

ASRS Database Report Set

General Aviation Flight Training Incidents

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

Update Number.....30.0

Date of UpdateApril 28, 2018

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

Number of New Records in Report Set50

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

National Aeronautics and
Space Administration

Ames Research Center
Moffett Field, CA 94035-1000



TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

Linda J. Connell

Linda J. Connell, Director
NASA Aviation Safety Reporting System

CAVEAT REGARDING USE OF ASRS DATA

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

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

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

Report Synopses

ACN: 1516305 *(1 of 50)*

Synopsis

PA28 flight instructor landing at O88 airport reported observing a RC aircraft apparently operating outside of the charted parameters associated with the RC operations area.

ACN: 1516263 *(2 of 50)*

Synopsis

DA-20 flight instructor reported a NMAC while performing a go-around at FFC with an RV performing an overhead approach.

ACN: 1515155 *(3 of 50)*

Synopsis

C172 flight instructor reported encountering ice and an altitude deviation during descent with turbulence.

ACN: 1515147 *(4 of 50)*

Synopsis

General aviation flight instructor reported a loss of engine power that resulted in a diversion to a nearby airport.

ACN: 1515139 *(5 of 50)*

Synopsis

C172 pilot reported contacting a runway edge light and rejecting takeoff due to misaligning on the runway.

ACN: 1514618 *(6 of 50)*

Synopsis

R22 Flight Instructor reported a precautionary off field land due to unanticipated contact with instrument weather conditions while operating a VFR helicopter.

ACN: 1514593 *(7 of 50)*

Synopsis

General aviation flight instructor reported noticing a crane rising to approximately 1,000 FT AGL in the vicinity of CPT airport that is not mentioned in the NOTAMs.

ACN: 1513807 *(8 of 50)*

Synopsis

Flight Instructor reported that his student flying a C172 solo encountered freezing rain weather shortly after takeoff.

ACN: 1513297 *(9 of 50)*

Synopsis

C172 flight instructor reported a NMAC with an aircraft that was not transmitting intentions on the CTAF frequency.

ACN: 1512955 *(10 of 50)*

Synopsis

C172 flight instructor reported a NMAC with a DA40 that was not transmitting intentions or following proper procedure.

ACN: 1512149 *(11 of 50)*

Synopsis

BE76 pilot reported the nose gear failed to extend. After considerable effort troubleshooting, the pilot landed without the nose gear extended.

ACN: 1511595 *(12 of 50)*

Synopsis

A C150 pilot reported a TRACON controller improperly applied JO7110.65, 4-2-8(d), procedure. This misapplication caused aircraft to not be provided terrain and obstacle clearance.

ACN: 1511572 *(13 of 50)*

Synopsis

A PA28-200 Pilot reported that during approach the landing gear did not indicate it was down and locked.

ACN: 1511498 *(14 of 50)*

Synopsis

C172 student pilot reported the trailing edge flaps were damaged during retraction perhaps due to the motor and the tracking system losing synchronization.

ACN: 1511487 *(15 of 50)*

Synopsis

GA flight instructor reported a near midair collision in the pattern at LVK.

ACN: 1511474 *(16 of 50)*

Synopsis

Citabria flight instructor and trainee reported difficulty maintaining control during the takeoff roll.

ACN: 1511273 *(17 of 50)*

Synopsis

SR20 Flight Instructor reported a rejected takeoff after a student lost directional control.

ACN: 1510785 *(18 of 50)*

Synopsis

GA pilot reported that two other aircraft in the pattern were using improper and unsafe non-towered airport practices.

ACN: 1510762 *(19 of 50)*

Synopsis

DA40 pilot reported that confusing instructions from Ground Control resulted in a runway incursion.

ACN: 1510308 *(20 of 50)*

Synopsis

GA flight instructor reported severe engine roughness after takeoff that resulted in a return to the departure airport.

ACN: 1510306 *(21 of 50)*

Synopsis

PA28R Flight Instructor reported engine roughness that resulted in the engine being unresponsive after landing.

ACN: 1509991 *(22 of 50)*

Synopsis

Cessna 180 pilot reported a runway excursion while landing on a snowy Runway 28 at PCZ.

ACN: 1509426 *(23 of 50)*

Synopsis

Bonanza 33 flight instructor reported taking evasive action after ATC failed to notify them of traffic for a parallel runway.

ACN: 1509104 *(24 of 50)*

Synopsis

Student Pilot reported a runway excursion following a crosswind landing.

ACN: 1509079 *(25 of 50)*

Synopsis

AA-5B Flight Instructor reported a flap asymmetry condition in flight.

ACN: 1509055 *(26 of 50)*

Synopsis

PA-44 Flight Instructor reported a landing gear indication issue that ultimately led to a gear collapse on landing.

ACN: 1508840 *(27 of 50)*

Synopsis

A Cessna 172RG instructor pilot reported the failure of the landing gear to extend normally. After a series of unsuccessful maneuvers to extend the gear, a decision was made to land with the landing gear partially retracted.

ACN: 1508596 *(28 of 50)*

Synopsis

GA pilot reported an airborne conflict during a training flight near DMW.

ACN: 1508253 *(29 of 50)*

Synopsis

Aeronca 7AC pilot reported a gust of wind caused a loss of directional control on the ground, resulting in some damage to the aircraft.

ACN: 1508242 *(30 of 50)*

Synopsis

Flight instructor reported student's loss of directional control on landing resulted in runway excursion, with no aircraft damage.

ACN: 1508202 *(31 of 50)*

Synopsis

C172 Flight Instructor reported a runway excursion following a crosswind landing and an attempted go around.

ACN: 1506713 *(32 of 50)*

Synopsis

PA28 pilot reported that the Course Deviation Indicator (CDI), failed after capturing the glideslope during an instrument approach.

ACN: 1505663 *(33 of 50)*

Synopsis

C-150 student pilot made an off-airport landing due to an unresponsive throttle.

ACN: 1504703 *(34 of 50)*

Synopsis

PA-28 flight instructor reported holding at the end of the runway while another pilot landed due to lack of a taxiway at the non-towered airport.

ACN: 1504682 *(35 of 50)*

Synopsis

Student pilot reported landing on a taxiway due to several distractions.

ACN: 1504154 *(36 of 50)*

Synopsis

PA-28 flight instructor reported a throttle malfunction that prevent the power from being reduced.

ACN: 1503520 *(37 of 50)*

Synopsis

PA-44 student pilot and flight instructor reported an aborted takeoff due to a brake system malfunction.

ACN: 1503235 *(38 of 50)*

Synopsis

Cessna 172 flight instructor reported a partial loss of power immediately after takeoff resulting in a return to the departure airport.

ACN: 1502812 *(39 of 50)*

Synopsis

GA Flight Instructor reported an airborne conflict while on downwind.

ACN: 1502289 *(40 of 50)*

Synopsis

PA28 student pilot reported a loss of control during takeoff that resulted in a runway excursion.

ACN: 1502261 *(41 of 50)*

Synopsis

C172 instructor pilot reported an altitude deviation and NMAC after the student pilot inadvertently climbed above the assigned altitude.

ACN: 1502069 *(42 of 50)*

Synopsis

C172 Flight Instructor reported a runway excursion following a crosswind landing.

ACN: 1502037 *(43 of 50)*

Synopsis

A C172 student pilot lost control after landing and departed the runway.

ACN: 1502012 *(44 of 50)*

Synopsis

Cirrus SR20 instructor pilot reported experiencing engine vibrations and high cylinder temperature on one cylinder during a training flight. Shortly after, the engine began to lose power and they returned to their departure airport.

ACN: 1501117 *(45 of 50)*

Synopsis

C172 flight instructor reported a NMAC with a UAV at 6500 in the vicinity of LAS airport.

ACN: 1501115 *(46 of 50)*

Synopsis

DA-42 flight crew reported a runway excursion during a simulated engine failure on takeoff.

ACN: 1501114 *(47 of 50)*

Synopsis

C172 flight instructor reported an NMAC after departing AAO.

ACN: 1500050 *(48 of 50)*

Synopsis

A Check Airman in a Cessna 172 reported that when as they started to cross a runway, a helicopter flew at low level in front of them causing a near miss.

ACN: 1499761 *(49 of 50)*

Synopsis

An American Champion Decathlon pilot reported inadvertently entering a spin condition while performing aerobatic maneuvers. A successful spin recovery was accomplished.

ACN: 1499339 *(50 of 50)*

Synopsis

A Cessna 172 Pilot reported that when the airplane was taxied and the brakes were equally applied, the airplane pulled to the left.

Report Narratives

Time / Day

Date : 201802
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : O88.Airport
State Reference : CA
Relative Position.Angle.Radial : 070
Relative Position.Distance.Nautical Miles : 10
Altitude.MSL.Single Value : 1400

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 8000

Aircraft : 1

Reference : X
ATC / Advisory.CTAF : O88
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 : Final Approach
Route In Use : Visual Approach
Airspace.Class E : O88

Aircraft : 2

Reference : Y
Aircraft Operator : Personal
Make Model Name : UAV - Unpiloted Aerial Vehicle
Operating Under FAR Part.Other
Mission : Personal
Flight Phase : Cruise
Airspace.Class E : O88

Person

Reference : 1
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 : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 2900
Experience.Flight Crew.Last 90 Days : 65
Experience.Flight Crew.Type : 2000
ASRS Report Number.Accession Number : 1516305
Human Factors : Situational Awareness

Events

Anomaly.Conflict : Airborne Conflict
Detector.Person : Flight Crew
Miss Distance.Horizontal : 5000
Miss Distance.Vertical : 800
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

While inbound to land at Rio Vista Airport in VMC, my student pilot and I were setting up to approach runway 7 at the 45 degree entry angle to the downwind leg. I had just completed the landing checklist and a 10 NM advisory radio transmission on CTAF 122.725. My attention was immediately drawn to a large RC aircraft making aerobatic maneuvers directly in front of my aircraft approximately 800 feet below my flight path and was operating WELL above the 400 ft UAS flight altitude restriction. I was alarmed to see the aircraft at this altitude and recognized flight at this altitude by (UAS) is prohibited by the FAA. I did NOT have to make any evasive action. However, I continued my concern about the RA aircraft and where it was headed so I could avoid evasive action or collision. Both I and my student saw the aircraft initially but we did NOT see the aircraft again. The flight terminated at Rio Vista Airport (O88) without any further incident.

After landing I researched information via the internet. There is a Remote-Controlled Airport near Isleton, Ca. In conclusion, it is my opinion the RC aircraft I witnessed exceeding the FAA altitude prohibition was operating from this location.

Synopsis

PA28 flight instructor landing at O88 airport reported observing a RC aircraft apparently operating outside of the charted parameters associated with the RC operations area.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : FFC.Airport

State Reference : GA

Altitude.AGL.Single Value : 600

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : FFC

Aircraft Operator : FBO

Make Model Name : DA20-C1 Eclipse

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Initial Climb

Airspace.Class G : FFC

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : FFC

Aircraft Operator : Personal

Make Model Name : Vans Aircraft Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Initial Approach

Airspace.Class G : FFC

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 1082

Experience.Flight Crew.Last 90 Days : 205

Experience.Flight Crew.Type : 289
ASRS Report Number.Accession Number : 1516263
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Detector.Automation : Aircraft RA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 400
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

I had the student perform a go-around from an aborted short field landing. On climb out, the Lynx ADS-B warned of traffic 400 feet above and slightly behind our aircraft. I was unsure if this was an anomaly until the traffic began a right hand turn. I looked out the window to see a yellow/blue RV doing an overhead break maneuver. Had my aircraft not had the Lynx installed, we would have climbed right into the initial overhead traffic. I never heard the RV make any radio calls on CTAF.

In the past, when asked over the radio why the RVs perform this maneuver their response is "It's in the AIM." AIM 5-4-27 describes the overhead approach maneuver as an IFR recover in VMC, developed at airports where aircraft have the operational need to conduct the maneuver. In my opinion, the FSDO should visit the airfield to observe the RVs performing this maneuver to see how much it negatively impacts the safe operations of aircraft in the AIM recommended traffic pattern.

Synopsis

DA-20 flight instructor reported a NMAC while performing a go-around at FFC with an RV performing an overhead approach.

