

## ASRS Database Report Set

# NMAC Incidents

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Report Set Description.....A sampling of reports that reference near midair collision events.

Update Number .....16

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

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

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



TH: 262-7

**MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data**

**SUBJECT: Data Derived from ASRS Reports**

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

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

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

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

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

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

Becky L. Hooey, Director  
NASA Aviation Safety Reporting System

## CAVEAT REGARDING USE OF ASRS DATA

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

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

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

# **Report Synopses**

ACN: 1861615 (1 of 50)

### Synopsis

C152 pilot reported an NMAC and a wake turbulence encounter departing VNC.

ACN: 1856701 (2 of 50)

### Synopsis

Air carrier Pilot reported seeing a UAS while descending in Class B airspace. The flight continued normally after the encounter.

ACN: 1855155 (3 of 50)

### Synopsis

GA flight instructor with student reported an NMAC with an air carrier aircraft while training in a practice area near GUM airport. The air carrier was on final approach to GUM. The conflict required evasive action.

ACN: 1854859 (4 of 50)

### Synopsis

A L30 TRACON Controller reported issuing vectors to avoid an NMAC between two aircraft flying published RNAV procedures when the arriving aircraft "stayed high" on the arrival to LAS airport. The reporter states the CHOWW RNAV arrival procedure conflicts with the GIDGT RNAV SID.

ACN: 1854851 (5 of 50)

### Synopsis

Flight crew reported an NMAC while on final approach. The crew stated that NMACs seem to be a common problem at the airport due to the high volume of VFR traffic.

ACN: 1854850 (6 of 50)

### Synopsis

Falcon 900 Captain reported responding to a TCAS Resolution Advisory to climb, avoiding another aircraft that was only detected by the TCAS system for a matter of seconds.

ACN: 1854841 *(7 of 50)*

### Synopsis

C172 pilot reported an NMAC after an aircraft turned the wrong way during a go-around and verbalized a lengthy radio call, preventing ATC from warning of traffic conflict.

ACN: 1854840 *(8 of 50)*

### Synopsis

DA40 instructor pilot reported directing the student to climb to avoid a helicopter that was cleared by Tower into the traffic pattern at the same altitude.

ACN: 1854839 *(9 of 50)*

### Synopsis

GA pilot reported an NMAC with another aircraft that had turned to a wrong heading and was quickly corrected by ATC.

ACN: 1854823 *(10 of 50)*

### Synopsis

Single Engine Pilot reported a possible airspace violation and NMAC . The pilot cited the complicated airspace at this location and confusion with ATC instructions as contributing to the event.

ACN: 1854773 *(11 of 50)*

### Synopsis

GA student pilot reported an NMAC with a helicopter in the traffic pattern at a non-towered airport while on takeoff.

ACN: 1854747 *(12 of 50)*

### Synopsis

C-172 instructor reported a student pilot on a solo flight had an NMAC event while on the landing pattern training. The student mistakenly identified the wrong aircraft to follow for landing resulting in a loss of separation and causing other aircraft to execute a go-around.

ACN: 1854624 *(13 of 50)*

### Synopsis

Air carrier First Officer reported an NMAC on approach to MCI following an unstabilized approach.

ACN: 1854368 *(14 of 50)*

### Synopsis

Corporate jet flight crew reported an NMAC on arrival into CMA after considerable confusion regarding the runway in use.

ACN: 1854208 *(15 of 50)*

### Synopsis

Cessna 172 flight instructor reported an NMAC event that was caused by an ATC assigned heading. Flight Instructor executed an evasive maneuver to prevent a collision.

ACN: 1854026 *(16 of 50)*

### Synopsis

Air taxi pilot reported a UAS passed by their aircraft when approaching to land. The pilot continued the approach and landed normally.

ACN: 1853898 *(17 of 50)*

### Synopsis

Air Carrier pilots reported receiving an RA while descending. The pilot flying started a climb until receiving "clear of conflict." The other aircraft was also an air carrier tracking towards the reporting pilots. There was no alert from ATC according to the reporter.

ACN: 1853801 *(18 of 50)*

## Synopsis

GA instructor reported an NMAC while flying a high wing tail wheel aircraft. Descending to enter the CTAF traffic pattern immediate evasive action was needed to avoid an aircraft that was climbing through the instructor's flight path.

ACN: 1853790 *(19 of 50)*

## Synopsis

Pilot reported a NMAC during takeoff. On their takeoff roll, an aircraft on downwind for the opposite runway turned a short base and final leg to land. All remaining taxiways for the instructor were closed due to construction. The instructor became airborne and executed an evasive maneuver.

ACN: 1853753 *(20 of 50)*

## Synopsis

Light aircraft pilot reported an NMAC in the pattern at LVK airport following an apparent miscommunication with the Tower.

ACN: 1853541 *(21 of 50)*

## Synopsis

GA pilot reported an NMAC while on the downwind at non-towered EDU requiring evasive action. The pilot of the other aircraft had reportedly not been communicating properly, which contributed to the event.

ACN: 1853443 *(22 of 50)*

## Synopsis

EMB-145 Captain reported an NMAC during cruise requiring the crew to disengage the autopilot and execute a climb maneuver to clear the conflict. The conflicting VFR aircraft was not in communication with ATC.

ACN: 1853179 *(23 of 50)*

## Synopsis



A Flight Instructor reported an NMAC event during initial climb with opposite direction landing aircraft. Flight Instructor stated the landing aircraft provided inaccurate position radio calls.

ACN: 1853151 *(24 of 50)*

### Synopsis

GA pilot reported being notified of causing an NMAC event after landing at non-towered airport GXY. Reporter stated no visual was traffic observed nor heard any traffic on UNICOM.

ACN: 1852703 *(25 of 50)*

### Synopsis

Tower Controller reported an NMAC requiring evasive action to avoid a collision.

ACN: 1852696 *(26 of 50)*

### Synopsis

Tower Controller reported an NMAC due to an aircraft turning in front of an arrival.

ACN: 1852693 *(27 of 50)*

### Synopsis

TRACON Controller and an involved pilot reported an NMAC requiring evasive action.

ACN: 1852637 *(28 of 50)*

### Synopsis

SR-20 pilot reported an NMAC event during final approach to a non-towered airport. All required radio position reports were completed with no traffic responses received. On final, flight crew made visual contact with an opposite direction departure and executed an evasive maneuver.

ACN: 1852306 *(29 of 50)*

## Synopsis

Air carrier Captain reported an NMAC event after ATC assigned a level off during initial climb after takeoff from MSP. The flight crew complied with the TCAS RA and notified ATC.

ACN: 1852168 *(30 of 50)*

## Synopsis

PA-34 Flight Instructor reported an NMAC event during cruise as ATC was slow in providing vectors, that resulted in both aircraft executing evasive maneuvers.

ACN: 1852164 *(31 of 50)*

## Synopsis

C172 flight instructor reported having to execute an evasive maneuver during an NMAC event while on visual approach as the other aircraft misidentified traffic, resulting in a loss of separation.

ACN: 1851891 *(32 of 50)*

## Synopsis

Cessna 172 pilot reported an NMAC event with a flight of three non-communicating aircraft. Upon establishing visual contact with the formation, the Cessna pilot executed a successful evasive maneuver.

ACN: 1851868 *(33 of 50)*

## Synopsis

GA pilot reported an NMAC event during takeoff with opposite direction glider landing on parallel runway at BDU non-towered airport.

ACN: 1851565 *(34 of 50)*

## Synopsis

Pilot reported an NMAC event while on ATC vector under Class B 4,000 ring at assigned altitude of 3,000 feet. Pilot took evasive action to avoid a collision. Pilot indicated ATC assigned route and altitude was conducive to VFR traffic conflict.

ACN: 1851499 *(35 of 50)*

### Synopsis

Helicopter pilot reported an NMAC while turning onto final approach, which led the pilot to take evasive action and land on a parallel taxiway. Pilot stated that the Tower Controller had not advised of the conflicting aircraft.

ACN: 1851489 *(36 of 50)*

### Synopsis

General aviation pilot had a near miss with a UAS while on approach and took evasive action.

ACN: 1851392 *(37 of 50)*

### Synopsis

CRJ200 Captain reported a near miss with a UAS while on descent to a Class B airport and reported to ATC.

ACN: 1850971 *(38 of 50)*

### Synopsis

Instructor pilot reported a near mid air collision after missing several radio calls from Tower during routine training operations.

ACN: 1850939 *(39 of 50)*

### Synopsis

Flight Instructor reported a near miss with a UAS while in the traffic pattern and took evasive action.

ACN: 1850667 *(40 of 50)*

### Synopsis

GA flight instructor with student reported an NMAC while on the approach pattern of LAF airport requiring evasive action to avoid a collision.

ACN: 1850141 *(41 of 50)*

### Synopsis

Pilot reported a near miss while turning right base when another aircraft turned left base for the same runway. Reporter executed a go-around and the other aircraft took evasive action to avoid a collision.

ACN: 1850136 *(42 of 50)*

### Synopsis

GA flight instructor with a student reported an NMAC during a visual approach after mistaking ATC instructions. The instructor was at the controls after the student experienced motion sickness.

ACN: 1849779 *(43 of 50)*

### Synopsis

Pilot reported that while beginning the takeoff roll, another aircraft on final performed a go-around to avoid a near midair collision.

ACN: 1849778 *(44 of 50)*

### Synopsis

Flight Instructor reported taking evasive action to avoid a near midair collision with another aircraft.

ACN: 1849759 *(45 of 50)*

### Synopsis

C172 pilot reported a communication breakdown with the other aircraft that was taking off resulted in evasive action to avoid a near midair collision while on approach to landing.

ACN: 1849721 *(46 of 50)*

### Synopsis

PA-44 flight Instructor reported an NMAC occurred while turning downwind in the traffic pattern when another aircraft entered the pattern on downwind and descended overhead

the instructor's aircraft. The Flight Instructor descended immediately and performed a go-around to a landing.

ACN: 1849662 *(47 of 50)*

### Synopsis

A First Officer reported seeing a drone pass by their aircraft while flying at 15,500 feet and advised ATC.

ACN: 1849653 *(48 of 50)*

### Synopsis

BE-33 Flight Instructor reported the trainee turned to a heading that was different from what they had communicated to the Tower Controller and caused an NMAC.

ACN: 1849190 *(49 of 50)*

### Synopsis

Houston I90 TRACON Controller reported an NMAC and stated handoff communication issues with ZHU Center contributed to the event.

ACN: 1848605 *(50 of 50)*

### Synopsis

Flight Instructor reported an NMAC during approach when another inbound aircraft did not acknowledge ATC instructions and the Tower Controller turned the first aircraft head on to the other.

# **Report Narratives**

## Time / Day

Date : 202112

Local Time Of Day : 0001-0600

## Place

Locale Reference.Airport : VNC.Airport

State Reference : FL

Relative Position.Distance.Nautical Miles : 1

Altitude.MSL.Single Value : 1000

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 15

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : VNC

Make Model Name : Cessna 152

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Flight Phase : Cruise

Airspace.Class E : ZMA

## Aircraft : 2

Reference : Y

ATC / Advisory.UNICOM : VNC

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Cruise

Airspace.Class E : ZMA

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 750

Experience.Flight Crew.Last 90 Days : 50

Experience.Flight Crew.Type : 350

ASRS Report Number.Accession Number : 1861615

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Conflict : NMAC

Anomaly.Inflight Event / Encounter : Wake Vortex Encounter

Detector.Person : Flight Crew

Miss Distance.Vertical : 30

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Landed As Precaution

## Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

We were on downwind Runway 23 at VNC and an airplane departed after we departed that was a C182. He came under us 20-30 ft in downwind, and then made a turn to the south without giving any call. I don't think he even noticed us. Since he was behind and under us we noticed him very late as well. I even felt his wake when he came too close and thinking of that wake as a damage to my aircraft, immediately decided to land. He never replied to me when I called him on radio.

## Synopsis

C152 pilot reported an NMAC and a wake turbulence encounter departing VNC.



## Time / Day

Date : 202111

Local Time Of Day : 0601-1200

## Place

Locale Reference.ATC Facility : P50.TRACON

State Reference : AZ

Altitude.MSL.Single Value : 8500

## Environment

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : P50

Aircraft Operator : Air Carrier

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Descent

Route In Use.STAR : EAGUL6

Airspace.Class B : PHX

## Aircraft : 2

Reference : Y

Make Model Name : UAV: Unpiloted Aerial Vehicle

Flight Phase : Hovering (UAS)

Airspace.Class B : PHX

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

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

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1856701

Human Factors : Situational Awareness

Human Factors : Distraction

Human Factors : Training / Qualification

## Events

Anomaly.Airspace Violation : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : Unauthorized Flight Operations (UAS)

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 200  
When Detected : In-flight  
Result.General : None Reported / Taken

## Assessments

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

## Narrative: 1

Descending on the EAGUL6 Arrival about 3 miles from the HINEY waypoint at around 8,500 feet I spotted a drone around 200 feet low come across our right wing. I was looking out my right window when I spotted the drone as we flew by it. [Hold accountable] the people that are putting our lives in danger.

