Flying
Function.Other.Other
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 141
Experience.Flight Crew.Last 90 Days : 40
Experience.Flight Crew.Type : 141
ASRS Report Number.Accession Number : 2216444
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : .25
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

While in the SE from ZZZ, while doing 8s on nylons we noticed a UH-60 that was at almost same altitude and extremely close. This area is a high density training area with many student pilots doing ground based maneuvers. We did not see any indication on our **MFD** of traffic until after we had visual on this aircraft. We diverted and aborted out maneuver due to this traffic not reporting position.

Synopsis

GA pilot reported while practicing ground base maneuvers observing a UH-60 in close proximity to their aircraft resulting in the pilot taking evasive action to avoid a collision with the UH-60.

ACN: 2215230 *(32 of 220)*

Time / Day

Date : 202502
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : PSM.Airport
State Reference : NH
Altitude.AGL.Single Value : 100

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Tower : PSM
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Landing
Airspace.Class D : PSM

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : PSM
Aircraft Operator : FBO
Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Final Approach
Airspace.Class D : PSM

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Check Pilot
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 1143
Experience.Flight Crew.Last 90 Days : 109
Experience.Flight Crew.Type : 686
ASRS Report Number.Accession Number : 2215230
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Incursion : Runway
Detector.Automation : Aircraft TA
Detector.Person : Air Traffic Control
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Separated Traffic

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

The two aircraft involved were a Small aircraft (aircraft X, which I was the flight instructor onboard) and a Small Aircraft (aircraft Y), both being used for flight training. Aircraft X was cleared for a touch and go on runway 34 from the left downwind by the tower controller at the PSM airport. Aircraft two was told to report aircraft X in sight, which upon doing so was cleared for the option on runway 34 as aircraft Y. As aircraft X was touching down, the tower controlled advised aircraft Y to complete a go around and to offset to the left side of the runway. Inside of aircraft X, an audible "traffic" alert was heard and the **MFD** displayed aircraft Y "+0" feet above. Upon glancing to my 7 O'clock, I observed aircraft Y continuing a descent towards the runway, unclear of if they were conducting a go around or not. I confirmed the flight controls from my student, applied full power, and conducted a prompt go around as I was unsure of if aircraft Y was going to continue to the runway and land on top of me. As I began a climb, aircraft Y began a climb and I began a right hand turn to offset to the right side of the runway, between the altitude of 50-200' AGL. At this point, the two aircraft were side-by-side on opposite sides of the runway at the same altitudes. Without being prompted, I advised the tower controlled that I had traffic in sight, and the controlled cleared me to begin a right crosswind turn at my discretion, which I had fully committed into at approximately 300 feet AGL. The tower controller asked aircraft Y if they had aircraft X on the approach for a second time and aircraft Y admitted that they did not have aircraft X in sight at the end; hence the lack of adequate spacing between the two aircraft. Aircraft X then made a full stop landing.

Synopsis

GA Flight Instructor reported a near miss at PSM airport with another aircraft on final while landing on a training flight. ATC instructed the other aircraft to go-around and offset from the runway, the Instructor observed the aircraft in close proximity, performed a takeoff and turned away from the aircraft immediately then returned for a landing.

ACN: 2210728 *(33 of 220)*

Time / Day

Date : 202502
Local Time Of Day : 0601-1200

Place

Altitude.MSL.Single Value : 1400

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : FBO
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Mission : Personal
Flight Phase : Initial Climb
Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal
Make Model Name : Extra 200/300 Series
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Mission : Personal
Flight Phase : Climb
Airspace.Class G : ZZZ

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 : Private
ASRS Report Number.Accession Number : 2210728

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Before taking off VFR, the aircraft was swerving on the taxiway behind me. I reported that I was holding short of runway XX and asked if the aircraft on the taxiway was doing okay. I take off as there is an aircraft on a 5-mile final. As I rotate, the E300 takes the runway. I am watching the E300 on the **MFD** (Multi-function display), and it appears they are right under me, so I turn. As I turned, my safety pilot saw the plane within 200-300 feet of us and the E300 started rapidly climbing, so I descended and turned away more.

Synopsis

C172 pilot reported a near mid air collision with another aircraft during takeoff climb at a non-towered airport.

ACN: 2210717 *(34 of 220)*

Time / Day

Date : 202502
Local Time Of Day : 1201-1800

Place

Altitude.MSL.Single Value : 5000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
Aircraft Operator : FBO
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Cruise
Route In Use : None

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Operating Under FAR Part : Part 91
Flight Plan : None

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Trainee
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
ASRS Report Number.Accession Number : 2210717
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 400
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

This was a training flight on commercial maneuvers with me and a CFI on board. The event began after us finishing a lazy eight and started setting up for a chandelle while turning towards an area of flatter terrain for the subsequent steep spirals we were planning to do. Both of us noticed the traffic flying about two hundred feet lower than us, slightly behind to the right side, parallel to our direction and is climbing. The G1000 sounded an audio alert about the traffic and both of us looked outside the windows for an attempt to gain visual on it. The CFI suggested me to perform a left 360 degree turn to let the traffic pass by, which I agreed and initiated the turn only slightly faster than standard rate (about a 20 degrees bank angle), giving us more of a buffer for separation. Upon finishing 270 degrees of the turn I scanned the instruments, including the map display to verify the position of the traffic, and discovered that said traffic has turned 180 degrees and coming directly at us from the left, only one hundred feet below us and climbing. I immediately initiated a full throttle Vx climb, reaching a +25 degrees pitch up attitude briefly before lowering the AOA to prevent stalling, while looking out the left side window for that traffic. I gained visuals almost immediately and confirmed that we were on a collision course and separation has not been established. I kept the climb until the traffic passed directly under us and upon leveling off, the **MFD** indicated that traffic was 400 feet below, about which the altitude we gained in the evasive climb. Both me and my CFI made expletive remarks to each other during the climb, and we agreed that the distance was way too close for anyone's comfort. This could easily be catastrophic. Suggestions: should have did a climbing/descending 360 instead of level, as separation on two axis is definitely better than one.