Time / Day

Date : 201801

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : IMC
Weather Elements / Visibility : Thunderstorm
Weather Elements / Visibility : Icing
Weather Elements / Visibility : Turbulence
Weather Elements / Visibility.Visibility : 0
Light : Daylight
Ceiling.Single Value : 3000

Aircraft

Reference : X
ATC / Advisory.TRACON : 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 : IFR
Mission : Training
Flight Phase : Descent
Route In Use : Vectors
Airspace.Class E : ZZZ

Person

Reference : 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 : Instrument
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 1460
Experience.Flight Crew.Last 90 Days : 120
Experience.Flight Crew.Type : 200
ASRS Report Number.Accession Number : 1515155

Events

Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence

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

Assessments

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

Narrative: 1

After picking up ice we made the decision to descend. As we descended we passed through moderate turbulence. As this happened I was working on regaining control of the airplane wings level. This caused us to sink an extra 300 feet from 3,000. I promptly recovered by adding power and climbing.

Synopsis

C172 flight instructor reported encountering ice and an altitude deviation during descent with turbulence.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 8500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 25000

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : M-20 B/C Ranger

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Training

Flight Phase : Descent

Route In Use : Direct

Airspace.Class E : ZZZ

Component : 1

Aircraft Component : Engine

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Carburetor Heat Control

Aircraft Reference : X

Problem : Malfunctioning

Component : 3

Aircraft Component : Carburetor

Aircraft Reference : X

Problem : Improperly Operated

Person

Reference : 1

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 : Multiengine
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 1177
Experience.Flight Crew.Last 90 Days : 133
Experience.Flight Crew.Type : 14
ASRS Report Number.Accession Number : 1515147
Analyst Callback : Completed

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Fuel tanks were topped off and the appropriate preflight checklist was completed prior to flight, with an expected endurance of approximately 4 and a half hours. At the time of run-up prior to flight, the appropriate checklist was followed and all systems appeared to be nominal. During enroute flight all systems appeared to be operating in a nominal condition. We began a descent completing the appropriate checklist. We flew approximately two and a half hours before a sudden loss of engine power was experienced. Subsequently, the appropriate emergency checklist was completed and air traffic control [was advised]. A diversion was made to ZZZ airport, and a forced landing was successfully executed at the airport with no damage or injuries. Student and I exercised CRM throughout the flight.

Callback: 1

Reporter added that water was found inside the carburetor and determined to be from carburetor ice. The carburetor heat system was also found to be malfunctioning.

Synopsis

General aviation flight instructor reported a loss of engine power that resulted in a diversion to a nearby airport.

Time / Day

Date : 201801

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Night

Ceiling.Single Value : 17000

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 : VFR

Mission : Training

Flight Phase : Takeoff

Route In Use : None

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

ASRS Report Number.Accession Number : 1515139

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Object

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Became Reoriented

Result.Flight Crew : Rejected Takeoff

Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

Contributing Factors / Situations : Aircraft

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

About to launch on an IFR instrument practice flight. Cleared to take off from [an intersection]. Taxied on to the runway and initiated the takeoff roll. I somehow confused the runway edge lights with the center light. Corrective action was initiated too late and as a result, I hit one runway edge light with the left side wheel fairing. Aborted the takeoff and notified the tower. Exited the runway on Golf, informed ground to remove debris from the wheel fairing from the runway and taxied back to the hangar. A combination of the landing light on the aircraft just died, I had not flown in the Cessna for a number of months, nor had I practiced IFR in a number of months were the factors leading up to the event.

Synopsis

C172 pilot reported contacting a runway edge light and rejecting takeoff due to misaligning on the runway.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 400

Environment

Weather Elements / Visibility : Fog

Weather Elements / Visibility.Visibility : 2

Ceiling.Single Value : 500

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : Robinson R22

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Takeoff

Route In Use : None

Person

Reference : 1

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 : Rotorcraft

Experience.Flight Crew.Total : 450

Experience.Flight Crew.Last 90 Days : 100

Experience.Flight Crew.Type : 410

ASRS Report Number.Accession Number : 1514618

Human Factors : Distraction

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Deviation - Procedural : FAR

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : VFR In IMC

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Landed As Precaution

Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Weather

Contributing Factors / Situations : Human Factors

Primary Problem : Weather

Narrative: 1

I decided to take a student to fly out to practice area to practice some approaches and hover work. We took off after pre-flight, VFR condition with 6000 ceiling and 10 SM Vis, wind was 050 at 6, temp 48, dew point 40, relative humidity rate 73% at ZZZ at the time we took off [approximately one hour before sunset]. I was wearing winter clothes but not the student, we both wore the life vest though. After about 50 minutes flight, I demonstrated an approach to the student then gave him control to take off, at 300 AGL before turning crosswind, I looked around for traffic and noticed fog/low clouds approaching us from the east, I said to the student the weather just turned bad, we have to return to the airport, and the next second visibility around us just dropped drastically. I took over the control from the student and turned towards the airport, about 1 minute later the visibility dropped to about 1 mile and I made a precaution landing to an empty field, 4NM southeast of the airport.

I didn't make the call to [advise the] tower in flight or report the precautionary landing due to the landing itself was pretty stressful as I was trying to confirm nobody was on the field and watch out for poles and wires in the low visibility. I called the tower after we shut down the helicopter.

Based on the TAF report published [six hours earlier], there was going to be temporary drizzle and mist, with ceiling drop to 2500 and VIS drop to 4~5 SM. I decided to go out of the airport anyway thought the 7 NM distance would allow us to return in case the weather turns bad, which turn out to be the cause of us flying into that dangerous situation way below my personal minimums. It's a VFR trainer R-22 without attitude indicator or any gyro instrument.

Synopsis

R22 Flight Instructor reported a precautionary off field land due to unanticipated contact with instrument weather conditions while operating a VFR helicopter.

Time / Day

Date : 201801
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : CPT.Airport
State Reference : TX
Relative Position.Angle.Radial : 335
Relative Position.Distance.Nautical Miles : 1
Altitude.MSL.Single Value : 700

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 4
Light : Daylight
Ceiling.Single Value : 700

Aircraft

Reference : X
ATC / Advisory.CTAF : CPT
Aircraft Operator : Personal
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Final Approach
Route In Use.Other
Airspace.Class G : CPT

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 1479
Experience.Flight Crew.Last 90 Days : 111
Experience.Flight Crew.Type : 310
ASRS Report Number.Accession Number : 1514593

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew

When Detected : In-flight
Result.Air Traffic Control : Issued New Clearance

Assessments

Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

I was conducting IFR training with a student today at the Cleburne, TX Airport (CPT). We were cleared for the RNAV Runway 15 approach, and upon breaking out of the overcast layer at 700 AGL on descent, we noticed there was a very large construction crane approximately 1/2 mile east/southeast of the airport.

I had done an extensive briefing for this flight with my student and had not noted any obstruction NOTAMs for this airport. This construction crane rises to approximately 1,000 [AGL] or 1,100 MSL. It is located due east, nearly abeam the numbers of Runway 33 at approximately 1/2 mile from the field. The only signal I noted on the crane was a difficult-to-see red and white flag.

As this was a training flight, we had received alternate climbout instructions from the Approach Controller at my request. The climbout instructions were to enter controlled airspace heading 090 and to maintain 3,000. Because the first 700 AGL of this area is Class G airspace, we continued on runway heading until we could verify we would clear the crane before turning out to the east.

I tried calling the FAA Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) office, but with no response there I called the airport, they informed me there should have been an active NOTAM for that crane. [They] informed me that [they] had no ability to put out an obstruction NOTAM [themselves], since these are handled by the OE/AAA office.

I would recommend a future enhancement to the NOTAM system which permits pilots and airport managers to report these issues in a more timely fashion. There are widespread IFR conditions across this area that are expected to last well into the weekend, and this crane poses an imminent threat to safety around the CPT airport.

Synopsis

General aviation flight instructor reported noticing a crane rising to approximately 1,000 FT AGL in the vicinity of CPT airport that is not mentioned in the NOTAMs.

Time / Day

Date : 201712
Local Time Of Day : 0601-1200

Place

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

Environment

Weather Elements / Visibility : Icing
Weather Elements / Visibility : Rain
Weather Elements / Visibility.Visibility : 6
Ceiling.Single Value : 4500

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 : Initial Climb
Flight Phase : Takeoff
Route In Use : None
Airspace.Class D : ZZZ

Person

Reference : 1
Location Of Person : Company
Reporter Organization : Personal
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 4650
Experience.Flight Crew.Last 90 Days : 60
Experience.Flight Crew.Type : 670
ASRS Report Number.Accession Number : 1513807
Human Factors : Situational Awareness
Human Factors : Training / Qualification

Events

Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Inflight Event / Encounter : Weather / Turbulence

Anomaly.Inflight Event / Encounter : VFR In IMC
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Weather
Primary Problem : Weather

Narrative: 1

My student (Private Pilot candidate) was on a solo flight to do practice landings. Both METAR and TAF for ZZZ, and METAR for Destination Airport showed ceiling and visibility well above minimums specified in Solo Endorsement. No rain or freezing precipitation was forecast. According to the student: Shortly after departure, freezing rain began at approximately 2500 MSL, partially obscuring forward vision. Student requested ZZZ tower for vectors to return for landing. Vectors were given and clearance to land issued. Student attempted to land twice without success, due to loss of visual contact with the runway. On the third attempt, student landed successfully with no damage or injuries. After learning of the occurrence, the student and I reviewed the events to try to figure out how to avoid similar events in the future. I initiated additional weather and preflight training with the student, which was well received. I was informed that during the three landing attempts, a pilot deviation may have occurred. I am immediately filing report after learning that a pilot deviation may have occurred.

Synopsis

Flight Instructor reported that his student flying a C172 solo encountered freezing rain weather shortly after takeoff.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1200

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Initial Approach

Route In Use : None

Airspace.Class E : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Government

Make Model Name : Helicopter

Operating Under FAR Part : Part 91

Flight Phase : Initial Approach

Airspace.Class E : ZZZ

Aircraft : 3

Reference : Z

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Operating Under FAR Part : Part 91

Flight Phase : Initial Approach

Airspace.Class E : ZZZ

Person

Reference : 1

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 : Multiengine
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 825
Experience.Flight Crew.Last 90 Days : 200
Experience.Flight Crew.Type : 400
ASRS Report Number.Accession Number : 1513297
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - 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
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1

During pattern training for a pre-solo student we were on short final for Runway XX. The winds were favoring that runway, although they were mostly crosswind. A government helicopter was also in the traffic pattern and had just completed a practice ILS to the opposing runway. They had broken off their approach at 1000 feet and entered the right downwind for Runway XX.

The government helicopter alerted us that there was an aircraft on the left downwind to [the opposite direction] runway and they weren't talking to anyone. Prior to that radio call to us, the helicopter had made a call to that aircraft asking their intentions. There was no response. As we did our touch and go (with the correct radio calls) we noticed that this aircraft had turned to a base leg on Runway YY and would be a traffic conflict with the government helicopter, now on a final to Runway XX. We alerted the helicopter and they made a landing on the adjacent taxiway intersection. We had made our crosswind turn early in order to avoid the aircraft.

At some point between then and us entering the downwind for Runway XX, the helicopter called us on the radio to let us know that the aircraft was traveling fast on a new downwind for Runway XX and would be a traffic conflict with us. I took the flight controls and elected for a 360 on the downwind in order to provide this faster aircraft some space. During the 360, we saw the aircraft approaching us rapidly and had to take evasive action to avoid him. We are not sure if this aircraft knew we were on the downwind, or even in his or her vicinity. The aircraft made a full stop taxi back at ZZZ and then departed for presumably their home field.

Synopsis

C172 flight instructor reported a NMAC with an aircraft that was not transmitting intentions on the CTAF frequency.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3500

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Initial Approach

Aircraft : 2

Reference : Y

Aircraft Operator : FBO

Make Model Name : DA40 Diamond Star

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Passenger

Flight Phase : Initial Approach

Person

Reference : 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 : Flight Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 492

Experience.Flight Crew.Last 90 Days : 120

Experience.Flight Crew.Type : 350

ASRS Report Number.Accession Number : 1512955

Human Factors : Communication Breakdown

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

Events

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

Assessments

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

Narrative: 1

I was flying with student in a C172. We headed toward [home airport], I made the top of stack request 10 miles north. 3500 was taken, 4000 was open and there was a GPS hold at 4500. I made my call to take 4000 ft in 7 minutes. I was following the published procedures.