## Synopsis

Air carrier Pilot reported seeing a UAS while descending in Class B airspace. The flight continued normally after the encounter.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZUA.ARTCC

State Reference : GU

Altitude.MSL.Single Value : 3000

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.Center : ZUA

Aircraft Operator : Personal

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 2

Operating Under FAR Part.Other

Flight Plan : VFR

Mission : Training

Flight Phase : Cruise

Airspace.Class E : ZUA

Airspace.Class G : GUA

## Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZUA

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Flight Phase : Initial Approach

Route In Use : Vectors

Airspace.Class E : ZUA

Airspace.Class G : GUM

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor  
Experience.Flight Crew.Total : 1.0  
Experience.Flight Crew.Last 90 Days : 160  
Experience.Flight Crew.Type : 500  
ASRS Report Number.Accession Number : 1855155  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

## Events

Anomaly.Conflict : NMAC  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 4000  
Miss Distance.Vertical : 0  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

We were training at the practice area that is class G with no transponder. Aircraft Y (Air Carrier) was coming in to final approach. We had traffic in sight and was watching them on our GPS, and also listening to Guam center. But Guam center did not have us on radar nor Aircraft Y had us in sight. I knew that Aircraft Y was descending, I decide to climb to avoid traffic. As we did that we came directly align with each other giving us about 4,000 feet horizontal distance, getting too close to each causing a near miss. It was VFR, but there was also clouds here and there. Having no transponder, clouds being visible, and me the pilot deciding not contacting Guam center for traffic advisory where the practice area is near the ILS path was the contributing factors. I should have contacted center for traffic advisory to help me, but also other aircraft. I also should have descended because we can never out climb an air carrier. Also, I know that the Aircraft Y will never go below the final approach fix altitude.

## Synopsis

GA flight instructor with student reported an NMAC with an air carrier aircraft while training in a practice area near GUM airport. The air carrier was on final approach to GUM. The conflict required evasive action.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : L30.TRACON

State Reference : NV

Altitude.MSL.Single Value : 11000

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : L30

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Climb

Route In Use.SID : GIDGT RNAV

Airspace.Class B : LAS

## Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : L30

Aircraft Operator : Corporate

Make Model Name : Medium Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Route In Use.STAR : CHOWW RNAV

Airspace.Class B : LAS

## Person

Location Of Person.Facility : L30.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 6

ASRS Report Number.Accession Number : 1854859

Human Factors : Time Pressure

Human Factors : Workload

Human Factors : Distraction

## Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Air Traffic Control  
When Detected : In-flight  
Result.Air Traffic Control : Issued New Clearance

## Assessments

Contributing Factors / Situations : Chart Or Publication  
Contributing Factors / Situations : Human Factors  
Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

Aircraft X on the GIDGT RNAV departure. Aircraft Y on the CHOWW RNAV arrival. Aircraft Y stayed high on the arrival. The outer fix altitude is 19,000 feet. The next restriction is TATUU between 10,500 feet and 9,500 feet. Aircraft X had the restriction of AIRRO at or above 11,500 feet and 250 knots. A vector to Aircraft X southeast was necessary to avoid a loss or possible near midair collision with Aircraft Y. The fixes of TATUU and AIRRO are 8 miles from each other and converge. There is no fix beyond AIRRO for the GIDGT departure. This allows the departure to increase speed and climb slower leaving 11,500 feet. This source converges with the CHOWW arrival at 19,000 feet descending. This is very unsafe. Must lower the altitude at CHOWW to at least 17,000 feet. Also, another fix on the GIDGT beyond AIRRO is needed. This fix should be at least 15,000 feet with a speed not to exceed 250 knots.

## Synopsis

A L30 TRACON Controller reported issuing vectors to avoid an NMAC between two aircraft flying published RNAV procedures when the arriving aircraft "stayed high" on the arrival to LAS airport. The reporter states the CHOWW RNAV arrival procedure conflicts with the GIDGT RNAV SID.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : TEB.Airport

State Reference : NJ

Altitude.MSL.Single Value : 2600

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 10000

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : N90

Aircraft Operator : Corporate

Make Model Name : Medium Large Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Route In Use : Direct

Airspace.Class B : TEB

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class B : TEB

## Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Experience.Flight Crew.Total : 5000

Experience.Flight Crew.Last 90 Days : 40

Experience.Flight Crew.Type : 1000

ASRS Report Number.Accession Number : 1854851

Human Factors : Distraction

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Workload  
Human Factors : Confusion

## Person : 2

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Corporate  
Function.Flight Crew : Captain  
Function.Flight Crew : Pilot Flying  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Flight Instructor  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Instrument  
Experience.Flight Crew.Total : 9000  
ASRS Report Number.Accession Number : 1854834  
Human Factors : Time Pressure  
Human Factors : Situational Awareness  
Human Factors : Distraction  
Human Factors : Workload

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude  
Anomaly.Deviation - Track / Heading : All Types  
Detector.Automation : Aircraft RA  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 200  
Miss Distance.Vertical : 200  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Air Traffic Control : Issued New Clearance

## Assessments

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

## Narrative: 1

We were on vectors west of the RNAV 19 approach at 3,000 ft. We were given direct to UNVIL, maintain 3,000 ft. In this area we are normally at 2,000 ft., but I believe we were at a higher altitude due to traffic in the area below us. Approaching UNVIL we were given, "Cross UNVIL at or above 2,000, cleared RNAV 19, expedite to 2,000." I set 2,000 in the ASEL and the Pilot Flying (PF) set path down to expedite to 2,000. Around 2,600, Approach said, "Cancel approach clearance, maintain 3,000, turn right 270." I set 3,000 in the ASEL and the PF reversed the descent into a climb and started the right turn. We got to about +1 degree path up when we got an RA to descend. The PF disconnected the autopilot to comply with the RA, but we immediately got the reversal RA, "Climb, climb now," to which we complied. This all happened during my initial readback of the cancel approach clearance. Approach gave us a further turn to 360. During my readback I said



that we were complying with an RA. We were given a 360 vector back to join RNAV and landed without further incident. The closest I saw the target on TCAS was -200 ft. During vectoring I believe I saw the offending aircraft which would have been within a couple hundred feet of us horizontally. This is a known area of high TCAS events, due to VFR traffic transiting. Lowering the shelf of Class B in the area would give controllers the airspace and separation they need to establish aircraft on approaches to 19. Crews should be vigilant of uncontrolled VFR aircraft transiting the area.

## Narrative: 2

We were on the RNAV GPS Y Runway 19 when we received an RA after crossing UNVIL on the approach. We were descending through 2,700 on the approach when Clearance told us to cancel approach clearance and turn westbound and maintain 3,000. We received the initial RA, "Increase descent," immediately followed by a, "Climb, climb now." We followed the RA procedure and received the clear of conflict shortly after. We advised ATC of the RA and we were vectored back around to commence the approach again with no issues. I would suggest they take a look at maybe lowering the Class B shelf around TEB or extending the TEB Class D for the most used approaches so we are not descending into VFR traffic. It is a very busy and congested airspace to begin with and dealing with VFR traffic that are not talking to ATC on a critical phase of flight can be dangerous.

## Synopsis

Flight crew reported an NMAC while on final approach. The crew stated that NMACs seem to be a common problem at the airport due to the high volume of VFR traffic.

## Time / Day

Date : 202111

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 160

Relative Position.Distance.Nautical Miles : 20

Altitude.MSL.Single Value : 9000

## Environment

Flight Conditions : VMC

Light : Night

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Corporate

Make Model Name : Falcon 900

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Route In Use : Vectors

Airspace.Class B : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : Cessna Aircraft Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Personal

Flight Phase : Descent

Route In Use : None

Airspace.Class B : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine  
Experience.Flight Crew.Total : 7000  
Experience.Flight Crew.Last 90 Days : 40  
Experience.Flight Crew.Type : 1500  
ASRS Report Number.Accession Number : 1854850

## Events

Anomaly.Conflict : NMAC  
Detector.Automation : Aircraft RA  
Detector.Person : Flight Crew  
Detector.Person : Air Traffic Control  
Miss Distance.Horizontal : 0  
Miss Distance.Vertical : 200  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Air Traffic Control : Separated Traffic

## Assessments

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

## Narrative: 1

At just after XA00Z descending to 9,000 feet, while being vectored from ZZZ Approach to intercept the final approach course for Runway XXR at ZZZ we experienced an RA. Just before the aircraft alerted us to the resolution, the Controller started to give us a traffic alert but his radio call was overtaken by the aircraft resolution audio and we began the immediate climb. We only saw the conflict aircraft for a matter of seconds on the TCAS before we realized he was climbing into our descent. The resolution had us climb the airplane to an eventual altitude of 9,700 feet before alerting us that we were clear of conflict. We advised the Controller that we were responding to an RA and when we were clear of the conflict. He continued our vectors and released us to ZZZ Tower soon after, where we advised him a second time that we had experienced a RA. We landed at ZZZ without further incident.

## Synopsis

Falcon 900 Captain reported responding to a TCAS Resolution Advisory to climb, avoiding another aircraft that was only detected by the TCAS system for a matter of seconds.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Relative Position.Distance.Nautical Miles : .2

Altitude.MSL.Single Value : 800

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 12000

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : 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

Route In Use : None

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

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 121

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Airspace.Class D : ZZZ

## Component

Aircraft Component : VHF

Aircraft Reference : Y

Problem : Improperly Operated

## Person

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Personal  
Function.Flight Crew : Pilot Not Flying  
Function.Flight Crew : Instructor  
Qualification.Flight Crew : Commercial  
Qualification.Flight Crew : Flight Instructor  
Experience.Flight Crew.Total : 1040  
Experience.Flight Crew.Last 90 Days : 211  
Experience.Flight Crew.Type : 552  
ASRS Report Number.Accession Number : 1854841  
Human Factors : Situational Awareness  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

## Events

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Air Traffic Control  
Miss Distance.Horizontal : .2  
Miss Distance.Vertical : 300  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

While in reporting aircraft [and] was downwind for right traffic [for] RWY XX approaching XY numbers, [I saw] an aircraft (C172) that was cleared to land decided to perform a go-around. In an attempt to avoid the upwind traffic (C152-slower), the go around aircraft made an immediate right crosswind turn. The right crosswind turn placed the go around aircraft and reporting aircraft on a collision course. While this was happening, ATC queried the go-around aircraft reasons for go-around and potential need for assistance. The CFI onboard the go around aircraft responded lengthily (I was doing soft field landing and had to go around etc...) while making the right crosswind turn. The reporting aircraft's instructor took over the controls from the student and performed a wide left 360 degree turn to avoid the go around aircraft. The go around aircraft's decision to over communicate prevented ATC from announcing a potential conflict. This incident highlights the importance of see and avoid and exercising situational awareness in the traffic pattern.

## Synopsis

C172 pilot reported an NMAC after an aircraft turned the wrong way during a go-around and verbalized a lengthy radio call, preventing ATC from warning of traffic conflict.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 0

Altitude.MSL.Single Value : 1400

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 12000

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : DA40 Diamond Star

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Route In Use : Direct

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Government

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1040

Experience.Flight Crew.Last 90 Days : 211.5  
Experience.Flight Crew.Type : 287  
ASRS Report Number.Accession Number : 1854840  
Human Factors : Situational Awareness

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Air Traffic Control  
Miss Distance.Horizontal : 0  
Miss Distance.Vertical : 200  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Air Traffic Control : Separated Traffic  
Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

While the aircraft (DA40) was in the right downwind (RWY XX) performing pattern operations, a helo was cleared by Tower to enter the ramp from a cardinal direction. From the DA40's TIS, the instructor realized that both aircraft were on a converging course and altitude (TPA of 1,100). The instructor instructed the student to climb 300 ft while taking account of Class C airspace, which starts at 1,600 [feet]. The instructor and student did not see the helo from the aircraft, only on the TIS. The helo flew directly underneath the DA40. ATC did not announce potential conflict. Near miss was avoided due to TIS and mental situational awareness.

