

ASRS Database Report Set

General Aviation Flight Training Incidents

Report Set Description.....A sampling of reports referencing General Aviation flight training.

Update Number34

Date of UpdateOctober 5, 2023

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

Records within this Report Set have been screened to assure their relevance to the topic.



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

A handwritten signature in blue ink, appearing to read "B. Hooey".

Becky L. Hooey, Director
NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

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

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

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

Report Synopses

ACN: 2006622 *(1 of 50)*

Synopsis

Student pilot reported a conflict with a seaplane that was departing from a lake located below the GIF traffic pattern.

ACN: 2004052 *(2 of 50)*

Synopsis

General aviation flight instructor on a training flight reported a near miss with a possible UAS during cruise and in controlled airspace.

ACN: 2003018 *(3 of 50)*

Synopsis

The LC-40 pilot reported on biennial flight review while performing a simulated loss of engine power landing with power reduced to idle, the aircraft became unstable on short final and developed an excessive sink rate and experienced a hard landing, damaging the main landing gear and skidded to a stop. Both pilots evacuated the aircraft and were uninjured.

ACN: 2002996 *(4 of 50)*

Synopsis

A pilot training in a new type aircraft with a known brake malfunction reported while landing they temporarily lost control of the aircraft resulting in a runway excursion.

ACN: 2002983 *(5 of 50)*

Synopsis

C172 flight instructor and their student reported the student did not account for the crosswind while landing, resulting in a loss of control and runway excursion.

ACN: 2002981 *(6 of 50)*

Synopsis

Flight instructor reported an NMAC event during departure for a training flight with an intruder aircraft entering the traffic pattern incorrectly. Flight instructor altered the landing pattern to avoid a conflict.

ACN: 2002763 *(7 of 50)*

Synopsis

PA-32 Flight Instructor reported losing engine power while returning to home base. After performing engine restart procedures to no avail, the pilot made an off-field landing on a highway with no damage to the aircraft or injuries.

ACN: 2002074 *(8 of 50)*

Synopsis

PA-28 instructor reported an NMAC event during departure cruise with an inbound arrival aircraft on ATC vectors. ATC failed to provide traffic information due to heavy communication traffic.

ACN: 2002046 *(9 of 50)*

Synopsis

A Flight Instructor reported a NMAC entering the traffic pattern at a non towered airport.

ACN: 2002021 *(10 of 50)*

Synopsis

Light aircraft instructor pilot reported descending to 350 feet above the ground on initial arrival into MYF to stay below a cloud layer.

ACN: 2002012 *(11 of 50)*

Synopsis

Aeronca Champ Instructor Pilot reported the student pilot experienced a hard landing and prop strike while landing in gusty wind conditions.

ACN: 2001970 *(12 of 50)*

Synopsis

PA28 pilot reported loss of engine power during approach. The flight crew executed an immediate landing at the airport.

ACN: 2001969 *(13 of 50)*

Synopsis

PA-28 student pilot and their instructor, who was observing from the airport, reported the student veered off the runway after landing.

ACN: 2001955 *(14 of 50)*

Synopsis

Twin engine aircraft flight instructor reported a critical ground conflict while landing at a non-towered airport. The pilot states the intruding aircraft was attempting to takeoff on a crossing runway that was not the current runway in use. The instructor told the conflicting aircraft to abort and it did. The instructor reports this is not the first time this particular aircraft has caused concerns at this airport.

ACN: 2001253 *(15 of 50)*

Synopsis

Instructor with trainee reported a NMAC while practicing landings and pattern work at a non-towered airport. The instructor took control and executed a missed approach.

ACN: 2000721 *(16 of 50)*

Synopsis

Student pilot reported lack of urgency to descend for conflicting traffic resulted in a NMAC.

ACN: 2000682 *(17 of 50)*

Synopsis

Flight Instructor with student reported a NMAC with a helicopter during takeoff from a non-towered airport.

ACN: 2000393 *(18 of 50)*

Synopsis

Helicopter instructor reported a NMAC while on final approach near the 1,000 ft. runway marker. Just prior to touchdown, a single engine aircraft landed below the helicopter creating the near miss.

ACN: 2000378 *(19 of 50)*

Synopsis

Instructor pilot reported the trainee became incapacitated and the instructor took control of the aircraft. While taking over the controls, the instructor stated it was difficult to see the flight instruments from the right seat because the trainee was obstructing the view. During this time a deviation in altitude and heading occurred. The instructor stated, after getting the aircraft stabilized, a safe landing was accomplished.

ACN: 2000352 *(20 of 50)*

Synopsis

C172 instructor reported an engine failure during landing while conducting flight training. The flight crew landed and required a tow off of the taxiway to the parking ramp.

ACN: 2000342 *(21 of 50)*

Synopsis

PA-28 instructor pilot reported a partial electrical power loss in cruise. The flight crew elected to divert.

ACN: 2000341 *(22 of 50)*

Synopsis

C172 pilot on a solo cross country reported the loss of control while intending to complete a touch and go. There was a cross wind at the time of the incident. The aircraft departed the runway and the prop of the single engine aircraft struck a taxiway light. The trainee taxied to the ramp and called the CFI for assistance. There was no other reported damage to the aircraft.

ACN: 2000339 *(23 of 50)*

Synopsis

Instructor with trainee reported a critical ground conflict. The instructor stated after clearing the water landing area to practice water landings, a small craft launched unknown to the pilots. The instructor reported the trainee sidestepped to the other side of the landing site.

ACN: 1999892 *(24 of 50)*

Synopsis

C172 Flight Instructor with student reported low voltage indications during cruise. The flight crew diverted and made a precautionary landing.

ACN: 1999485 *(25 of 50)*

Synopsis

PA-44 pilot reported descending below minimum altitude during a training flight. The pilot recognized the altitude deviation and climbed back up to minimum altitude.

ACN: 1998399 *(26 of 50)*

Synopsis

PA-44-180 instructor reported a runway excursion while instructing the student on simulated aborted single engine takeoff procedures in the aircraft. The instructor simulated the aborted takeoff condition by applying rudder displacement and the student responded by locking the brake resulting in a loss of control on the runway. The aircraft looped 135 degrees from the takeoff position.

ACN: 1998398 *(27 of 50)*

Synopsis

Instructor pilot reported loss of braking action during landing roll out. The aircraft ran off the runway and into a ditch, resulting in damage to the propeller.

ACN: 1998394 *(28 of 50)*

Synopsis

PA28 Flight Instructor reported severe engine vibration and power loss after takeoff. The Instructor immediately returned to the airport and made a safe landing.

ACN: 1998308 *(29 of 50)*

Synopsis

Flight Instructor reported a temporary loss of directional control during landing due to a flat tire. Maintenance was notified who replaced the tire and taxied the aircraft to ramp with no issues.

ACN: 1998010 *(30 of 50)*

Synopsis

Pilot reported receiving training in a PA-30, when a gear malfunction occurred, and the gear collapsed on landing after being extended. The aircraft was secured and there were no injuries.

ACN: 1997944 *(31 of 50)*

Synopsis

C172 pilot reported a runway excursion during landing rollout after failing to compensate for the wind conditions.

ACN: 1997297 *(32 of 50)*

Synopsis

Flight Instructor on training flight with student reported a runway excursion during landing rollout.

ACN: 1997293 *(33 of 50)*

Synopsis

GA Flight Instructor reported encountering wake turbulence from a corporate jet after the jet cut inside him on departure from GVL.

ACN: 1997273 *(34 of 50)*

Synopsis

C172 Flight Instructor reported ATC radio coverage below 3,000 ft. in the vicinity of BAZ airport is poor and often results in traffic separation issues.

ACN: 1996740 *(35 of 50)*

Synopsis

C172 student pilot reported ground strike due to wind gust during landing flare.

ACN: 1996673 *(36 of 50)*

Synopsis

Flight Instructor on training flight with student descended too low during maneuvers.

ACN: 1996105 *(37 of 50)*

Synopsis

PA-28 flight instructor reported a runway incursion by another aircraft while on approach to land on training flight with a student.

ACN: 1996030 *(38 of 50)*

Synopsis

Pilot on training flight reported a conflict with another aircraft that was landing on the same runway in the opposite direction of the traffic pattern.

ACN: 1995996 *(39 of 50)*

Synopsis

Flight Instructor reported a misunderstanding of the ammeter readings led to an electrical failure in flight, a manual gear extension, and the inability to communicate with ATC at a towered airport.

ACN: 1995406 *(40 of 50)*

Synopsis

C172 pilot reported engine sputtering in cruise. The flight crew executed a missed approach and requested priority handling and ran the QRH and checklists. The flight crew continued to destination airport.

ACN: 1995115 *(41 of 50)*

Synopsis

Flight Instructor reported a NMAC with another aircraft that was on final approach for the parallel runway and had overshoot the turn from base to final.

ACN: 1995110 *(42 of 50)*

Synopsis

Flight Instructor on a training flight in the airport traffic pattern reported a NMAC with a helicopter.

ACN: 1995104 *(43 of 50)*

Synopsis

C172 flight instructor reported an engine failure in flight and a subsequent off field landing resulted in no injuries or damage to the aircraft.

ACN: 1994807 *(44 of 50)*

Synopsis

C172 Flight Instructor reported smelling strong fuel fumes in the cockpit during a training flight. The flight crew performed an air turnback with the Flight Instructor assuming control as the Student Pilot was affected by the fumes. Maintenance found the aircraft's filler tube developed a crack in the area welded to the gas tank.

ACN: 1994802 *(45 of 50)*

Synopsis

Flight Instructor reported a NMAC in the traffic pattern and taking evasive action to avoid another aircraft who entered in the opposite direction pattern.

ACN: 1994797 *(46 of 50)*

Synopsis

C172 Flight Instructor reported ATC failed to report traffic which resulted in a NMAC.

ACN: 1994540 *(47 of 50)*

Synopsis

Flight Instructor reported an aircraft descended in the traffic pattern, unaware of the aircraft below which resulted in a NMAC.

ACN: 1994504 *(48 of 50)*

Synopsis

C172 student pilot and their instructor reported the student temporarily lost control of the aircraft while landing resulting in a bounced landing, runway excursion and ground strike causing minor damage.

ACN: 1994492 *(49 of 50)*

Synopsis

Student pilot reported a NMAC with another training aircraft at non-towered airport on final approach when another aircraft made a non-standard turn without a radio call.

ACN: 1994192 *(50 of 50)*

Synopsis

C172 Flight Instructor reported while on final approach saw an aircraft flying beneath in close proximity while conducting training at a non-towered airport.

Report Narratives

Time / Day

Date : 202212

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : GIF.Airport

State Reference : FL

Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : GIF

Aircraft Operator : Personal

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 Approach

Route In Use : Visual Approach

Airspace.Class E : TPA

Aircraft : 2

Reference : Y

Make Model Name : Seaplane or Amphibian

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Airspace.Class E : TPA

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Student

ASRS Report Number.Accession Number : 2006622

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Airborne Conflict
Detector.Person : Flight Crew
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 : Procedure
Primary Problem : Airspace Structure

Narrative: 1

During downwind flight within the traffic pattern for Runway 05, a seaplane took off below us into the left downwind portion of the traffic pattern at a non-towered airport, GIF. My instructor took the controls and turned the plane so that I could see the plane departing beneath us and then I resumed controls for the remainder of the flight when I had the traffic in sight. There is a lake on the southwest corner of the airport where the seaplane departed, but as this was the first time at this airport, my instructor and I were unaware. I made radio calls entering and throughout the traffic pattern and heard nothing from the seaplane. I realize the seaplane was not required to have / utilize a radio. However, this seemed to represent an unnecessary hazard considering the location of the lake used for seaplane departures and landings. I write this in the hope that seaplanes no longer be allowed to take off under a traffic pattern of a non-towered airport when the use of radios are not required. A final note, my instructor departed the airport without me and told me of other dangerous activities within the traffic pattern of the seemingly busy airport and expressed concern of the safety should we ever decide to fly into that airport again in the future.

Synopsis

Student pilot reported a conflict with a seaplane that was departing from a lake located below the GIF traffic pattern.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : FAT. TRACON

State Reference : CA

Relative Position.Distance.Nautical Miles : 5

Altitude.MSL.Single Value : 5000

Environment

Flight Conditions : VMC

Weather Elements / Visibility : Haze / Smoke

Weather Elements / Visibility.Visibility : 7

Light : Daylight

Ceiling : CLR

Aircraft : 1

Reference : X

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 : IFR

Mission : Training

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

Make Model Name : UAV: Unpiloted Aerial Vehicle

Crew Size.Number Of Crew : 1

Airspace.Class E : ZZZ

Flying In / Near / Over (UAS) : Airport / Aerodrome / Heliport

Flying In / Near / Over (UAS) : Aircraft / UAS

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 : 355

Experience.Flight Crew.Last 90 Days : 71

Experience.Flight Crew.Type : 268
ASRS Report Number.Accession Number : 2004052
Human Factors : Time Pressure
Analyst Callback : Completed

Events

Anomaly.Airspace Violation : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Unauthorized Flight Operations (UAS)
Detector.Person : Flight Crew
Miss Distance.Horizontal : 50
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

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

Narrative: 1

While on a training flight under an IFR flight plan, my student and I came close to striking what appeared to be a small balloon or drone type device. The conditions were daytime VMC with sky clear, however the in-flight visibility was degraded due to haze across the valley. We were returning to our home airport and flying direct to NTELL intersection at the time of the incident. The object was situated at 5,000 ft MSL approximately 5 NM northwest of MAE, near Highway 99. It was mostly silver or gray with a short rope or cable carrying what seemed like a dark rectangular box/device. I could not tell if it was also tethered to the ground. Upon seeing the object very close to our wing out to the left, I immediately took controls from my student (who was under a view limiting device at the time) and started a bank to the right to increase separation distance. After we passed by the object, I gave controls back to my student and attempted to look back to get a better idea of what it was. I then contacted FAT Approach with the approximate location, altitude, and description of the object. I do not believe I could have done anything different to prevent the near miss, as there had been no previous reports about the object, there was no way to see it on the ADSB-In, and the haze made small objects difficult to see.