As we got closer 3500 feet became open. I made the announcement to take 3500. Crossed the VOR, tear drop entry, made outbound call, turned inbound. Student told me he was turning inbound. I made the procedure turn inbound call for the ILS.

As we got closer to the VOR, another plane came up from beneath us and almost caused a midair. The DA40 passed inches beneath us. I was able to increase the AOA just enough to get us out the way. As the wake passed I had a moment of doubt as [to] whether or not there was contact on the main gear - I believe that although we did not make contact we were inches from contact. I was able to see (all be it briefly) the two pilots in the cockpit.

I made an announcement on frequency that there was a plane in the stack that was not talking of frequency, they replied saying they had made intention to take 3500 in 1 minute. That however is not the procedure and I did not hear this call. The student was able to verify that he heard nothing. The other plane then made his procedure call over the VOR. This is when I was able to take down the tail number.

Synopsis

C172 flight instructor reported a NMAC with a DA40 that was not transmitting intentions or following proper procedure.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

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

Environment

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

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : Duchess 76
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Initial Approach
Airspace.Class D : ZZZ

Component

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 1219
ASRS Report Number.Accession Number : 1512149
Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Ground Event / Encounter : Ground Strike - Aircraft

Anomaly.Ground Event / Encounter : Gear Up Landing

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Maintenance Action

Result.Flight Crew : Landed in Emergency Condition

Result.Air Traffic Control : Provided Assistance

Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

When reaching 1 nm from the FAF, we went to lower the landing gear. When indicated two green lights for the main gears, no green light for the nose gear illuminated. We had the tower conduct a visual inspection of the gear and they confirmed that the nose gear was not extended. We proceeded to the practice area where we attempted to extend the gear through normal and emergency procedures. Unable to get the gear extended, we returned to circle the airport while emergency personnel arrived at the field. After exhausting all means, I decided to land without my nose gear extended. We were able to feather the propellers before touchdown. There were no injuries and minimal damage.

Synopsis

BE76 pilot reported the nose gear failed to extend. After considerable effort troubleshooting, the pilot landed without the nose gear extended.

Time / Day

Date : 201801
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : D10.TRACON
State Reference : TX
Altitude.MSL.Single Value : 2500

Environment

Flight Conditions : VMC
Weather Elements / Visibility.Visibility : 8
Light : Daylight
Ceiling.Single Value : 1000

Aircraft

Reference : X
ATC / Advisory.TRACON : D10
Aircraft Operator : Personal
Make Model Name : Cessna 150
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class E : D10

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 1450
Experience.Flight Crew.Last 90 Days : 90
Experience.Flight Crew.Type : 290
ASRS Report Number.Accession Number : 1511595
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

This report pertains to the "VFR-to-IFR Flights" section of the 7110.65, Section 4-2-8.

I was instructing a student in VFR conditions at ZZZ. Forecast overcast conditions were moving into the area, and our home base of ZZZ1 was reporting OVC010. I filed an IFR flight plan while at ZZZ, departed VFR, and requested an IFR clearance from D10 TRACON. The controller asked me if I could maintain my own terrain and obstruction clearance from my present altitude through 2,500 ft MSL. I accepted, noting that a large antenna complex with tops at 2,500 ft MSL was approximately 2 miles north. The controller advised me that upon reaching 2,500 to fly heading 250.

When I reached 2,500, I flew heading 250. The controller then asked me if I could maintain my own terrain and obstruction clearance for 3 more miles. Because I was local to the area and was familiar with the relevant obstructions, I accepted; however, this is still a misuse of Section 4-2-8 in the 7110.65. The 250 heading I was assigned was actually not sufficient to prevent the wind from drifting me into the antenna complex. As a result, when I accepted (for a second time) terrain and obstruction clearance, I made a left turn to about a 210 heading, which put me on a track that diverged from the antennas.

Had this procedure been applied to a non-local pilot, the controller would have essentially allowed a pilot to climb from VFR into IMC conditions near an antenna complex, with the false expectation that upon reaching the 2,500 ft altitude specified that he would no longer have responsibility for terrain and obstruction clearance. The problem is that by the time 2,500 ft was reached, we were much closer to the antenna complex than when we started the climb. Factoring in any delays in notifying a pilot that he needs to take back terrain and obstruction clearance responsibility when he is that close to the antennas, or any other factors, and this could cause a CFIT accident.

The simple solution is to follow the procedures already in the 7110.65. When asking pilots who are requesting an IFR clearance to maintain terrain and obstruction clearance from our present altitude through X altitude, "X" should be the minimum IFR altitude so that when we reach it, we know terrain and obstruction clearance responsibility goes back to and is retained by the controller. The idea that we can reach the altitude requested (in my case 2,500) and then be asked to again take back this responsibility, after flying an assigned heading no less, is not congruent with the procedures in the 7110.65 and is not

addressed anywhere in the AIM.

If what I propose means I get vectored across the localizer for the ILS 34 at GKY while climbing to the MVA/MIA, then so be it. I'd rather be vectored across a localizer for a few miles than not be at a sufficient altitude and have a CFIT.

Synopsis

A C150 pilot reported a TRACON controller improperly applied JO7110.65, 4-2-8(d), procedure. This misapplication caused aircraft to not be provided terrain and obstacle clearance.

Time / Day

Date : 201801
Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 1000

Environment

Flight Conditions : VMC
Light : Night

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : Personal
Make Model Name : PA-28R Cherokee Arrow All Series
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

Component

Aircraft Component : Gear Down Lock
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 820
Experience.Flight Crew.Last 90 Days : 22
Experience.Flight Crew.Type : 50
ASRS Report Number.Accession Number : 1511572
Human Factors : Time Pressure
Human Factors : Troubleshooting

Events

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

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

I wanted to maintain single engine currency and single engine night currency. With that in mind I booked the aircraft late in the day from the flying club and headed out after dark to the airport.

I arrived at the airport and proceeded to preflight the aircraft. Immediately I noticed frost on the wings, stabilizers, and windshield. I continued with the preflight making note to check that all the lights were operational; exterior, interior, and instrument lights.

After completing the preflight I walked over to the club's ready room to retrieve the canister of TKS fluid to spray down the aircraft. I returned, sprayed down the aircraft wings, horizontal stabilizer, windshield, and top of the fuselage after which I returned the spray can to the ready room and started up the engine.

Taxi, Runup, and takeoff proceed normally and I headed out to the practice area north of the field to allow myself time to familiarize myself with the aircraft and its handling capabilities. In the practice area I proceeded with slow flight and noted no issues with configuration. With slow flight complete I proceeded to execute an arrival stall after which I recovered. During recovery I raised the gear and the flaps and noted no abnormalities with the aircraft or its systems. I proceeded to do two steep turns before heading back to the airport.

Having been instructed to enter the pattern on the right downwind to [the] runway following an Archer on the left downwind. I programmed the GPS and began to configure the aircraft for arrival. Approximately midfield right downwind to [the] runway I lowered the gear and noticed that the left main gear light did not light up. I continued my approach and proceeded to swap out the lightbulbs to check if the bulb in question had simply burned out. Having swapped the bulbs and establishing that the bulb had not burned out proceeded to recycle the gear to no effect. At this stage I called the tower to indicate I had a possible failure of the left main landing gear and that I would like to do a low approach. In addition I asked the tower to take a look and see if they could make out if the left main gear was extended or not. The tower approved my request and indicated that it would be difficult to make out at night but they would do their best. In addition a rescue vehicle on frequency also called to indicate that they would look as well.

I flew the low approach keeping the aircraft slow and holding the left wing high as to expose the underbelly of the aircraft to both the tower and the rescue vehicle. Both reported that the gear appeared to be extended normally.

Upon hearing this I indicated I would like to return for a full stop landing but would extend the downwind as I trouble-shot the gear a bit more.

Having done the low approach and established that the gear was extended I proceeded not to recycle the gear. Instead I ran the emergency gear extension checklist which involved slowing the aircraft, pushing the emergency gear extension handle, and hoping for the best. This elicited no further response from the offending indicator. I then checked the Circuit Breakers all of which were in the normal position, I rechecked the light switches as well as cycled all the instrument lights, I skidded the aircraft to the left and right as well as one sharp pull up in an attempt to joggle the gear lock into place. This availed nothing. Finally, I indicated to tower that I was turning base and would attempt a full stop landing.

The tower indicated to me rescue vehicles were onsite and that I was cleared to land. I confirmed my clearance to land. I approached on speed and proceeded to land as softly as possible and to hold the left wing off the runway as long as aerodynamically possible. When the left main gear finally made contact with the runway there was a slight yaw into the wheel as well as an audible compression of the shock absorber on the left side of the aircraft. However the landing gear did not collapse.

The tower indicated to me to exit the runway to the left and I asked for a right 360 on the runway in an attempt to again engage the gear lock to prevent collapse on taxi back. The tower approved my request and I taxied back to the hangar without further event.

Upon shut down I immediately exited the aircraft and inspected the gear however I could not find any visible issues. The rescue vehicles that had followed me back from their station took my personal information including a copy of my certificate and medical as well as my phone number and indicated to me that the tower has their own process and that I could expect a phone call.

I then proceeded to call the manager of the club to let them know of the incident and put the aircraft back into the hangar and headed home.

Synopsis

A PA28-200 Pilot reported that during approach the landing gear did not indicate it was down and locked.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Cruise

Airspace.Class E : ZZz

Component

Aircraft Component : Trailing Edge Flap

Aircraft Reference : X

Problem : Failed

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Student

Experience.Flight Crew.Total : 83

Experience.Flight Crew.Type : 83

ASRS Report Number.Accession Number : 1511498

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Overcame Equipment Problem

Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

Practicing power-off stalls with my instructor. When recovering from a power-off stall (had full flaps), as I was moving flaps from 20 degrees to 10 degrees, all of a sudden the plane shuddered and the right flap has completely bent. Looks like the motor and one of the tracking systems were not synchronized and it bent and tore the flap. No parts detached. Returning to the airport and landing was not an issue, and no emergency was declared. However this seems to be a serious structural/metal fatigue issue and for a plane that recently passed its 100-hour I am unsure how this went unnoticed.

Synopsis

C172 student pilot reported the trailing edge flaps were damaged during retraction perhaps due to the motor and the tracking system losing synchronization.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : LVK.Airport

State Reference : CA

Altitude.AGL.Single Value : 500

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : LVK

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 : Final Approach

Route In Use : None

Airspace.Class D : LVK

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : LVK

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Final Approach

Airspace.Class D : LVK

Person

Reference : 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 : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Flight Engineer

Experience.Flight Crew.Total : 8000

Experience.Flight Crew.Last 90 Days : 200

Experience.Flight Crew.Type : 1500

ASRS Report Number.Accession Number : 1511487

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Detector.Person : Flight Crew

Detector.Person : Air Traffic Control

Miss Distance.Horizontal : 100

Miss Distance.Vertical : 100

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Airport

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

In 30 plus years of flying, this is the closest that I have ever been to another airplane in the air.

I was with a student in the pattern at LVK on Runway 7 left. We had just taken off. The pattern was busy. Tower told us we were number 3 for the runway. We told tower that we did not see our traffic and ask them to keep us advised. Later during downwind, we told tower again that we did not see our traffic. Tower advised that they were on a 1.5 mile final.

We saw the called traffic they were number two we could see the aircraft on short final and turned base to fall in line behind that aircraft.

The left pattern was very busy and the controller got distracted by an aircraft who wanted a long landing on 7R. As I was on final, I called the tower and advised that we were on short final on 7L. I got an acknowledgment from the tower. A moment later, another aircraft advised the tower that they had no one in front of them for the runway. At the time, I assumed that he was for Runway 25R although an alarm bell was going off as I had not registered him earlier in my own mind.