## Synopsis

DA40 instructor pilot reported directing the student to climb to avoid a helicopter that was cleared by Tower into the traffic pattern at the same altitude.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 800

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 12000

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : DA40 Diamond Star

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Route In Use : Direct

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : 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

Mission : Personal

Flight Phase : Final Approach

Airspace.Class D : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 1040

Experience.Flight Crew.Last 90 Days : 211

Experience.Flight Crew.Type : 280



ASRS Report Number.Accession Number : 1854839

Human Factors : Situational Awareness

## Events

Anomaly.Conflict : NMAC

Anomaly.Deviation - Track / Heading : All Types

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Person : Air Traffic Control

Miss Distance.Horizontal : 0.1

Miss Distance.Vertical : 100

Were Passengers Involved In Event : N

When Detected : In-flight

Result.Air Traffic Control : Separated Traffic

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1

While the reporting aircraft was on an extended left base turn, the aircraft that was supposed to follow the reporting traffic behind turned directly towards the reporting aircraft. The distance (horizontal) between the reporting and other aircraft was approximately 200ft according to G1000 TIS. Prior to the near miss, the other aircraft's CFI reported to have the traffic to follow "in sight." When the other aircraft turned towards the reporting aircraft on base, ATC promptly instructed the other aircraft to return to downwind immediately. Due to ATC's quick response, no evasive action was needed to be performed by the reporting aircraft. Evasive maneuvers would have been difficult due to a busy pattern. ATC's sharp observation prevented the problem to deteriorate.

## Synopsis

GA pilot reported an NMAC with another aircraft that had turned to a wrong heading and was quickly corrected by ATC.

## Time / Day

Date : 202111

Local Time Of Day : 0601-1200

## Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

Altitude.MSL.Single Value : 2500

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Climb

Route In Use : Direct

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

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

Crew Size.Number Of Crew : 2

Flight Plan : IFR

Airspace.Class D : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Flight Engineer / Second Officer

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 24685

Experience.Flight Crew.Last 90 Days : 17

Experience.Flight Crew.Type : 215

ASRS Report Number.Accession Number : 1854823

Human Factors : Confusion  
Human Factors : Distraction  
Human Factors : Time Pressure  
Human Factors : Workload  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

## Events

Anomaly.Airspace Violation : All Types  
Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Anomaly.Deviation - Track / Heading : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Detector.Automation : Air Traffic Control  
Detector.Person : Air Traffic Control  
Detector.Person : Flight Crew  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Became Reoriented  
Result.Air Traffic Control : Issued Advisory / Alert

## Assessments

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

## Narrative: 1

On a southbound departure from ZZZ I requested clearance from ZZZ2 Tower to transition west through the ZZZ2 Class D airspace. The controller approved my request with a midfield crossover restriction. She called [small jet] traffic 2 miles south of ZZZ3 at 3,000 feet. During her call she responded with an incorrect call sign. Subsequent to my initial response I visually acquired the [small jet]. By this point I had initiated a west bound turn and climb to higher altitude for my transition as I believed I was well within the ZZZ2 Class D and below the 3,000 foot floor of the Class B. The controller became excited and issued instructions to stop climb to "XYY" and subsequent transmissions to "YY". This caused extreme confusion to me as to whom her instructions were directed. The airspace in the location near my westbound turn is complicated as there is overlapping design with different control and altitude jurisdictions. I use aircraft GPS navigation and EFB data for a visual presentation of airspace. While it is possible I penetrated Class B airspace it was purely unintentional. At one point the Tower controller stated "you almost hit a [small jet]". I had visual contact with the small jet who was going to pass well behind my flight path. The complicated nature of the airspace design combined with the controller's tone and delivery of incorrect call sign contributed to an extremely confusing experience.

## Synopsis

Single Engine Pilot reported a possible airspace violation and NMAC . The pilot cited the complicated airspace at this location and confusion with ATC instructions as contributing to the event.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 2300

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 18000

RVR.Single Value : 6000

## Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Corporate

Make Model Name : Cheetah, Tiger, Traveler AA5 Series

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Landing

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 309

Experience.Flight Crew.Last 90 Days : 17

Experience.Flight Crew.Type : 18

ASRS Report Number.Accession Number : 1854773

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Distraction

Human Factors : Time Pressure

Human Factors : Other / Unknown

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

## Events

Anomaly.Conflict : NMAC  
Detector.Person : Flight Crew  
Miss Distance.Vertical : 300  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.General : None Reported / Taken

## Assessments

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

## Narrative: 1

I was practicing landings in Aircraft X [and] completed 6 with Flight Instructor and did 2 solo landings. ZZZ is an uncontrolled airport, fairly busy, and there was a lot of radio traffic. During the time I was flying left-hand patterns, there was a helicopter practicing landings in a right-hand pattern and was turning base over the numbers which made him very difficult to see. Also, I did not hear a radio call from the helicopter for his base turn or his turn to final. I don't know if the pilot didn't make the radio call or if he was covered by other radio transmissions. My instructor pilot confirmed that he did not hear the call either. Once I rotated on takeoff I heard "he's 300 ft. above" but that was the only part of the call I heard. It's my understanding that the helicopter may - and I emphasize may, because I did not see him - aborted his landing and executed a right crosswind turn. I may have been on takeoff while the helicopter was on final and/or landing but I believe I was ahead of him as I did not see any traffic on takeoff.

## Synopsis

GA student pilot reported an NMAC with a helicopter in the traffic pattern at a non-towered airport while on takeoff.

## Time / Day

Date : 202111

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 800

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : 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 : Landing

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

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 : Landing

Airspace.Class D : ZZZ

## Person

Location Of Person : Company

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 42

Experience.Flight Crew.Last 90 Days : 35

Experience.Flight Crew.Type : 42

ASRS Report Number.Accession Number : 1854747

Human Factors : Confusion

Human Factors : Time Pressure

Human Factors : Situational Awareness

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
Detector.Person : Air Traffic Control  
Miss Distance.Horizontal : 2  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

My student was on solo flight inside traffic pattern for ZZZ RWY XXR. Right traffic abeam the numbers on downwind. He was asked to report traffic on final in sight by Tower, but unfortunately got confused and said traffic is in sight by having contact with the traffic which was inside base- final turn number one. Added workload, confusion and lack of extensive experience, he turned inside the traffic on short final which put his aircraft in close proximity and hence the other traffic had to discontinue approach and go around. Realizing the mistake and with further instruction from ATC avoided any further incidents. Moreover, [he] received landing clearance shortly after and landed safely. The incident was reviewed with him / ATC and his authorized instructor. Takeaway from the incident includes learning more about being aware of the traffic ahead, behind and in proximity of our aircraft in high work load environments like traffic patterns and approach phases of flight. I, the instructor, will make sure that he receives extensive training on the things he was found deficient.

## Synopsis

C-172 instructor reported a student pilot on a solo flight had an NMAC event while on the landing pattern training. The student mistakenly identified the wrong aircraft to follow for landing resulting in a loss of separation and causing other aircraft to execute a go-around.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : MCI.Tower

State Reference : MO

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : MCI

Aircraft Operator : Air Carrier

Make Model Name : Medium Large Transport

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class B : MCI

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : MCI

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Airspace.Class B : MCI

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1854624

Human Factors : Situational Awareness

## Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Anomaly.Conflict : Ground Conflict, Less Severe

Detector.Automation : Aircraft RA

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

## Assessments



Contributing Factors / Situations : Procedure  
Primary Problem : Procedure

## Narrative: 1

The Approach Controller left us high and fast compared to the preceding Aircraft Y. We were instructed to slow and descend which we did. We were asked if we had the Aircraft Y in sight which we did as well as the runway. Our ground speed was roughly 35 kts. faster than the Aircraft Y as ground speed mini had our approach speed at 160 kts. Our spacing was roughly two and one half miles according to our ND. The Aircraft Y did not clear the runway with sufficient spacing and we were directed to go-around. While on subsequent vectors and turning base, ATC advised of VFR traffic that would be at our 12 o'clock position and 500 ft. below. That traffic was in sight visually, as well as on the TCAS. While on our base leg, that aircraft climbed to within 300 ft. and we received a TCAS RA with instructions not to descend. The autopilot was disconnected and level flight was maintained. Once we were clear of the conflict, automation was restored and we landed without further incident. MCI was operating on Runway 27 with high winds from the west. With this not being their normal two runway traffic flow, spacing issues could become more challenging. When we were given the instruction to slow and descend, a comment was made about the Controller having forgotten about us. It didn't help that the Aircraft Y was not able to make F or E as the Tower had hoped and then was instructed to expedite to C8. For the TCAS, the same Controller that didn't allow for enough approach spacing may have felt an earlier turn to base and final was a good way to help us out to make amends. After the initial base vector, he did shorten our turn by 10 degrees to allow us to pass behind the other aircraft, which would have worked had that aircraft maintained a VFR altitude.

## Synopsis

Air carrier First Officer reported an NMAC on approach to MCI following an unstabilized approach.

## Time / Day

Date : 202111

Local Time Of Day : 1801-2400

## Place

Locale Reference.Airport : CMA.Airport

State Reference : CA

Altitude.MSL.Single Value : 4000

## Environment

Flight Conditions : VMC

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : NTD

Aircraft Operator : Fractional

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 135

Flight Plan : IFR

Flight Phase : Initial Approach

Airspace.Class E : NDT

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class E : NDT

## Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Fractional

Function.Flight Crew : First Officer

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1854368

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

## Person : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Fractional

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

ASRS Report Number.Accession Number : 1854369

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

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Detector.Automation : Aircraft RA  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Air Traffic Control : Issued New Clearance

## Assessments

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

## Narrative: 1

After misleading instructions by Point Mugu Approach telling us [CMA] was landing 08 instead of our requested RNAV GPS Y 26 approach we had to reprogram for Runway 8, then were transferred to Approach who told us CMA was landing 26. We asked for vectors to program again the box to RNAV Y 26. ATC vectored us to join RNAV Y 26 approach and we had an RA. We were ready because we had them on TCAS. Captain who was flying followed the RA instruction and we came within 200 ft. of traffic. We asked for vectors to re-intercept the course for the approach and proceeded to land safely. ATC (Point Mugu) were under the false impression that CMA was landing 08 when the actually were landing 26, this created unnecessary stress and reprogramming of FMS and way more complicated vectoring than necessary. Then second approach ATC vectors us too close to traffic they did not speak to, that too was unnecessary and unsafe. ATC Approach personnel should better communicate between locations and double check their facts and serve pilot and passengers instead of shooing them along without understanding the time it takes to reprogram and brief last minute changes.

## Narrative: 2

On the descent very close to CMA as we were talking to approach frequency setting up for the approach when we got an RA to climb. We were being vectored around at 4000 ft. when the RA occurred. It instructed to me to climb so I climbed to 4,600 ft. to clear the conflict. We reported the RA to approach. We then set up for the RNAV Runway 26, shot the approach and landed. ATC was the cause! We got the ATIS for CMA and they were landing Runway 26. We set up for Runway 26. Then we got handed over to Point Mugu Approach who emphatically told us that CMA was landing Runway 8. We asked him if we could land 26. He recommended that we set up for Runway 8. So we did. Then he handed us over to either Socal or the Tower (I can't remember). They put us on a heading and then said we were cleared for the RNAV Runway 26. We told them that we were set up for Runway 8 because of what the last Controller had told us. The new Controller asked us what we wanted to do. He asked if we wanted vectors to get reset up for the RNAV Runway 26 and we agreed. So while he was vectoring us we got the RA. Had the Controller at Pt Mugu not given us erroneous information, I don't believe this would have happened.

## Synopsis

Corporate jet flight crew reported an NMAC on arrival into CMA after considerable confusion regarding the runway in use.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 320

Relative Position.Distance.Nautical Miles : 7

Altitude.MSL.Single Value : 2200

## Environment

Flight Conditions : Marginal

Weather Elements / Visibility.Visibility : 10

Light : Daylight

## Aircraft : 1

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.Other

Flight Plan : None

Mission : Training

Flight Phase : Descent

Route In Use : Visual Approach

Airspace.Class D : ZZZ

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : Military Trainer

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Final Approach

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

ASRS Report Number.Accession Number : 1854208

Human Factors : Time Pressure

Human Factors : Communication Breakdown

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

## Events

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

## Assessments

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

## Narrative: 1

Toward the end of my hour and a half flight block at ZZZ, my student and I were transitioning back to ZZZ from a local airport (ZZZ1) where we conducted practice landings and maneuvers in our designated practice area in which we were ramped out by dispatch to. We called 10 NM northwest and told ATC our intentions. They instructed us to report back 4 NM northwest, we complied. Upon reaching approximately 7 NM northwest, after several broken radio calls that my student and I were unable to distinguish, we were instructed to fly NE in order to provide separation for a flight of military T6's that were on a long straight in final. I confirmed that ATC wanted us to fly northeast in order to avoid an aircraft that was on a straight in, they confirmed. Making a judgment call, I decided to instruct my student to fly straight north due to not wanting to cross over, under, or in front of the approaching aircraft that were seemingly on a straight in long final. Being out of the class D airspace, I was free to do as I pleased to ensure safety of flight. We called ATC and informed them we were doing so, unsure of what they wanted us to do, as we saw on our Multi-Function Display (MFD), the indication of an aircraft -2 (200 ft. below) moving toward us at a fast rate. ATC informed us that there was no traffic to the northwest, and that they were on a straight in. To which I responded they are incorrect because I have two military T6's in sight (visual, and on my MFD) and they were passing below us approximately 200 ft. below. We then turned to the left (west trending south/southeast) in order to keep the T'6s in sight and continue in to the airport.