Synopsis

Cessna 172 pilot receiving instruction reported an NMAC with another aircraft during a training maneuver.

ACN: 2196265 *(35 of 220)*

Time / Day

Date : 202412
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Distance.Nautical Miles : 0
Altitude.AGL.Single Value : 0

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Ground : ZZZ
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : DA40 Diamond Star
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Personal
Flight Phase : Taxi

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : ZZZ
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Phase : Final Approach
Airspace.Class C : ZZZ

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 : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 410
Experience.Flight Crew.Last 90 Days : 9.5
Experience.Flight Crew.Type : 300
ASRS Report Number.Accession Number : 2196265
Human Factors : Situational Awareness
Human Factors : Troubleshooting
Human Factors : Workload
Human Factors : Fatigue

Events

Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Ground Incursion : Taxiway
Anomaly.Ground Incursion : Runway
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
Miss Distance.Horizontal : 8000
Miss Distance.Vertical : 1000
When Detected : Taxi
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Separated Traffic
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Software and Automation
Primary Problem : Human Factors

Narrative: 1

The event was a runway incursion at ZZZ runway XX and taxiway 1 at night due to lack of situational awareness, complacency, and task management, as well as unfamiliarity with the airfield. The taxi instructions given by ground were taxiway 2 then 1 to the XYL run up area. Due to lack of familiarity with the field and darkness, I initially taxied past the run up area after turning left onto taxiway 1, resulting in the need to do a 180 turn back to the run up area. I was told to advise once run up was complete. Prior to the run up check during the initial taxi, I noticed the oil pressure gauge was towards the lower end of the acceptable range, and this soon became my primary focus. During the run up, I was satisfied with all engine indications, however, a large portion of my focus remained on engine indications after the run up was complete. After the run up check, I was instructed by ground to cross XYL, hold short of XYR and switch to tower. However, since my focus was still on my engine instruments, I left the engine page up on the G1000 **MFD** without referencing the moving map , and turned left onto taxiway 1, toward runway XX. This was incorrect, however during the time I mistakenly felt this was the correct direction, as taxiway 1 was the last taxiway given in the initial taxi instructions, and I incorrectly had in mind that I need to be on taxiway 1 before getting to XYL. Additionally, I was somewhat confused on my exact location after taxing past, and having to return to, the run up area. At this point, my focus was still mostly on my engine instruments, which caused me to

miss the fact I crossed taxiway 3, and as I approached runway XX, I didn't take the time to verify that I was approaching the correct runway until it was too late. I was told I could cross runway XYL, and assumed that the first runway I was approaching would be XYL. I realized too late that I was about to enter the wrong runway, and crossed runway XX without clearance, causing an aircraft to go around. Furthermore, I did not hear the call the aircraft on approach made at the time, as that would have been another cue to watch for landing traffic. The only corrective action that could be taken was not coming to a stop on the active runway, as I was already past the hold short markings when I realized where I was. I was told to make a 180, cross runway XX, and cross XYL again. Only after the incursion happened did I pull up the moving map to reference the airport diagram for taxi. One of the largest contributing factors was unfamiliarity with the airfield, as was evident in missing the run up area. I believe complacency played a large role in this incident as well, as I did not feel I needed to take the time to double check my taxi routing, since the taxi instructions weren't very complex. Finally, task management was clearly a major factor, as I was focused on engine indications instead of where I was moving the aircraft. The biggest takeaway from this incident is to focus on the most critical task, and to separate tasks. There was no reason I couldn't have remained longer in the run up area looking at my engine indications until I was satisfied. There was also no reason to skip double checking taxi routing, especially at an unfamiliar field. Additionally, fatigue may have played some role, as it was towards the end of the day. There were multiple ways to avoid this incident. The first being asking for a progressive taxi from ground, as this would have eliminated any confusion about which direction to turn. The second being treating all runway crossings, no matter how routine, with complete focus and attention.

Synopsis

DA40 pilot reported they turned the wrong direction on a taxiway and entered a runway without clearance resulting in an aircraft on short final executing a go around.

ACN: 2195845 *(36 of 220)*

Time / Day

Date : 202412
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DYB.Airport
State Reference : SC
Altitude.MSL.Single Value : 900

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Ceiling.Single Value : 1700

Aircraft : 1

Reference : X
ATC / Advisory.UNICOM : DYB
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Climb
Route In Use : None
Airspace.Class E : DYB

Aircraft : 2

Reference : Y
ATC / Advisory.UNICOM : DYB
Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Airspace.Class E : DYB

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 1228
Experience.Flight Crew.Last 90 Days : 81
Experience.Flight Crew.Type : 419
ASRS Report Number.Accession Number : 2195845
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

Prior to departure checked for traffic on final visually and ADS-B traffic on the **MFD** and no traffic was observed (distance ring on the **MFD** was set to 2.5 miles). While turning crosswind and climbing from ~800 ft to pattern altitude we noticed a traffic conflict appear on the G1000 and received a traffic audio traffic alert. The traffic was nearly the same altitude flying westbound through the DYB traffic pattern on the south side of the airport. I immediately took control of the plane and executed an evasive maneuver to the right to slow convergence of the aircraft and determined the best altitude was to climb. Once we no longer had a risk to flight safety we obtained the call sign from the G1000 and I re-entered the pattern and executed a landing. Prior to starting turn to crosswind there was no evidence of the traffic on the G1000 and with the plane behind us were unable to acquire visually. We did make calls before departure indicating runway and remaining in the pattern and made a call turning crosswind. Aircraft X started near Ladson and ended shortly after the NMAC. I didn't pick up again until the plane was SE of Atlanta. Why the plane was flying at pattern altitude directly through the DYB traffic pattern with no radio calls is unknown. They also did not appear to make any evasive maneuvers.