Shortly thereafter, the tower told aircraft to go around. Suddenly, and RIGHT in front up, up from underneath us came this aircraft. Scared the you know what out of my student who quickly announced to me "[Expletive] TAKE THE PLANE", which I did. I maneuvered to allow the conflict aircraft to continue its climb. I am guessing that we had around 100 ft between us and the other plane.

Upon landing, I called the tower on the phone and chatted with the controller. His focus, which I found odd, was on the fact that he did not believe that he had made an error and that the CIC (Controller In Charge) had noticed the two planes on 7L and instructed him to issue the go around instruction. I told the controller that I was not interested in 'blame'

but just wanted to try and figure out how this happened.

The controller told me that the other aircraft had 'cut in front' of me. How that is possible in a Class D is a bit surprising.

In any event, I believe that there was a controller error here and that he confused the lower airplane and ourselves. I believe when he issued the go around instruction, he thought he was talking to us and it would have made sense as we were the higher and further out aircraft. Instead, he issued the go around instruction to the lower and close in aircraft and we nearly had a very bad situation.

What I took away from this is that I need to be even more alert when my internal warning bell goes off. And I should have been on the lookout for controller distraction and I was not. Fortunately, I got lucky but I used up one of my lives today for sure!

Synopsis

GA flight instructor reported a near midair collision in the pattern at LVK.

Time / Day

Date : 201801

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 : 12000

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Champion Citabria Undifferentiated

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Takeoff

Route In Use : None

Person : 1

Reference : 1

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 : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 6800

Experience.Flight Crew.Last 90 Days : 77

Experience.Flight Crew.Type : 51

ASRS Report Number.Accession Number : 1511474

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Private
ASRS Report Number.Accession Number : 1511907
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Anomaly.Ground Event / Encounter : Ground Strike - Aircraft
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Returned To Departure Airport

Assessments

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

Narrative: 1

We briefed a student sortie, Tailwheel transition, in a Citabria at ZZZ Airport. Preflight and taxi were normal. We were cleared for takeoff and began the takeoff roll.

At the beginning of the roll, I noticed the student was applying light brake pressure as he was moving the rudders, and I reminded him to use only the rudders. At approximately 30-40 mph, I prompted him to raise the Tailwheel. He moved the stick slightly forward only, and I prompted him again. As I prompted him the third time, I began to push the stick forward, but it did not move. At this point, the stick was about halfway between neutral and full aft.

About this time, we began to drift to the right side of the runway. I called out, "my flight controls" and tried to move the plane back to centerline, but could not move the stick forward or laterally. After a couple seconds, the student relinquished control and I applied left aileron and rudder. I got the plane on the left wheel, and attempted to continue left back to centerline, and attempted to get airborne. As we lifted off, I heard the aft end of the plane strike something.

I continued the takeoff, and told tower that we had probably struck a runway light. I continued straight out; tower asked my intentions. I asked for the winds. I landed on the main wheels, and touched the Tailwheel lightly to the ground and back up, to verify the Tailwheel was undamaged and would roll properly; it did. I put the Tailwheel back down, it rolled normally; I turned off on [the] taxiway and taxied to the maintenance facility.

I notified the flying club management, the aircraft owner, and the maintenance facility.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

Citabria flight instructor and trainee reported difficulty maintaining control during the takeoff roll.

Time / Day

Date : 201801

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

Aircraft Operator : FBO

Make Model Name : SR20

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Takeoff

Person

Reference : 1

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 : Flight Instructor

ASRS Report Number.Accession Number : 1511273

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Flight Cancelled / Delayed

Result.Flight Crew : Became Reoriented

Result.Flight Crew : Regained Aircraft Control

Result.Flight Crew : Returned To Gate

Result.Flight Crew : Rejected Takeoff

Assessments

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

Narrative: 1

During the takeoff roll the student pilot started losing directional control of the airplane. The instructor pilot took the controls and was unable to regain fully directional control so decided to abort the takeoff. After the event flight was cancelled.

Synopsis

SR20 Flight Instructor reported a rejected takeoff after a student lost directional control.

Time / Day

Date : 201801

Place

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

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : Personal
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Final Approach
Airspace.Class E : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 1000
ASRS Report Number.Accession Number : 1510785
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
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

Practicing autopilot loading procedures IFR approaches (not logging and not under the hood) single pilot. Flying back to home airport two flight school planes in pattern. They seemed to be fighting with each other. I called 8 mile final 5 mile final and then had one aircraft cut me off by turning base. I called my position at 3 miles (two miles away from aircraft) and asked where he was. He realized his mistake and just did a low approach. He was never a factor for conflict, but was still not a very standard way to handle the situation, by just calling base and not verifying my position, as I was a full stop. Other aircraft immediately extended his downwind for me. With their comments on radio and nonstandard patterns made tough to concentrate on my altitude and localizer so, I did a visual approach to airport (hand flown) from eight miles out. Standard communication and better coordination between rival schools would help traffic flow for everyone. Should not have been an issue with just three total aircraft. Not a safety issue today, but if one of the aircraft would have been a solo student, I am sure they would have been very confused. Better coordination/professionalism would allow all aircraft to accomplish their training goals.

Synopsis

GA pilot reported that two other aircraft in the pattern were using improper and unsafe non-towered airport practices.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : LGB.Airport

State Reference : CA

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Ground : LGB

Aircraft Operator : Personal

Make Model Name : DA40 Diamond Star

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Taxi

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 592

Experience.Flight Crew.Last 90 Days : 44

Experience.Flight Crew.Type : 381

ASRS Report Number.Accession Number : 1510762

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

Events

Anomaly.Deviation - Procedural : Clearance

Anomaly.Ground Incursion : Runway

Detector.Person : Air Traffic Control

When Detected : Taxi
Result.Flight Crew : Returned To Gate
Result.Air Traffic Control : Issued Advisory / Alert
Result.Air Traffic Control : Issued New Clearance

Assessments

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

Narrative: 1

I called Ground Control from my parking spot to request a taxi to runway 25R. Runway 25R is on the north side of the field and it is necessary to cross Runway 30 to get to Runway 25R. I usually takeoff on Runway 25L, but today was 25L [was closed]. I received a taxi clearance to taxi via Bravo to Kilo, hold short of Runway 30. As I was taxiing down Bravo, I was instructed to hold short of Delta. After holding short of Delta for approximately two minutes, I was told to continue taxi via Kilo, cross 30, and I was instructed to expedite. After reading back the instruction, I added power to quickly accelerate, and Ground Control issued an instruction to hold short of 30. Then, I thought I heard "cancel hold short", which I believe I read back. I, therefore, proceeded to enter Runway 30 to continue taxi via Kilo. Quickly, I heard "STOP. STOP. STOP." I then stopped, but had crossed the runway hold markings. Ground Control instructed me to turn around and exit the runway, which I did. After receiving instruction to cross Runway 30 and taxi via Kilo, I continued taxiing. Once in the run-up area, I decided to cancel my flight and received clearance to taxi back to parking.

Although I was focused on the taxi operation and was not distracted, in hindsight, I was confused about the multiple instructions regarding crossing Runway 30. The lesson I have learned is that I need to be certain of taxi instructions or stop and ask for clarification.

Synopsis

DA40 pilot reported that confusing instructions from Ground Control resulted in a runway incursion.

Time / Day

Date : 201801

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3000

Environment

Flight Conditions : VMC

Light : Night

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 : VFR

Mission : Training

Flight Phase : Climb

Route In Use : Direct

Airspace.Class E : ZZZ

Component : 1

Aircraft Component : Engine

Aircraft Reference : X

Problem : Malfunctioning

Component : 2

Aircraft Component : Cylinder Head

Aircraft Reference : X

Problem : Failed

Person

Reference : 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 : Flight Instructor

Experience.Flight Crew.Total : 620

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 300

ASRS Report Number.Accession Number : 1510308

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Landed As Precaution
Result.Flight Crew : Returned To Departure Airport

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

[A few days prior to the event] I had operated the aircraft and during the run-up I noted a 350 RPM drop on one magneto. I terminated the flight and returned to the ramp, I informed the maintenance of the discrepancy. I was informed that one of the sparkplug electrodes had welded itself closed and this was the cause of the RPM drop. The aircraft maintenance log noted that the defective sparkplug was replaced and all sparkplugs were cleaned. I had flown the aircraft with a different student [earlier in] the day. The flight consisted of performing touch and go's, no issues or discrepancies were noted.

The mission to the flight was to perform a VFR night cross country to meet requirements for the student's private pilot certificate. My student and I performed all the required preparation for our night cross country. Both my student and I conducted a preflight inspection, no discrepancies were noted, and I deemed the aircraft airworthy. The engine started quite easily since it was warm. The starting and before taxi checklists were completed, and the student taxied to the departure end of runway XY. The student performed the engine run up and no discrepancies were noted. Both magnetos showed approximately 75 RPM drops each, engine oil pressure and temperature gauges read in the middle of their green arcs, and the fuel pressure was in the green arc. Overall a normal healthy seeming engine run up. The student then prepared the rest of the aircraft for the flight, and completed all required checklists.

The student performed the takeoff. On the takeoff roll the student verbally called out that tachometer showed power indications, the engine instruments were in the green, and the airspeed was alive. I looked and the tachometer showed approximately 2300 RPM when were on the ground, and 2500 once we were in the air and accelerating. I also checked the engine instruments, all read in the green arcs. The only abnormal point of the takeoff was that my student rotated at 50 KIAS rather than the normal 60 KIAS, and he set climb speed at V_x rather than V_y . In the post flight debriefing he said he was slightly confused regarding our earlier discussion regarding aircraft performance charts and short field takeoffs.

The student climbed to 800 ft AGL and we were cleared to turn south, the student continued to climb at V_y on a southerly heading. At approximately 2500 ft MSL tower gave us a frequency change and the student changed radios to the flight service station frequency. The student opened our flight plan, and then switched frequencies to get VFR flight following.

At approximately 3000 ft MSL and 3 NM south of ZZZ the engine made a loud bang noise, and continuous vibrations were felt. The aircraft had noticeably slowed down. I took control of the aircraft and started a right turn towards ZZZ. I ensured the throttle was a

full and looked at the tachometer, which read 2000-2100 RPM. I performed the engine troubleshoot checklist, and leveled the aircraft to prevent our airspeed from decaying further. I asked the student to change fuel tanks per the checklist, no noticeable improvement was apparent from any of the corrective actions. I called ZZZ tower and said we had severe engine roughness, and intended to make a right base entry for runway XX. Tower cleared us to land on runway XX, requested souls on board and offered emergency services. I reported cleared to land runway XX, two souls on board, and requested emergency services. I maintained my altitude until I determined I could glide to the runway, at which point I retarded the throttle, extended the flaps to 40 degrees, and initiated a forward slip to lose altitude. The engine did not run rougher at a lower power setting. I performed the landing on runway XX and exited the runway.

I requested to taxi across runway XY to the ramp, I was then cleared and taxied to the ramp. On the ramp, I performed a full power static run up. At full throttle, the tachometer indicated approximately 1900 PRM, and all the engine instruments were in their green arcs. I then checked both magnetos, neither showed a drop of more than 100 RPM. Next, I performed the securing engine checklist and shut down the engine. I tied down the aircraft.

I watched the maintenance personnel investigate the engine. They performed an idle engine run up and noted that the left rear cylinder was cold. They then checked for compression and found none. Next, they removed the cylinder cover to check the movement of the valves, pushrods, and rocker arms; all moved and showed no signs of deformation. I then got close to the engine and looked down on the top of the cylinder and noticed a large crack on the cylinder head, the maintenance personnel removed the left rear cylinder. Upon removal, a crack was observed originating from one sparkplug hole which propagated around the heads circumference past the opposite sparkplug hole. The chief mechanic commented that the engine only had about 800 hours since it was overhauled.

Synopsis

GA flight instructor reported severe engine roughness after takeoff that resulted in a return to the departure airport.