Callback: 1

The reporter indicated the near miss was between 20 and 50 feet. They had no additional information to share.

Synopsis

General aviation flight instructor on a training flight reported a near miss with a possible UAS during cruise and in controlled airspace.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

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 : 10000

Aircraft

Reference : X

ATC / Advisory.UNICOM : ZZZ

Aircraft Operator : Personal

Make Model Name : Lancair Columbia

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Mission.Other

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Component

Aircraft Component : Landing Gear

Aircraft Reference : X

Problem : Failed

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 : Multiengine

Qualification.Flight Crew : Private

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 922

Experience.Flight Crew.Last 90 Days : 6

Experience.Flight Crew.Type : 36

ASRS Report Number.Accession Number : 2003018

Human Factors : Communication Breakdown

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

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation - Speed : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Anomaly.Inflight Event / Encounter : Unstabilized Approach
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Evacuated
Result.Flight Crew : Took Evasive Action
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

The flight was undertaken as the practical portion of a biennial flight review. The aircraft was configured on the downwind leg of ZZZ Runway XX at traffic pattern altitude for a simulated landing with loss of engine power. Abeam the approach end of the runway power was reduced to idle. The aircraft was at its best glide speed of 95 kts. In the turn from base to short final at 300 ft. speed was noted to be 85 kts. The aircraft was tracking runway heading on the center line wings level when the main landing gear contacted the runway. The aircraft skidded to a stop ~30 degrees to the right of runway heading 15-20 ft. to the left of center line. Neither occupant was injured. Significant damage appears to be limited to the main landing gear legs. Problems 1. The airplane was low and slow, "behind the power curve", at a high rate of descent. 2. I, the pilot, was committed to completing the assigned exercise and thinking the instructor would likely advise against continuing a poor approach. Solutions 1. I realized the situation and should have added power to arrest the descent and/or go around to reset for a landing with a stabilized approach perhaps as early as the turn to the base leg. 2. As pilot in command (PIC) I have the entire responsibility for discontinuing any maneuver that appears out of envelope and should have abandoned the exercise without waiting on any other information or advice.

Synopsis

The LC-40 pilot reported on biennial flight review while performing a simulated loss of engine power landing with power reduced to idle, the aircraft became unstable on short final and developed an excessive sink rate and experienced a hard landing, damaging the main landing gear and skidded to a stop. Both pilots evacuated the aircraft and were uninjured.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : Skylane 182/RG Turbo Skylane/RG

Crew Size.Number Of Crew : 3

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Component

Aircraft Component : Brake System

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 : Instrument

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 310

Experience.Flight Crew.Last 90 Days : 80

Experience.Flight Crew.Type : 9

ASRS Report Number.Accession Number : 2002996

Human Factors : Confusion

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Maintenance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Result.Flight Crew : Regained Aircraft Control

Assessments

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

Narrative: 1

Working on my jump runs with other senior pilot. Both were Commercial Pilot and wearing a parachute. I knew the brake system is weird because all the senior pilots told me that "try not to use brake, just use rudder and aerodynamic brake". I was coming down to the runway and I made go around on first trial because I was fast and knew that the brake system is weird so I may not stop on the runway. Second trial, I made it short, and was rolling down half of the runway. By the time we pass Taxiway X, all of the sudden, left wing went up. So I try to correct it with the left rudder and left aileron, which cause go off to the left. Used the right rudder and brake to compensate for that, but right rudder and brake barely worked. Therefore, we off the runway to the left around 200 ft. Emergency guys checked the runway condition, lights, sign and everything, and they said everything was fine. Luckily we did not hit anything. But he told me there was a skid mark on the runway which is drawn to the left with the right main wheel tire. No one was injured, did not hit anything, the plane was fine. But we noticed that the right main wheel tire was almost edge of the flat tire. Person A who was on the right told me that the pilots who are working for this skydive company have been asking the boss if the brakes can be fixed, and Person 2 and Person 3 tried to fix it but still has the same issue. However, even though with that problem, senior pilots have been making safe landings so far. I unconsciously used the brake which was unnecessary. Now I realized that it is better to use aileron to correct the attitude if left or right wing go up while rolling down the runway, not the rudder. Each airplane characteristics is all different, so I realized that the appropriate procedures has to be followed. I should have acted accordingly, not like I was flying the plane I have been flying.

Synopsis

A pilot training in a new type aircraft with a known brake malfunction reported while landing they temporarily lost control of the aircraft resulting in a runway excursion.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

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 : Landing

Airspace.Class D : ZZZ

Person : 1

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 : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1310

Experience.Flight Crew.Last 90 Days : 182

Experience.Flight Crew.Type : 750

ASRS Report Number.Accession Number : 2002983

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Training / Qualification

Human Factors : Workload

Human Factors : Confusion

Person : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Student
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 151
Experience.Flight Crew.Last 90 Days : 8
ASRS Report Number.Accession Number : 2003004
Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Time Pressure

Events

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

Assessments

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

Narrative: 1

After completing an instrument lesson with a private pilot, we are landing Runway XX at ZZZ and the wind was 080 at 8 kts. As we are on final, my student veers off center line of the runway so I explain to them to use wind correction and aileron inputs into the wind to track toward the runway and stay on the center line. The entire approach was stable all the way down into the round off and flare. I am the primary instructor of this student and they have had pretty consistent landings during my training with them, but regardless, as an instructor, I am always ready to take over controls, especially during landings. As we are touching down I realize that the student is no longer doing any wind correction with the ailerons or rudder. We touch down and the nose is pointed to the right so I call out left rudder to which they are unresponsive. I then call my controls to the student twice before they let go and I can now control the airplane. At this point, we are about to go off the runway into the grass so the only thing I have time for is to maintain elevator back pressure to prevent the nose from getting stuck in the ground. I avoid hitting any of the lights or any part of the runway environment and I maintain positive control of the plane and am able to get back on the pavement for the turn off of the runway onto the taxiway. When we return to parking I inspect the plane and determine that there was no damage to the plane and debrief my student on what happened and how we could have prevented this from occurring by maintaining our wind correction during the landing roll. As an instructor, I believe I did the best I could to control the situation. I believe simple wind correction could have prevented the problem and if the student felt like they did not have control of the plane then a go-around could have been appropriate. I have always been very cautious with students and I don't believe I let my guard down, but it just goes to show that sometimes all it takes is a small slip-up to develop into a bigger issue and that I should always be prepared. During our debrief, I made plans with that student to go over

training in crosswind procedures including taxi, take-off, and landing prior to any additional training.

Narrative: 2

Came in to land on Runway XX and misjudged crosswind correction. I came down to the right of center line and applied crosswind correction too late. Landed to the right of center line and rolled off of the runway into the grass. I believe that it would have been avoidable if I identified the crosswind and applied appropriate correction earlier to stay on center line while coming into land.

Synopsis

C172 flight instructor and their student reported the student did not account for the crosswind while landing, resulting in a loss of control and runway excursion.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1000

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft : 1

Reference : X

Aircraft Operator : FBO

Make Model Name : PA-18/19 Super Cub

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Initial Climb

Aircraft : 2

Reference : Y

Aircraft Operator : FBO

Make Model Name : Stearman

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase.Other

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 : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1191

Experience.Flight Crew.Last 90 Days : 187

Experience.Flight Crew.Type : 839

ASRS Report Number.Accession Number : 2002981

Human Factors : Workload

Human Factors : Time Pressure

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 500
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

After making a radio call that I was departing ZZZ towards the north, I took off from ZZZ northbound in the PA-18-150 on straight floats. I had one student on board with me training for his seaplane rating and no other souls on board. As we began our climb out on departure, I noticed the PT-17 over the airport on a western heading and heard his radio call that he intended to enter the pattern. He appeared to be about 1000 ft., which would put that aircraft 500 ft. below the FAA's recommended midfield altitude when entering the pattern. The pilot of the PT-17 began turning left on a downwind earlier than I expected. It also became clear, with this action, that the pilot of the PT-17 was using the alternate downwind entry from midfield as opposed to the FAA's advised entry of a teardrop. The course the PT-17 was turning towards appeared to put them on course to pass over the top of me as I departed northbound. I assumed they didn't see me, so I started a turn roughly 30 degrees to the right and made a radio call that I had the PT-17 in sight and we were no longer a factor for each other. By the time we passed each other, my PA-18-150 was 500 ft. below the PT-17 and 500-1000 ft. away laterally. The pilot of the PT-17 broadcasted on the radio, "I would call that a factor." I told him my name and invited him to discuss it further if he wanted and he invited me to his office. Myself and my student had the aircraft in sight the entire time and I took action to not only remain well below them but also move laterally so we didn't pass directly underneath them. The PA-18-150 has excellent forward visibility and a window along the top of the cockpit making my upward visibility fantastic as well. In my and my student's opinion, we were far from interfering with the PT-17 or causing any concern of being too close. However, it has become clear that the PT-17 pilot mistakenly believes we passed very close to and directly underneath them, though he also claims his visibility is greatly impaired by the PT-17 airframe. One thing that could have assuaged the PT-17 pilot's concern would be for them to cross midfield at the FAA's recommended altitude, which would have put them 500 ft. higher than they were. That would have given them a full 1,000 ft. clearance from the departing PA-18-150. On my end, perhaps I could have leveled off or even descended, though I have concerns about buzzing the houses/road traffic off my departure end and remaining low over a congested area with few to no emergency options. The PT-17's radio call also sounded angry/sarcastic. Instead of pursuing further conversation with him to try and solve the negative interaction, I should have continued without further engagement. Though it was my intention to deescalate, it had the opposite affect and I wish I hadn't pursued further conversation.

Synopsis

Flight instructor reported an NMAC event during departure for a training flight with an intruder aircraft entering the traffic pattern incorrectly. Flight instructor altered the landing pattern to avoid a conflict.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Weather Elements / Visibility.Other

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : PA-32 Cherokee Six/Lance/Saratoga/6X

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class G : ZZZ

Component : 1

Aircraft Component : Reciprocating Engine Assembly

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Cylinder Head

Aircraft Reference : X

Problem : Malfunctioning

Person

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 : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 12300

Experience.Flight Crew.Last 90 Days : 20
Experience.Flight Crew.Type : 100
ASRS Report Number.Accession Number : 2002763

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

Assessments

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

Narrative: 1

On Day 0 while on a training flight returning to home base airport ZZZ in level flight at 1,500 ft. At about XA:07 the engine began to develop loss of power with the number 6 cylinder head temperature, CHT, went zero. Followed engine restart procedures - switched fuel tanks, fuel pump on, mixture full rich, throttle open. Without any change, executed an off-field landing on highway. No damage to the airplane or those on board.

Synopsis

PA-32 Flight Instructor reported losing engine power while returning to home base. After performing engine restart procedures to no avail, the pilot made an off-field landing on a highway with no damage to the aircraft or injuries.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 5

Light : Daylight

Ceiling.Single Value : 3000

Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

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 : Cruise

Route In Use : Direct

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

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 : Initial Approach

Route In Use : Vectors

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 : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 350
Experience.Flight Crew.Last 90 Days : 80
Experience.Flight Crew.Type : 340
ASRS Report Number.Accession Number : 2002074
Human Factors : Other / Unknown
Human Factors : Time Pressure
Human Factors : Workload

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 50
Miss Distance.Vertical : 50
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

Departed ZZZ at approximately XA30 local, departed Runway XX, and was flying runway heading to 2000 MSL, after exiting class D turned to proceed directly to ZZZ1, after clearing the Bravo shelf above we climbed to 2,500 and were at cruise while proceeding northeast bound direct to ZZZ1, upon reaching the ZZZZZ intersection at XA45 local, without any warning from TCAS or ADS-B an aircraft what looked like a Cessna Skylane or Cessna 206 Came across our nose at the same altitude traveling west to east at approximately 50-100 ft. in front of us. We were the second to last departure to depart Runway XX, I believe the other aircraft was inbound to ZZZ at 2,500 to land Runway XY, and should've been communicating with ZZZ Approach and should've been vectored around us. The aircraft we nearly collided with was Aircraft Y, a Cessna 182. On frequency with ZZZ Approach XXX.X they had asked Aircraft Y to recycle and activate his mode-c transponder twice around XA30 local, the aircraft was then given a delay vector of 090 for the runway change at ZZZ, was then given a 310 heading, the ads-B record of the flight indicates the lack of ads-b and mode C capability of the suspected Cessna. The ZZZ Controller was quite busy at the time but never issued a traffic alert to the Cessna and most likely because he didn't know its position ultimately resulting in a near-fatal accident.