## Synopsis

Cessna 172 flight instructor reported an NMAC event that was caused by an ATC assigned heading. Flight Instructor executed an evasive maneuver to prevent a collision.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZZZ.Tower

State Reference : US

## Environment

Flight Conditions : VMC

Ceiling : CLR

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

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

Crew Size.Number Of Crew : 2

Flight Plan : VFR

Mission : Passenger

Flight Phase : Initial Approach

Airspace.Class C : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : UAV: Unpiloted Aerial Vehicle

Airspace.Class C : ZZZ

Configuration (UAS) : Multi-Rotor

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

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

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Type : 3000

ASRS Report Number.Accession Number : 1854026

Human Factors : Situational Awareness

Human Factors : Training / Qualification

Human Factors : Distraction

## Events

Anomaly.Airspace Violation : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : FAR

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

Anomaly.Deviation / Discrepancy - Procedural : Unauthorized Flight Operations (UAS)

Detector.Person : Flight Crew

Miss Distance.Horizontal : 500

Miss Distance.Vertical : 100

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Requested ATC Assistance / Clarification

## Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

While turning right base to final at ZZZ for Runway XX, Pilot Flying and I noticed what appeared to be a quad-rotor drone off our right wing approximately 500 feet away, and 100 feet below our altitude. We believe the drone was at approximately 600 feet altitude. This was reported to ZZZ Tower via radio and subsequent phone call to the Tower Manager. He took a lot of information from us about the events for a report on his end. A drone was flying in controlled airspace near final approach for Runway XX. It didn't appear to be in cooperation with ZZZ ATC control.

## Synopsis

Air taxi pilot reported a UAS passed by their aircraft when approaching to land. The pilot continued the approach and landed normally.



## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZZZ.ARTCC

State Reference : US

Altitude.MSL.Single Value : 25000

## Aircraft : 1

Reference : X

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Nav In Use : FMS Or FMC

Nav In Use : GPS

Flight Phase : Descent

Route In Use : Direct

Airspace.Class A : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Cargo / Freight / Delivery

Nav In Use : FMS Or FMC

Nav In Use : GPS

Route In Use : Direct

Airspace.Class A : ZZZ

## Person : 1

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Pilot Not Flying

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1853898

Human Factors : Distraction

Human Factors : Situational Awareness  
Human Factors : Time Pressure  
Human Factors : Workload  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

## Person : 2

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Flight Crew : First Officer  
Function.Flight Crew : Pilot Flying  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Instrument  
ASRS Report Number.Accession Number : 1853660  
Human Factors : Workload  
Human Factors : Time Pressure  
Human Factors : Distraction  
Human Factors : Communication Breakdown  
Human Factors : Situational Awareness  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude  
Detector.Automation : Aircraft RA  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Flight Crew : FLC complied w / Automation / Advisory

## Assessments

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

## Narrative: 1

It was the First Officer's leg from ZZZ1 to ZZZ. We were flying Flight ABCA. We were flying Aircraft X. On descent into ZZZ, we were cleared to descend via a STAR arrival. We were then given a level off altitude of FL250. We received a TCAS alert from traffic at our 10 O'clock position..."Traffic Traffic"...then a few seconds later we received a RA to "Climb Climb". I notified ATC that we received a RA and that we were climbing. The First Officer immediately disconnected the autopilot and auto throttles and executed a climb. At FL255 the TCAS system said, "Clear of Conflict". We returned to FL 250. ATC then re-cleared us to descend via the STAR arrival again. We landed on Runway XXR (previously XYR) and

taxied into our Gate X at ZZZ. ATC climbed an aircraft within approximately 500 feet of us, we received an RA and reacted to it. Better situational awareness by the ATC controller.

## Narrative: 2

While flying the STAR RNAV arrival into ZZZ, we were given a number of step-down descents that kept us above our programmed VNAV descent path. Approaching ZZZZZ at the 12 o'clock position was an aircraft flying at us and climbing toward our altitude. We were at FL250 and received a TCAS RA directing a climb to FL255 with which we complied. We notified ATC of our TCAS RA response. After clear of traffic, we descended back to FL250 and resumed the arrival. Immediately after this occurrence, we changed frequencies. Perhaps this traffic conflict was a result of miscommunication between the two controllers. I am surprised that the ATC controllers would not have received an alert about two aircraft on a collision course. We routinely receive many irrelevant traffic alerts, but in this instance, we heard nothing from ATC.

## Synopsis

Air Carrier pilots reported receiving an RA while descending. The pilot flying started a climb until receiving "clear of conflict." The other aircraft was also an air carrier tracking towards the reporting pilots. There was no alert from ATC according to the reporter.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 330

Relative Position.Distance.Nautical Miles : 7

Altitude.MSL.Single Value : 2100

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 20

Light : Daylight

Ceiling.Single Value : 10000

## Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

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 : Personal

Flight Phase : Descent

Route In Use : Direct

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

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

Flight Phase : Climb

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 2200

Experience.Flight Crew.Last 90 Days : 40

Experience.Flight Crew.Type : 10

ASRS Report Number.Accession Number : 1853801

Human Factors : Communication Breakdown

Human Factors : Distraction  
Human Factors : Time Pressure  
Human Factors : Workload  
Human Factors : Other / Unknown  
Human Factors : Situational Awareness  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Conflict : NMAC  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 20  
Miss Distance.Vertical : 20  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

Flying VFR back to my home airport in Aircraft X. This is an older tailwheel airplane with limited electrical availability so no ADSB in or out. We were breaking in a cylinder so we were constantly monitoring the oil pressure and the oil temp. We were leaving our VFR cruise altitude of 3500 feet and descending to set up for a 45 entry to our home base traffic pattern at ZZZ. We had listened to the local AWOS and was monitoring the CTAF, getting ready to call 7 miles out. We did not hear anyone nor did we see anyone leave. Visibility was great. I had been flying the return trip, but asked my husband in the back seat to take over and land as I had been flying all day and needed a break. He took the stick and I looked down for only a few seconds to scan the instruments and gauges. When I looked up, there was an airplane right in front of me - I could see faces, wheels, etc, and it looked like they were slightly climbing, so I instinctively pushed the stick forward and dove - which scared my husband who started yelling, but he then saw the other airplane. My husband is also a pilot with over 10,000 hours of GA experience, and 51 years of flying. It scared us both - I actually cringed when I pushed the stick forward because I thought we were going to hit them and expected to feel an impact. We think they saw us at that point because they turned back toward us. They were a low wing and we are a high wing. No one did anything wrong, but it is an example of serious need to SEE AND AVOID as head on gives you zero time. I was looking and scanning even though I was not controlling the stick, and looked down for maybe 7 or 8 seconds, but it was enough to make a huge difference. Normally we fly with an ADS-B receiver connected to our phone, but the phone had dropped to the floor and we couldn't reach it. Although ADS-B is great and maybe it would have helped us see them sooner, it would not help them see us, so I can only say how important it is to be diligent and look outside.

## Synopsis

GA instructor reported an NMAC while flying a high wing tail wheel aircraft. Descending to enter the CTAF traffic pattern immediate evasive action was needed to avoid an aircraft that was climbing through the instructor's flight path.

## Time / Day

Date : 202111

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 : 20

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Takeoff / Launch

Airspace.Class G : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase : Landing

Airspace.Class G : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 14500

Experience.Flight Crew.Last 90 Days : 100

Experience.Flight Crew.Type : 250

ASRS Report Number.Accession Number : 1853790

Human Factors : Communication Breakdown

Human Factors : Confusion

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Distraction

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

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 1000  
Miss Distance.Vertical : 0  
Were Passengers Involved In Event : N  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

ZZZ has major surface construction in progress. Only a single taxiway to enter/exit the runway exists...all other entrances/exits were closed and barrier blocked. At [this morning] I taxied out for a local flight. On taxi I heard no one in the pattern or calling in nor did I see anyone in the pattern. I announced entering the runway to back taxi Runway XY. As I was back taxiing an aircraft reported overhead turning downwind for Runway XZ. At this point I was nearly into position for takeoff on [Runway] XY. There would have been no conflict whatsoever if the aircraft overhead had simply made a normal downwind and base leg, however that is not what happened. As soon as I announced takeoff on Runway XY the aircraft overhead announced turning final...the aircraft was barely on a downwind leg and had not even turned or even announced turning base for [Runway] XZ. The aircraft circled into a final approach for Runway XZ about 1/4 mile from the departure end of Runway XY. I was committed to the takeoff and even if I had been able to clear the runway there were no runway exits for me to use to clear the runway. As I lifted off the aircraft maintained a straight on heading to my aircraft and forced me to turn left sharply at very low altitude barely above the tree tops. I believe this was a malicious maneuver done intentionally to me. After I was clear of the runway environment the aircraft could have landed, but instead they announced a go-around. I am aware of the right of way rules and that an aircraft on final has the right of way to aircraft on the ground. However I believe the other aircraft abused the right of way rules to force me off the runway...which was impossible due to my already having begun my takeoff roll and the closed runway exits.

## Synopsis

Pilot reported a NMAC during takeoff. On their takeoff roll, an aircraft on downwind for the opposite runway turned a short base and final leg to land. All remaining taxiways for the instructor were closed due to construction. The instructor became airborne and executed an evasive maneuver.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : LVK.Tower

State Reference : CA

Relative Position.Distance.Nautical Miles : 0

Altitude.MSL.Single Value : 2000

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Ceiling.Single Value : 18000

RVR.Single Value : 10000

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : LVK

Aircraft Operator : Fractional

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Initial Approach

Route In Use : Direct

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : LVK

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

Crew Size.Number Of Crew : 1

Flight Phase : Initial Approach

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Fractional

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Private

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 3300

Experience.Flight Crew.Last 90 Days : 20

Experience.Flight Crew.Type : 75

ASRS Report Number.Accession Number : 1853753

Human Factors : Communication Breakdown



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

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation - Track / Heading : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Air Traffic Control : Issued Advisory / Alert  
Result.Air Traffic Control : Issued New Clearance

## Assessments

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

## Narrative: 1

I was approaching LVK 10 miles from the north at approximately 3000 ft. I picked up LVK ATIS, then contacted the Tower. I was cleared to enter a right downwind for Runway 25R. I requested to cross midfield with a left break entry into the left downwind for closed traffic Runway 25L. I was cleared as requested. At approximately 1 mile I was again cleared to cross midfield as requested and land number one on Runway 25L. As I crossed over the downwind for Runway 25R I saw [another aircraft] below me by approximately 500 feet at my 3 o'clock and passing behind. I called the Tower and reported [the other aircraft] in sight. On my base to final turn the Controller asked me to make this landing a full stop and taxi back. I landed uneventfully. I contacted LVK Ground who asked me to call the Tower. I taxied to a non-movement area and made the call and explained my actions.