Time / Day

Date : 201710
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 6000

Environment

Flight Conditions : VMC
Light : Daylight

Aircraft

Reference : X
ATC / Advisory.Tower : ZZZ
Aircraft Operator : FBO
Make Model Name : PA-28R Cherokee Arrow All Series
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Cruise
Flight Phase : Final Approach
Flight Phase : Landing
Flight Phase : Initial Approach
Route In Use : None
Airspace.Class E : ZZZ

Component

Aircraft Component : Engine
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 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 : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 430
Experience.Flight Crew.Last 90 Days : 150
Experience.Flight Crew.Type : 40
ASRS Report Number.Accession Number : 1510306

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Aircraft X was a recent purchase by the company and had recently come out of maintenance and inspection after the purchase. I was the member of the company who had the most time in the particular aircraft. In comparison to the other PA-28-201 the company owned, Aircraft X seemed under powered, regularly backfired during ground operations, and consistently had fouled plugs. I regularly told the maintenance department about my perceived discrepancies. The maintenance department performed inspections looking for any noticeable issues, none to my knowledge were found.

Approximately one week prior to the engine failure while performing a post flight inspection my student noticed an oil slick along the left cowling. During the flight, no noticeable indications of an oil leak were noticed. The maintenance department removed the cowling and upon further inspection both left valve covers were leaking oil. Upon further inspection three bolts were missing from each valve cover, and all remaining bolts were loose. One mechanic remarked that he had never seen anything like this happen before. He also quoted how he remembered checking the torque of all the valve cover bolts during the previously completed annual.

The following is an account of what happened during the flight where the engine failure occurred. The purpose of the flight was training/review in preparation for the student's check ride. The student was a Private Pilot with an Instrument Rating and approximately 250 hours total time.

Conducted engine run up near departure end. Noticed left Magneto running rough. Leaned mixture to burn off fouling, after leaning procedure both magnetos passed required check. Departed straight out, then turned right for south departure. Set climb power, noticed fuel flow was low, about 10-11 gallons per hour with mixture control set to full rich. Engine ran rough for less than 0.5 sec, then regained normal power. CFI turned on fuel pump as precaution.

Entered power off stall at 6000 ft MSL. During power reduction, no engine roughness noticed. Recovered from power off stall, during recovery using full power intermittent engine roughness noticed by student. Vibration felt through yoke, CFI did not feel vibration. CFI decided to return, with student flying. As student reduced power to descend, engine roughness increased. Fuel flow reduced to approximately 6 gallons per hour with mixture control full rich. Student returned power to full and engine roughness decreased but remained continuously. When power increased to full, fuel flow increased to 9 gallons per hour. CFI took control of the aircraft.

5 miles south of ZZZ approximately 5000 ft MSL CFI called Tower and [advised of] engine

roughness, requested landing. Turned to make long straight in due to low descent rate resulting from required high power setting to prevent engine roughness. Approximately 6 mile right base, CFI asked student to run engine troubleshoot checklist. Both magnetos operated satisfactory, alternate air made engine roughness increase in severity, engine oil pressure, engine oil temperature, and fuel pressure all in the green. Approximately 3 mile straight in CFI made right 360 to descend more and get on glide path. Approximately 2 mile final about 2300 ft MSL CFI lowered gear to reduce airspeed to below flap speed. 1 mile final set flaps 10 degrees, on short final set flaps 25 degrees. During power reduction to flare engine roughness increased substantially. Touched down at about 80 KIAS, with throttle at idle, engine barely running and shuttering during roll out. CFI increased throttle to full to clear runway, engine seemed unresponsive. CFI pulled mixture to idle and engine stopped. Coasted to stop near hold short line on and taxiway. Student completed securing aircraft checklist. CFI assessed outside conditions for fuel leak or fire, none were present. CFI called tower and said that emergency services were no longer needed, and requested a tow vehicle. Student and CFI pushed aircraft clear of runway hold short line and waited for airport personnel.

The maintenance department performed an inspection on Aircraft X. The two bolts holding the flange of the intake tube on the left rear cylinder had fallen out. One of the bolts was recovered from the bottom of the cowling, the other was not recovered. The intake tube had disconnected from the cylinder head and had fallen and laid on the exhaust tube below it. Upon further inspection, the rubber gasket connecting the intake tube to the intake manifold had cracked.

Synopsis

PA28R Flight Instructor reported engine roughness that resulted in the engine being unresponsive after landing.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : PCZ.Airport
State Reference : WI
Altitude.AGL.Single Value : 0

Environment

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

Aircraft

Reference : X
ATC / Advisory.CTAF : PCZ
Aircraft Operator : Personal
Make Model Name : Cessna 180 Skywagon
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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 377
Experience.Flight Crew.Last 90 Days : 11
Experience.Flight Crew.Type : 30
ASRS Report Number.Accession Number : 1509991
Human Factors : Situational Awareness

Events

Anomaly.Deviation - 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.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

Landing runway 28 at PCZ, the aircraft departed the runway at a slight angle. Snow on surface of ground was deeper than I believed and slowed gear enough to cause a prop strike and gently tip aircraft on its nose. When aircraft first veered slightly off center, I made the decision to allow it to continue thinking that would be safer and less chance of a ground loop than trying to recover on the runway.

Synopsis

Cessna 180 pilot reported a runway excursion while landing on a snowy Runway 28 at PCZ.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.ATC Facility : CHD.Tower

State Reference : AZ

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.Tower : CHD

Make Model Name : Bonanza 33

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Final Approach

Airspace.Class D : CHD

Aircraft : 2

ATC / Advisory.Tower : CHD

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

Crew Size.Number Of Crew : 1

Flight Phase : Final Approach

Airspace.Class D : CHD

Person

Reference : 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 : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1300

Experience.Flight Crew.Last 90 Days : 180

Experience.Flight Crew.Type : 400

ASRS Report Number.Accession Number : 1509426

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : ATC

Communication Breakdown.Party2 : Flight Crew

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 1000
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

I was completing my second instructional flight of the day. This was a cross country flight meant to prepare my student for his upcoming check ride. We departed and proceeded to CHD, our first airport of landing. We called tower and received the following instruction: "join left base runway 4L, report 4 miles." We maneuvered for the base and at the appropriate distance made the requisite report.

As we approached the base to final turn, my student was focused on accomplishing a procedural task. Not wanting to overshoot the centerline for fear of having to maneuver back to the runway, I told my student to stop his procedure and turn. I was also noting the TCAS showing traffic 12 O'clock and closing fast. As we turned the TCAS sounded its alert, by that point I already saw the traffic.

My first thought was: "this guy must be violating CHD's class delta." I had not picked anything up over the frequency that he was there. Nonetheless the traffic was flying parallel to me 0.2 nautical miles away at my altitude. It looked like there were two people inside, hard at work flying their plane. I called CHD tower and reported that I, "had traffic just off my right wing in-sight." Tower responded, "roger, he is making right traffic runway 4R."

I estimate that the centerlines of the two runways at CHD are approximately 1,000 ft apart. I assume the other aircraft had a true airspeed of 100 knots and that I had a true airspeed of 105 knots. This is a best case estimate as it is very easy to be going much faster. With some basic math I calculate a closure rate, head of, of 342 ft per second. Assuming then that both pilots became momentarily distracted and flew past their centerline I calculate that they would have approximately 2.9 seconds to realize their mistake.

When I reported the traffic to the tower I couldn't help but to feel he was annoyed that I had even brought it up. I later had to explain the situation to my student pilot. I told him that I disagreed with the way the controller managed the situation. I told my student that this was a great lesson. I made him promise me that if he ever saw a potentially dangerous situation as a pilot, but wasn't sure if it was worth his time to warn somebody of it, that he would absolutely do the right thing. Even if he wasn't sure. After all it would have been tragic to have spent so much money on radars, control towers and radios with the idea of safety in mind, only to have a controller decide not to use those tools to help keep me safe. I want my tax money back.

Synopsis

Bonanza 33 flight instructor reported taking evasive action after ATC failed to notify them of traffic for a parallel runway.

Time / Day

Date : 201801
Local Time Of Day : 1201-1800

Place

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

Environment

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

Aircraft

Reference : X
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 : None
Mission : Training
Flight Phase : Landing
Route In Use : Direct

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Student
Experience.Flight Crew.Total : 36
Experience.Flight Crew.Last 90 Days : 36
Experience.Flight Crew.Type : 36
ASRS Report Number.Accession Number : 1509104
Human Factors : Training / Qualification
Human Factors : Situational Awareness

Events

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

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Human Factors

Narrative: 1

I was coming back on my first solo cross-country and I entered the pattern on a mid-field crosswind. I extended my downwind for a helicopter approximately three miles. I turned base and final and I was a slightly high so I pulled out power to descend and maintained 70 knots on final. As I came over the runway, I started to round out my landing. I heard the stall horn as I flared and I touched down. After my initial touchdown I let out some of my crosswind correction and bounced. When I bounced, the cross wind pushed me to the left and I went into the grass. I hit a light with the left landing gear strut and continued until I came to a complete stop on Taxiway A. I believe that the cause was due to me letting out my crosswind correction too soon and in the future I will do remedial training with my instructor over crosswind operations including taxi, takeoff and landing to prevent this incident from happening again.

Synopsis

Student Pilot reported a runway excursion following a crosswind landing.

Time / Day

Date : 201712

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 3500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 100

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : Cheetah, Tiger, Traveler AA5 Series

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Cruise

Component

Aircraft Component : Trailing Edge Flap

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1200

Experience.Flight Crew.Last 90 Days : 35

Experience.Flight Crew.Type : 90

ASRS Report Number.Accession Number : 1509079

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Detector.Person : Flight Crew

When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Diverted
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Landed As Precaution
Result.Aircraft : Equipment Problem Dissipated

Assessments

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

Narrative: 1

Upon recovering to 90kts 'maneuvering cruise' flight after demonstrating a stall, it was noted that an annoying level of right pressure was required on the flight controls to maintain wings level. At first I attributed this to a fuel imbalance, though it didn't quite make sense that such an imbalance would have developed in such a short time. Looking out at the right wing I then noted that the right flap had not retracted fully, and was still extended perhaps 2 to 7 degrees (estimated). I made the decision to terminate the flight, and took control from my student for the remainder of the flight, though I continued to talk them through my ADM, so they could learn from the real-world lesson. Evaluating the situation, I elected to remain within a reduced flight envelope near the point that had already been proven. This meant maintaining speed at or below 90kts, throttle setting at or below about 2100 RPM, roughly 1g load factor, and no further flap setting changes. Rather than return to the airport of departure, which was beyond some hills creating orographic turbulence that could have added to the load factor, I elected to return to a nearby airport that had long, wind-aligned runways; this would provide ample margin for a no-flap landing and obviate the necessity for any side slip aerodynamic forces from a crosswind landing. I approached and landed without issue, and taxied to parking. Looking over the flap, someone wiggled it, and it popped right back to its normal position. The suspect roller was greased, the flap mechanism was inspected, and no further issue arose.

Synopsis

AA-5B Flight Instructor reported a flap asymmetry condition in flight.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Light : Dusk

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : PA-44 Seminole/Turbo Seminole

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Landing

Airspace.Class C : ZZZ

Component

Aircraft Component : Main Gear

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor

ASRS Report Number.Accession Number : 1509055

Human Factors : Distraction

Human Factors : Troubleshooting

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Anomaly.Ground Event / Encounter : Ground Strike - Aircraft

Detector.Person : Flight Crew

When Detected : In-flight

Result.General : Maintenance Action

Result.Flight Crew : Landed in Emergency Condition

Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

On returning from a training flight my student was instructed to enter left downwind, when we were mid-field downwind he attempted to drop gear and we got no indication on left main landing gear. I attempted to bring gear up and back down but it still didn't show down and locked indication on left main. We then attempted rearranging gear lights to see if we had light malfunction but that didn't solve problem. We then requested frequency change to speak to company about landing gear issue and worked with tower to maintain traffic pattern. After speaking with company we arranged to do low pass so maintenance could look at gear and see if it was down. After completing this we decided to attempt landing and went ahead and [advised ATC] just in case gear failed. During landing I took over and personally landed aircraft and attempted to land as slow and soft as possible. However, after touching down, during roll out left main landing gear started collapsing at which time I tried to maintain aircraft on runway and bring to a stop. After stopping we completed shutdown of all systems and checked for injuries and then evacuated from airplane.

Synopsis

PA-44 Flight Instructor reported a landing gear indication issue that ultimately led to a gear collapse on landing.