Synopsis

General aviation instructor pilot reported a near miss with another aircraft in the traffic pattern of non-towered airport DYB. The instructor took control and maneuvered to avoid the other aircraft based on the ADS position on the flight instruments, then re-entered the pattern and landed safely.

ACN: 2194268 *(37 of 220)*

Time / Day

Date : 202412
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : DLH.Airport
State Reference : MN
Relative Position.Angle.Radial : 350
Relative Position.Distance.Nautical Miles : 15
Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC
Weather Elements / Visibility : Haze / Smoke
Weather Elements / Visibility.Visibility : 8
Ceiling.Single Value : 8000

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : DLH
Aircraft Operator : FBO

Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Cruise
Route In Use.Other
Airspace.Class E : DLH

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : DLH
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Cruise
Route In Use.Other
Airspace.Class E : DLH

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 450
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 150
ASRS Report Number.Accession Number : 2194268
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Vertical : 400
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

I was doing Basic Attitude Instrument Flying with my student north of DLH. I noticed an aircraft above me about 1,200 feet on my **MFD** (Multi-Function Display). I had not gotten a traffic advisory from ATC at all yet about them, and at the time they were no factor to our operations. Shortly after, I glanced back at my **MFD** and saw a traffic advisory light up yellow on my screen, upon looking out my window, I saw the aircraft descending quickly at a close proximity to mine. I grabbed the controls from my student (who was under the hood at the time) and advanced power to full, and began a climbing left turn. Right as I saw them, ATC gave me a call to "Turn north immediately for company traffic," which I complied with. I saw the other aircraft pass below me and continue southwest bound and they were no factor after that. This other aircraft was doing a simulated emergency descent when the near miss occurred.

Synopsis

Light aircraft instructor pilot reported an NMAC in the vicinity of DLH airport.

ACN: 2193823 *(38 of 220)*

Time / Day

Date : 202412
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 40000

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 6
Weather Elements / Visibility.Other
Light : Dusk
Ceiling.Single Value : 1400

Aircraft

Reference : X
ATC / Advisory.Center : ZZZ
Aircraft Operator : Corporate
Make Model Name : PC-24
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Descent
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class A : ZZZ
Airspace.Class C : ZZZ

Component : 1

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

Component : 2

Aircraft Component : Brake System
Aircraft Reference : X
Problem : Malfunctioning

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : First Officer
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 6296
Experience.Flight Crew.Last 90 Days : 54
Experience.Flight Crew.Type : 299
ASRS Report Number.Accession Number : 2193823
Human Factors : Workload
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Diverted
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : FLC complied w / Automation / Advisory
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

While in cruise at FL400 in VMC conditions, we encountered a momentary LIFT DUMP FAIL Msg. Which self cleared after a few seconds then it re occurred 2 more times. Shortly after the third message appeared and while running the appropriate checklist for this failure we encountered complete loss of Electronics on the CO-pilots side or (Display Unit (DU) 3 & 4 in this case). We also incurred several CAS messages cascading along with multiple aural chime warnings at this moment. The pilots

side Primary Flight Display (PFD) and upper Multi-function Flight Display (**MFD**) (DU 1 & 2) stayed operational but we lost the Autopilot along with the pilots side Electronic Standby Instrument System (ESIS). At this moment the second in command (SIC) said he felt the cabin pressure changing in his vestibular system. O2 Masks were donned immediately upon which [priority handling was requested] along with an EMER Descent initiated. We [requested priority handling] with the Center Controller and explained a possible cabin pressure issue along with partial loss of electronics. The controller asked if we would like to divert to nearest airport which was ZZZ upon which we answered yes. As we descended from FL 400 we immediately entered IMC conditions where we encountered icing, turbulence and then precipitation at lower altitudes. Manual flight control became very challenging as we ran checklists in the conditions being encountered. The Autopilot was inoperative and weather conditions were deteriorating as we descended into night IMC. As we were being vectored by ZZZ Approach in our descent and around for the ILS XX we continued running the checklist for GEN 1 & 2 Fail messages being displayed. We also had noticed the overhead BUSS TIE was illuminated OPEN along with both GEN's being INNOP. We were able to close the BUSS TIE and reset GEN 2 successfully. Systems began to recover slowly by the time we were being vectored onto the approach. We elected not to reset GEN 1 at this moment being we had already been configured for landing and were in visual conditions and not sure if the reset of GEN 1 would trip and Fail GEN 2 wiping out the electronics all over again. As we broke out below the base of the cloud's and had the Runway insight and were configured for landing we asked ZZZ Tower to change our status from [priority handling] (which the Tower Controller appreciated). Based on the checklist, we briefed that normal brakes maybe unavailable and that we would use remaining accumulator pressure along with EMER Brake if necessary to come to a complete stop on the 9,000 ft runway for the Airport Rescue and Firefighting (ARFF) inspection. After we came to a complete stop on the Runway with remaining brake pressure and without incidence with both engines still running we elected to try and reset GEN 1 without success. ARFF inspected our aircraft for any visible signs of damage. No damage was reported by ARFF, so we elected to clear the Runway to the nearest Taxiway following the Fire Rescue vehicle. At this stage our normal brake pressure accumulator started depleting on our Synoptic page so we elected to set the parking brake and shut down both engines and asked to be towed to the FBO. A thorough post flight inspection was completed by both crew members upon which no obvious damage was noticed except for a very small piece of what appeared to be fairing protective tape on the lower side of fuselage that began to peel back slightly.

Synopsis

PC-24 First Officer reported an electrical failure in cruise. Flight crew diverted to a safe landing.