Synopsis

PA-28 instructor reported an NMAC event during departure cruise with an inbound arrival aircraft on ATC vectors. ATC failed to provide traffic information due to heavy communication traffic.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 5800

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 : VFR

Mission : Training

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

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 : Climb

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Flight Engineer / Second Officer

Function.Flight Crew : Instructor

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 18500
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 200
ASRS Report Number.Accession Number : 2002046
Human Factors : Confusion
Human Factors : Communication Breakdown
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.Horizontal : 100
Miss Distance.Vertical : 50
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Approaching ZZZ from the south a planned arrival crossing from east to west at 5,800 ft, 200 ft. above pattern altitude for Runway XX and 200 ft. below the Class B at 6,000 ft. above. Stated these intentions 3 different times on CTAF. The last announced crossing mid field to head west and reenter pattern on a 45 to downwind to enter for a right pattern to [Runway] XX landing. We planned to cross over the pattern which is 5,600 ft. One other aircraft was in the pattern coming from south to north on downwind. His call was downwind and departing the pattern to the northwest. Unfortunately he continued on the downwind leg to the north and climbed while in the pattern to 5,850 ft. My student in the left seat saw the plane and climbed to 6,000 ft. and we missed each other but very close. I was able to meet with the other instructor and discussed climbing above pattern altitude while on downwind when an aircraft is crossing mid field. It was clearly obvious he understood the danger of what he allowed his student to do. Pilot Handbook of Aeronautical Knowledge (PHAK) mid field crossing and stating your intentions is the preferred entry. Climbing above the pattern to depart the area is not acceptable. Fortunately no one was injured.

Synopsis

A Flight Instructor reported a NMAC entering the traffic pattern at a non towered airport.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : MYF.Airport

State Reference : CA

Relative Position.Distance.Nautical Miles : 5

Altitude.MSL.Single Value : 1600

Environment

Flight Conditions : Marginal

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 1600

Aircraft

Reference : X

ATC / Advisory.Tower : MYF

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 : Descent

Route In Use : Direct

Airspace.Class D : MYF

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 : 2230

Experience.Flight Crew.Last 90 Days : 110

Experience.Flight Crew.Type : 1650

ASRS Report Number.Accession Number : 2002021

Human Factors : Situational Awareness

Events

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

Anomaly.Deviation / Discrepancy - Procedural : FAR

Anomaly.Inflight Event / Encounter : Weather / Turbulence

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

Assessments

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

Narrative: 1

My student and I were returning from the East San Diego practice area. It was crowded at the practice area with clear weather, but since there were too many other aircraft, I decided to return to MYF for touch and go's. We obtained ATIS 12 miles out, reporting 1600 foot broken ceiling, lower than the 1900 foot ceiling we took off in an hour prior. As we got closer and called tower for landing on Runway 28L, I saw the overcast extended further east than expected. Realizing we would need to get under it to get to the airport and that doing so would violate SEE Class D, I quickly switched #2 comm to SEE tower with #1 on MYF tower and requested a decent through their airspace, which was granted. MYF told us of traffic ahead and 1 to 2 o'clock that we did not have yet, and continued towards the visual checkpoint of Lake Murray. Just prior to lake Murray, I picked up the traffic ahead and reported it, ATC told us to follow the traffic in. At that time we were doing 115 KTS and the traffic was much slower, so I told my student to slow to 80 and maintain altitude. By this time we were below the overcast. It was then that I noticed on my Foreflight that we were not only below the overcast, but with the rising terrain we were 350 to 400 feet AGL over a congested residential area. I again told by student to hold altitude knowing that the terrain would lower further west. We followed the aircraft in and landed uneventful, but we knew we were too low for the previous area. What caused this error was my failure to relate the 1600 ft. ceiling at the airport with the higher terrain along the final approach path, also that coupled with quickly obtaining airspace transition and searching for traffic. Two things I would have done differently had I realized how far the overcast extended. I would have either turned back east, gained altitude and requested an IFR approach to MYF, or landed at SEE which had scattered clouds and at higher altitude than the broken ceiling of MYF and then obtained an IFR clearance to MYF. Note: MYF and SEE are similar elevations.

Synopsis

Light aircraft instructor pilot reported descending to 350 feet above the ground on initial arrival into MYF to stay below a cloud layer.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Weather Elements / Visibility : Windshear

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Corporate

Make Model Name : Aeronca Champion

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Route In Use : Direct

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Instructor

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 6695

Experience.Flight Crew.Last 90 Days : 56

Experience.Flight Crew.Type : 500

ASRS Report Number.Accession Number : 2002012

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Ground Event / Encounter : Ground Strike - Aircraft

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Human Factors

Narrative: 1

Upon landing during tail wheel transition training with a Commercial Pilot ASEL student, we experienced LLWS. The wind was a gusty cross wind that was at times shifting to quartering tail wind. As we approached the flare, the wind sheared and the student pushed the nose down. This caused the aircraft to land hard in a nose low attitude resulting in a prop strike. There was no apparent damage to the aircraft other than the propeller. As the CFI seated in the rear seat, I tried a recovery, but was not able to prevent the hard contact with the runway. This could have been prevented had I discontinued the training flight when the wind conditions were not favorable for the mission. The pilot under instruction lack of familiarity with the operation of tail wheel aircraft exacerbated the situation. Neither the pilot under instruction nor the CFI experienced any injuries. There was no damage done to the runway. The aircraft did not leave the runway as I was able to regain control.

Synopsis

Aeronca Champ Instructor Pilot reported the student pilot experienced a hard landing and prop strike while landing in gusty wind conditions.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Initial Approach

Route In Use : Visual Approach

Component : 1

Aircraft Component : Fuel Selector

Aircraft Reference : X

Problem : Improperly Operated

Component : 2

Aircraft Component : Reciprocating Engine Assembly

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 : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 280

Experience.Flight Crew.Last 90 Days : 60

ASRS Report Number.Accession Number : 2001970

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness
Human Factors : Troubleshooting
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Overcame Equipment Problem
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

We are flying VFR flight from ZZZ1 to ZZZ, its a time build flight, I flew with another pilot who is PVT with IFR rated, he is the one who flying the airplane, he haven't flew for a very long time, so his flying skill is not great, so I monitor the entire flight, as we get cleared into the Bravo airspace, ATC told to lower the ALT 2 times, which we did complied , when we were 10 NM away from ZZZ, ATC told us to decent 2,500 ft. and contact Tower, when we report to Tower, the engine suddenly lost power, the RPM dropped, and the airplane start to decent, so I took over the control immediately, and start to pitch for VG, and [requested priority handling] with Tower, at the same time, I was also trying to restart the engine and looking for place to land, unfortunately we are over the lake, and we are too low, around less than 2,000 ft. MSL, no way we will make it to the runway, and I lost sight of the airport and the other pilot just froze. I asked for a heading from Tower, and got runway insight immediately. At the same time, my engine started to come back, but it was on and off. I was trying to maintain the RPM and my ALT, that extra RPM allowed me to stop sinking, and I told Tower that we will be able to make to the runway, but only straight in. With 13 kts. tailwind, the Tower cleared the area for me. When I was may be 2-3 NM away from final, my engine came back. I did not touch the throttle anymore, because I don't want my engine to shut off again, and I would rather be high and fast into the runway then low and stalled. I managed to land safe and soft. After we parked the airplane, I check the both tank, right tank fuel was totally empty and right tank has about 17 gallons at least, however the fuel selector was on left when the engine shut off, and we did set a timer to switch the tank every 22 minutes. I was the one who set the timer on the phone and reminded my copilot to switch the tank. The flying time is about 3 hours which is the same time on the way there, we were full fueled at ZZZ1, and we fueled about 22.5 gallons, which is how much fuel that we used to fly here. Out of a fuel tank capacity of 48 gallons of fuel, so we suspect a fuel leak.

Synopsis

PA28 pilot reported loss of engine power during approach. The flight crew executed an immediate landing at the airport.

Time / Day

Date : 202305

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 21000

Aircraft

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Component : 1

Aircraft Component : Brake System

Aircraft Reference : X

Problem : Malfunctioning

Problem : Improperly Operated

Component : 2

Aircraft Component : Propeller Blade

Aircraft Reference : X

Component : 3

Aircraft Component : Nose Gear

Aircraft Reference : X

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Student

Experience.Flight Crew.Total : 206

Experience.Flight Crew.Last 90 Days : 48
Experience.Flight Crew.Type : 206
ASRS Report Number.Accession Number : 2001969
Human Factors : Time Pressure
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Troubleshooting
Human Factors : Workload
Human Factors : Training / Qualification

Person : 2

Location Of Person : Gate / Ramp / Line
Reporter Organization : FBO
Function.Flight Crew : Instructor
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Air Traffic Control.Supervisory : 12607
Experience.Flight Crew.Total : 1540
Experience.Flight Crew.Last 90 Days : 10
ASRS Report Number.Accession Number : 2001996
Human Factors : Training / Qualification
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Observer
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

My CFI and I had planned to perform my solo at ZZZ on Day 0. Before taking off, we confirmed weather was appropriate for the lesson we had in mind. I got my endorsement before departing from ZZZ1 and we once again checked all was good to go fly. We performed four touch and goes before both of us agreed I was proficient enough to go solo. While being in control of the airplane, all three touch and goes that I performed went well. I made sure to monitor my airspeed, altitude, radio calls, and keeping a safe distance from surrounding traffic. During my last landing, I declared a full stop. Once I was on the ground and the brakes were applied, the airplane did not stop as I intended it to. I tried applying more pressure on the brakes and the aircraft started veering to the right side of the runway. Once I saw I was getting off the runway after trying to maintain centerline, I immediately started shutting all the systems down. I turned off the mixture, throttle, gas

valve, and magnetos. Not long after that [the CFI] arrived at the scene and made sure I suffered no damage. We inspected the plane and called the flight school to notify them.

Narrative: 2

On Day 0, I was flight instructing for Person A for her Private Pilot License. We flew from ZZZ1 to ZZZ for her solo flight in a Piper PA28-180. The weather was perfect. Winds, temperature and visibility were all above her VFR minimums. When we arrived, the first four takeoff and landings were with me in the left seat. Person A completed all takeoff and landings within ACS (Airman Certification Standards) standards. After getting out of the aircraft, Person A did three touch-and-goes on her own. It was after her the last landing when the aircraft veered off the runway, went down a small incline and into a ditch. I immediately ran to her to make sure she was okay. I then noticed the front wheel was sheared off and the propeller was bent from running into the ditch. We then notified the flight school, and walked into the lobby to unwind and wait for assistance. Within an hour, the local authorities arrived with the aircraft owner. The authorities closed the airfield as we pulled the aircraft out of the ditch and to a parking spot near the hangar.

Synopsis

PA-28 student pilot and their instructor, who was observing from the airport, reported the student veered off the runway after landing.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 150

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : ZZZ

Aircraft Operator : FBO

Make Model Name : Light Transport, High Wing, 2 Turboprop Eng

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 E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.UNICOM : ZZZ

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

Crew Size.Number Of Crew : 1

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 : 1160

Experience.Flight Crew.Last 90 Days : 270

Experience.Flight Crew.Type : 130

ASRS Report Number.Accession Number : 2001955

Human Factors : Other / Unknown

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Time Pressure

Events

Anomaly.Conflict : Ground Conflict, Critical

Detector.Person : Flight Crew

Miss Distance.Horizontal : 300

Miss Distance.Vertical : 0

Were Passengers Involved In Event : N

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

While flying in the traffic pattern for Runway X at ZZZ with a student, Aircraft Y announced he would be departing Runway XX. Another pilot quickly communicated that there were two aircraft already holding short for Runway X which was wind favoring and several other aircraft were also using. Aircraft Y announced he would continue holding short until those two aircraft had departed. When the second aircraft made their departure call for Runway X, my student had announced our base turn for Runway X. Monitoring the traffic holding short of [runway] XX, I saw him roll across the hold short line and start his takeoff roll for XX just after we had announced our turn to final for Runway X. I made an urgent call for him to abort his takeoff and was seriously concerned there would be a low level mid air collision at the intersection of Runway X and XX. Thankfully the pilot of Aircraft Y aborted his takeoff attempt and a collision was avoided, with the pilot of that aircraft then deciding to taxi to Runway X for departure. This is not unusual behavior and the pilot of Aircraft Y has a reputation for departing and landing on runways that cross the active flow of traffic causing a collision hazard on a regular basis. His lack of patience to use the proper runway instead of the runway with the shortest taxi route, or arrival route, and lack of situational awareness is going to kill someone. A control tower would also have prevented this event from occurring.

Synopsis

Twin engine aircraft flight instructor reported a critical ground conflict while landing at a non-towered airport. The pilot states the intruding aircraft was attempting to takeoff on a crossing runway that was not the current runway in use. The instructor told the conflicting aircraft to abort and it did. The instructor reports this is not the first time this particular aircraft has caused concerns at this airport.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : ZZZ

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Final Approach

Route In Use : Direct

Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.UNICOM : ZZZ

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

Crew Size.Number Of Crew : 1

Airspace.Class G : ZZZ

Person

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 : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 1200

Experience.Flight Crew.Last 90 Days : 140

ASRS Report Number.Accession Number : 2001253

Human Factors : Confusion

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload
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.Person : Other Person
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
Miss Distance.Vertical : 300
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

A student pilot and myself were on our 2nd leg to ZZZ. We entered the downwind on the 45 for Runway XX over the waypoint, following another Aircraft Y. Aircraft Z (i don't recall the full tail #) on the crosswind passed in front of us following the lead aircraft, we followed the Aircraft Z in a wide right downwind, and announced that we were following Aircraft Z in the downwind. An "Aircraft A" announced he was crosswind to downwind. I told my student to lower flaps to %50 to follow the Aircraft Z ahead. The first Aircraft Y landed, with Aircraft Z turning base. We extended our downwind to allow for sufficient space to follow the Aircraft Z. The Aircraft A announced their downwind call. Once the Aircraft Z was behind us I instructed my student to turn base and make a radio call. Shortly thereafter the Aircraft A made a base leg call. In my head I thought he must have been closer than I thought, and was turning behind us, while checking the FMS traffic screen. The Aircraft A wasn't present. At this point I was looking outside and to my left for said Aircraft A. I told my student to turn final, and he made the radio call "Aircraft X turning final". Shortly thereafter we heard a call from the Aircraft A that he was turning final. Nothing on the FMS or anything visually. Another aircraft spoke up, Aircraft A you just cut a guy off on final, wait he's going around!". The Aircraft A had just passed into our 1 o'clock low, I called for the controls and climbed and broke out of the pattern to the northwest. My student and I flew northeast to re-enter the downwind on the 45 for an uneventful landing. The Aircraft A made his landing and taxiing calls, seemingly unaware of what had occurred. We landed and taxied back for departure toe the north without incident.