Time / Day

Date : 201801

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

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

Airspace.Class D : ZZZ

Component

Aircraft Component : Gear Extend/Retract Mechanism

Aircraft Reference : X

Problem : Failed

Person

Reference : 1

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 : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 1799

Experience.Flight Crew.Last 90 Days : 137

Experience.Flight Crew.Type : 45

ASRS Report Number.Accession Number : 1508840

Human Factors : Workload

Human Factors : Troubleshooting

Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Ground Event / Encounter : Gear Up Landing
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : Maintenance Action
Result.Flight Crew : Landed in Emergency Condition
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

At around mid-morning my student and I started up the aircraft and taxied out of the ramp. We then proceeded to do normal operations and test. After all the test were complete, and the engine had warmed, we then took off to the south (of course with proper clearance). We then proceeded south over 10 miles and did a series of maneuvers in preparation to my students CFI check ride.

After we finished up on maneuvers, we then came back into the airport for landing practice. After completion of the first touch and go, we continued in the pattern for another landing. Upon reaching mid-field downwind, as my student placed the gear selector down we realized we didn't have a down and locked gear indication (one green light). My student then asked the tower for an east heading to work on our issue. After running the checklist, "Landing gear fails to extend checklist". This did not fix our issue. We have now realized by looking out the window that the right main is swinging freely in a mid-travel position. At this time, we realized we needed more time and space to analyze our issue. At this point, I have taken over the radios and my student is flying. We then asked the tower for a turn to the south to clear his airspace and further work on the issue. As my student was flying to the south, I gave tower my phone number and asked him to get one of FBO mechanics to call me. After talking to the mechanic, we then confirmed that we could try and slip the plane to get the gear to lock down but the chances were it was not going to swing into position. We then talked about a "gear up landing" and how that would be a less risky landing then landing with 2 of 3 gear down.

Once I was off the phone with the mechanic, I told my student to climb to 5000 feet to get some altitude under us before we tried a series of slips and pitch changes to try and swing the gear into place. All of these techniques did not work. We then asked tower for a low approach over the field and headed back to the airport. We asked for the low approach to see if the mechanic could see anything different from his viewpoint. We wanted to see if he saw anything out of the ordinary besides the gear not fully down and locked (something else blocking the gear from extending fully). After passing him, he said the nose wheel and left main appear down but the right main was not fully extended and locked.

We now had all the confirmation we needed that we were going to have to do a gear up landing. We then declared PIC authority under FAR 91.3 and proceeded to the south once more to wait for emergency crews to arrive. Once established on a South heading, I took control of the aircraft and asked my student to pull out the POH (Pilot's Operating Handbook) and double check the emergency procedures and see if there was anything that differed between our checklist and the POH. After confirming the checklists were

identical and there were no other procedures we then discussed how putting the gear up was the safest way to land the aircraft in the situation we were given.

The emergency services have now arrived and we headed back in to do a gear up landing. On the downwind leg, we cycled the gear up. The gear all came up but the right main. It dangled in a half travel position. We confirmed this with tower and then told them we would no longer talk to them once we turned final. This being because we were going to turn off the master and all electrical components prior to landing.

After turning final we turned all electrical systems off. Once the field was made, we then pulled the mixture to idle/cutoff and cracked the exit doors. I then glided the plane to the runway and held it right above the runway until it got slow enough it couldn't fly anymore. We then impacted the runway with the planes belly. The plane then skidded to a stop and my student and I exit towards the tail as previously briefed.

Synopsis

A Cessna 172RG instructor pilot reported the failure of the landing gear to extend normally. After a series of unsuccessful maneuvers to extend the gear, a decision was made to land with the landing gear partially retracted.

Time / Day

Date : 201801

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : DMW.Airport

State Reference : MD

Altitude.MSL.Single Value : 3500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : DMW

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Cruise

Route In Use.Other

Airspace.Class E : PCT

Aircraft : 2

ATC / Advisory.CTAF : DMW

Make Model Name : Skyhawk 172/Cutlass 172

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class E : PCT

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Trainee

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 260

Experience.Flight Crew.Last 90 Days : 60

Experience.Flight Crew.Type : 23

ASRS Report Number.Accession Number : 1508596

Human Factors : Situational Awareness

Human Factors : Workload
Human Factors : Distraction

Events

Anomaly.Conflict : Airborne Conflict
Detector.Person : Flight Crew
Miss Distance.Horizontal : 500
Miss Distance.Vertical : 500
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

I, a private pilot, was getting dual instruction in the practice area west of EMI. We had just finished slow flight including turns of 90 degrees, albeit with a nose-high attitude. I was recovering the plane to straight and level flight in a cruise configuration for the next maneuver. When I looked left to begin a clearing turn, I saw that we were overtaking what appeared to be a C172 at our 10 o' clock and about 500 ft above us. It was close enough to surprise me, but not close enough to see the n-number. Within seconds, we established radio contact on the CTAF for DMW as is customary for flights in the practice area. We deconflicted our intentions and continued flying.

I believe we got into this situation because I fixated on the manifold pressure and RPM gauges. My outside scan was just a quick glance at the horizon, and did not include time for a traffic scan. I had portable ADS-B receiver operating, but was paying attention to the display.

Also, segmenting the flying into individual maneuvers that each started with clearing turns took away focus on looking for traffic at other times in the flight.

Synopsis

GA pilot reported an airborne conflict during a training flight near DMW.

Time / Day

Date : 201712
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Relative Position.Angle.Radial : 00
Relative Position.Distance.Nautical Miles : 00
Altitude.AGL.Single Value : 0

Environment

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

Aircraft

Reference : X
Aircraft Operator : Personal
Make Model Name : Aeronca Champion
Operating Under FAR Part : Part 91
Flight Plan : None
Mission : Training
Flight Phase : Taxi

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Private
Experience.Flight Crew.Total : 1380
Experience.Flight Crew.Last 90 Days : 10
Experience.Flight Crew.Type : 280
ASRS Report Number.Accession Number : 1508253
Human Factors : Training / Qualification

Events

Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : Taxi
Result.Aircraft : Aircraft Damaged

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Weather

Primary Problem : Ambiguous

Narrative: 1

Taxi down runway. There was gust of north wind. Ended up in ditch. Damaged airplane.

Synopsis

Aeronca 7AC pilot reported a gust of wind caused a loss of directional control on the ground, resulting in some damage to the aircraft.

Time / Day

Date : 201712
Local Time Of Day : 1201-1800

Place

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

Environment

Light : Daylight

Aircraft

Reference : X
ATC / Advisory.CTAF : ZZZ
Aircraft Operator : FBO
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Flight Phase : Landing
Route In Use : None
Number Of Seats.Number : 2

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 26419
Experience.Flight Crew.Last 90 Days : 219
Experience.Flight Crew.Type : 90
ASRS Report Number.Accession Number : 1508242
Human Factors : Training / Qualification

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

Narrative: 1

During landing, there were two bounces with mild side loading. The plane veered 20 degrees right and went off onto the dirt.

We saw no damage to runway lights or the aircraft, which was designed for off airport flying. After carefully returning for another takeoff and a debrief, we continued without further difficulty.

Surrounding factors included modest experience in both of our roles, conventional landing gear, light crosswinds, a wide temp/dew point spread, and landing nearly into the sun.

I saw this a mostly fortune outcome. A severe swerve or brake application to stay on the pavement would have easily caused a ground loop. Instead, we only went a short ways off the runway, slowly, under control, going straight, and causing no damage. We both learned a lot too.

More discipline about straightness, drift, premature main gear touchdown, keeping the stick fully aft, rapid rudder use, and going around were the corrective highlights.

Synopsis

Flight instructor reported student's loss of directional control on landing resulted in runway excursion, with no aircraft damage.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 0

Environment

Weather Elements / Visibility : Windshear

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.Other

Person

Reference : 1

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

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 437

Experience.Flight Crew.Last 90 Days : 60

Experience.Flight Crew.Type : 324

ASRS Report Number.Accession Number : 1508202

Human Factors : Training / Qualification

Human Factors : Situational Awareness

Events

Anomaly.Ground Excursion : Taxiway

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Inflight Event / Encounter : Unstabilized Approach

Detector.Person : Flight Crew

When Detected : Taxi

Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Airport

Contributing Factors / Situations : Weather

Primary Problem : Weather

Narrative: 1

Cleared to land. On smooth touchdown on centerline with left crosswind correction input got blown farther left by gust. Plane slewed left and then right as I attempted to correct for gust into calmer winds. When plane slewed hard right I attempted go around but was unable to maintain climb and suitable directional control. Placed plane back on runway to left of centerline with energy going off the runway the left. Exited runway to the left and went over culvert towards a taxiway. Went further off the left of [the taxiway] and came to rest in the ramp area. Notified tower all aboard were ok and then ran shutdown checklist after facing plane into the wind.

Synopsis

C172 Flight Instructor reported a runway excursion following a crosswind landing and an attempted go around.

Time / Day

Date : 201712
Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON
State Reference : US
Altitude.MSL.Single Value : 2600

Environment

Flight Conditions : IMC
Weather Elements / Visibility.Visibility : 6
Light : Daylight
Ceiling.Single Value : 1700

Aircraft

Reference : X
ATC / Advisory.TRACON : ZZZ
Aircraft Operator : FBO
Make Model Name : PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Training
Nav In Use : GPS
Flight Phase : Final Approach
Airspace.Class C : ZZZ

Component

Aircraft Component : Positional / Directional Sensing
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Air Transport Pilot (ATP)
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 3130
Experience.Flight Crew.Last 90 Days : 35
Experience.Flight Crew.Type : 2600
ASRS Report Number.Accession Number : 1506713
Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Automation : Aircraft Terrain Warning
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Overcame Equipment Problem
Result.Flight Crew : Returned To Clearance
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Number 1 CDI glideslope indicator failed after glideslope capture on IFR approach. Descent below glide path triggered alarm with ATC which advised below glide path. Switched Number 2 radio CDI and initiated climb rejoining glide path and continued approach. Note localizer functioned normally.

Synopsis

PA28 pilot reported that the Course Deviation Indicator (CDI), failed after capturing the glideslope during an instrument approach.

Time / Day

Date : 201712
Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 3000

Environment

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

Aircraft

Reference : X
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 : Cruise
Route In Use : Direct
Airspace.Class E : ZZZ

Component

Aircraft Component : Throttle/Power Lever
Aircraft Reference : X
Problem : Failed

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Student
Experience.Flight Crew.Total : 38
Experience.Flight Crew.Last 90 Days : 14
Experience.Flight Crew.Type : 10
ASRS Report Number.Accession Number : 1505663

Events

Anomaly.Aircraft Equipment Problem : Critical
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew

Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Landed in Emergency Condition
Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

I was flying back to ZZZ on a cross country when I hit turbulence. I pulled the throttle back to lose some airspeed, but when I pushed it back in, it stayed at idle. I checked fuel, mags, mixture, etc., with no response so I found a suitable field and landed with no damage to the aircraft.

Synopsis

C-150 student pilot made an off-airport landing due to an unresponsive throttle.

Time / Day

Date : 201712
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 : 12000

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 : None
Mission : Training
Flight Phase : Taxi
Airspace.Class G : ZZZ

Aircraft : 2

Reference : Y
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Flight Phase : Landing
Airspace.Class G : ZZZ

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Flight Engineer / Second Officer
Function.Flight Crew : Instructor
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Flight Engineer
Experience.Flight Crew.Total : 1408
Experience.Flight Crew.Last 90 Days : 183
Experience.Flight Crew.Type : 534
ASRS Report Number.Accession Number : 1504703
Human Factors : Communication Breakdown

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

Events

Anomaly.Conflict : Ground Conflict, Less Severe
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Ground Incursion : Runway
Anomaly.Ground Event / Encounter : Other / Unknown
Detector.Person : Flight Crew
When Detected : Taxi
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

My student and I were back-taxiing on runway while another aircraft entered the traffic pattern on an extended left base for [the same] runway. We decided to expedite our back taxi so we could depart before the traffic was on final, however the other pilot decided to do a "modified" final, which took less time, and we elected to continue to the beginning of the runway and hold at the beginning of the displaced threshold to wait for landing traffic. As the instructor, I felt like this was the safest course of action since there were no taxiways to exit the runway. However, I believe that if the other pilot had entered the traffic pattern in the downwind, rather than the base, and flown a longer final, then this would have been avoided. The other aircraft landed safely and after he cleared the runway, we departed.