ACN: 2191800 *(39 of 220)*

Time / Day

Date : 202312
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : HWO.Airport
State Reference : FL
Relative Position.Angle.Radial : 300
Relative Position.Distance.Nautical Miles : 11
Altitude.MSL.Single Value : 800

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Tower : HWO
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Descent
Route In Use : Direct
Airspace.Class E : HWO

Aircraft : 2

Reference : Y
Make Model Name : Helicopter
Airspace.Class E : HWO

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 3058.2
Experience.Flight Crew.Last 90 Days : 170.1
Experience.Flight Crew.Type : 699.5
ASRS Report Number.Accession Number : 2191800
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

My student and I were coming back from ZZZ following Highway XX when we proceeded direct to HWO about 30 NM out. While we were about 15 NM from HWO we looked at our **MFD** (Multi-Function Display) screen and we saw what was a helicopter but did not visually see them. We started our descent down to 1000 feet MSL when on the **MFD** screen it showed the target at our same altitude. So we proceeded to descend down to 800 feet MSL. We both looked to our right and the helicopter was 200 feet above us looking like it was maintaining 1000 feet MSL heading north bound flying under the shelf of FLL Class C.

Synopsis

Light aircraft flight instructor reported an NMAC with a helicopter in the vicinity of HWO airport.

ACN: 2185529 *(40 of 220)*

Time / Day

Date : 202411
Local Time Of Day : 0601-1200

Place

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

Environment

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

Aircraft : 1

Reference : X
Aircraft Operator : FBO
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Descent
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
Aircraft Operator : Personal
Make Model Name : Bonanza 36
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Personal
Flight Phase : Cruise
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 377
Experience.Flight Crew.Last 90 Days : 130.5
Experience.Flight Crew.Type : 377
ASRS Report Number.Accession Number : 2185529
Human Factors : Time Pressure
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 3000
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

I was up in the practice area with my student performing maneuvers just north east of a lake. We communicated in the practice area frequency that we were at 6,000 making a controlled shallow to medium spiral descent down to 4,500. At around 5000 feet our **MFD** (Multi-function Flight Display) reports that there was traffic 300' below us. I then immediate find the plane and take controls and immediately cram full power and start establishing a climb. At no point did I see the other plane make any changes in their flight path to avoid this conflict. Both my student and myself are constantly being vigilant and scanning for traffic and at no point did we see traffic on our radar or outside of our aircraft until they got very close to us.

Synopsis

Flight Instructor with student practicing maneuvers in a practice area reported a NMAC with another aircraft flying through the area.

ACN: 2182331 *(41 of 220)*

Time / Day

Date : 202411
Local Time Of Day : 1201-1800

Place

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

Relative Position.Distance.Nautical Miles : 8.8
Altitude.MSL.Single Value : 2000

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : FBO
Make Model Name : DA40 Diamond Star
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Cirrus Aircraft Undifferentiated
Operating Under FAR Part : Part 91
Flight Phase : Climb
Airspace.Class D : ZZZ

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Student
Qualification.Other
Experience.Flight Crew.Total : 1.0
Experience.Flight Crew.Last 90 Days : 49.2
Experience.Flight Crew.Type : 77.4
ASRS Report Number.Accession Number : 2182331
Human Factors : Communication Breakdown
Human Factors : Training / Qualification
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 1130
Experience.Flight Crew.Last 90 Days : 80
Experience.Flight Crew.Type : 1105
ASRS Report Number.Accession Number : 2183798
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Departing from ZZZ1 to ZZZ, at 8.8 NM, 2500 ft called ZZZ Tower for approach, Tower called "turn right downwind, report midfield, Runway XX" At this point there is another traffic from 1 oclock ascending, my instructor pointed at the **MFD** (Multi-function Flight Display) radar and asked "what are you going to do?" Initially I didn't take action because by turning right I will be above the runway, and I don't want to block it. My instructor then called Tower if we should worry about the incoming traffic, Tower did not answer. I started doing a 20 degree bank to the right, a few moment later, he then headed up, cursed, grabbed the controls and did a 50 degree bank to the right because it was so close to the other traffic.

Narrative: 2

I was on a retrain flight with a student after his repeated deficiencies on a stage check (which included failures to avoid traffic, emergencies, landings, and radios). I intended on bringing the student to ZZZ to practice radios in the pattern as he has shown that he struggles with radios. En-route to ZZZ from ZZZ1 the student had been struggling with the radios and began to become saturated causing him to struggle to hold altitude, and he had been drifting toward a 3 mile right downwind (to Runway XX ZZZ) and I was now tasked with intervening to ensure we did not climb too high, nor make ATC mad with my students inability to comprehend what "reporting midfield right downwind" meant, and making sure we entered the pattern appropriately. The student fell behind but did begin a descent to the pattern altitude, slowly. We were about 5 miles out by this point, so not in the Delta yet, but soon to be. During the descent I was watching to see if the student would look at the Multi-function Flight Display (**MFD**) at all (again, this student struggled greatly with watching for other people). He did not look at the **MFD** at all, so I had to point out the traffic target to him, at this point they had just departed and were 1,200ft below us. The student began to look outside, but made no change to his course. The traffic had departed XX at ZZZ and was now climbing toward us, 700ft below, so I made a call to Tower, I said "Tower Aircraft X, should we be worried about Aircraft Y?" (the departing aircraft). Tower made no response at all to that inquiry. My student still was not changing course so I instructed him to turn to the south-east (Aircraft Y turned left toward us while climbing when he was originally on a north-west heading, but now was pointing west toward us). I still had not gotten a visual on the traffic and I believed the cowling was blocking it, so I had moved my head over to the student's side and immediately spotted the traffic of the plane moving toward us. I intervened and steeply banked to the right (40ish degrees) to avoid the traffic. During the turn, my **MFD** had displayed (-02) showing him 3 miles away, 200ft low pointed directly at us. I believe Tower saw us change heading by 90 degrees because he came back on the radio to (again) tell us to report midfield downwind. I was almost in shock, how could he have not realized that I reached out to him asking about the traffic and Tower 1-- did not respond at all, so had I not maintained awareness it could have been a near miss and 2-- my student had perfect vision of this traffic while mine was blocked by the cowling, and had I not moved my head over to see his sided I would not have seen the closure rate between us and the cirrus. The whole time after, my student seemed unphased... there had already been multiple written debriefs of unsatisfactory performances of his prior surrounding traffic avoidance. I tried to continue the lesson, but was a little shaken up after the event that I ended up terminating the flight after two laps. The problem arose for a few reasons, I had a student that was known to fail at avoidance, there was traffic departing XX and we were told to do right downwind XX (so when the departing traffic turned to the northwest we were already in a conflicting path), Tower failed to mention the traffic and ignored my asking about the traffic, and I should have intervened long before instead of waiting on the student to take action especially if I knew there were deficiencies in his traffic avoidance. I expected in a Delta that there would be more control over the traffic, and maybe I put too much trust that ATC had everything under control.