Synopsis

Instructor with trainee reported a NMAC while practicing landings and pattern work at a non-towered airport. The instructor took control and executed a missed approach.

Time / Day

Date : 202305

Place

Locale Reference.ATC Facility : NCT.TRACON

State Reference : CA

Altitude.MSL.Single Value : 3550

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 6

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : NCT

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class E : ZZZ

Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class E : ZZZ

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 : Student

Experience.Flight Crew.Total : 65

Experience.Flight Crew.Last 90 Days : 4

ASRS Report Number.Accession Number : 2000721

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC

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

Detector.Person : Air Traffic Control

Miss Distance.Horizontal : 0

Miss Distance.Vertical : 400

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Air Traffic Control : Issued Advisory / Alert

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

I was flying a true course of about 131 degrees, when NORCAL TRACON called an aircraft advising them of traffic. NORCAL received no response. NORCAL then contacted me, advising me of traffic in front of me at 3800 [ft.] MSL. This leads me to believe that the aircraft that did not respond was the traffic that ZZZ was now advising me of. NORCAL 's call to the unknown aircraft and their call to me were within seconds. After sighting the traffic, I told NORCAL I would descend to 3300 [ft.] MSL until the traffic passed. ZZZ acknowledged. I did not descend with urgency and only reached about 3400 [ft.] MSL before the traffic passed. Without NORCAL, I might not have seen the traffic. One human performance consideration is the over reliance on TRACON and other controllers to protect the pilot. The pilot must be responsible for themselves. Complacency is also a danger to pilots. After seeing the traffic, I did not feel urgency to get 500 ft. clearance. I also had more stable cruise than my last training flight, and I did not want to ruin it with an urgent descent, so I only descended mildly.

Synopsis

Student pilot reported lack of urgency to descend for conflicting traffic resulted in a NMAC.

Time / Day

Date : 202305

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Relative Position.Distance.Nautical Miles : 1

Altitude.AGL.Single Value : 600

Environment

Weather Elements / Visibility.Visibility : 10

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : FBO

Make Model Name : Cessna 152

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Takeoff / Launch

Flight Phase : Initial Climb

Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Flight Phase : Landing

Airspace.Class G : ZZZ

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 370

Experience.Flight Crew.Last 90 Days : 50

Experience.Flight Crew.Type : 350

ASRS Report Number.Accession Number : 2000682

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Human Factors : Workload

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

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 400
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

While practicing landings on Runway XXL at ZZZ airport, a helicopter was practicing touch and goes using a left pattern for Runway XXR. Over the CTAF, a miscommunication occurred regarding the timing of a takeoff. My student and I believed the helicopter was making a full stop on the runway based on their radio call, and indicated we would wait for their landing before departing. After they appeared to stop, we made a departure call and began a takeoff roll. The helicopter then began proceeding upwind. By then, I was unsure we would be able to safely abort the takeoff, so I continued upwind, keeping the helicopter in sight. I attempted to contact the helicopter on the CTAF about their intentions, and twice received no reply. They then announced a left crosswind departure. I leveled off, anticipating they would continue their climb and turn above me, announced my position, and asked if they had me in sight. They looked and seemed to visually acquire me at this time. I am unsure whether separation actually fell below 500 feet, but I figured the potentially hazardous situation caused by lack of communication at a hazardous airport was worth the report. I was later informed that helicopters do not always touch down and "taxi back" ZZZ based on operating restrictions, and believe my own lack of familiarity with helicopter pattern operations may have been a factor as well.

Synopsis

Flight Instructor with student reported a NMAC with a helicopter during takeoff from a non-towered airport.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : VDF.Airport

State Reference : FL

Altitude.AGL.Single Value : 40

Environment

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : ZZZ

Aircraft Operator : FBO

Make Model Name : Helicopter

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.UNICOM : ZZZ

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Landing

Airspace.Class G : ZZZ

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 : Commercial

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 419

Experience.Flight Crew.Last 90 Days : 179

Experience.Flight Crew.Type : 308

ASRS Report Number.Accession Number : 2000393

Human Factors : Communication Breakdown

Human Factors : Distraction

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.Horizontal : 0
Miss Distance.Vertical : 40
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Me and a student were flying on right traffic to Runway 5 (Runway in use). I myself did the right base call and a final call after clearing and turning on to final Runway 5. I remember, that there was quite some traffic on the CTAF frequency at the time and I vividly remember hearing an aircraft calling a final after we were already on short final (I believe we were at end of runway). On short final (being over the runway) approaching the 1000 ft. markers steep at about 40 ft., we noticed Aircraft Y landed right below us on the runway. I called out the aircraft right away about what's going on and he replied, "I called out final." If we were lower (which we were supposed to be if the student was on track), a collision would have been unavoidable. The aircraft was so close and so low, that (ramp personnel said) our downwash from the rotors affected his landing significantly just before touchdown. Communication and situational awareness are in my opinion definitely a factor in this incident. It was a busy traffic pattern. At least 4 planes and us as the helicopter. We, as helicopters, are requested to fly right traffic opposite than the airplanes. Traffic joins together on final where situational awareness must be increased even more by everyone. We had a plane land in front of us and I might have assumed, that this was the last aircraft that I remembered to have heard on the radio calling out a final. I do not want to say, that the other student did not do a call he might have, I just don't recall, neither does my student. We had several factors negatively affecting effective communication. Me instructing while in busy traffic pattern and language barriers of the student in the airplane. Management is now trying to implement new procedures for the airport to where we would stay away of the runway and just use one of the two parallel taxiways for landing.

Synopsis

Helicopter instructor reported a NMAC while on final approach near the 1,000 ft. runway marker. Just prior to touchdown, a single engine aircraft landed below the helicopter creating the near miss.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 270

Relative Position.Distance.Nautical Miles : 5

Altitude.MSL.Single Value : 2500

Environment

Weather Elements / Visibility : Fog

Weather Elements / Visibility.Visibility : 10

Ceiling.Single Value : 1100

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 : IFR

Mission : Training

Flight Phase : Initial Approach

Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Function.Other.Other

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 3550

Experience.Flight Crew.Last 90 Days : 20

Experience.Flight Crew.Type : 500

ASRS Report Number.Accession Number : 2000378

Human Factors : Communication Breakdown

Human Factors : Physiological - Other

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Confusion

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

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Physical Injury / Incapacitation
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Became Reoriented

Assessments

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

Narrative: 1

The "time last 90 days" and "time in type" listed above are very rough estimates. I was acting as safety pilot/pilot in command for an instrument practice flight. The pilot flying "locked up", that is he stopped responding, so I took over. My initial action was to turn to complete the entry to a holding pattern at ZZZ. I over-corrected several times and lost control of both pitch and roll. After a minute or so of over-correcting I realized that I could not see the instruments well from the right side and was flying "by the seat of my pants". I realized that the left seat pilot had his arm up holding the glare shield. This blocked my view. I got him to move his arm and I regained control and completed the approach. We will continue flight practice but much more carefully. I will become more familiar with the panel layout of the particular plane we are to fly that day and have a clear exchange of control.

Synopsis

Instructor pilot reported the trainee became incapacitated and the instructor took control of the aircraft. While taking over the controls, the instructor stated it was difficult to see the flight instruments from the right seat because the trainee was obstructing the view. During this time a deviation in altitude and heading occurred. The instructor stated, after getting the aircraft stabilized, a safe landing was accomplished.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : 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 : None

Mission : Training

Flight Phase : Final Approach

Airspace.Class D : ZZZ

Component : 1

Aircraft Component : Reciprocating Engine Assembly

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Powerplant Fuel System

Aircraft Reference : X

Problem : Malfunctioning

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 675

Experience.Flight Crew.Last 90 Days : 65

Experience.Flight Crew.Type : 425

ASRS Report Number.Accession Number : 2000352

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

During the entire duration of the flight (up to the point of short final at our origin airport), there were no early tell-tale signs of power loss. Conditions were 25-35 Degrees C around our areas of training, mostly clear skies and fair winds. (They told me this after the engine died), But engine did not appear lose power at that time. During idle power and touchdown, landing appeared as normal but upon turning onto taxiway and crossing the edge of the runway, engine started to lose RPM and then after 5-10 seconds, the engine quit completely. Before it quit, the student noticed this as well, and attempted to add throttle as they assumed that not enough throttle was being applied to maintain engine above idle. We were able to cross over the hold-short lines with the remaining momentum of the aircraft, but just barely over. I attempted a restart by turning on the boost pump, mixture full rich, and throttle in 1/2 to build fuel flow, but failed to restart. We addressed ATC, and had airport ops tow us back to parking. My student told me after stopping past the runway that on short final, that he noticed a lack of power gain when throttle was applied. No one was injured and plane was grounded after securing. I initially suspected vapor lock as the conditions were warm, but this was before my student told me what they experienced while on short final. I suspect it to be fuel injector-related or fuel pump-related.

Synopsis

C172 instructor reported an engine failure during landing while conducting flight training. The flight crew landed and required a tow off of the taxiway to the parking ramp.

Time / Day

Date : 202304

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 26

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

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 : Cruise

Route In Use : None

Airspace.Class E : ZZZ

Component

Aircraft Component : Electrical Power

Aircraft Reference : X

Problem : Malfunctioning

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 20200

Experience.Flight Crew.Last 90 Days : 70

Experience.Flight Crew.Type : 130

ASRS Report Number.Accession Number : 2000342

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.General : Maintenance Action
Result.Flight Crew : Diverted
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Landed As Precaution
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Partial loss of electrical equipment, 26 NM northwest of ZZZ airport. Called ZZZ ATC for clearance direct to land in case of a total loss of electrical power.

Synopsis

PA-28 instructor pilot reported a partial electrical power loss in cruise. The flight crew elected to divert.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

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 : 12000

Aircraft

Reference : X

ATC / Advisory.UNICOM : ZZZ

Aircraft Operator : Fractional

Make Model Name : Skyhawk 172/Cutlass 172

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

Route In Use : Direct

Airspace.Class G : ZZZ

Component

Aircraft Component : Propeller

Aircraft Reference : X

Problem : Improperly Operated

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Fractional

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Trainee

Function.Other.Other

Qualification.Flight Crew : Student

Experience.Flight Crew.Total : 55

Experience.Flight Crew.Last 90 Days : 22

Experience.Flight Crew.Type : 55

ASRS Report Number.Accession Number : 2000341

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Training / Qualification
Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Weather / Turbulence
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Rejected Takeoff
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

On Day 15 a student solo cross-country flight was planned as partial fulfillment of Part 61 training requirements towards my private pilot certification. This report is a description of events that occurred before, during and after this flight. The objective of this solo cross-country flight was to fly from ZZZ1 to ZZZ2 assisted by flight-following, with one landing at ZZZ en-route between the departure and destination points. A similar dual cross-country flight (student and instructor) had previously been successfully completed on Day 0. This Day 0 flight took off from ZZZ1, made a full-stop landing at ZZZ2; then departed to ZZZ3; made a full-stop landing and a subsequent takeoff from ZZZ3; Then flew to ZZZ where a touch-and-go maneuver was performed, and finally terminated at ZZZ1. This was followed on Day 14 by a student solo cross country round-trip from ZZZ1 to ZZZ4 which was successfully completed. On Day 15, the original plan was to fly solo directly from ZZZ1 to ZZZ2 overflying the reservoir via ZZZZZ and then return to ZZZ1 with one landing en-route at ZZZ. This would be very similar to the previous dual-cross country flight to ZZZ2 except without a stop at ZZZ3. On that day, low clouds persisted around the reservoir/ZZZZZ area into late morning. Meanwhile, skies south of ZZZ1 were less cloudy which offered a better chance of crossing the mountains. With the expectation that air traffic patterns around ZZZZZ would likely cause ZZZ Approach to issue altitude restrictions of 4,500 ft. - which meant overflying these clouds might not be an option - and with the desire to avoid any chance of encountering a scud-running scenario between the low clouds and the mountains on this VFR flight, it was agreed to modify the direction of the outbound flight and head southbound to ZZZ en-route to ZZZ2. While clouds were present south of ZZZ1, they were scattered, and altitude restrictions were less likely to be encountered, which meant that overflying these clouds would be a viable option. I was advised that while three landings would be needed to satisfy the cross-country portion of the Part 61 training requirements, a touch-and-go at ZZZ would be sufficient to meet this requirement. A flight-following was requested on this trip during initial contact with ZZZ1 Ground. Upon completing all pre-flight and run-up checks, takeoff from ZZZ1 occurred at XA26. Upon transfer from ATC to ZZZ Approach, I was told that altitude would be at my discretion which meant I was free to overfly cloud cover over the mountains south of ZZZ1. I climbed to 7,500 ft. altitude and remained there until I was around eight (8) NM west of ZZZ. I had switched over (with authorization) from ZZZ Approach to ZZZ CTAF a few minutes before I began the descent into ZZZ; and at around 1,100 ft. MSL I