## Synopsis

Light aircraft pilot reported an NMAC in the pattern at LVK airport following an apparent miscommunication with the Tower.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : EDU.Airport

State Reference : CA

Relative Position.Distance.Nautical Miles : 2

Altitude.AGL.Single Value : 900

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 99

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.CTAF : EDU

Aircraft Operator : Personal

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class G : EDU

## Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : EDU

Make Model Name : Small Aircraft

Flight Phase : Final Approach

Airspace.Class G : EDU

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 720

Experience.Flight Crew.Last 90 Days : 13

Experience.Flight Crew.Type : 355

ASRS Report Number.Accession Number : 1853541

Human Factors : Situational Awareness

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

## Events

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

## Assessments

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

## Narrative: 1

While on upwind in the pattern for Runway 17 at EDU, a faster airplane reported 4 miles inbound from the south. I assumed he would make a standard 45 entry and join behind us in the pattern, so I continued onto the crosswind, reported my position, and then turned onto the downwind. I was surprised when the other pilot reported that he too was on downwind, so I reported my position (on downwind abeam the 17 numbers) and began my descent. The other pilot did not clarify his position, and at that moment I saw an advisory on my ADS-B device that he was directly below me by 200 feet, evidently having already started his descent. I immediately arrested my descent, added power, and climbed back to TPA while bailing out of the pattern to the east of the field. I felt this was the safest direction to fly, in order to fly clear of the pattern, rather than to risk getting even closer to the other aircraft should he also choose to take evasive action. After reaching pattern altitude, I maneuvered over the university campus east of the field, at a TPA of 900 feet MSL, to re-enter the pattern on a left 45-degree entry while staying within 2 miles of the airport. It was then I realized that I was 100 feet below the minimum altitude required for VFR flight over a congested area. Even though I was within 2 miles of the airport, I now realize that I should have climbed to 1,000 feet AGL until entering the 45-degree leg to the downwind. I think this occurred due to getting saturated with what appeared to me like a very hazardous situation with a faster-moving aircraft who didn't make adequate radio calls, suddenly catching up with me in the pattern. In the future, I will anticipate that pilots may not make accurate calls with respect to their range and to seek clarification in cases like these.

## Synopsis

GA pilot reported an NMAC while on the downwind at non-towered EDU requiring evasive action. The pilot of the other aircraft had reportedly not been communicating properly, which contributed to the event.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 13000

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : EMB ERJ 145 ER/LR

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Cruise

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1853443

## Events

Anomaly.Conflict : NMAC

Detector.Automation : Aircraft RA

Detector.Automation : Aircraft TA

Miss Distance.Vertical : 400

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

Result.Flight Crew : Overrode Automation

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1

At 13,000 feet ATC informed flight of VFR traffic at 12 O'clock 500 below. The traffic was not speaking to ATC. Moments later the TCAS issued a TA. Shortly after the TCAS issued an RA to MONITOR VERTICAL SPEED but no vertical maneuver. Then the TCAS issued an RA to climb. Crew disengaged the Autopilot and responded to the RA. Crew notified ATC. When clear of conflict flight returned to normal cruise altitude. Closest approach noted was -400 on the TCAS directly below when flight reached an altitude of 13,400.

## Synopsis

EMB-145 Captain reported an NMAC during cruise requiring the crew to disengage the autopilot and execute a climb maneuver to clear the conflict. The conflicting VFR aircraft was not in communication with ATC.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 200

## Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Initial Climb

Airspace.Class G : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 1

Flight Phase : Landing

Airspace.Class G : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 1250

Experience.Flight Crew.Last 90 Days : 80

Experience.Flight Crew.Type : 1000

ASRS Report Number.Accession Number : 1853179

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.Conflict : NMAC

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

Detector.Person : Flight Crew

Miss Distance.Horizontal : 100

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

## Assessments

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

## Narrative: 1

I was doing a training flight with my student. The airport we operate out is uncontrolled (XXX). The winds were very light and favoring Runway XX. Me and my student planned on taking off Runway XX. We transmit our Intentions on CTAF that we are planning taking off Runway XX. I hear the other aircraft on the radio and they say plan on landing Runway XY. Since they were coming from the north they announced that they plan over flying the field and entering the downwind. So I thought that they are probably going to be another 15 minutes give or take and not be factor. So I go ahead and do another radio call that we are departing Runway XX. So on the upwind portion of the pattern at around 500 feet AGL me and my student see the aircraft on the final for Runway XY. I Immediately take controls continue my climb and turn to the right. After investigating the incident I have discovered that the aircraft decided to enter right base for XY and land. The other aircraft did not go around they continued their approach and landed.

## Synopsis

A Flight Instructor reported an NMAC event during initial climb with opposite direction landing aircraft. Flight Instructor stated the landing aircraft provided inaccurate position radio calls.

## Time / Day

Date : 202111

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : GXY.Airport

State Reference : CO

Relative Position.Angle.Radial : 280

Relative Position.Distance.Nautical Miles : 8

Altitude.MSL.Single Value : 4900

## Environment

Light : Daylight

Ceiling : CLR

## Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : GXY

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 : Personal

Flight Phase : Final Approach

Route In Use : None

Airspace.Class G : GXY

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Flight Plan : None

Mission : Personal

Flight Phase : Landing

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 2500

Experience.Flight Crew.Last 90 Days : 20

Experience.Flight Crew.Type : 200

ASRS Report Number.Accession Number : 1853151

Human Factors : Communication Breakdown



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

## Events

Anomaly.Conflict : NMAC  
Detector.Person : Other Person  
Miss Distance.Horizontal : 100  
Miss Distance.Vertical : 50  
When Detected : In-flight  
Result.General : None Reported / Taken

## Assessments

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

## Narrative: 1

While on a pleasure flight, elected to do a low approach on a private airstrip. Observed with traffic system in [the cockpit] an aircraft landing on the field; entered a left downwind, left base, and final approach, while no other aircraft were reported on traffic system. Monitored 122.80, heard no reports. Was later informed of second aircraft on approach to field, which [went] missed approach. Second aircraft was never visible on traffic or visual.

## Synopsis

GA pilot reported being notified of causing an NMAC event after landing at non-towered airport GXY. Reporter stated no visual was traffic observed nor heard any traffic on UNICOM.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1700

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Make Model Name : T6A Texan II / Harvard II (Raytheon)

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Initial Approach

Route In Use : None

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Phase : Descent

Route In Use : None

Airspace.Class D : ZZZ

## Person

Location Of Person.Facility : ZZZ.Tower

Reporter Organization : Government

Function.Air Traffic Control : Instructor

Function.Air Traffic Control : Local

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 2.5

ASRS Report Number.Accession Number : 1852703

Human Factors : Confusion

## Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

Anomaly.Deviation - Altitude : Overshoot

Anomaly.Deviation - Track / Heading : All Types

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

Detector.Person : Flight Crew

Miss Distance.Vertical : 100

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Human Factors

## Narrative: 1

Training in progress on LC1 position. Aircraft X was in the right closed traffic pattern along with 2 other aircraft. Aircraft Y called inbound 9 miles NW of the field and was instructed to enter right downwind for XXR. The pilot requested to fly overhead to enter a left downwind for XXL. The trainee instructed Aircraft Y to overfly midfield at or above two thousand feet, the pilot replied "Roger," acknowledging the instructions. Pattern altitude for closed traffic is one thousand four hundred feet. Aircraft Y, abeam midfield reported Aircraft X in sight as he flew southbound to cross overhead midfield. Aircraft X then reported that he had to perform an evasive turn to avoid a "near midair incident." At the time of that report, Aircraft X indicated 017 and Aircraft Y indicated 018 on the radar display. The aircraft both continued on and landed on their assigned runway. This incident occurred because both aircraft involved flew in a manner other than what was instructed and expected of them. Aircraft Y descended well below his altitude restriction and Aircraft X was flying well above pattern altitude without notifying the tower of his intentions to do so. Both aircraft placed themselves in a position to create a conflict with each other. Due to the lag in radar display, the proximity of the aircraft was both unrealized and unexpected until the pilot had reported it to us. Pilots must be familiar with standard procedures as well as follow any instructions given them by ATC, if both of those had taken place, there would have been no incident.

## Synopsis

Tower Controller reported an NMAC requiring evasive action to avoid a collision.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1500

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Military

Make Model Name : Fighter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Flight Phase : Initial Approach

Airspace.Class C : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class D : ZZZ

## Aircraft : 3

Reference : Z

ATC / Advisory.Tower : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Flight Phase : Cruise

Airspace.Class D : ZZZ

## Person

Location Of Person.Facility : ZZZ.Tower

Reporter Organization : Government

Function.Air Traffic Control : Local

Qualification.Air Traffic Control : Fully Certified

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

ASRS Report Number.Accession Number : 1852696  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : ATC  
Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Detector.Person : Air Traffic Control  
When Detected : In-flight  
Result.Air Traffic Control : Provided Assistance  
Result.Air Traffic Control : Issued New Clearance

## Assessments

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

## Narrative: 1

Aircraft X was VFR in a left downwind after departing Runway XXR. Aircraft Y was on a Visual Approach and cleared to land on XXL. Aircraft X was VFR orbiting 4 miles east of ZZZ. When Aircraft Y was about 6 mile final at about 1,500 ft Aircraft X was about 1 mile south of ZZZ still in the downwind. Aircraft X then decided to cross over final at 1,500 ft in front of Aircraft Y who at the time was at 1,300 ft. Aircraft X did not give a reason or a traffic insight call. I Local Controller (LC) immediately issued traffic to Aircraft X about Aircraft Y by saying "turn left immediately for final traffic at 1,300 ft type aircraft." I don't believe I got a response. By that time he was clear of Aircraft Y and headed straight towards Aircraft Z. This time I informed Aircraft X to turn left heading 360 immediately to avoid the traffic. Again no response. I issued traffic to both aircraft until Aircraft Z reported the Aircraft X in sight and it was no longer a factor. I terminated control of Aircraft X at the edge of the Class Delta east of the field. Aircraft Y and Aircraft Z landed with no further incident. Aircraft X should have informed me of his intentions much sooner. The reason he was LDW [Left Downwind] instead of RDW [Right Downwind] was because of Aircraft Z to the East and IFR final traffic inbound. There should be a set procedure to remove conflict with IFR Air Carrier traffic.

## Synopsis

Tower Controller reported an NMAC due to an aircraft turning in front of an arrival.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 6000

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : M-20 T Predator

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : IFR

Flight Phase : Cruise

Route In Use : Vectors

Airspace.Class E : ZZZ5

## Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : ZZZ

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : IFR

Flight Phase : Cruise

Airspace.Class E : ZZZ

## Person : 1

Location Of Person.Facility : ZZZ.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Approach

Qualification.Air Traffic Control : Fully Certified

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

ASRS Report Number.Accession Number : 1852693

Human Factors : Situational Awareness

Human Factors : Distraction

## Person : 2

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Private

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 411.9  
Experience.Flight Crew.Last 90 Days : 28.3  
Experience.Flight Crew.Type : 221.3  
ASRS Report Number.Accession Number : 1854816  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Detector.Automation : Aircraft Other Automation  
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 : Environment - Non Weather Related  
Contributing Factors / Situations : Human Factors  
Primary Problem : Human Factors

## Narrative: 1

As a Preface, the day was busy. I got my butt kicked just about every session with the exception of one where I worked Data. All the others were either North radar combined or south radar with ZZZ1 final and ZZZ2 final. ZZZ1 arrivals were outrageous with fighters, C17s, T38s, and TEX2s all day. I was working south Radar dealing with a handful of T38s with poor radios for TACAN, ILS, LOC, and high TACAN approaches at ZZZ1. We combined north radar to south radar in the middle of it since north radar didn't have very much traffic and we could get someone fresh to keep the rotation of positions going. Aircraft X was direct ZZZ2 for the GPS XXL at 060 southbound. Aircraft Y was westbound towards ZZZ3 at 060. Honestly, I simply forgot that I was working north radar during my battle with getting the T38s on the ground and sequencing them behind a C206 on the GPS runway X at ZZZ1 while juggling the High TACAN T38s in with the regular approach T38s. Before the conflict alert went off I heard "Approach, what about this traffic at my 10 o'clock?" I looked up searching for who could have said that and saw the Aircraft X and Aircraft Y on converging courses at the same altitude. It wasn't good. I turned Aircraft Y to a 240 heading then gave the traffic alert. Then I turned Aircraft X to a 270 heading and gave a traffic alert. During the exchange, someone was "hotmic'd" so I was worried the instructions didn't go out, but both planes turned to divert. The closest was 1.23 miles and 100ft. I believe Aircraft X called us later on the phone saying he was going to final NMAC paperwork and that he was shook up. It would be very convenient for me to point the finger at someone else to say "Someone could have been watching the scope with me", but honestly, the buck stops with me. I was burnt out on the session with the error and I could have spoke up and asked for an easier sector. I could have been more vigilant in scanning my airspace to notice an extremely easy to see, textbook conflict and fixed it before it became a problem.