Synopsis

Flight instructor on training flight with student reported a NMAC with another aircraft while in the airport traffic pattern.

ACN: 2181387 *(42 of 220)*

Time / Day

Date : 202411
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.Tower
State Reference : US
Relative Position.Angle.Radial : 269
Relative Position.Distance.Nautical Miles : 18
Altitude.AGL.Single Value : 800

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Initial Climb
Route In Use : None
Airspace.Class D : ZZZ

Component

Aircraft Component : Engine
Aircraft Reference : X
Problem : Malfunctioning

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 207
Experience.Flight Crew.Last 90 Days : 25
Experience.Flight Crew.Type : 207
ASRS Report Number.Accession Number : 2181387
Human Factors : Training / Qualification
Human Factors : Troubleshooting
Human Factors : Workload
Human Factors : Time Pressure

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 379
Experience.Flight Crew.Last 90 Days : 33
Experience.Flight Crew.Type : 355
ASRS Report Number.Accession Number : 2181405
Human Factors : Troubleshooting
Human Factors : Training / Qualification
Human Factors : Time Pressure
Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

We were completing an emergency approach and landing maneuver in accordance with the commercial rating outline. We completed the maneuver going down to about 800ft AGL and smoothly put power back to full power to climb back to a cruise altitude (mixture was full the whole time) and approximately 5-10 seconds on our climb out the engine shook and rpm dropped to 2200 and climb performance dropped to approximately 100-200 fpm at around 72 kts indicated. EGT and CHT reading for cylinder 1 (Garmin G-1000) dropped and showed no visual reading on the temperature charts for that cylinder. Upon [requesting priory handling] with ZZZ Tower due to the low altitude this took place, we headed back direct to ZZZ to land on Runway XX. After the loss of power, emergency checklists for engine roughness/loss of power were run. Approximately 5 nm on the final for Runway XX, we noticed the same reading for cylinder 3 were missing on the EGT and CHT chart on the Multi-function Flight Display (**MFD**) and upon landing, only one cylinder was showing readings and shutdown was commenced.

Narrative: 2

We were on the go around from practicing simulated emergency approach to land around 18NM W of ZZZ at 2500 ft, and as the student pilot adding the power to full, we experienced engine roughness and lost CHT and EGT on #1 cylinder. Our max climb rate was 200 fpm with full power and mixture. As we were slowly climbing to 3000 feet we contacted ZZZ Tower. The engine roughness persisted and we ran through the appropriate checklist but it did not solve the problem. As we were getting closer to ZZZ, Runway XX, when we were 5 NM W of ZZZ, we lost CHT and EGT on #2 and #3. As we were coming in on the final approach of Runway XX, the engine roughness progressd worse, but we were able to make it to the runway safely.

Synopsis

C172 student pilot and Instructor reported the engine lost power on initial climb from a go around and return to the airport.

ACN: 2178071 *(43 of 220)*

Time / Day

Date : 202410
Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : IWA.Tower
State Reference : AZ
Altitude.MSL.Single Value : 2500

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Tower : IWA
Aircraft Operator : FBO
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Takeoff / Launch
Flight Phase : Initial Climb
Airspace.Class D : IWA

Aircraft : 2

Reference : Y
ATC / Advisory.Tower : IWA
Aircraft Operator : FBO
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : VFR
Mission : Training
Flight Phase : Initial Climb
Flight Phase : Takeoff / Launch
Airspace.Class D : IWA

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 559
Experience.Flight Crew.Last 90 Days : 177
Experience.Flight Crew.Type : 532
ASRS Report Number.Accession Number : 2178071
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Confusion

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

My student and I were conducting touch-and-go practice in the traffic pattern at IWA. We were flying left traffic for runway 12L. After completing our final touch-and-go, we requested a full-stop landing from the Tower. The Tower instructed us to "fly straight out." Simultaneously Aircraft Y was departing from the parallel runway, 12C. I wasn't initially aware of this aircraft. They were behind us and higher, effectively in our blind spot. At approximately 2,500 feet MSL on the upwind of 12L, the Tower instructed, "Aircraft X, make right traffic for 12R." Before initiating the turn, I checked the **MFD** (Multi-function Flight Display) for traffic, but due to the close proximity of Aircraft Y, I mistakenly believed it was an ADS-B "shadow" of our own aircraft. As we turned right, we ended up within 200 feet of Aircraft Y, which was climbing out from runway 12C. The Tower immediately instructed us to "continue on the upwind" after realizing the close proximity of the two aircraft. A few seconds later, they directed us to resume right traffic. After we turned back to the upwind, Aircraft Y adjusted their course to the south to avoid further conflict. Eventually I took controls and descended the airplane to break off. ATC did not issue to us a warning or mentioned that we were at fault. We landed safely back at IWA.

Synopsis

Flight Instructor reported a NMAC after the Tower instructed them to turn crosswind into conflict with an aircraft departing the parallel runway.