commenced the 45-degree entry into a left traffic pattern for Runway XX, which I entered at 900 ft. The winds at ZZZ as I approached my short final was from 280 at around 9-10 kts. The wind direction was re-verified after landing and when the aircraft was parked. This 40-degree crosswind did not pose a major challenge, and with sufficient crosswind correction I landed on Runway XX safely and in full control of the aircraft at XB04. Once the aircraft was safely on the ground and rolling along the runway centerline, I commenced the touch-and-go procedure. This involved focusing on (1) carb-heat; (2) trim; and (3) flaps - in that order, with flaps intending to be retracted only once airborne with sufficient airspeed, being mindful of Vfe - while ensuring sufficient right rudder to offset the left-turning tendency of the accelerating aircraft. However, in the heat of the moment while focusing on ensuring proper trim so as to prevent an excessive pitch-up tendency, insufficient right-rudder was applied during the acceleration, which caused the aircraft to swerve to the left, which in turn caused a loss of control. As it became clear that I would be unable to maintain directional control and stay the course along the runway, I aborted the takeoff and turned my focus on ensuring that the aircraft continued to maintain proper attitude and did not tip over at any point. As the aircraft swerved to the left, the propeller hit a blue taxiway light at the intersection of the runway and the diagonal taxiway. The aircraft continued to roll over the grass and re-emerged onto the taxiway at which point I slowly taxied the aircraft to the end of the taxiway, turned around and taxied it into nearby a parking spot. After the aircraft was secured, I contacted my CFI, notified him of the situation, and sent photos of the propeller strike. Further inspection revealed that there was no other visible damage to the aircraft, and all lights, control surfaces, and the aircraft hull appeared intact. Due to the propeller strike, it was determined that the aircraft was not safe to fly and so I awaited further instructions from my CFI who arrived later in the day from ZZZ1 to pick me up. The aircraft was tied-down at ZZZ and we left a note with airport operations, as no airport management personnel were around anywhere in or around the airport on that day. Although my student pilot certificate was issued in late last year, I never received it in the mail to date. Upon calling FAA on the day following the event, I discovered that it was returned to the FAA as undeliverable on account of FAA incorrectly addressing my mail to a non-existent street address (typo). I was told the certificate would be re-sent to me in a few weeks. Several lessons can be learned from this experience and this will be the topic of conversation, reflection and introspection in the coming days and weeks. It is clear that things could have been done differently - for example, more practice could have been undertaken before a solo touch-and-go attempt - and better expectations, communication and clarifications can be developed between student and teacher when agreeing upon a flight plan and strategy. Hindsight however - as they say - is 20/20. The hope is that such painful mistakes can be avoided in future.

Synopsis

C172 pilot on a solo cross country reported the loss of control while intending to complete a touch and go. There was a cross wind at the time of the incident. The aircraft departed the runway and the prop of the single engine aircraft struck a taxiway light. The trainee taxied to the ramp and called the CFI for assistance. There was no other reported damage to the aircraft.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 010

Relative Position.Distance.Nautical Miles : 8

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : A-1 Husky

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Takeoff / Launch

Airspace.Class G : ZZZ

Person

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 : Flight Instructor

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 5000

Experience.Flight Crew.Last 90 Days : 52

Experience.Flight Crew.Type : 55

ASRS Report Number.Accession Number : 2000339

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Distraction

Events

Anomaly.Conflict : Ground Conflict, Critical

Detector.Person : Flight Crew

Miss Distance.Horizontal : 250

Miss Distance.Vertical : 75

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 : Ambiguous

Narrative: 1

As a CFI instructing a student on water landings on a lake and surrounding bodies of water, we selected a river that feeds east to west into the lake. There is a 30 degree bend in the river with ample room to land on one side and takeoff again after the bend. We cleared both sections of the river for boats, obstacles, and obstructions by overflying and setting up for a downwind. The land on both sides of the river needed to be cleared more thoroughly as someone was launching a boat on the north side (obscured by trees). Landing was uneventful. However, the student elected to step taxi around the bend to set up for the next takeoff. As the CFI, I should have brought the aircraft to taxi speed and rounded the turn to allow for additional clearing. After rounding the corner, we noticed that a boat had launched and since we were already on the step, we lifted off to vertically deconflict. Neither the aircraft nor the boat needed to maneuver to remain deconflicted, but 500 [ft.] distance was not preserved. Upon debrief, there was time to abort the take-off if done immediately, taxi past the boat, and continue the takeoff. Decision timing was a factor. Just because a waterway is clear, doesn't mean it will remain so. Thorough clearing of both river banks for activity is important.

Synopsis

Instructor with trainee reported a critical ground conflict. The instructor stated after clearing the water landing area to practice water landings, a small craft launched unknown to the pilots. The instructor reported the trainee sidestepped to the other side of the landing site.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Relative Position.Distance.Nautical Miles : 10

Altitude.MSL.Single Value : 10000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

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 : IFR

Mission : Training

Flight Phase : Cruise

Component : 1

Aircraft Component : AC Generator/Alternator

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Electrical Distribution Relay

Aircraft Reference : X

Problem : Malfunctioning

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 : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 1294

Experience.Flight Crew.Last 90 Days : 151

Experience.Flight Crew.Type : 1234

ASRS Report Number.Accession Number : 1999892

Human Factors : Workload
Human Factors : Situational Awareness
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Diverted
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

At approximately XA:30 in level cruise flight at 10,000 ft. on an IFR flight, we heard an aural alert and my student noted a Low Volts annunciator on the aircraft's PFD. The Low Volts annunciator extinguished within a few seconds, but both myself and my student noticed the M BUS Amps erratically varying from +24/-10 over the course of a few minutes. Since our destination of ZZZ1 was still roughly an hour away, I instructed my student to request a diversion to ZZZ (which we were abeam at the time). We did not declare an emergency. The student stated to ATC that we just lost our alternator and we would like to divert to ZZZ. ATC started to vector us, provided a revised clearance, and asked how long it would take for us to get down? Assuming the controller meant to our new assigned altitude of 7,000 ft., I replied about 3 minutes. Leaving the autopilot engaged, I set a descent rate of 1,000 FPM and began to run through the Low Volts Annunciator Checklist. We cycled the Alternator off, noted that the ALT FLD circuit breaker was still pushed in, and then turned the Alternator switch back on. Engine indications appeared relatively normal for a few minutes while we continued our descent, although the M BUS Volts read closer to 25 Volts. Approach Control provided a few more heading and altitude changes, and cleared us for the ILS XXR as we had some difficulty visually identifying the airport due to the sun reflecting off a shallow haze layer. As we turned onto the LOC, the M BUS Amps dipped again, and we received another Low Volt Annunciator. We were within a couple minutes of landing and had not yet begun to draw off the standby battery. Since landing with main battery power seemed assured, we did not execute the Reduce Electrical Load Checklist. Around this same time, I heard Approach Control mention something to another aircraft about them following an aircraft. I was too focused on monitoring the electrical system, so did not fully grasp that ATC had [requested priority handling] on our behalf, although I do not recall ATC making any direct mention of this or ask for souls/fuel remaining. We continued along the ILS, and were given a change to Tower frequency for landing clearance. As we approached the runway, ATC's prior statement about the priority aircraft became clear to me because there were fire trucks waiting along the runway for our arrival. We had a normal landing on Runway XXR, taxied clear of the runway and to the FBO under our own power and without further incident. In

retrospect, I believe the diversion decision was the prudent and safe call to make. However, as this was the first time I've had to deal with an anomaly of this sort in flight, the execution of tasks wasn't totally perfect and there are a few things I would do differently in the future. The timing of requesting the diversion may have been slightly premature as we had not yet run the appropriate troubleshooting checklists. However, given our proximity to the airport at the time and the lack of Towered airports along our remaining flight path, requesting the diversion when we did seemed to make the most sense. Had we run through the checklists first, we would have been further away from our best diversion option. Rather than asking the student to request the diversion, I should have tasked them with running the checklists while I coordinated with ATC. This would have helped me to maintain better situational awareness about ATC's decision to [request priority handling] on our behalf. I could have also more clearly communicated the nature of our diversion, and helped ATC to coordinate the response from the ground personnel more effectively. I believe the decision to leave the autopilot engaged was correct as this reduced the workload of hand-flying the aircraft as we worked to resolve the issue, and increased our ability to exercise CRM (Crew Resource Management). Had we reduced the Electrical Load per the aircraft checklist, we would not have had autopilot functionality. If we had a longer distance to travel in a future diversion, this would not be something I could rely upon and would need to adhere to the aircraft's checklist more closely.

Synopsis

C172 Flight Instructor with student reported low voltage indications during cruise. The flight crew diverted and made a precautionary landing.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.ATC Facility : ZZZ

Aircraft Operator : Corporate

Make Model Name : PA-44 Seminole/Turbo Seminole

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Cruise

Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1999485

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Confusion

Events

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Automation : Aircraft Other Automation

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

I was conducting single engine procedures and a full secure of the aircraft's engine and the aircraft descended while the terrain was rising in elevation. The aircraft technically descended right below 4,000 ft. AGL, which is not allowed per organization procedures. I turned around towards a lower elevation to get above the MRA (Minimum Reception Altitude) for the rest of the procedure. The rest of the flight continued on without any other issues. A loss of situational awareness of the altitude of the surrounding elevation caused this event. In the future, I need to more closely monitor how fast the terrain rises in a practice area before conducting a full secure procedure.

Synopsis

PA-44 pilot reported descending below minimum altitude during a training flight. The pilot recognized the altitude deviation and climbed back up to minimum altitude.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1394

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : FBO

Make Model Name : PA-44 Seminole/Turbo Seminole

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Takeoff / Launch

Route In Use : None

Airspace.Class D : ZZZ

Component

Aircraft Component : Wheels/Tires/Brakes

Problem : Improperly Operated

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Air Traffic Control : Local

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 839

Experience.Flight Crew.Last 90 Days : 185

Experience.Flight Crew.Type : 136

ASRS Report Number.Accession Number : 1998399

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Confusion

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

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

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Flight Cancelled / Delayed

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Rejected Takeoff

Assessments

Contributing Factors / Situations : Company Policy

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

Narrative: 1

Student's 3rd flight in a multi engine aircraft and 1st time performing a simulated aborted take off with one engine inoperative. Aborted take off procedure was discussed during prebrief; idle throttles and maintain directional control with rudders and then brakes as necessary to return to centerline and call "Aborting." We also discussed the methods I would use for simulating single engine out such as either pulling one mixture or applying rudder to simulate the engine out. We had practiced aborted takeoffs in a previous mission in a simulator. In aircraft, during engine runup, I informed the student we would be setting up for a short field take off but she could expect a simulated one engine out to implement the aborted takeoff procedures. I did not inform the student which engine I would be simulating but planned for the left engine as it was on the non-taxi side of the runway. On the runway the student set up for a short field take off. As soon as she released the brakes I verified that the airspeed tape had no indication and applied left rudder. Student pulled throttles idle but also applied firm brakes. Brakes locked up and aircraft continued swerving to the left. I believe this was due to the left rudder input still being in place as the student became scared and applied brakes. I took controls while the aircraft was still on the runway but the aircraft was already passing through 50 degrees off centerline and continued to loop left towards the left side of the runway. I did not want to slam on the right rudder and risk the aircraft losing control in the opposite direction or continue locking the brakes. I accepted that the aircraft would be leaving the runway and neutralized the rudders. Our aircraft stopped about 135 degrees from our take off position to the left. In retrospect I think I could have left my feet position hovering over the rudders instead of returning them to the floor after the initial left rudder input so I could have assisted remaining in the runway before it was too late.

Synopsis

PA-44-180 instructor reported a runway excursion while instructing the student on simulated aborted single engine takeoff procedures in the aircraft. The instructor simulated the aborted takeoff condition by applying rudder displacement and the student responded by locking the brake resulting in a loss of control on the runway. The aircraft looped 135 degrees from the takeoff position.

Time / Day

Date : 202305

Place

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : Light Sport Aircraft

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Component

Aircraft Component : Normal Brake System

Aircraft Reference : X

Problem : Malfunctioning

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1700

Experience.Flight Crew.Last 90 Days : 21

Experience.Flight Crew.Type : 54

ASRS Report Number.Accession Number : 1998398

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Confusion

Events

Anomaly.Aircraft Equipment Problem : Critical

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

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Ground Event / Encounter : Ground Strike - Aircraft

Detector.Person : Flight Crew

Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
Result.General : Flight Cancelled / Delayed
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

Flight instructor was demonstrating landing. Aircraft touched down about halfway down 4,000 foot downward sloping runway at normal touchdown speed in a 3-point attitude. After touchdown, spoilers and wheel brakes were applied; however, wheel brakes had almost no braking effect. The student in the left seat pumped brake handle; however, braking action did not improve. The aircraft subsequently exited the end of the runway and was maneuvered into a ditch. The engine was shut off prior to exiting the runway. The tip of the wood propeller was damaged due to impact with an earth embankment. No other damage was incurred.