Synopsis

PA-28 flight instructor reported holding at the end of the runway while another pilot landed due to lack of a taxiway at the non-towered airport.

Time / Day

Date : 201712
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 : Haze / Smoke
Weather Elements / Visibility.Visibility : 10
Light : Daylight
Ceiling.Single Value : 20000

Aircraft

Reference : X
Aircraft Operator : FBO
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

Person

Reference : 1
Location Of Person.Aircraft : X
Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Student
Experience.Flight Crew.Total : 98.5
Experience.Flight Crew.Last 90 Days : 18.1
Experience.Flight Crew.Type : 95.9
ASRS Report Number.Accession Number : 1504682
Human Factors : Situational Awareness
Human Factors : Distraction

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Flight Deck / Cabin / Aircraft Event : Other / Unknown
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Anomaly.Deviation - Procedural : Clearance
Anomaly.Inflight Event / Encounter : Weather / Turbulence
Detector.Person : Flight Crew

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

Assessments

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

Narrative: 1

Accidentally aligned and landed on taxiway.

There were several factors which led to pilot distraction:

1. Haze. Initial plan for cross-country flight was canceled due to reduced visibility.
2. Concerned the engine would stop prior to landing. It had a rough start and engine was running roughly during the start of the run up. The worry stayed on the back of my mind during the pattern.
3. Wearing relatively new prescription sunglasses.
4. Once aligned on what I thought it was the runway I focused on the approach, looked towards the end of the path instead of checking the numbers at the beginning of the runway.
5. Missed to raise the seat for better vision.
6. Confusion on radio calls due to ATIS information being reported incorrectly and similar call sign on the radio.

In future:

- I will create a checklist for final approach to confirm the right runway.
- Do not practice landings if not comfortable when hazy.

Synopsis

Student pilot reported landing on a taxiway due to several distractions.

Time / Day

Date : 201712
Local Time Of Day : 1201-1800

Place

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

Environment

Flight Conditions : VMC
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 : VFR
Mission : Training
Flight Phase : Cruise
Route In Use : Direct
Airspace.Class C : ZZZ

Component

Aircraft Component : Throttle/Power Lever
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 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 : Commercial
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 610
Experience.Flight Crew.Last 90 Days : 41
ASRS Report Number.Accession Number : 1504154

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew

When Detected : In-flight
Result.Flight Crew : Diverted

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Took student to practice area. After steep turns we configured for slow flight. Student reported that he couldn't retard power any more for the maneuver. I took command of the airplane and could advance throttle but not pull back to idle at all. It was catching on something. At this point I could force it but what if it broke. I immediately headed towards ZZZ. Along the way I tried to baby it back but nothing. So knew I would have to set up for a power off landing. With ZZZ being 3800 ft runway and now with a REAL world situation I knew it had to be perfect for a zero overrun. With that in mind I decided to [advise] and head to ZZZ1. I called tower and did thus so. Abeam the numbers I cut the mixture and cut mags and did a successful landing.

Synopsis

PA-28 flight instructor reported a throttle malfunction that prevent the power from being reduced.

Time / Day

Date : 201712

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

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

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

Component

Aircraft Component : Normal Brake System

Aircraft Reference : X

Problem : Malfunctioning

Person : 1

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Trainee

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 234

Experience.Flight Crew.Last 90 Days : 128

ASRS Report Number.Accession Number : 1503520

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Not Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Flight Instructor
Experience.Flight Crew.Total : 300
Experience.Flight Crew.Last 90 Days : 100
Experience.Flight Crew.Type : 40
ASRS Report Number.Accession Number : 01503544

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Gate
Result.Flight Crew : Rejected Takeoff

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

On a training flight with my instructor we were performing a short field takeoff. This was my first flight in a multiengine plane after six hours in the simulator. With my feet on the brakes I applied full power and then released the brakes. We rolled forward about a foot before the plane made a sharp yaw to the left and stopped. I reduced power. The brakes were locked up. At this point we did a positive exchange of controls and my instructor took over since he was PIC. He called the tower to alert them to our aborted takeoff. We checked the parking brake but that wasn't the problem. He called the tower to let him know that we were going to shut down and need to be towed to the ramp. Suddenly the brakes unlocked and we were able to taxi back to the ramp.

Narrative: 2

First multiengine flight for my student. Everything was running smoothly thru the run up. Cleared to takeoff. I told my student the takeoff was supposed to be a short field take off. When the student released the brakes the plane turned left due to the left brake being locked. On the runway for a minute trying to unlock brakes. Aborted takeoff and after realizing the parking brake had come on and took it off taxied to the ramp. We assigned the aircraft to maintenance due to the fact that the parking brake had come on without our doing.

Synopsis

PA-44 student pilot and flight instructor reported an aborted takeoff due to a brake system malfunction.

Time / Day

Date : 201712
Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.AGL.Single Value : 5

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 : Initial Climb
Route In Use : Direct
Airspace.Class D : SMO

Component

Aircraft Component : Engine
Aircraft Reference : X
Problem : Malfunctioning

Person

Reference : 1
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 : Instrument
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 1440
Experience.Flight Crew.Last 90 Days : 90
Experience.Flight Crew.Type : 500
ASRS Report Number.Accession Number : 1503235
Human Factors : Time Pressure

Events

Anomaly.Aircraft Equipment Problem : Critical
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Departure Airport
Result.Flight Crew : Landed in Emergency Condition

Assessments

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

Narrative: 1

Almost immediately after liftoff, the engine experienced a partial loss of power. I declared control of the aircraft "My airplane", identified the potential to land on the remaining runway, immediately pulled the power, and lowered the flaps. Subsequently, recognized the aircraft was not descending or slowing sufficiently to make the runway landing, I added power, and raised flaps, expecting the next potential landing spot in the event of complete power loss would be the golf course adjacent the runway. The engine continued to provide just enough power to maintain an airspeed of approximately 75 knots, and very small positive rate of climb, estimated 50-100 fpm. The engine continued to sputter, but the aircraft continued to climb slowly, so landing on the golf course was no longer an option.

The next phase of this short flight would be to nurse the aircraft far enough beyond the city to ditch the aircraft into the water close to the beach. While expecting to do just that, I maintained airspeed and climb rate while searching for places to land in case the ocean could not be reached. Fortunately I gained enough altitude to determine that I could make the turn back to the airport. I contacted the tower, [advised them of the situation], and notified them I would be landing. The landing was uneventful, and there was no damage, no injuries. Cause of the partial loss of power is unknown at this time.

Synopsis

Cessna 172 flight instructor reported a partial loss of power immediately after takeoff resulting in a return to the departure airport.

Time / Day

Date : 201712

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

Ceiling.Single Value : 12000

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

Make Model Name : Luscombe Model 8/Luscombe 50

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Initial Approach

Airspace.Class E : ZZZ

Aircraft : 2

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

Operating Under FAR Part : Part 91

Airspace.Class E : ZZZ

Person

Reference : 1

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 : Glider

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Sea

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 7600

Experience.Flight Crew.Last 90 Days : 75

Experience.Flight Crew.Type : 500

ASRS Report Number.Accession Number : 1502812

Human Factors : Communication Breakdown

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

Narrative: 1

I was flying with student advising of route I wanted him to fly during his supervised solos. Since wind was calm I had him depart, circle to West about three miles, reenter pattern on 45 to downwind, execute an approach and land. He would then taxi to the end of runway XX and repeat the above per my clearance.

We enter the downwind and he clearly announces doing so. I then noticed a Piper Cadet about 3 miles to SE in a descent toward our airport. By the time we reach midfield the Cadet was at our altitude and cut across around midfield heading right to us.

I deviated right out of pattern and circled back onto downwind and which time the Cadet was about 2 miles to the SW and then headed directly to ZZZ1.

After contacting the ZZZ1 tower the chief noted the aircraft came from a local flight school. The manner in which the flight was flown looked as if an instructor was practicing simulated engine failure with a student but no talking on ZZZ CTAF.

Synopsis

GA Flight Instructor reported an airborne conflict while on downwind.

Time / Day

Date : 201712
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 : CLR

Aircraft

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

Person

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : FBO
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Student
Experience.Flight Crew.Total : 40
Experience.Flight Crew.Last 90 Days : 40
Experience.Flight Crew.Type : 40
ASRS Report Number.Accession Number : 1502289
Human Factors : Training / Qualification

Events

Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
Were Passengers Involved In Event : N
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Regained Aircraft Control
Result.Flight Crew : Returned To Gate

Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

Narrative: 1

Went to practice a soft field takeoff and when the nose wheel came off the ground I didn't have enough right rudder in and the plane was pulled to the left. The plane went off the runway and down into the grass so I just took it back onto the taxiway and taxied back to the ramp area. I then did a walk around and nothing seemed to be broken on the plane.

Synopsis

PA28 student pilot reported a loss of control during takeoff that resulted in a runway excursion.

Time / Day

Date : 201712

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 4000

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : 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 : IFR

Mission : Training

Flight Phase : Climb

Route In Use : Vectors

Airspace.Class E : ZZZ

Person

Reference : 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 : Flight Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 400

Experience.Flight Crew.Last 90 Days : 120

Experience.Flight Crew.Type : 300

ASRS Report Number.Accession Number : 1502261

Human Factors : Situational Awareness

Human Factors : Distraction

Events

Anomaly.Conflict : NMAC

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Procedural : Clearance

Detector.Automation : Air Traffic Control

Miss Distance.Vertical : 500
Were Passengers Involved In Event : N
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued Advisory / Alert

Assessments

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

Narrative: 1

Instructor and student were climbing out on SID when instructed to climb to 4000 ft. ATC advised traffic 12-1 o'clock 1000 ft above. While watching for that traffic the student accidentally climbed through the assigned altitude and came dangerously close to the other aircraft, enough for ATC to get an alert and issue a pilot deviation and phone number to call when back on the ground.

Synopsis

C172 instructor pilot reported an altitude deviation and NMAC after the student pilot inadvertently climbed above the assigned altitude.

Time / Day

Date : 201712

Local Time Of Day : 1201-1800

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Person

Reference : 1

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

Experience.Flight Crew.Total : 800

Experience.Flight Crew.Last 90 Days : 150

ASRS Report Number.Accession Number : 1502069

Events

Anomaly.Deviation - Track / Heading : All Types

Anomaly.Ground Excursion : Runway

Anomaly.Ground Event / Encounter : Loss Of Aircraft Control

Anomaly.Inflight Event / Encounter : Weather / Turbulence

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Weather

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Shortly before normal landing [Tower] announced wind 090 at 8 kts. I proceeded with a crosswind landing approaching the runway with crosswind correction of left aileron and right rudder.

All was a normal landing up and until shortly before left wheel touch down. I can only guess it was a gust. Left wing dipped dramatically down. Fearing a strike I corrected right and the right wheel touched down. I over corrected left and aircraft veered left and stopped to the left of the runway in the grass.

Synopsis

C172 Flight Instructor reported a runway excursion following a crosswind landing.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : CRG.Airport

State Reference : FL

Altitude.AGL.Single Value : 0

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

Aircraft Operator : Personal

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Route In Use : Visual Approach

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Student

Experience.Flight Crew.Total : 75

Experience.Flight Crew.Last 90 Days : 20

Experience.Flight Crew.Type : 55

ASRS Report Number.Accession Number : 1502037

Human Factors : Training / Qualification

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 : Human Factors

Primary Problem : Human Factors

Narrative: 1

Landed airplane safely.

The current weather was reporting winds of 210 at 06. After touchdown around of all the gear near A3 the plane started to veer to the right, I started to add pressure to the left rudder and the plane continued to veer to the right until it rolled off the runway into the grass just before A5.

The plane crossed A5 and back into the grass then came to a complete stop. I was able to bring the plane back onto the pavement and safely taxi off of 14 at E and taxi back to the ramp.

Synopsis

A C172 student pilot lost control after landing and departed the runway.