ACN: 2177438 *(44 of 220)*

Time / Day

Date : 202410
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : D01.TRACON
State Reference : CO

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None

Mission : Training
Flight Phase : Cruise
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Small Aircraft, High Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 482
Experience.Flight Crew.Last 90 Days : 70.0
Experience.Flight Crew.Type : 457.2
ASRS Report Number.Accession Number : 2177438
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

So i was flying with a student doing VOR intercepting and tracking procedures in a known training area in Colorado Denver airspace. I was on frequency and let everyone in the area know what operations we were doing. While I was flying a random aircraft popped up on my **MFD** about a mile away from our current position and if we were to continue to fly that direction we would be flying towards a collision. So, I in Aircraft X turned left to avoid the traffic and go the opposite direction, and made a radio call letting aircraft in the area know where I was and that there was an aircraft without an identifier flying towards us. The unidentified aircraft then proceeded to turn towards us and fly only 300 feet above us. Not making any calls or corrections. I looked around and couldn't find any aircraft.

Synopsis

Flight Instructor reported a NMAC while flying in a known practice area with an aircraft that was not communicating on the practice area frequency. The instructor turned the aircraft left to avoid a collision and the other aircraft flew 300 feet above them.

ACN: 2175164 *(45 of 220)*

Time / Day

Date : 202410
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : JCA.Airport
State Reference : GA
Altitude.MSL.Single Value : 2000

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : JCA
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Climb
Airspace.Class G : JCA

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : JCA
Make Model Name : Small Aircraft, Low Wing, 2 Eng, Retractable Gear
Mission : Training
Flight Phase : Climb
Airspace.Class G : JCA

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 430
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 400
ASRS Report Number.Accession Number : 2175164
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Miss Distance.Horizontal : 400
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Pattern work with my student at JCA. 4 planes in in the pattern, two flight school planes and 2 pilots who do not speak English well. Final lap in the pattern for Runway 35, We announce a left crosswind departure to the southwest. We begin our left crosswind turn to the west , and I hear "Departure leg Runway 35 Aircraft Y." I look back to find the traffic, and see Aircraft Y. I then hear "Jackson county left crosswind 35 Aircraft Y." Knowing he is in a twin, I know he is moving and climbing faster than me. I Then announce " Jackson traffic Aircraft X is in the left crosswind departure for 35 to the west, do you see us?" "No," is the response my student and I get back on the CTAF. I see no corrective action on the ADS-B traffic map on our **MFD** (Multi-function Flight Display). I announce "You are climbing into us." no response. Looking at the onboard ADS-B traffic map I see no corrective action, and we are within or close to TPA of 2000 MSL, Aircraft Y kept ascending until he caught up to us. I command "my controls" from my student, and pulled a maneuver to gain as much altitude as possible, knowing he was remaining in the pattern. I ultimately read "00" on the altitude difference, and the the plane on the **MFD** was directly atop ours. I could not see him behind me. I can only assume it was a miss of 400 feet. I truly have no idea how close they were. 400 feet of a near miss feels generous. I then hear "left downwind 35 Jackson." At this point I am close to 2300, I believe, and finally locate Aircraft Y. I then ask "do you see me off your right wing?" "I do now." Was the response. I do not know if a

lack of English proficiency, blatant disregard for listening to other planes in the pattern, or poor ADM (Aeronautical Decision Making) contributed. Potentially all three. No decision to extend the upwind. I can only climb so fast in a single engine. Left is the downwind where I know Aircraft Y wants to go. Right is the corrective action he would make if any would come from him. Descending puts me on top of his airplane. If this was a plane with no radios, I can only do so much. however, it was established that this plane has radios, he can make the calls, and he can hear me. From my understanding this airplane had a spacing issue coming back into ZZZ as well.

Synopsis

GA Flight Instructor with student reported an NMAC during departure climb from JCA non-towered airport requiring evasive action. Reporter stated language barrier was a factor in the incident.

ACN: 2173554 *(46 of 220)*

Time / Day

Date : 202410
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : HCR.Airport
State Reference : UT
Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : HCR
Aircraft Operator : FBO
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Takeoff / Launch
Flight Phase : Initial Approach
Route In Use : Visual Approach
Airspace.Class G : HCR

Aircraft : 2

Reference : Y
ATC / Advisory.CTAF : HCR
Make Model Name : Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew : 1
Flight Phase : Initial Approach
Flight Phase : Final Approach
Airspace.Class G : HCR

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 670.9
Experience.Flight Crew.Last 90 Days : 158.4
ASRS Report Number.Accession Number : 2173554
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Anomaly.Conflict : Ground Conflict, Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Incursion : Runway
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Went with a student up to Heber to practice short field landings for stage check. We made standard calls over Deer Creek stating our position and intentions all the way in. While we were about to cross over the north end of the Deer Creek Reservoir, there was an aircraft that showed up on ADS-B departing off of Runway 22 at HCR with no radio calls. The aircraft turned toward us at the same altitude, we made two more calls stating our position and intention with no response. I took the controls from the student and entered a steep descent and he turned to follow us briefly before turning away. Still no calls made from the other aircraft. After performing 4 touch and go landings at the airport in left traffic, we decided we would do one more and while we were on base I could see the same aircraft doing aerobatics just west of the airport over the town of Charleston/midway. Once we joined final I saw them enter a high right downwind (approx. 1700' AGL), again with no calls. By the time we had done our landing and started our takeoff roll, I checked our **MFD** (Multi-function Flight Display) again and saw the aircraft on short final directly behind us at 200' AGL. The operator then made their only call of the day "Aircraft Y overflying 22" and I saw the aircraft at an approximate 45 degree bank with extreme speed 100 feet above us directly parallel the runway before making a sharp turn right to re enter the downwind. We then departed southwest and had no more calls from the aircraft after multiple attempts to call them up by their tail number specifically.

Synopsis

General Aviation instructor pilot reported a near miss with another aircraft while maneuvering into the traffic pattern at a non-towered airport. The instructor took the controls and maneuvered to avoid the aircraft.