Synopsis

Instructor pilot reported loss of braking action during landing roll out. The aircraft ran off the runway and into a ditch, resulting in damage to the propeller.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Relative Position.Angle.Radial : 120

Relative Position.Distance.Nautical Miles : 0.5

Altitude.AGL.Single Value : 400

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Initial Climb

Route In Use : None

Airspace.Class D : ZZZ

Component

Aircraft Component : Reciprocating Engine Assembly

Aircraft Reference : X

Problem : Malfunctioning

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1600

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 1500

ASRS Report Number.Accession Number : 1998394

Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Returned To Departure Airport
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

This is a report to explain the incident we had with a Piper Cherokee PA 28 161, Aircraft X, on this present day at ZZZ airport. We were assigned Aircraft X to perform a flight lesson. The student pilot did preflight inspection accordingly to the proper checklist/updated including fuel inspection (Quantity and taking samples from both tanks to check for contaminants), Oil inspection, and every item suggested by the checklist while I was monitoring the procedures. Everything was inspected and was in normal condition to ensure a safe flight. After that, I did my own check on fuel, oil, magnetos, landing gear, brakes, ailerons, and flaps like every flight after the student does it too with positive result for a safe flight. After the preflight and how is suggested by checklist, the student taxied to the run up area to perform the RUNUP Check, like every flight with me monitoring the procedures. After the check, everything looked normal and he taxied to the hold short line on Runway XXR and we called for take-off clearance. We got the clearance to take-off and on the take-off (UPWIND) at 400 ft. we started experiencing engine power issues where we were not able to maintain climb rate or even level flight. RPM dropped and all the cockpit was shaking due to the strong vibrations. In a few seconds, I took control of the aircraft and the student was assisting me on what he was told to do including switching fuel tank as part of the engine failure checklist. After the checklist was done, we had no response from the engine that was having hard time to maintain power output. Then I advised ATC and landed safely on Runway XYR. We stopped at the very end of the runway and we were contacted by airport personal, fire fighters, and ambulance. They asked if we needed something and we denied any assistance since we were good. After that, I sent back the student to ramp with them on one of the trucks for safety and I taxied the aircraft back to the ramp where the maintenance personal and management was waiting for us.

Synopsis

PA28 Flight Instructor reported severe engine vibration and power loss after takeoff. The Instructor immediately returned to the airport and made a safe landing.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Component

Aircraft Component : Wheels/Tires/Brakes

Aircraft Reference : X

Problem : Failed

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

ASRS Report Number.Accession Number : 1998308

Human Factors : Time Pressure

Human Factors : Distraction

Human Factors : Workload

Events

Anomaly.Aircraft Equipment Problem : Less Severe

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

Result.General : Maintenance Action

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Flight Crew : Overcame Equipment Problem

Result.Air Traffic Control : Provided Assistance

Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Student and check flight instructor were conducting a local flight. Upon landing Runway XX at ZZZ, the crew encountered a flat tire and momentarily lost then regained directional control of the aircraft. The crew did not attempt to exit the runway, and contacted ZZZ Tower to notify them of the situation. Company maintenance was contacted to replace the tire and the crew taxied back to the company ramp with no further issues.

Synopsis

Flight Instructor reported a temporary loss of directional control during landing due to a flat tire. Maintenance was notified who replaced the tire and taxied the aircraft to ramp with no issues.

Time / Day

Date : 202305

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

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : PA-30 Twin Comanche

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Airspace.Class D : ZZZ

Component

Aircraft Component : Landing Gear

Problem : Failed

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 3095

Experience.Flight Crew.Last 90 Days : 105

Experience.Flight Crew.Type : 75

ASRS Report Number.Accession Number : 1998010

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Evacuated

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

I was receiving training from the owner, a multi engine instructor. I had not flown Aircraft X in more than 10 years. I also needed a flight review. The owner/MEI agreed to provide the training and flight review as a prerequisite to purchasing the plane (Aircraft X) and was acting as pilot in command. We were doing touch and go landings at ZZZ when the incident occurred. The owner/MEI was demonstrating proper technique for power, flaps, flare, etc. On The second landing the aircraft suffered what we believe was a gear malfunction and landed gear up on the runway. There were no injuries and after everything was secured, airport authorities and the instructor and myself all confirmed the gear switch was in the down position. Pictures of the plane before and after the plane was lifted confirmed that all three gear were extended and may have collapsed on landing.

Synopsis

Pilot reported receiving training in a PA-30, when a gear malfunction occurred, and the gear collapsed on landing after being extended. The aircraft was secured and there were no injuries.

Time / Day

Date : 202305

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Route In Use : Direct

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 : 175

Experience.Flight Crew.Last 90 Days : 55

Experience.Flight Crew.Type : 165

ASRS Report Number.Accession Number : 1997944

Human Factors : Situational Awareness

Events

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

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Object

Anomaly.Ground Event / Encounter : Weather / Turbulence

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Human Factors

Narrative: 1

After landing on Runway XX at ZZZ, I failed to fully compensate for the winds/gusts (180 @ 14 G 24). Just after the intersection with Runway XXL, the plane slid and left the runway to the right into the grass and hit one runway light. I fully stopped the plane before impacting any other lights or signs. Emergency services were dispatched to assess the situation. The FBO brought out a tug and moved the plane back to the runway surface and then towed it to the FBO. After inspecting the prop and the damaged light, we determined that the light hit on the right side of the fuselage just before the step used check fuel levels. There was no impact to the prop or control surfaces. I flew the plane back to its home base at ZZZ1 later that afternoon without any unusual events.

Synopsis

C172 pilot reported a runway excursion during landing rollout after failing to compensate for the wind conditions.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

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 : 5000

Aircraft

Reference : X

ATC / Advisory.Tower : 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 : None

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

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

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 640

Experience.Flight Crew.Last 90 Days : 120

Experience.Flight Crew.Type : 640

ASRS Report Number.Accession Number : 1997297

Human Factors : Situational Awareness

Events

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

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Start with an uneventful instructional flight for primary student, he's at pre-solo phase. At the practice area, we did simulated engine failure on Vy and Vx climb out at 3000 [ft.] AGL, and steep turns. Then we went to an uncontrolled airport for 2 landings. The student did great, so we head back to the home airport. Traffic pattern was busy. We had two traffic in front of us, and two traffics behind us. The student had the flight controls. After we touched down, while still in ground roll, Tower called if able exit Taxiway 1. The student turned to the left, but our speed was too fast to make that turn. We already slightly passed the taxiway line. My reaction was to help make the turn instead of taking control and go straight on the runway. That was a bad judgment call on me. When I realized we were not gonna make it, I don't want the airplane to skid and loose control in a turn, so I chose to avoid the lights, and we ended up in the grass, [and] called the tower right away. He called the airplane behind us to go around. Then I used the power to taxi back to the pavement and taxi back to park. Called the Tower afterwards, he said next time I should tell him unable, don't try to force it. Ironically, "unable" did pop out my head when I think we were too fast to make the turn, but I was incompetent to say it and execute it. I am very embarrassed because I thought I teach all my students to not force the turns, but I didn't do it today. It's 100 percent my fault, I am not a good instructor.

Synopsis

Flight Instructor on training flight with student reported a runway excursion during landing rollout.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZTL.ARTCC

State Reference : GA

Relative Position.Angle.Radial : 180

Relative Position.Distance.Nautical Miles : 1.4

Altitude.MSL.Single Value : 2400

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 12000

Aircraft : 1

Reference : X

Aircraft Operator : Personal

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

Aircraft : 2

Reference : Y

ATC / Advisory.UNICOM : GVL

Aircraft Operator : Fractional

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

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Flight Phase : Takeoff / Launch

Person

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 : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Experience.Air Traffic Control.Supervisory : 4996

Experience.Flight Crew.Total : 1481

Experience.Flight Crew.Last 90 Days : 136
ASRS Report Number.Accession Number : 1997293
Human Factors : Situational Awareness
Analyst Callback : Attempted

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 2000
Miss Distance.Vertical : 100
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Aircraft Y departed Runway 23 very shortly after Aircraft X, then turned inside of their downwind. Per the FAR/AIM the overtaking aircraft should overtake to the right. There was no reason for Aircraft Y to make a steep low altitude turn inside of a GA airplanes crosswind to downwind turn, that could be an accelerated stall issue, on top of the wake turbulence he caused for the Aircraft X who was doing flight training at the time. After talking to the instructor in Aircraft X, the student was startled and the instructor had to take control during the event. GVL needs a Tower, there are way too many people here treating it like it's the wild west and demonstrating poor ADM when it comes to random pattern entries and departures.

Synopsis

GA Flight Instructor reported encountering wake turbulence from a corporate jet after the jet cut inside him on departure from GVL.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : SAT.TRACON

State Reference : TX

Relative Position.Angle.Radial : 070

Relative Position.Distance.Nautical Miles : 5

Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 5000

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : SAT

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 : Initial Approach

Airspace.Class E : SAT

Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class E : SAT

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 6500

Experience.Flight Crew.Last 90 Days : 50

Experience.Flight Crew.Type : 2500

ASRS Report Number.Accession Number : 1997273

Human Factors : Communication Breakdown

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

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Ground Equipment Issue
Detector.Person : Flight Crew
Miss Distance.Horizontal : 1500
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Radio coverage and range of San Antonio approach is very poor on most all of their multiple frequencies. This presents a special problem at New Braunfels airport (BAZ) when doing practice or actual instrument approaches. Approach radio coverage is pretty much unusable below 3000 ft. on the east side of the airport and spotty in most all areas surrounding the airport. Everyone including Approach is well aware of this and they are forced to hand off inbound traffic to New Braunfels Tower way too early and Tower, being non-radar, is blind to that traffic until acquiring them visually. Often, after the handoff, Approach has to call Tower on the phone to have them warn the handed-off aircraft of a potential conflict. I personally have had several uncomfortable close-encounters with traffic while doing practice instrument approaches at BAZ which could have been avoided if I could have remained in contact with Approach longer. Its a bit odd that radar and VOR coverage there goes down to 500 ft. or so yet comm radio coverage is pretty much unusable below 3000 ft. If improvements cannot easily be made at SAT, then there needs to be an RCO for the approach freq at BAZ. SAT Approach coverage is poor in most all other directions too. I have been flying 20 miles south of SAT before on a clear day and could actually see the airport visually but yet Approach radio coverage was very poor below 2500 ft.

Synopsis

C172 Flight Instructor reported ATC radio coverage below 3,000 ft. in the vicinity of BAZ airport is poor and often results in traffic separation issues.

Time / Day

Date : 202304

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Aircraft

Reference : X

ATC / Advisory.Tower : 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 : None

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class D : ZZZ

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Student

Experience.Flight Crew.Total : 157

Experience.Flight Crew.Last 90 Days : 26

Experience.Flight Crew.Type : 38

ASRS Report Number.Accession Number : 1996740

Events

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

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Ground Event / Encounter : Ground Strike - Aircraft

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Regained Aircraft Control

Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Human Factors

Narrative: 1

On Date I was on approach on Runway XX at ZZZ. As I flared to land, I was hit with a gust of wind from the left that caused the right wing to scrape the pavement and resulted in a propeller strike. I then taxied back to the ramp under the airplanes own power. As part of my preflight, I obtained a weather briefing and the winds were not gusty. I flew a normal pattern and approach and everything was fine until just after touchdown and loss of control.

Synopsis

C172 student pilot reported ground strike due to wind gust during landing flare.

Time / Day

Date : 202305

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZMP.ARTCC

State Reference : MN

Altitude.MSL.Single Value : 300

Aircraft

Reference : X

ATC / Advisory.Center : ZMP

Aircraft Operator : FBO

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Descent

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1996673

Human Factors : Situational Awareness

Events

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

Anomaly.Deviation / Discrepancy - Procedural : FAR

Anomaly.Inflight Event / Encounter : CFTT / CFIT

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

During flight training with commercial student, we descended too low due to an error in calculation of pivotal altitude for lazy 8's. Altitude estimate would be around 300 [ft.] AGL at lowest point. Error in calculation and catching the error too late. Triple checking math for maneuvers and verifying ground level is accurate.

Synopsis

Flight Instructor on training flight with student descended too low during maneuvers.