## Narrative: 2

While en route from ZZZ4 to ZZZ2 on an IFR flight plan, I was given direct ZZZ2 while just off ZZZ4. En route, while approaching the X area, I noticed an ADS-B target on my iPad, traveling northwest bound at 230 knots ground speed, at my altitude. Based on my iPad, it

appeared that we were likely to conflict. I estimate my distance from this target initially was 6-8 miles when I first noticed. Suspecting a conflict, I eagerly awaited ATC's turn instructions to either aircraft. I searched visually for the aircraft for the purposes of anticipating a traffic call from ATC, hoping to say "Traffic in sight." When I heard no instruction for either aircraft, and could not acquire the target visually, I queried ATC (ZZZ Approach) with the following phrase: "ZZZ Approach, Aircraft X, do you have the traffic off my left wing?" This resulted in immediate instructions for me to make a turn to a heading of 270, and for the other aircraft to make a turn to the south, heading of 180 or 190. I initiated the turn prior to acknowledging ATC's instruction, and read back this instruction while in the turn. While turning, I received a traffic alert from Foreflight running on my iPad, which called traffic at "10 o'clock, same altitude." I am convinced that had I not queried ATC regarding this conflict, the controller would not have taken action. After both aircraft were established on new, non-conflicting courses, the controller handed off the other aircraft to another facility. During the hand-off, the controller apologized to the other aircraft for the incident. I was then given vectors for the RNAV RWY XYZ approach, was handed to the tower, and landed without issue. I believe ADS-B traffic information in the cockpit and the use of traffic information on my iPad while in busier airspace, combined with a proactive approach with ATC (my query about potential conflict) helped resolve this situation. I am surprised this occurred in such well-traveled airspace, very near a Class B airport and right at the Class B boundary. I would be curious to know if ATC received a CA-collision alert on their radar display.

## Synopsis

TRACON Controller and an involved pilot reported an NMAC requiring evasive action.



## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Distance.Nautical Miles : 1.5

Altitude.MSL.Single Value : 1300

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 100

Light : Daylight

Ceiling.Single Value : 6000

## Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : FBO

Make Model Name : SR20

Crew Size.Number Of Crew : 2

Operating Under FAR Part.Other

Flight Plan : None

Mission : Training

Flight Phase : Landing

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class G : ZZZ

## Aircraft : 2

Reference : Y

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

Flight Phase : Takeoff / Launch

Airspace.Class G : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Trainee

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 104

Experience.Flight Crew.Last 90 Days : 14

Experience.Flight Crew.Type : 104  
ASRS Report Number.Accession Number : 1852637  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : Flight Crew

## Events

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

## Assessments

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

## Narrative: 1

I was on an Instrument flight with my instructor when we decided to fly the RNAV XX at ZZZ which is an uncontrolled airport. My instructor was making final calls for runway XX on the CTAF while we were descending towards the runway, we hear no response so we continue with our descent. On final my instructor tells me to take off my goggles and go visual, at that point he asks me if what he's seeing on the runway is another plane or not. I looked and sure enough it was coming straight for us departing on runway YY. We were at around 1300 ft. when we noticed and decided to bank right where we missed him by what I would assume was less than 200 ft. [No one] was injured in this but my instructor and I were pretty shaken up. I think this problem arose from the lack of communication from the departing aircraft. If they had said their intentions then we would have known they were departing and would have made proper actions to get very clear out of their way. I also believe that it was in part that the AWOS was reading calm winds. This ends up making it so that the runway does not have a predominant headwind causing pilots to just "pick a runway". These I believe are very dangerous and could result, and have resulted in accidents before. I think one way to mitigate this would be to have something in the chart supplements, or making a regulation that forces a directional runway to be used at a non-towered airport when winds are reading calm which makes it so everyone is using the same direction (like what we do with VFR magnetic heading altitudes). Or I believe that you should have to use comms while at non-towered airports as well. I believe that these being implemented would make aviation much safer and I wouldn't have to worry about someone crashing head on into me at my local non-towered airport.

## Synopsis

SR-20 pilot reported an NMAC event during final approach to a non-towered airport. All required radio position reports were completed with no traffic responses received. On final, flight crew made visual contact with an opposite direction departure and executed an evasive maneuver.

## Time / Day

Date : 202111

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : MSP.Airport

State Reference : MN

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : MSP

Aircraft Operator : Air Carrier

Make Model Name : Commercial Fixed Wing

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Climb

Airspace.Class B : MSP

## Aircraft : 2

Reference : Y

Aircraft Operator : Personal

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 1

Flight Plan : IFR

Mission : Personal

Airspace.Class B : MSP

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1852306

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

## Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation - Altitude : Excursion From Assigned Altitude

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

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Automation : Aircraft RA  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

After takeoff, leveled off at 5,000 feet per ATC instructions while inside Class B airspace. Got an RA descend, single engine aircraft came within 400 feet of aircraft. Reported RA to ATC. They did not seem concerned. Cause - ATC vectored us within 500 feet of a small airplane.

## Synopsis

Air carrier Captain reported an NMAC event after ATC assigned a level off during initial climb after takeoff from MSP. The flight crew complied with the TCAS RA and notified ATC.

## Time / Day

Date : 202111

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 : 5

Light : Daylight

Ceiling.Single Value : 4200

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : PA-34-200T Turbo Seneca II

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Training

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : Beechcraft Twin Piston Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Cruise

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Captain

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Instructor

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Flight Instructor  
Experience.Flight Crew.Total : 5100  
Experience.Flight Crew.Last 90 Days : 75  
Experience.Flight Crew.Type : 4100  
ASRS Report Number.Accession Number : 1852168  
Human Factors : Time Pressure  
Human Factors : Communication Breakdown  
Human Factors : Human-Machine Interface  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

## Events

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

## Assessments

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

## Narrative: 1

[I] was talking to ZZZ ATC in [the] vicinity of ZZZ1. ATC advised traffic 9 o'clock, 2 miles, same altitude. Saw traffic on ADS-B but did not have visual confirmation. Advised ATC, no contact. ATC then directed me to climb to 3,500 - did not say immediate climb, just climb to 3,500 ft. Initiated climb. Still scanned for traffic and no traffic observed. While in climb, ATC - different voice - said, "STOP climb, descend." I started a descent. ATC stated, "STOP descent, it appears traffic is breaking away." At that point, I noticed aircraft on left wing, about 200 ft. from me in a steep descending right turn to pass behind me. I identified the aircraft as a low-wing but that is all I could identify, focused on flying. I asked ATC to mark the location and that I wanted to file a report for a near-miss. Flight continued to ZZZ3 and landed without incident. I subsequently phoned the radar facility and spoke to the Supervisor about the situation. In a subsequent email, I received info from the pilot of the other aircraft, whom I know personally. His account for it is below. That was me in Aircraft Y between ZZZ2 and ZZZ1 today on the 170 heading. It was a real demonstration in how onboard traffic technology can lead us down a dangerous path. I [was] watching you on ADS-B and opted to climb to increase the separation but it looked like you had the same thought. That was followed by a rapid descent which you mirrored as well. Interesting how this incredible technology can lead into unintended consequences. My takeaway is to make an early heading change rather than altitude whenever possible. In hindsight, I probably should have taken a southwest heading initially. Also, 98% of the time I use flight following. However, today I was on a 1200 code. The aircraft was probably blocked by the left windshield strut - I was flying right seat - as I never observed the traffic until the last minute. Perhaps if ATC would have issued something like "BREAK/BREAK Aircraft X IMMEDIATE RIGHT CLIMB" it would have conveyed more urgency. Better yet, ATC should have provided a vector sooner. ATC Supervisor jumped in and provided the needed vectors; I understand primary ATC controller was training a new

person and that may have caused some distractions. Fortunately, [the] other pilot, ATP retired pilot with 30,000+ hours, saw me and avoided. [I recommend a] joint phone call with ATC [and] both pilots to write up an article so others can learn from it.

## Synopsis

PA-34 Flight Instructor reported an NMAC event during cruise as ATC was slow in providing vectors, that resulted in both aircraft executing evasive maneuvers.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 6800

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft : 1

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

Route In Use : Visual Approach

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Luscombe (Silvaire) Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Climb

Route In Use : None

Airspace.Class D : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 530

Experience.Flight Crew.Last 90 Days : 80



Experience.Flight Crew.Type : 400  
ASRS Report Number.Accession Number : 1852164  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : Other

## Events

Anomaly.Conflict : NMAC  
Detector.Automation : Aircraft TA  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 200  
Miss Distance.Vertical : 100  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

My student and I had just departed Runway XXR to do some training in the traffic pattern in ZZZ. We were instructed to extend our departure leg to allow aircraft on the parallel to turn crosswind before us. After that, Aircraft Z turned crosswind. We were given clearance to turn crosswind about another mile beyond them to join left traffic for XXL to start pattern work. Aircraft Y behind me was given instruction to extend upwind and to look for Aircraft X traffic on the crosswind leg - my student and I - and to report them in sight. He reported that he had the Aircraft Z traffic in sight and Tower gave them instructions to turn crosswind north of the Aircraft X traffic. Aircraft Y appeared to have seen the Aircraft Z ahead of us that was already on downwind but had not seen us turning crosswind to downwind. On downwind, I heard the situation play out on the radio and became aware of a potential hazard as we approached the normal crosswind leg. I saw an aircraft on the ADS-B screen on our transponder showing it approaching from our left and climbing with 200 - 100 feet below. I grabbed controls of the aircraft as Tower began advising Aircraft Y of Aircraft X traffic ahead, and told him to descend 200 feet immediately. I saw the aircraft approaching us directly from the left and did a climbing left-hand chandelle to avoid the converging traffic that appeared to still be climbing. I am not certain that they saw us in time to begin a descent, which is why I did not initiate a right-hand turn as stated in Part 91 for right-of-way rules. The aircraft departed the airspace to the west and we continued flying out traffic pattern with no action towards the other aircraft from ATC.

## Synopsis

C172 flight instructor reported having to execute an evasive maneuver during an NMAC event while on visual approach as the other aircraft misidentified traffic, resulting in a loss of separation.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 180

Relative Position.Distance.Nautical Miles : 2

Altitude.MSL.Single Value : 2500

## Environment

Flight Conditions : VMC

Weather Elements / Visibility : Turbulence

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 3500

## Aircraft : 1

Reference : X

ATC / Advisory.CTAF : ZZZ

Aircraft Operator : Personal

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Personal

Flight Phase : Cruise

Route In Use : Direct

Airspace.Class G : ZZZ

## Aircraft : 2

Reference : Y

Aircraft Operator.Other

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Operating Under FAR Part.Other

Flight Plan : None

Mission.Other

Flight Phase : Cruise

Airspace.Class G : ZZZ

## Aircraft : 3

Reference : Z

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Flight Phase : Cruise

Airspace.Class G : ZZZ

## Aircraft : 4

Reference : A  
ATC / Advisory.Tower : ZZZ  
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer  
Flight Phase : Cruise

## Person

Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Personal  
Function.Flight Crew : Pilot Flying  
Function.Flight Crew : Single Pilot  
Qualification.Flight Crew : Private  
Qualification.Flight Crew : Instrument  
Experience.Flight Crew.Total : 285  
Experience.Flight Crew.Last 90 Days : 10  
Experience.Flight Crew.Type : 285  
ASRS Report Number.Accession Number : 1851891  
Human Factors : Communication Breakdown  
Human Factors : Workload  
Human Factors : Time Pressure  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : Other

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 500  
Miss Distance.Vertical : 200  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

While operating VFR on an eastbound heading, I encountered a flight of [3] aircraft proceeding in loose formation in a northeast direction. At the time, I was communicating on the CTAF of the local airport while transiting their airspace. I attempted to raise the aircraft on the CTAF frequency as I saw their positions on ADS-B but only had one of the aircraft visually. I was reluctant to turn north because of aircraft operating at a nearby airport, and was reluctant to turn south as I did not have visual confirmation of the position of all three aircraft in the "formation." Because of the overcast layer above, my ability to climb was restricted by the ceiling. As I approached the formation flight, when I was very close, I finally observed all three aircraft and was able to execute a turn to pass over their path. I should have made a turn well before I approached them to eliminate the conflict well ahead of time, including a turn back to the west to create greater separation by flying behind their "formation." I was focused on visually identifying all three aircraft and my inability to contact them on CTAF, where an earlier decision to execute a turn around the other aircraft would have avoided this situation entirely.

## Synopsis

Cessna 172 pilot reported an NMAC event with a flight of three non-communicating aircraft. Upon establishing visual contact with the formation, the Cessna pilot executed a successful evasive maneuver.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : BDU.Airport

State Reference : CO

Altitude.MSL.Single Value : 5400

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 50

Light : Daylight

Ceiling.Single Value : 12000

RVR.Single Value : 10000

## Aircraft : 1

Reference : X

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Takeoff / Launch

Airspace.Class G : BDU

## Aircraft : 2

Reference : Y

Aircraft Operator : Personal

Make Model Name : Other

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Personal

Flight Phase : Landing

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 230

Experience.Flight Crew.Last 90 Days : 31

Experience.Flight Crew.Type : 150

ASRS Report Number.Accession Number : 1851868

Human Factors : Distraction

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 400  
Miss Distance.Vertical : 0  
When Detected : In-flight  
Result.General : None Reported / Taken

## Assessments

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

## Narrative: 1

Was taking off Runway 8 at BDU; glider traffic called base for glider [Runway] 26 (a small runway parallel to Runway 8). Was surprised that glider was flying traffic pattern opposite of everyone else, and wasn't quite sure what to make of it, but I deemed it to be no factor. When I took off, the glider was on short final for the opposite parallel runway, and I passed about 400 feet south of them when I took off. To be clear, there was no risk of collision, but it was a bit too close for comfort. I definitely misjudged whether the glider would be a factor, and especially given the fact that they were using the opposite parallel runway, in the future I will refrain from taking off until any glider traffic in the pattern is on the ground.