ACN: 2170118 *(47 of 220)*

Time / Day

Date : 202409
Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : D10.TRACON
State Reference : TX
Altitude.MSL.Single Value : 2300

Environment

Weather Elements / Visibility.Visibility : 10
Light : Dusk
Ceiling : CLR

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : D10
Aircraft Operator : FBO
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 : IFR
Mission : Training
Flight Phase : Initial Approach
Route In Use : Vectors
Airspace.Class E : D10

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : D10
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Airspace.Class E : D10

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 325
Experience.Flight Crew.Last 90 Days : 82
Experience.Flight Crew.Type : 150
ASRS Report Number.Accession Number : 2170118
Human Factors : Communication Breakdown
Human Factors : Training / Qualification
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
Detector.Person : Air Traffic Control
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

The problem arose as we were being vectored to out final approach course by Regional Approach. Regional approach saw an aircraft flying right at us at +200 feet from our elevation. The Pilot flying and Myself (pilot monitoring) saw the same indication on our **MFD** showing ADSB Data. There were many events happening in rapid succession. Event one was the Controller giving us vectors to intercept the final approach course, the next was when approach said "you have traffic at your one o'clock" and that the altitude was about 200 feet above our current altitude. I called him back and said looking because I was on the radios, I saw an airplane in the distance but it seemed too far away, approach called again and said "Aircraft X I need you to have that traffic in sight" at this time I still did not have the traffic but from seeing the other traffic in the distance, my pilot flying shook his head as if he had the traffic in sight so I told the Controller "Traffic in sight" while still personally trying to get an eye on this traffic, the Controller seemed rushed and gave me my clearance which I missed because I was more concerned with the VFR traffic who approach was not talking to so I asked for the clearance again, the Controller gave it to me, I read it back to him in a disorganized way then the airplane was right over the top of us, I still did not have it in sight, and the Controller passed us over to Arlington (GKY's) tower. There were many things going wrong at this time. 1. I should have told my pilot flying to turn left and avoid the traffic then let ATC know what we were doing. 2. The VFR traffic should have made better decisions than to fly right through the approach end of a very busy airport and should have performed their VFR duties of keeping an eye out for other airplanes and seeing and avoiding. 3. The Controller should have vectored us away from the traffic. 4. The pilot in command should have turned the aircraft away from the traffic and performed his PIC duties. Many thing going wrong rapidly could have ended in a different way today. My Pilot Flying and I both reviewed the events and came to the conclusion that better communication in the cockpit could have helped this situation out end.

Synopsis

General aviation pilot reported a near miss with another VFR aircraft while being vectored onto an approach. No evasive action was taken.

ACN: 2165702 *(48 of 220)*

Time / Day

Date : 202409
Local Time Of Day : 1201-1800

Place

Locale Reference.Intersection : ZZZZZ
State Reference : US
Relative Position.Angle.Radial : 250
Relative Position.Distance.Nautical Miles : 6
Altitude.MSL.Single Value : 9000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Corporate
Make Model Name : Cessna Citation Sovereign (C680)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Descent
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
ATC / Advisory.TRACON : ZZZ
Make Model Name : King Air C90 E90
Mission : Skydiving
Flight Phase : Descent
Airspace.Class E : ZZZ

Component

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

Person : 1

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 5400
Experience.Flight Crew.Last 90 Days : 5
Experience.Flight Crew.Type : 1300
ASRS Report Number.Accession Number : 2165702
Human Factors : Distraction
Human Factors : Human-Machine Interface
Human Factors : Time Pressure
Human Factors : Workload
Human Factors : Confusion

Person : 2

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : Pilot Not Flying
Function.Flight Crew : Captain
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 6691
Experience.Flight Crew.Last 90 Days : 23
Experience.Flight Crew.Type : 2179
ASRS Report Number.Accession Number : 2165765
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

9000ft. Traffic alert. Watching traffic on TCAS. Saw white airplane [Aircraft Y] close to what looked like what was showing on TCAS. Called, I see traffic. Traffic getting closer on TCAS. Waiting to see which direction RA is going to give us. RA climb. Autopilot off. Put flight director in the green. Almost immediately RA guidance drops. No, Clear of Contact. Looked at right side Primary Flight Display (PFD). RA guidance dropped. Looked out left window. Aircraft Y windscreens very visible, then saw airplane in a steep right bank descending.

Narrative: 2

Arrival into ZZZ. Speaking with ZZZ approach. Our aircraft had recently leveled after ATC instructions to descend from 11,000' and maintain 9000'. As we approached the ZZZZZ intersection, we noticed, on our traffic display, Aircraft Y approximately 4 miles our 11 o-clock position at an altitude above ours and descending. Rapidly, the target was turning toward our flight path and descending into our altitude. The PF visually spotted the aircraft. Within seconds, our TCAS alerted a TA that very quickly progressed into a RA. The RA directed a climb and the PF immediately complied. The RA cleared when our aircraft reached 9200. I looked at the traffic on the Multi-function Flight Display (**MFD**) to see it was indicated as under us at an altitude of 9000. That aircraft then continued descent as it passed behind us. While the RA was initiating, ATC made a callout to what I later learned was the other aircraft, a King Air 90. ATC was instructing, "Traffic 1 o'clock, 1 mile, stop your descent." The other aircraft did not verbally respond. After we cleared conflict, which was to our left and rear, I asked the PF how close the aircraft came to us. The PF replied, 'I could see both of his windscreens." I asked if we were within 200 feet and the PF replied, "Yes." When the RA initiated, I notified ATC that we were responding to a TCAS RA. His response was, "Yeah, that was my fault. Traffic is behind you now, no factor." After landing at our destination, ZZZ, I called the TRACON supervisor. I learned that the King Air was a sky diving transport and was in the process of a rapid turning descent post sky divers away. From all indications, this was a near mid air collision. Had the PF not spotted the King Air and taken immediate evasive action when the RA initiated, I believe a collision would have been likely. I believe this occurrence had multiple contributing factors. First, the sky diving aircraft dropped jumpers over the ZZZ1 airport and then turned toward the arrival corridor, approximately 3 miles away. The King Air was maneuvering in a steep spiral to lose altitude solely for the purpose of saving time while trying to beat his jumpers to the ground. In the commercial airman certification standards, such a maneuver requires clearing the area. The King Air almost definitely didn't do this. ATC never advised us of the King Air nor his purpose. ATC had made a general call of sky diving over ZZZ1 prior to our check-on. ATC never advised of our position and altitude to the King Air until the, "1 o-clock, 1 mile" call. Lastly, when I advised ATC that we were complying with the RA, his reaction was dismissive and not within guidelines, "Behind you now, no factor." I believe this is very inappropriate because I had only just reported the RA and had not reported clear of conflict. I believe this all could have been avoided with better communication from ATC, better decision making from the King Air, better awareness and collision avoidance practices from the King Air, and policy to keep such operations out of the published and assigned STAR.