Time / Day

Date : 202304

Local Time Of Day : 1801-2400

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Relative Position.Distance.Nautical Miles : 2

Altitude.MSL.Single Value : 300

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Night

Ceiling.Single Value : 12000

RVR.Single Value : 7000

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

Make Model Name : HS 125 Series 700

Crew Size.Number Of Crew : 2

Flight Plan : IFR

Flight Phase : Takeoff / Launch

Airspace.Class E : ZZZ

Person

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 : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 600

Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 580
ASRS Report Number.Accession Number : 1996105
Human Factors : Communication Breakdown
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.Horizontal : 0
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Executed Go Around / Missed Approach

Assessments

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

Narrative: 1

I was acting as a flight instructor with a student in a Piper Warrior, doing a night cross country flight from ZZZ1 to ZZZ. The entire flight was conducted under VFR flight following, and communication was maintained with ATC throughout. The flight proceeded normally until the final approach into ZZZ. At roughly 10 NM north-west of ZZZ the ZZZ Approach Controller informed us that there was no observed traffic in between us and ZZZ, radar services were terminated and we were to squawk VFR and change to the local advisory frequency. We complied and announced our position and intention to use Runway XXR for pattern work on the ZZZ CTAF. Hearing no response on the CTAF frequency, we proceeded with decent and before landing preparations. We proceeded to announce our position and intention to use Runway XXR several times while on approach to a 45 degree right base-to-final. Due to the runway edge lights creating a glare, we were unable to see that a Hawker 700 had entered Runway XXR and had proceeded to back taxi to line up with Runway XXL. The Hawker 700, then turned around 180 degrees to line up, while we were on final approach to Runway XXR. Throughout the back taxi the Hawker 700 made no radio calls on CTAF. After the Hawker had completed the back taxi, the landing lights were visible and I identified the aircraft's presence for the first time. At this time, we were nearly over the runway approach lights and I called for a go-around. We successfully completed the go-around procedure, and the Hawker 700 did not start the take-off roll. After the go-around, we were on the upwind leg turning to the crosswind leg and I observed the Hawker 700 take-off on Runway XXL and proceed into a climbing left turn. At no point was I able to contact the Hawker 700 on CTAF, and the Hawker 700 made no radio calls on CTAF throughout the entire event. The Hawker proceeded on course and we completed our planned pattern work without incident. Due to the taxi path of the Hawker 700, I do not believe the pilots of the Hawker 700 could have made visual contact with us until we had started our go-around. I am not certain if the pilots of the Hawker 700 ever made visual contact with us. Due to the glare from the runway edge lights, we were unable to identify the position of the aircraft until final approach making a go-around necessary. The Hawker 700 never made a single radio call on CTAF, as a result we were unaware they existed until we made visual contact. After the go-around I briefly monitored

another frequency listed for ZZZ Tower, in case the Hawker 700 had mistakenly chosen the incorrect frequency. I do not know which frequency the Hawker 700 was transmitting on, or if the jet was transmitting at all. I suspect the pilots mistakenly used an incorrect frequency, which led to the inability to communicate. I would like to stress that the timing of the event could have led to a near-midair collision. Had we begun our approach roughly 20-30 seconds later than we did, I suspect the Hawker 700 would have begun a take-off roll. This could have resulted in a rejected take-off, and a go-around. Worst case scenario, the jet would have accelerated past V1 and been forced to continue, making both aircraft take aggressive evasive action to avoid a midair collision.

Synopsis

PA-28 flight instructor reported a runway incursion by another aircraft while on approach to land on training flight with a student.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

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 : None

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : PA-31T Cheyenne I

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 : FBO

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Private

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 722

Experience.Flight Crew.Last 90 Days : 41

ASRS Report Number.Accession Number : 1996030

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Ground Conflict, Critical

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

Detector.Person : Flight Crew

Result.General : None Reported / Taken

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

I was flying a Cessna 172S. I arrived at ZZZ airport in the morning at about XA: 30AM local time. The runway in use was Runway XX. We were in ZZZ to do [student orientation flights]. I flew that plane from ZZZ1 airport. After landing I proceeded to do another flight for about an hour and came back to land, the runway was still XX and there were quite a few planes in the pattern for landing at ZZZ, I landed and proceeded to take my second [student] for her [flight]. After about an hour I was on my way back to ZZZ1 and the runway in use was still XX, my company airplane landed about 8 minutes in front of me, I made calls 15 miles out of the airport in the CTAF frequency then 10 miles out 5 miles out and on short final. Another planes that was doing pattern work at ZZZ was on left downwind for Runway XX and I was doing a straight in approach, that plane acknowledge that I was on final and that he would follow me to land as number 2. I proceeded to land and as soon as I landed and I was on the rollout slowing down and a Twin Piper Cheyenne had just landed on the opposite runway, Runway XY. I was already slowing down and I was able to almost come to a complete stop to see what this plane was going to do. He proceed to exit the runway immediately and I try to reach him on the CTAF frequency to ask him/her about the situation but there was no response. The aircraft never communicated on the CTAF frequency his intentions to land on Runway XY, also looking at the track data, he overflow the airport midfield and proceeded to make a right downwind for runway XZ, which I believe is the incorrect procedure as well to land on that runway. The Twin Piper never communicate his/her intentions and perhaps they were on the wrong CTAF frequency because when I tried to communicate with them there was no response. Nothing happened both planes were able to stop in time and exit the runways in a safe manner but the aircraft was on the wrong runway and never communicated on the CTAF frequency for ZZZ.

Synopsis

Pilot on training flight reported a conflict with another aircraft that was landing on the same runway in the opposite direction of the traffic pattern.

Time / Day

Date : 202304

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 5

Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 13

Light : Daylight

Ceiling.Single Value : 4500

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : Duchess 76

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class D : ZZZ

Component

Aircraft Component : Electrical Power

Aircraft Reference : X

Problem : Malfunctioning

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 : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Experience.Air Traffic Control.Supervisory : 2310

Experience.Flight Crew.Total : 850

Experience.Flight Crew.Last 90 Days : 15

Experience.Flight Crew.Type : 155

ASRS Report Number.Accession Number : 1995996

Human Factors : Communication Breakdown
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Troubleshooting
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Automation : Aircraft Other Automation
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
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
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

During preflight with my student, I noticed that there was a slight trickle of water coming from the magneto switches in the cockpit. I was surprised, but not alarmed - I thought I would attempt to start the engines and that if anything was truly amiss then a circuit breaker would pop. None did, and the airplane started fine. All electronics seemed to operate normally. During alternator testing, I noticed that the ammeters were not reading properly. Shutting off the master switch did not shut down the electrical system, so I believed the alternators to be working. I tested the system using each alternator by itself with the master switch off and the electrical system functioned properly with the exception of the ammeter gauges - sometimes they read charging, sometimes they read zero. I did not receive a low voltage light warning on either alternator. Since the electrical system stayed running with either of the alternator switches on, I believed that they were both working and that the gauges themselves might be faulty. After approximately 75 minutes of flight, I instructed my student to land at ZZZ1. The ammeter needles had read zero the entire flight, so I thought I should test the system again. Shutting off the master switch (on the ground) resulted in a complete electrical shutdown. At this time, I thought the alternators were working intermittently, as I did not believe we had been flying with full electronics on for over an hour on just the battery alone. I turned the master back on, and we flew back to ZZZ. Enroute, the NAV2 circuit breaker popped, and I chose not to push it back in as I did not know what was causing the electrical problem. I still had full use of my COM1 radio, a Garmin GTN750. As we neared ZZZ and contacted the tower, I noted that the screen on the GPS was beginning to flicker. I notified the tower that I was about to lose all electrical power. Tower gave me a lower altitude and said they would call my base turn. At that point, I lost all electrical power and could no longer communicate. I attempted to lower my landing gear, but did not have sufficient power to do so. I guided

my student through a manual gear deployment and advised him that this would have to be a no-flap landing. I tried to contact tower, hoping that my transmission would get through - the screen on the 750 was still flickering off and on. I could hear tower attempting to call me, but I did not have sufficient power to transmit. They did not respond to my radio traffic. I performed a no flap landing and exited the runway when I saw that it was safe to do so - I then ensured that the taxiway was clear and taxied back to my parking area, still unable to use my radios or any other equipment. In retrospect, I could have not taken off in the first place, since the gauges were not operating correctly. I also could have stayed on the ground at ZZZ1 once I discovered that we were essentially running on battery power alone. I also could have notified Approach as to my predicament prior to arriving in ZZZ airspace.

Synopsis

Flight Instructor reported a misunderstanding of the ammeter readings led to an electrical failure in flight, a manual gear extension, and the inability to communicate with ATC at a towered airport.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1100

Environment

Flight Conditions : IMC

Weather Elements / Visibility.Visibility : 5

Light : Daylight

Ceiling.Single Value : 300

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Training

Flight Phase : Initial Approach

Route In Use : Vectors

Component : 1

Aircraft Component : Cylinder Head

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Reciprocating Engine Assembly

Aircraft Reference : X

Problem : Malfunctioning

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1

Experience.Flight Crew.Last 90 Days : 70

Experience.Flight Crew.Type : 400

ASRS Report Number.Accession Number : 1995406

Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.General : Maintenance Action
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Flying to ZZZ low IFR encounter clouds at 400 ft AGL leaving ZZZ1. On the way to ZZZ engine sputtered for a brief second. Checked instruments all was good. (Normal encounter) shot the Localizer XX into ZZZ went missed headed to ZZZ2 shot ILS XY there. Upon reaching minimums went full power to "go missed" engine started sputtering and shaking violently as we entered the clouds about 300 ft AGL. RPM's dropped to 1900. Airspeed and climb rate drastically went down. Able to maintain alt. Began to climb for best ALT eventually RPM's came back up 2300 able to do small climb. Called ATC [Requested priority handling] souls on board. Eventually got vectors back for XX ILS ran checklists, nav functions, radios, loading approaches, Person 1 flew. Came back in engine violently shaking popped out of clouds 180-200 ft AGL landed. Maintenance said push rod was bent and valve stuck for back left cylinder. Aircraft X Date XA: 30 AM.

Synopsis

C172 pilot reported engine sputtering in cruise. The flight crew executed a missed approach and requested priority handling and ran the QRH and checklists. The flight crew continued to destination airport.

Time / Day

Date : 202303

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Relative Position.Angle.Radial : 340

Relative Position.Distance.Nautical Miles : 1

Altitude.MSL.Single Value : 800

Environment

Flight Conditions : VMC

Light : Daylight

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 : Final Approach

Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : Cessna 150

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Final Approach

Airspace.Class D : 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 : Multiengine

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1150

Experience.Flight Crew.Last 90 Days : 190
Experience.Flight Crew.Type : 300
ASRS Report Number.Accession Number : 1995115

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
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

I was on base close to final for Runway XXL when I checked to make sure final was clear and saw a Cessna 150 from my company, it was being operated by a solo student (not his first solo) who was overshooting both finals due to a growing crosswind. He flew a tight right pattern for Runway XXR and this and his poor judgement of the turn caused him to overshoot and almost hit us. To evade I dove and turned left while adding full throttle and then reported to tower a near miss. The students overconfidence in his ability was a contributing factor in my opinion.

Synopsis

Flight Instructor reported a NMAC with another aircraft that was on final approach for the parallel runway and had overshoot the turn from base to final.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1240

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 6

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

Flight Plan : None

Mission : Training

Flight Phase : Initial Approach

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : UH-1N Twin Huey

Operating Under FAR Part : Part 91

Flight Phase : Cruise

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 : Flight Instructor

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 5000

Experience.Flight Crew.Last 90 Days : 40

Experience.Flight Crew.Type : 1000

ASRS Report Number.Accession Number : 1995110

Events

Anomaly.Conflict : NMAC

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 : Human Factors

Primary Problem : Human Factors

Narrative: 1

Entering ZZZ Runway XX pattern heard helicopter transmit will be overflying field 1000 ft. from east to west at 1000 ft. Continuous visual scanning picked up helicopter cross midfield at appx same altitude as our downwind altitude. Took evasive action to climb as helicopter flew under our aircraft. Vertical separation appeared to be 200 ft. - 400 ft. passing directly under us. Helicopter made no further transmissions.

Synopsis

Flight Instructor on a training flight in the airport traffic pattern reported a NMAC with a helicopter.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 3500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

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 : Descent

Airspace.Class E : ZZZ

Component

Aircraft Component : Reciprocating Engine Assembly

Aircraft Reference : X

Problem : Failed

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 550

Experience.Flight Crew.Last 90 Days : 60

Experience.Flight Crew.Type : 500

ASRS Report Number.Accession Number : 1995104

Events

Anomaly.Aircraft Equipment Problem : Critical

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Diverted
Result.Flight Crew : Inflight Shutdown

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

At approximately XA30 zulu I conducted a flight that resulted in a loss of engine power in flight. The flight was a training lesson with a pre-solo student. We took off around XB30 local time and proceeded from ZZZ to the northeast to our practice area. Upon departing to the northeast we received flight following with ZZZ Approach for our VFR maneuvers in the local area. We proceeded approximately 8-12 miles northeast of ZZZ where we did a series of ground reference maneuvers at 2500 ft. MSL. After performing ground reference maneuvers we started a constant airspeed climb at 75 kts. to an altitude of 4000 ft. MSL. At 4000 ft. MSL we set up for slow flight and a power off stall. We then did an unusual attitude recovery. After unusual attitude recovery practice we then did a series of power on stalls at 4000 ft. MSL. We performed 4 power off stalls and activated the carburetor heat anytime the power was outside of the green arc. We then turned the carburetor heat on and reduced power to 1800 RPM where we descended at 500 FPM for approximately 1 minute. Once at 3500 ft. MSL I reached over and retarded the throttle to idle to simulate an engine failure. Upon reducing the throttle to idle the carburetor heat was still on. I then asked my student "what do we do if we have an inflight engine failure?" they stated that we start with the checklist, I then corrected them and stated that we pitch for maximum lift/drag speed which is 65 kts. We then chose the best field to hypothetically land in. I then noticed that I could see the shape of the propeller turning instead of the typical blur of a turning prop. I immediately looked at the tachometer and we had less than 400 RPM. I immediately advanced the throttle forward and there was no increase in RPM. I then verbally announced to my student that "I have flight controls". As I took over flight controls we were already trimmed for 65 kts. and had a field selected. At this point we are at approximately 3000 ft. MSL and I start the engine restart procedure and confirm with the checklist. I checked the fuel selector valve to both (it was already on both), mixture rich (already rich), carb heat on (still on), fuel primer locked (still locked in place), and then I turned the key from both to start. The propeller was windmilling and I tried the starter 3 times. I then let ZZZ Approach know that we had lost engine power and we were circling a field. Approach asked how many souls and fuel. I stated that we have 2 souls and 30-35 gallons of fuel. We were at approximately 2500 ft. MSL (approximately 1000 ft. AGL) on a downwind for the selected field. I then asked ZZZ Approach what the winds were at ZZZ. Approach stated the winds were 150 degrees and I cannot recall the velocity. I determined that the engine would not be able to be restarted in flight. I then focused on securing the cabin. I turned the fuel selector valve off, pulled the mixture to cut off, turned the ignition key to off and removed the key, and unlatched my door and told my student to unlatch their door. I then turned base and added flaps as necessary. Upon turning final we had the field made and I made a call to ZZZ Approach and told them that we will be landing in a field and this would be our last call. I then turned the master switch off. I landed on a grass field that was approximately 2500 ft. long and used a soft field landing technique. Once we safely rolled to a stop we evacuated the airplane. There was no damage to the airplane and no injuries.