## Synopsis

GA pilot reported an NMAC event during takeoff with opposite direction glider landing on parallel runway at BDU non-towered airport.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 125

Relative Position.Distance.Nautical Miles : 16

Altitude.MSL.Single Value : 3000

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 12000

RVR.Single Value : 10

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : ZZZ

Aircraft Operator : Personal

Make Model Name : Socata (Aerospatiale), Undifferentiated or Other Model

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Personal

Flight Phase : Descent

Route In Use : Vectors

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

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 : VFR

Mission : Personal

Flight Phase : Cruise

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Flight Instructor  
Experience.Flight Crew.Total : 3300  
Experience.Flight Crew.Last 90 Days : 60  
Experience.Flight Crew.Type : 900  
ASRS Report Number.Accession Number : 1851565  
Human Factors : Communication Breakdown  
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

## Events

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

## Assessments

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

## Narrative: 1

I was being vectored from ZZZ to ZZZ1 to the south and under the ZZZ2 Class B 4,000 ring at 3,000 feet. There was converging VFR traffic apparently not talking to Approach at 2,500 feet. The Controller turned me from a 250 to 270 heading which, according to my TCAS, indicated a convergence with the VFR traffic. As we converged, the VFR traffic began to climb as indicated by TCAS. I did not see the traffic. With the traffic at my location and 200 feet below, I began an immediate ascent to 3,400 feet. I received an urgent traffic alert on my TCAS. The location of the incident was just to the south of the 3,000 feet Class B ring. Pilot provided the following reasons why the routing was not the best route. On short flights from the east to ZZZ1, as a turbine aircraft, I am usually vectored over ZZZ2 in Class B. This avoids a large amount of VFR traffic ordinarily present between ZZZ3 and ZZZ1. I question the Controllers decision to vector me at a low altitude through a swarm of VFR traffic on a clear day. The Controller was not talking to the VFR traffic 500 feet below me and should not have vectored me toward the traffic knowing that the traffic could ascend to my altitude of 3,000 feet without even a radio call. Even if vectoring me south, the Controller could have given me a veil of protection from VFR traffic if he had routed me through the 3,000 feet Class B veil instead of putting me under the 4,000 feet veil in Class E.

## Synopsis

Pilot reported an NMAC event while on ATC vector under Class B 4,000 ring at assigned altitude of 3,000 feet. Pilot took evasive action to avoid a collision. Pilot indicated ATC assigned route and altitude was conducive to VFR traffic conflict.



## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 50

## Environment

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Helicopter

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Passenger

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Flight Phase : Final Approach

Airspace.Class D : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Rotorcraft

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 2300

Experience.Flight Crew.Last 90 Days : 150

Experience.Flight Crew.Type : 2300

ASRS Report Number.Accession Number : 1851499

Human Factors : Communication Breakdown

Human Factors : Time Pressure

Human Factors : Training / Qualification

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

## Events

Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 50  
Miss Distance.Vertical : 30  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

During approach to final, I took evasive action to avoid a collision with an airplane. We were both cleared to land on the runway and approached from different angles, different altitudes, and different speeds at the same time. I landed on the parallel taxiway to avoid a collision causing a taxiway incursion. The issue began as I approached the airport from downwind to final and became critical in the last moments of my final approach to land. I was approaching the airport at the end of a tour and part of our pre-determined routes take us over ZZZ1, about 1 mile directly off of the departure of Runway XX and about 1.5 miles north of the airport. Typically, with north flow, we pass ZZZ1 and make a gentle turn to the left and intercept the downwind leg. The controller had instructed me to enter the downwind leg parallel [to] Runway XX and cleared me to land the same. As I approached ZZZ1 from the north, the controller asked me if I knew which runway I was to use. I replied to the affirmative and repeated the landing instructions as he gave them to me, "Right downwind for Runway XX, cleared to land." He replied that it looked like I was making my approach to Runway XY. I reassured him I was a mile north of the centerline and clear of the departure end. He reminded me I was to enter the right downwind for Runway XX; by now, I was firmly established on an unmistakable downwind. I descended and began my base turn, then the base to final leg, which would have put me right on the runway as instructed. As I began to pass over the parallel taxiway and descend to the runway, I saw an airplane passing over the threshold to my left. At this point I knew that if I continued the approach, I would be hit from behind by the airplane. I visually cleared Taxiway XX, parallel [to] Runway XX, [and] saw that it was clear all the way down to the fuel pumps at the opposite end of the airport. There were no aircraft taxiing from the ramp on my right to the taxiway, and there were no aircraft taxiing off of the runway to my left. Given the aggressive maneuver and attitude of my aircraft, my speed, my altitude, and the current gusting wind conditions, I determined that the taxiway was my best option with regard to safety. I committed to and continued my approach to the taxiway; helicopters landing and departing from this taxiway is a normal and regular occurrence. While doing so, I immediately called the Tower over the radio and asked him to confirm

my landing clearance, "Could you verify, was I cleared to land on Runway XX or Taxiway XX parallel Runway XX?". He told me once again, he cleared me to land on the runway and from his tone I could tell he was angry at me and demanded to know why I made the approach to the taxiway. I told him, "Because there is an airplane on the runway, we would have collided." He and I had some back-and-forth over the radio before he instructed me to call the Tower when I landed, which I had already intended to do. Then, he cleared me to land on the taxiway after I was already in a 4-ft. hover over the taxiway. After landing and securing my aircraft, I called the Tower. He was obviously angry at the situation and demanded to know why I went to the taxiway. I told him I didn't have another option; it was the safest place for me to go given my current flight condition. He told me I was supposed to pass behind the airplane and then land on the runway. I told him until I visually saw the airplane over the runway, I had no idea it was there. I asked him why I didn't get a traffic advisory, why didn't he tell me I was number two for the runway, why didn't he inform me there was another airplane that close to me going to the same place I was going at the same time. I don't recall what he told me next but I believe it was something else implying I was in the wrong. It was outrageous enough to anger me and remind him that I am the pilot in command of my aircraft and I am responsible for the safety of myself, my passengers, my aircraft, and my surroundings; I do not have the luxury of a computer screen that tells me where other traffic is in relation to me in my aircraft - that that is his job. He told me he "didn't have time for this" and hung up on me. I noted that there was not a lot of chatter on the radio at the time of the incursion and afterwards. I believe one fixed-wing student pilot and instructor in the pattern, one Cessna taxiing to park on the other side of the airport, and myself. This controller is relatively new to the airspace although he had worked it several years ago, up until Date if I remember correctly. He does not seem to be aware of our pre-determined tour routes as he should be, certainly by now. He has a habit of issuing me a landing clearance while I am outside the airspace, and at the last moment when I am already established and committed to that landing area, diverting me to another. For example, he will clear me to land on the runway and then move me to the taxiway as I am on short final. Making that transition, even as gently as possible, makes some of my passengers - most of whom have never been in a helicopter - very anxious. There is very little consistency with him whereas with every other controller, I know exactly what to expect and how to work cohesively with them. Furthermore, he seems to be easily angered or frustrated and will take a less-than-professional tone with the offending pilot or aircraft for the remainder of the day. This has caused a lot of problems with new students who are just learning to talk on the radio or are still developing confidence in their radio abilities. In the past I have tried to schedule students who are new to radio operations around his schedule so they do not have to deal with him.

## Synopsis

Helicopter pilot reported an NMAC while turning onto final approach, which led the pilot to take evasive action and land on a parallel taxiway. Pilot stated that the Tower Controller had not advised of the conflicting aircraft.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : JYO.Airport

State Reference : VA

Altitude.MSL.Single Value : 1200

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 3500

## Aircraft : 1

Reference : X

ATC / Advisory.Center : ZDC

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Personal

Flight Phase : Final Approach

Route In Use : Visual Approach

Airspace.Class D : JYO

## Aircraft : 2

Reference : Y

Make Model Name : UAV: Unpiloted Aerial Vehicle

Airspace.Class D : JYO

Configuration (UAS) : Multi-Rotor

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

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

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Private

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 270

Experience.Flight Crew.Last 90 Days : 30

Experience.Flight Crew.Type : 50

ASRS Report Number.Accession Number : 1851489

Human Factors : Situational Awareness

Human Factors : Training / Qualification  
Human Factors : Distraction

## Events

Anomaly.Airspace Violation : All Types  
Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Unauthorized Flight Operations (UAS)  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Flight Crew  
Miss Distance.Vertical : 100  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

Following an extended Left Hand downwind for Runway 17 at JYO staying at pattern altitude, my Safety Pilot and I made a left turn towards final at 1,400 feet. Once established on the final towards the runway we started a slow descent. At 1,400 feet, about 2.5 miles from the runway on final, we noticed a red quadcopter drone coming towards us, it looked like it was moving towards the north. We descended a bit to 1,200 feet and the drone passed straight over us, missing the aircraft by about 100 to 200 feet vertical. The drone continued flying to the north on runway heading and we landed uneventfully. The encounter was immediately reported to ATC.

## Synopsis

General aviation pilot had a near miss with a UAS while on approach and took evasive action.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.ATC Facility : ZZZ.TRACON

State Reference : US

Altitude.MSL.Single Value : 12400

## Environment

Flight Conditions : Mixed

## Aircraft : 1

Reference : X

Aircraft Operator : Air Carrier

Make Model Name : Regional Jet 200 ER/LR (CRJ200)

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : IFR

Mission : Passenger

Flight Phase : Descent

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : UAV: Unpiloted Aerial Vehicle

Airspace.Class E : ZZZ

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

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Air Carrier

Function.Flight Crew : Captain

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

ASRS Report Number.Accession Number : 1851392

Human Factors : Situational Awareness

Human Factors : Distraction

## Events

Anomaly.Airspace Violation : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Anomaly.Deviation / Discrepancy - Procedural : Unauthorized Flight Operations (UAS)

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

Detector.Person : Flight Crew

Miss Distance.Vertical : 200

When Detected : In-flight

Result.General : Police / Security Involved

Result.Flight Crew : Requested ATC Assistance / Clarification

Result.Air Traffic Control : Provided Assistance

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Environment - Non Weather Related

## Narrative: 1

While descending on the ZZZZZ Arrival into ZZZ about halfway between ZZZZZ1 and ZZZZZ2, we were descending through 12,400 ft. for 12,000 ft., and we had what looked like a drone pass off our left side about 200 ft. or so away. We did not have to do any evasive maneuvers. It appeared to be black and silver and cylindrical with what appeared to be the little drone rotors. It was right around the tops of the cloud layer. We reported it to ATC about 15 seconds later. A little while after reporting it ATC asked us what gate we were planning on. We told them [gate] XX. After landing and taxiing to the gate, [authorities] met us in the jetway and asked us about what we saw. I repeated the events just as I have written here to him. What appeared to be a drone was just above the cloud layer near our flight path on the ZZZZZ Arrival in to ZZZ. Drones should not be near commercial aircraft.

## Synopsis

CRJ200 Captain reported a near miss with a UAS while on descent to a Class B airport and reported to ATC.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

## Environment

Weather Elements / Visibility.Visibility : 6

Light : Daylight

Ceiling : CLR

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 121

Flight Plan : VFR

Mission : Training

Flight Phase : Final Approach

Route In Use : None

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class D : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Private

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 264

ASRS Report Number.Accession Number : 1850971

Human Factors : Situational Awareness

Human Factors : Communication Breakdown

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew



## Events

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : Clearance

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Procedure

## Narrative: 1

I was flying with my student out of ZZZ, coming in from the practice area, we were cleared to make a left base for Runway XXL, about 5 miles out, we're given a new instructions to fly straight to the rail road, and make straight in approach for [Runway] XXR upon new ATIS. We flew that and proceeded to fly our extended final toward runway. Controller informs us that he will be calling our right crosswind turn. We do our touch and go and around 5-600 feet I am called for a radio check. He informs me I missed for calls and luckily the other aircraft had seen me with adequate time. I see the other aircraft maybe 100 feet above and 10 to the left of me. I dove to the right and resumed normal traffic pattern operations and terminated my flight there. No number given to call, just a close call.