Synopsis

A Corporate flight crew descending on a STAR to a satellite airport reported receiving an RA and a NMAC when the RA guidance dropped.

ACN: 2154053 *(49 of 220)*

Time / Day

Date : 202408
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DMW.Airport
State Reference : MD
Relative Position.Distance.Nautical Miles : 2
Altitude.MSL.Single Value : 2100

Environment

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

Aircraft : 1

Reference : X
ATC / Advisory.Center : ZDC
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
Mission : Personal
Flight Phase.Other
Route In Use : Visual Approach
Airspace.Class C : DMW

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Airspace.Class D : DMW

Component

Aircraft Component : Indicating and Warning - Flight & Navigation Systems
Aircraft Reference : X
Problem : Malfunctioning

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 : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 1419.9
Experience.Flight Crew.Last 90 Days : 7.4
ASRS Report Number.Accession Number : 2154053
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Landed As Precaution

Assessments

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

Narrative: 1

Approaching Carroll County airport (DMW) from the West on a northerly track at 2,100 ft. MSL, I noted on the TIS That there was multiple incoming traffic from the northeast inbound towards DMW, including one aircraft that was calling 7 miles out to

the northwest inbound on an instrument approach. From my position it looked like I could have entered the traffic pattern from a high crosswind from Runway 34 at approximately 2000 feet and get ahead of the incoming traffic. I was West of the airport approximately a mile and a half to perhaps 2 miles from the airport and in evaluating the number of traffic that was inbound to the airport I decided to enter the airport pattern from a high extended crosswind from Runway 34. I heard an aircraft call out that it was taking the Runway for departure from 34 and myself and my crew were looking for the aircraft. At about this time, the **MFD** in my aircraft suddenly failed and had basically become frozen and inoperable. There was now no TIS information being displayed. I pulled the breaker on the **MFD** and reset the device and continued on with the approach. Upon reaching near the extended center line of Runway 34, I suddenly saw an aircraft approximately 300 feet below my altitude off my 1 to 2 o'clock position flying towards my tail. The aircraft was approximately 300 feet below my altitude and would quickly pass behind me so no evasive action was taken. I was flying above the traffic pattern altitude at 2,000 feet so I had believed at the time I was at a safe altitude for any departing traffic which would normally climb out to 1,300 feet before making any altitude or heading changes. I was able to reset my **MFD** but when it came back alive it was still not functioning properly. I continued to the airport and entered a downwind pattern, but because of other incoming traffic entering the downwind, I elected to simply climb in the pattern and remove myself from the pattern to the South and then come back and join the approach to downwind from a 45° angle and landed without incident.

Synopsis

Part 91 Pilot reported while entering the DMW traffic pattern had a NMAC with another aircraft 300 feet below and passing behind them.

ACN: 2152032 *(50 of 220)*

Time / Day

Date : 202408

Place

Locale Reference.ATC Facility : ZZZ.ARTCC
State Reference : US
Altitude.MSL.Single Value : 7800

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft : 1

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : Personal
Make Model Name : Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Climb
Route In Use : None
Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 450
Experience.Flight Crew.Last 90 Days : 120
Experience.Flight Crew.Type : 417
ASRS Report Number.Accession Number : 2152032

Events

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

Assessments

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

Narrative: 1

My student and I were climbing up to an appropriate altitude to conduct CFI demonstration stalls after getting through most of the required maneuvers for his proficiency (clearing turns had been completed for each maneuver with consistent scans to the Multi-function Flight Display (**MFD**) for traffic as well as outside). We were on flight following and in constant communication with ZZZ Approach who was giving us active traffic advisories. During the climb, we witnessed a tail dragger (tailwheel) aircraft overtake us from the opposite direction and flew directly over us within approximately 250'-300' vertically (judging with visual distance). Evasive action was taken immediately on our end to avoid the aircraft, and because of that I could not catch the tail number. This aircraft did not have a transponder/ADS-B out and was not visible on the traffic map (which was configured appropriately per the checklist). Immediately following the incident, I verbally verified with ZZZ Approach that we had not lost radar contact, and they confirmed that they could still see us. The tail dragger continued to not show up on the traffic map and proceeded southbound. I thoroughly debriefed with the student the importance of outside vision, proper visual scanning techniques, and how we need to account for what others do in the practice area. We also talked about the consequences of a lack of transponder/ADS-B use. Practice area congestion is growing significantly in this area and this incident illustrates the importance of collision avoidance in all phases of flight, even with appropriate precautionary measures in place. It also illustrates the importance of the usage of ADS-B out and appropriate transponder usage and how the presence of this type of equipment on the other aircraft, as well as radio communication from the other aircraft, could have helped prevent this incident. Reach out to me with any additional questions.

Synopsis

C172 flight instructor reported the need to take evasive action to avoid a collision with opposite direction traffic.