Synopsis

C172 flight instructor reported an engine failure in flight and a subsequent off field landing resulted in no injuries or damage to the aircraft.

Time / Day

Date : 202304

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Weather Elements / Visibility.Other

Ceiling.Single Value : 4000

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Climb

Route In Use : None

Airspace.Class D : ZZZ

Component

Aircraft Component : Fuel Tank

Aircraft Reference : X

Problem : Failed

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 6800

Experience.Flight Crew.Last 90 Days : 20

Experience.Flight Crew.Type : 800

ASRS Report Number.Accession Number : 1994807

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Communication Breakdown

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

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Flight Deck / Cabin / Aircraft Event : Smoke / Fire / Fumes / Odor
Anomaly.Flight Deck / Cabin / Aircraft Event : Illness / Injury
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Fuel Issue
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Maintenance Action
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition

Assessments

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

Narrative: 1

On or about Day 0, I departed ZZZ in a C172 with a student working on his instructor rating. Shortly after takeoff we smelled raw fuel fumes and returned for a landing. The scent of the fumes got stronger in our descent. The student asked me to land. On the ground he told me he got a migraine headache from the fumes. It appeared he was incapacitated from the fumes. If he was by himself this could have been deadly. The plane was withdrawn from service and the fuel tank sent to a welding shop. Apparently the filler tube developed a crack where it is welded to the gas tank. We were lucky that there was no fire or explosion, as in Aircraft Y. This was the second time this year that this fuel tank leaked. Last [eight or nine months ago] I refused to fly the plane after smelling fumes on another training/demonstration flight. The plane continued to be operated by other instructors and students, despite my emailed warnings to them, until it was pulled from service for its 100-hour inspection. The fuel tank was apparently sent to a welding shop for repair. I spoke with another Aircraft Inspector who works for a different school and was told that this was a common problem in their Cessna aircraft. This Inspector believes the problem is caused by the fuelers letting the fuel nozzle apply too much force on the filler neck. Our Inspector/Director of Maintenance thinks is caused by the fuel tank walls or top flexing, and causing stress cracks where the nozzle is welded. Person A at Company confirmed that a lot of Cessna fuel tanks have cracks where the filler neck joins the top of the tank. They seem to think it is from the fuelers letting the nozzles put too much pressure on the filler necks. However, they said the top of the tanks also develop cracks. The Cessna leaking fuel tanks appear to be a systemic problem and it is inconceivable that the FAA is unaware of the problem and obscene that there have been no ADs issued to warn pilots to have mandatory fuel tank inspections [and] ground the aircraft anytime there is the smell of fuel in the cockpit or fuel stains behind the filler caps or under the wing above the door. Some operators have taken the step of not filling the fuel tanks to the top. However, in a descent, there will be fuel behind and consequently above the filler neck to create a pressure head to drive fuel through the crack in the neck weld. Partially

filling a tank with a known leak should be considered operating an aircraft in a reckless manner and consequent violation of FAR 91.13.

Synopsis

C172 Flight Instructor reported smelling strong fuel fumes in the cockpit during a training flight. The flight crew performed an air turnback with the Flight Instructor assuming control as the Student Pilot was affected by the fumes. Maintenance found the aircraft's filler tube developed a crack in the area welded to the gas tank.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 180

Relative Position.Distance.Nautical Miles : 1

Altitude.MSL.Single Value : 2000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

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 : Descent

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

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

Crew Size.Number Of Crew : 1

Flight Phase : Descent

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

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 : 618

Experience.Flight Crew.Last 90 Days : 38

Experience.Flight Crew.Type : 610

ASRS Report Number.Accession Number : 1994802

Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

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 : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

My student and I were coming into land Runway XX at ZZZ in Aircraft X, approaching from the North at 2,000 feet. I was making radio calls every 2 miles informing the CTAF of my position and intentions. I was using my portable ADS-B as well as visual scanning for traffic avoidance and saw that Aircraft Y was entering the traffic pattern on left downwind for XX from the south at 1,400 ft. MSL (Traffic Pattern Altitude), they were making appropriate position reports on CTAF. At this time I was at 2,000 feet MSL over the field maneuvering for the teardrop procedure to enter the left downwind for XX after Aircraft Y. There was another plane following Aircraft Y called Aircraft Z from the south at 1,700 ft. MSL as well who was not talking on the CTAF. I instructed my student to make a climbing right turn to 2,500 ft. MSL to avoid a head on collision with Aircraft Z, as we were within 300 ft. vertically due to them being too high while entering the traffic pattern (if we continued at that heading and altitude). After Aircraft Y entered the left downwind for XX, Aircraft Z entered the right downwind for [Runway] XY. I informed Aircraft Y that there was opposite traffic in the pattern. Once Aircraft Z entered final for XY they came on the radio frequency apologizing that they hadn't been on the correct frequency. I informed them they were operating on the opposite pattern and that left pattern turns are standard at ZZZ. At this time Aircraft Y was on final for XX. At this point I (Aircraft X) am 2 miles south beginning to turn back to the airport for the left downwind for XX. Another plane (I don't remember their tail number) followed me into the left downwind for XX. Once Aircraft Z realized they were on the opposite pattern they flew at 300 ft. AGL while sidestepping Runway XY to the left and climbing, they informed us they were going to fly and extend right downwind for XX to allow me (Aircraft X) to land. At that point I was established on left downwind for XX. My student continued their visual approach to land, we made a go around decision on final because our approach became unstabilized due to time and focus diverted to avoid Aircraft Z maneuvering in a non-standard fashion. I believe this issue was caused by Aircraft Z nonstandard entry to ZZZ pattern in combination with lack of radio communications, and loss of situational awareness for other aircraft in the terminal area, creating an unsafe environment for all aircraft involved.

Synopsis

Flight Instructor reported a NMAC in the traffic pattern and taking evasive action to avoid another aircraft who entered in the opposite direction pattern.

Time / Day

Date : 202304

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 290

Relative Position.Distance.Nautical Miles : 3

Altitude.MSL.Single Value : 2300

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

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 : Climb

Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y

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

Flight Phase : Descent

Airspace.Class D : 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 : 800

Experience.Flight Crew.Last 90 Days : 80

Experience.Flight Crew.Type : 600

ASRS Report Number.Accession Number : 1994797

Human Factors : Communication Breakdown

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 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 : Procedure
Primary Problem : Procedure

Narrative: 1

While on a training flight my student and I did one touch and go at ZZZ. After a successful touch and go I advised tower we would like to depart the airspace out the west. Tower approved our turn out to the west and said frequency change approved. While still in ZZZ airspace I noticed another aircraft approaching us on my iphone via foreflight. The target seemed to be moving fast in our direction about a minute later the target turn red and stated it was at our altitude. I then switched back over to tower and looked over the right wing to find Aircraft Y is at an attitude about 200-500 feet away. We were still in ZZZ airspace and received no warning but the potential conflict. If I was not tracking traffic on my iphone this could have been a midair. Aircraft Y looked like it was on a final course for the localizer for ZZZ1 airport their gear was in the down position.

Synopsis

C172 Flight Instructor reported ATC failed to report traffic which resulted in a NMAC.

Time / Day

Date : 202304

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 300

Altitude.MSL.Single Value : 1500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Ceiling : CLR

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 : VFR

Mission : Training

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

Aircraft Operator : Personal

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Descent

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

Experience.Flight Crew.Total : 340

Experience.Flight Crew.Last 90 Days : 30

Experience.Flight Crew.Type : 190

ASRS Report Number.Accession Number : 1994540

Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC

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

Detector.Person : Flight Crew

Miss Distance.Horizontal : 0

Miss Distance.Vertical : 300

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Pilot in a Aircraft Y did not have situational awareness and came onto downwind traffic (Aircraft X). Let Aircraft X continue on and maneuvered to clear the area and avoided further traffic. The pilot of the Aircraft Y was not at traffic pattern altitude when he came down on top of Aircraft X. No collision but close for sure.

Synopsis

Flight Instructor reported an aircraft descended in the traffic pattern, unaware of the aircraft below which resulted in a NMAC.

Time / Day

Date : 202304

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 0

Relative Position.Distance.Nautical Miles : 0

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

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 : Landing

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Student

Experience.Flight Crew.Total : 24

Experience.Flight Crew.Last 90 Days : 23

Experience.Flight Crew.Type : 24

ASRS Report Number.Accession Number : 1994504

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Person : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization.Other

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 438

Experience.Flight Crew.Last 90 Days : 90
Experience.Flight Crew.Type : 354
ASRS Report Number.Accession Number : 1994519
Human Factors : Workload
Human Factors : Training / Qualification
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Ground Event / Encounter : Object
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Aircraft : Aircraft Damaged

Assessments

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

Narrative: 1

At ZZZ the Instructor and I (student) were doing touch and go's on Runway XX. We felt a small tailwind, so we switched to Runway YY. The first landing on YY we floated quite a bit. I added some power to the aircraft to help with a smooth landing. Once I took out the extra power the plane dropped due to having a low speed. We bounced upon landing and drifted to the left quickly. We decided to go around and added full power. The plane struggled to gain altitude and the left side of the elevator struck two runway lights before starting to climb again. We landed for a full stop after to get out and inspect the plane. We found a 5 to 6 inch dent and paint chipped on the elevator. We immediately flew back to ZZZ1, our home airport. The plane performed as normal on the trip back.

Narrative: 2

My student and I were practicing landings at ZZZ. We were on final approach to land on Runway YY, and right before touchdown the plane began to float. In response, my student added power to soften the touchdown but quickly took the power back out. As a result we landed and bounced on the runway. After bouncing, the aircraft quickly drifted to the left side of the runway. We then added full power to attempt a go-around, however the aircraft was still low and on the far left side of the runway. As a result, we struck two runway lights on the left side of Runway YY at ZZZ before gaining sufficient altitude. We continued to climb and continued to stay in the traffic pattern for Runway XX at ZZZ. After completing the additional lap in the pattern we stopped to get out and assess the damage. Upon inspection I found about a 6 inch dent on the left side of the elevator of the aircraft. I deemed the aircraft still flyable, so we departed ZZZ and returned to our home airport of ZZZ1 where we could get the necessary maintenance. As the instructor, I believe that I should have been quicker to respond to the student's deviation of center line and taken corrective action sooner so that we could have avoided causing damage to the airport and

aircraft. I also believe that I should have stayed grounded at ZZZ after assessing the damage, rather than returning back to our home airport of ZZZ1.

Synopsis

C172 student pilot and their instructor reported the student temporarily lost control of the aircraft while landing resulting in a bounced landing, runway excursion and ground strike causing minor damage.

Time / Day

Date : 202304

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 300

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 : FBO

Make Model Name : Cessna 150

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

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 : Landing

Route In Use : Visual Approach

Airspace.Class E : ZZZ

Aircraft : 3

Reference : Z

ATC / Advisory.CTAF : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class E : ZZZ

Person

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Student
Experience.Flight Crew.Last 90 Days : 20
Experience.Flight Crew.Type : 71
ASRS Report Number.Accession Number : 1994492
Human Factors : Communication Breakdown
Human Factors : Training / Qualification
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Other

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 220
Miss Distance.Vertical : 200
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Aircraft X was about 200 feet, heading 050 speed 65-ish approaching Runway XX to land. At the same time, Aircraft Z made an abrupt heading change and discontinued descending for landing, slowing his descent rate to -98 FPM. 16 second later he is climbing at 500FPM and made a turn to 350 heading from the base turn. Aircraft Y then made a very non-standard turn out of traffic to a heading of N NW without a radio call and departed ZZZ. Also, Aircraft Z was in the traffic pattern and heard the conversation from Aircraft Y and when seeing the aircraft again was able to snap a photo of it.

Synopsis

Student pilot reported a NMAC with another training aircraft at non-towered airport on final approach when another aircraft made a non-standard turn without a radio call.

Time / Day

Date : 202304

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 15

Light : Daylight

Ceiling.Single Value : 30000

Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : 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 : None

Mission : Training

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.UNICOM : ZZZ

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Airspace.Class G : ZZZ

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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 2000

Experience.Flight Crew.Last 90 Days : 200

Experience.Flight Crew.Type : 1500

ASRS Report Number.Accession Number : 1994192

Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Human Factors : Confusion
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Vertical : 200
When Detected : In-flight

Assessments

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

Narrative: 1

I was instructing a private pilot on use of the G1000 and autopilot of this aircraft. We were making the visual approach for ZZZ Runway XX. We were about 3- to 4-mile final after completing a left 360 for traffic spacing as there were multiple aircraft in the pattern. When I looked down off the starboard side and saw an aircraft fly under me, it was confusing on how he got there because everyone in the traffic pattern was on communications with us. On the ground the pilot of the other aircraft wanted to start a fight. Luckily cooler heads prevailed.

Synopsis

C172 Flight Instructor reported while on final approach saw an aircraft flying beneath in close proximity while conducting training at a non-towered airport.