Time / Day

Date : 201712

Local Time Of Day : 1801-2400

Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Environment

Flight Conditions : VMC

Light : Night

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : FBO

Make Model Name : SR20

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Training

Flight Phase : Climb

Airspace.Class E : ZZZ

Component

Aircraft Component : Cylinder

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

ASRS Report Number.Accession Number : 1502012

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Diverted

Result.Flight Crew : Returned To Departure Airport

Result.Flight Crew : Landed in Emergency Condition

Result.Air Traffic Control : Provided Assistance

Assessments

Contributing Factors / Situations : Aircraft

Primary Problem : Aircraft

Narrative: 1

During the climb out, instructor pilot and pilot under instruction felt a vibration that rapidly increased, coming from the engine. Instructor pilot noted the CHT (Cylinder Head Temperature) for cylinder number 6 was on the caution range. Instructor pilot took the controls and leveled off the airplane. After a few seconds CHT for cylinder number 6 went on red, and we started losing power. Instructor pilot contacted ATC to let them know the situation, and we requested a deviation back to [departure airport]. Landing and taxiing were completed without any further issue.

Synopsis

Cirrus SR20 instructor pilot reported experiencing engine vibrations and high cylinder temperature on one cylinder during a training flight. Shortly after, the engine began to lose power and they returned to their departure airport.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : LAS.Airport

State Reference : NV

Relative Position.Angle.Radial : 100

Relative Position.Distance.Nautical Miles : 2

Altitude.MSL.Single Value : 6500

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.TRACON : L30

Aircraft Operator : FBO

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

Route In Use : Vectors

Airspace.Class B : LAS

Aircraft : 2

Reference : Y

Make Model Name : UAV - Unpiloted Aerial Vehicle

Operating Under FAR Part.Other

Flight Phase : Cruise

Airspace.Class B : LAS

Person

Reference : 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 : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 864

Experience.Flight Crew.Last 90 Days : 181

Experience.Flight Crew.Type : 498

ASRS Report Number.Accession Number : 1501117
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Detector.Person : Flight Crew
Miss Distance.Horizontal : 150
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

The problem was a near mid air collision with small drone at 6500 MSL that appeared to be moving southerly while my airplane was flying a magnetic heading of 200 approximately. Our lateral separation was between 150-200 feet. We were in the immediate vicinity of LAS, almost directly above the approach end of Runway 26L. The drone was yellow in color and circular, at most 3 feet in diameter, and did not appear fixed wing. It appeared to have some kind of design/camera at its center. We were receiving radar vectors from Las Vegas TRACON. I was scanning visually while my student was under the view limiting device. We made no evasive action, there was merely a second between the time I saw the drone and it's passing of our position. I queried Las Vegas Approach if there was any drone activity in the area, they responded there was not, I then proceeded to describe the situation, to which they asked questions regarding the drone's altitude and flight path, and prior to our hand off they said they had made a report. This near mid air collision was no fault of Las Vegas Approach or my own, rather the drone operator who violated the airspace.

Synopsis

C172 flight instructor reported a NMAC with a UAV at 6500 in the vicinity of LAS airport.

Time / Day

Date : 201712

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 : 8

Light : Dusk

Ceiling.Single Value : 4000

Aircraft

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : FBO

Make Model Name : DA42 Twin Star

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Takeoff

Route In Use : None

Person : 1

Reference : 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 : Flight Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 380

Experience.Flight Crew.Last 90 Days : 45

Experience.Flight Crew.Type : 33

ASRS Report Number.Accession Number : 1501115

Human Factors : Training / Qualification

Human Factors : Confusion

Person : 2

Reference : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Trainee
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Student
Experience.Flight Crew.Total : 3269
Experience.Flight Crew.Last 90 Days : 65
Experience.Flight Crew.Type : 2
ASRS Report Number.Accession Number : 1501138
Human Factors : Confusion
Human Factors : Training / Qualification

Events

Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Ground Excursion : Runway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : In-flight

Assessments

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

Narrative: 1

My student and I were practicing engine failures prior to take off. I briefed him on the procedure for an engine out on the runway, and told him I would be failing one of his engines. I failed the left engine during takeoff at about 15 knots. Rather than pull power to idle, the student attempted to maintain centerline solely with use of the rudder. We left the runway surface left of the runway, and came to a stop in the grass. We taxied to the ramp, checked the gear for any damage, and returned to our home airport.

In the future, I will brief the students on the procedure, and then show them the procedure myself before allowing the student to try. I will also position my hand in such a way to be able to remove the students hand from the throttles in the event of a failure to follow proper procedures.

Narrative: 2

During initiation of simulated single engine failure (multi-engine aircraft) on deck, student failed to take proper corrective action resulting in aircraft conducting a 90 degree heading change on wet runway and into the grass adjacent to runway ending in aircraft 180 degrees from initial heading. No damage to aircraft or airfield facilities.

Synopsis

DA-42 flight crew reported a runway excursion during a simulated engine failure on takeoff.

Time / Day

Date : 201712

Local Time Of Day : 0601-1200

Place

Locale Reference.Airport : AAO.Airport

State Reference : KS

Altitude.AGL.Single Value : 500

Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 6

Weather Elements / Visibility.Other

Light : Daylight

Aircraft : 1

Reference : X

ATC / Advisory.CTAF : AAO

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 Climb

Airspace.Class E : AAO

Aircraft : 2

Aircraft Operator : Personal

Make Model Name : Zenith Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Final Approach

Route In Use.Other

Airspace.Class E : AAO

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 3000

Experience.Flight Crew.Last 90 Days : 100

Experience.Flight Crew.Type : 900

ASRS Report Number.Accession Number : 1501114
Human Factors : Situational Awareness

Events

Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Automation : Aircraft TA
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 200
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

[I] checked both communication radios with the airport base station using the Unicom/CTAF frequency. The AAO ASOS reported winds to be 4 to 6 kts from 10 degrees magnetic, indicating that runway 36 should be used. The wind socks also indicated that runway 36 should be used.

The student pilot taxied to the runway 36 run up pad and completed a pre-takeoff check. Prior to takeoff, the pilots on board visually looked for traffic and listened on the CTAF frequency. No other traffic was observed or heard. On CTAF the student pilot announced that he was taking off on runway 36, taxied onto the runway and took off. Nearing the north end of the 6000 ft runway, climbing through 400 or 500 ft AGL, [we] both observed a yellow-colored target at [our] altitude on the onboard ADS-B Flight Information System (FIS). Seconds later the conflicting aircraft, believed to be a CH2T aircraft, was observed passing below [us] and then arcing to a SSE track. No communications were ever heard from the conflicting aircraft.

Note: the FIS indicates conflicts, but does not recommend a course of action.

[I] believe that the CH2T was practicing Runway 18 ILS approaches to AAO. Aircraft practicing instrument approaches into AAO normally make several announcements on the CTAF frequency - particularly when the approach is opposite the active runway direction.

Synopsis

C172 flight instructor reported an NMAC after departing AAO.

Time / Day

Date : 201711

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 : 1

Reference : X

ATC / Advisory.Ground : ZZZ

Aircraft Operator : FBO

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 : Taxi

Route In Use : None

Airspace.Class D : ZZZ

Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Make Model Name : Helicopter

Flight Phase : Takeoff

Airspace.Class D : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Check Pilot

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 9500

Experience.Flight Crew.Last 90 Days : 90

Experience.Flight Crew.Type : 400

ASRS Report Number.Accession Number : 1500050

Human Factors : Communication Breakdown

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

Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : Ground Conflict, Critical
Detector.Person : Flight Crew
Miss Distance.Horizontal : 50
Miss Distance.Vertical : 5
When Detected : Taxi
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

Ground control gave us a clearance to taxi via B, B2 and cross Runway XY at B2. We headed south on B, turned right (west) onto B2 to cross runway XY. As we were on B2 crossing runway XY, I heard ground controller state "aircraft on B4 stop, hold position, aircraft on B4 stop immediately."

We were on B2 but I had been listening to other calls on ground and no one should have been on B4, so I thought he might be talking to us (this took less than one second) and as I continued to scan ahead I saw a helicopter north bound on runway XY low level. (I believe the helicopter had come from his base eastbound, overflew taxiway A and then turned low level northbound on runway XY).

The pilot flying and I both hit the brakes immediately as the helicopter passed in front of us. Probable cause of near collision, ground controller gave a us taxi clearance with runway crossing instructions, the tower controller gave the helicopter a clearance to depart north bound on runway XY and failed to realize we were taxiing.

Synopsis

A Check Airman in a Cessna 172 reported that when as they started to cross a runway, a helicopter flew at low level in front of them causing a near miss.

Time / Day

Date : 201711

Local Time Of Day : 0601-1200

Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.AGL.Single Value : 700

Environment

Flight Conditions : VMC

Light : Daylight

Aircraft

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : Decathlon 8KCAB

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Cruise

Airspace.Class E : ZZZ

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 2100

Experience.Flight Crew.Last 90 Days : 40

Experience.Flight Crew.Type : 100

ASRS Report Number.Accession Number : 1499761

Human Factors : Time Pressure

Human Factors : Confusion

Human Factors : Situational Awareness

Events

Anomaly.Deviation - Procedural : Published Material / Policy

Anomaly.Inflight Event / Encounter : Loss Of Aircraft Control

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Regained Aircraft Control

Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

Narrative: 1

Flight was an aerobatic instructional flight. The plan was to remain VMC and at or above 1,500 ft at all times. Aerobatic maneuvers were entered at 2,000-2,500 ft to maintain a 1,500 ft floor.

During a half Cuban 8, with the instructor (myself) at the controls, I inadvertently entered an inverted spin at the top of the maneuver. I recovered at about 700 ft AGL.

On the upline of the entry, I heard the stall horn go off. I eased off a bit and the aircraft went over the top fine. I was uncoordinated in my roll, and entered the spin. I need to remember that loaded maneuvers increase stall speed and impart a yaw -hence a spin.

I recovered using the Meigs-Bueller method (throttle-Idle, hands off) as I couldn't tell which way we were spinning from the back seat of the Decathlon.

Synopsis

An American Champion Decathlon pilot reported inadvertently entering a spin condition while performing aerobatic maneuvers. A successful spin recovery was accomplished.

Time / Day

Date : 201711

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.Ground : ZZZ

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Taxi

Route In Use : None

Component

Aircraft Component : Normal Brake System

Aircraft Reference : X

Problem : Malfunctioning

Person

Reference : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 318

Experience.Flight Crew.Last 90 Days : 19

Experience.Flight Crew.Type : 141

ASRS Report Number.Accession Number : 1499339

Human Factors : Situational Awareness

Events

Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Ground Excursion : Taxiway
Anomaly.Ground Event / Encounter : Loss Of Aircraft Control
Detector.Person : Flight Crew
When Detected : Taxi
Result.General : Maintenance Action

Assessments

Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1

Intention was a dual checkout flight in a new model of the C172. After preflight inspection and engine start, instructor and myself each performed a brake check/positive exchange of flight controls. I called for taxi clearance and was instructed to taxi from my hangar to the active runway, holding short of an intersecting runway. We began taxi procedures as normal, with appropriate speeds, power settings, and brake usage. As we approached the hold short line of the intersecting runway, I began reducing power and adding brake pressure. The airplane veered to the left with equal pressure on both brakes. The instructor and myself were both standing on the right brake, but there was no effect. We exited the taxiway and rolled 5-10 feet into the grass beside the taxiway. We pulled the throttle and mixture to idle, and advised ground control that we needed assistance before turning the electrics off. The airplane and airport property were not damaged. Once we got the airplane back to the hangar, mechanic inputted additional hydraulic fluid. Was not able to detect any other problems with the brake system. Mechanic thought we had bubbles in the brake lines. No hydraulic fluid was observed on the ground or leaking out of the brake assembly prior to departure. To prevent a recurrence, I think it is important to have a thorough preflight inspection, continue checking brakes, and taxiing at safe and reasonable speeds during every ground operation. I believe it is also important to communicate about any airplane abnormalities to colleagues, supervisors, etc. Post incident discussion revealed that other pilots who flew this airplane had intermittent problems with the right brake.

Synopsis

A Cessna 172 Pilot reported that when the airplane was taxied and the brakes were equally applied, the airplane pulled to the left.