## Synopsis

Instructor pilot reported a near mid air collision after missing several radio calls from Tower during routine training operations.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1200

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 6500

## Aircraft : 1

Reference : X

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Training

Flight Phase : Initial Approach

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : UAV: Unpiloted Aerial Vehicle

Airspace.Class D : ZZZ

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

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

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 347

Experience.Flight Crew.Last 90 Days : 89

Experience.Flight Crew.Type : 311

ASRS Report Number.Accession Number : 1850939

Human Factors : Situational Awareness

Human Factors : Time Pressure

Human Factors : Distraction

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Unauthorized Flight Operations (UAS)  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 0  
Miss Distance.Vertical : 100  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

I was doing a flight with my private student and was in the traffic pattern for Runway XXL at ZZZ, on the third lap in the pattern I saw something in my peripheral vision. My student couldn't see it due to the altitude the engine cowling was blocking his vision, there was a drone that was at approximately 1,100 ft. I quickly pulled the yoke back to gain altitude to avoid the drone that was right in front of us. I reported it to the ZZZ Tower and they asked me questions about what happened, the drone activity was not a part of the ZZZ ATIS, and the Controllers did not see it. When I landed the plane I had to call the ZZZ Tower and give them a little more details and filed a safety report with my flight school.

## Synopsis

Flight Instructor reported a near miss with a UAS while in the traffic pattern and took evasive action.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : LAF.Airport

State Reference : IN

Altitude.MSL.Single Value : 16000

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : LAF

Aircraft Operator : FBO

Make Model Name : Small Aircraft

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Landing

Airspace.Class D : LAF

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : LAF

Make Model Name : Small Aircraft

Airspace.Class D : LAF

## Person

Location Of Person.Aircraft : X

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 690

Experience.Flight Crew.Last 90 Days : 100

ASRS Report Number.Accession Number : 1850667

Human Factors : Communication Breakdown

Human Factors : Confusion

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : ATC

## Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 400  
Miss Distance.Vertical : 400  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action  
Result.Air Traffic Control : Issued New Clearance  
Result.Air Traffic Control : Provided Assistance

## Assessments

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

## Narrative: 1

For a training flight with a student, I was told when 10 miles out by LAF Tower to report 3 miles north for right traffic Runway 28. When reporting 3 miles north, Tower gave an amendment to my instructions and switched me over to the left downwind for Runway 5. This was simple enough as it required a standard 45 degree entry into the left downwind. As we approached 2 miles, Tower gave instructions to Aircraft Y to take off of Runway 28 which was full length. As we entered the left downwind for 5, we spotted Aircraft Y on the upwind of 28 which directly crosses into the left downwind of Runway 5. As it became apparent that the aircraft's good climb rate would have resulted in a near midair collision, I assumed the controls from the student and executed an immediate right 360 turn to avoid the aircraft which was on a perpendicular collision course. I stated to Tower we were taking evasive action and making a right 360 for collision avoidance. In the right 360, Tower then switched Aircraft Y to left traffic Runway 5, which in turn placed them in sequence before us to land. Once established on the downwind we resumed normal operations and landed without incident. Tower never acknowledged the risk of having an aircraft taking off on a crossing runway to us.

## Synopsis

GA flight instructor with student reported an NMAC while on the approach pattern of LAF airport requiring evasive action to avoid a collision.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 443

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 5

Light : Daylight

Ceiling.Single Value : 10000

## Aircraft : 1

Reference : X

ATC / Advisory.UNICOM : ZZZ

Aircraft Operator : Personal

Make Model Name : Bonanza 36

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Mission : Personal

Flight Phase : Initial Approach

Airspace.Class G : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.UNICOM : ZZZ

Aircraft Operator : FBO

Make Model Name : Skyhawk 172/Cutlass 172

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Training

Airspace.Class G : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Pilot Flying

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Private

Experience.Flight Crew.Total : 361

Experience.Flight Crew.Last 90 Days : 10

Experience.Flight Crew.Type : 93

ASRS Report Number.Accession Number : 1850141

Human Factors : Communication Breakdown

Human Factors : Confusion

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

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation - Track / Heading : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Executed Go Around / Missed Approach  
Result.Flight Crew : Took Evasive Action

## Assessments

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

## Narrative: 1

On Date, Pilot #1 (reporting Pilot) experienced a near-miss event when turning right base for Runway XX at ZZZ Airport. Meteorological conditions were excellent, basically clear and unlimited visibility. The chain of events are as follows: Pilot #1 was flying recreationally from ZZZ1 to ZZZ, and knew that prevailing winds were 7-10 knots from 100° by listening to the ASOS, thus knew Runway XX would be in use and joined the pattern RIGHT downwind for XX. Pilot #2 was a beginning student pilot accompanied by an instructor. Aircraft Y was mid-flight in a X:XY hour training mission with a beginning student pilot left seat who was also operating the radio on the Unicom frequency for ZZZ. The aircraft was a Cessna 172K. Prior to approaching the airport, Aircraft Y had flown nearly to the Coast south of ZZZ, executed a series of 360° turns and approached ZZZ from LEFT downwind and executed a series of three touch and goes and balked landings from the EAST side of the airport (LEFT pattern). When joining the pattern RIGHT midfield downwind for 17 Pilot #1 first heard the student pilot announce that they were LEFT downwind XX. This was the first radio communication that Pilot #1 heard. Pilot #1 announced on the Unicom to Aircraft Y that "Runway 17 was RIGHT pattern", at which point the instructor keyed the radio and said, "he wanted to try something ... ". The student pilot had been the primary radio operator up to this point, and as is frequently the case with student pilots, the student's radio work was lacking in both crispness and accuracy. Pilot #1 proceeded RIGHT downwind for 17, turned RIGHT base for 17, and turned final for 17 when the instructor for Aircraft Y exclaimed, "You cut us off!". Words were exchanged on the radio and Pilot #1 proceeded to abort the landing on short final and executed a go-around. Aircraft Y executed an evasive action by performing a left 180 from an estimated heading of 260°, then performed a left 90° turn to 0° and proceeded to execute an extended LEFT downwind for XX, ultimately turning LEFT base and then final for XX while Aircraft X executed a go around. Aircraft Y landed. Pilot #1 successfully executed the go around, reentered the pattern RIGHT downwind and completed a successful landing on 17 and taxied back while Aircraft Y taxied and took off and then executed a series of RIGHT pattern maneuvers, with better radio communication on the part of the student pilot. All told Aircraft Y executed about 10 landings/go arounds/touch and goes, initially 5 from LEFT pattern, and after the incident 5 from RIGHT pattern. The problem arose due to lack of preparation and knowledge of pattern traffic on the part of the instructor in Aircraft Y.

This lack of situational awareness on the part of the instructor and failure to research the airspace properly before and during the training flight in Aircraft Y and inaction to research the airspace around the airport (ZZZ) caused the incident to occur. Instructor showed clear lack of judgement on this flight, not just at ZZZ. Aircraft Y took off from ZZZ2 and initially executed a series of RIGHT 360s in a notorious aerial hot spot southwest of Road X and Hwy X, which lies between active runways at ZZZ3 and ZZZ4 at the western edge of the VFR tunnel between ZZZ5 and ZZZ6. Ask any Controller about this area and they will tell you this was terrible judgement. Pilot #1 was focused on pattern work and on executing the proper RIGHT base and final approach and missed seeing the other aircraft. Poor radio work on the part of the student pilot (failure to announce position and intent) also contributed to the incident. Factors affecting the quality of human performance include a number of human factors, including pilot fatigue from having flown from ZZZ7 to ZZZ2 after midnight the previous night, and overtraining the student pilot during accelerated beginner's instruction (too much too soon). The instructor also exhibited anger and denial after the incident, both signs of stress. Pilot #1's perception is that the student pilot was unaware of the poor judgement of her instructor. The poor student sounded like they wanted to cry when operating the Unicom after the incident, likely due to the imposed stress of the situation due to the instructor's lack of preparation and low quality of instruction.

## Synopsis

Pilot reported a near miss while turning right base when another aircraft turned left base for the same runway. Reporter executed a go-around and the other aircraft took evasive action to avoid a collision.



## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 240

Relative Position.Distance.Nautical Miles : 4

Altitude.MSL.Single Value : 1500

## Environment

Flight Conditions : VMC

Light : Daylight

Ceiling : CLR

## Aircraft : 1

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 : Cruise

Route In Use : Visual Approach

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Airspace.Class D : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 470

Experience.Flight Crew.Last 90 Days : 58.3

Experience.Flight Crew.Type : 35

ASRS Report Number.Accession Number : 1850136

Human Factors : Communication Breakdown

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

## Events

Anomaly.Flight Deck / Cabin / Aircraft Event : Illness / Injury  
Anomaly.Conflict : NMAC  
Detector.Person : Flight Crew  
Detector.Person : Air Traffic Control  
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 was giving flight instruction. A few minutes before reporting 10 miles west from ZZZ my student told me that he was feeling motion sickness and decided to give me the flight controls. I took the flight controls and the communications. I reported 10 miles west of the airport and the Controller told me to report and enter the right base for Runway XX. I misunderstood the communications and thought that he asked me to report three miles west of the airport. Before reporting three miles from the airport I noticed that there was an aircraft flying closer to me but at a lower altitude. After that the Controller repeated the original instructions. At that moment I realized that I misunderstood his instructions. Then he asked me just to enter the pattern following that traffic and land. When I landed and exit from the runway, ATC asked me to call Tower.

## Synopsis

GA flight instructor with a student reported an NMAC during a visual approach after mistaking ATC instructions. The instructor was at the controls after the student experienced motion sickness.

## Time / Day

Date : 202110

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.CTAF : ZZZ

Aircraft Operator : FBO

Make Model Name : Beechcraft King Air Undifferentiated or Other Model

Crew Size.Number Of Crew : 1

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Passenger

Flight Phase : Takeoff / Launch

Route In Use : None

## Aircraft : 2

Reference : Y

ATC / Advisory.CTAF : ZZZ

Make Model Name : Amateur/Home Built/Experimental

Crew Size.Number Of Crew : 1

Flight Phase : Landing

Airspace.Class G : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Corporate

Function.Flight Crew : Single Pilot

Function.Flight Crew : Pilot Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Air Transport Pilot (ATP)

Experience.Flight Crew.Total : 5172

Experience.Flight Crew.Last 90 Days : 192

Experience.Flight Crew.Type : 257

ASRS Report Number.Accession Number : 1849779

Human Factors : Communication Breakdown

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

## Events

Anomaly.Conflict : NMAC  
Anomaly.Conflict : Ground Conflict, Critical  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Person : Flight Crew  
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

I announced my taxi from Parking to the active Runway XX. Approaching a taxiway intersection, I queried on CTAF whether there was any traffic in the area, to which I received no response. The only traffic I saw via ADS-B was about 6 miles to the west of the airport. As the parallel taxiway doesn't extend the full length of the runway, a back-taxi is required for Runway XX. I didn't taxi to the end of the taxiway since there was no one in the area, and instead turned on an earlier taxiway to back-taxi. Once I was on the runway and taxiing, I heard a radio call, "Aircraft X, why would you back-taxi from there instead of going to the end?" To which I responded, "My apologies, I didn't see or hear any other traffic in the pattern. I can of course taxi faster on the runway and will expedite." Immediately after, the other aircraft made a downwind call. At that point I noticed that according to ADS-B, the aircraft was still showing about 3 miles west of the airport. As I turned around at the end, the other aircraft made a base call. As I lined up with the runway and began my takeoff roll, I saw that he had turned a short base with a flight path in front of my aircraft. By my estimate, he had turned base approximately 1000 ft. prior to [the] approach end of the runway. Shortly after starting the turn, he made the call, "Aircraft Y going around for the goddamn Aircraft X." Though he announced the go-around, he flew his aircraft in a descending flight path towards my aircraft. I'm not sure if he was attempting to "buzz" my aircraft or not, but as my aircraft out-accelerated him, he made an abrupt pull up, back onto downwind. In my opinion, his aggressive maneuvering was an airborne version of "road rage" in which he put me, my passengers, and himself in an unsafe situation. I attempted to talk with him after my short flight [of] 8 minutes to debrief the situation, but he had pulled into his hangar and left very quickly after. This gentleman owns the hangar next to ours and frequently expresses his opinion that we're not welcome at the airport; I've never met him myself. In his attempt at creating another situation to complain about, he put multiple lives at risk.

## Synopsis

Pilot reported that while beginning the takeoff roll, another aircraft on final performed a go-around to avoid a near midair collision.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ZAN.ARTCC

State Reference : AK

Altitude.MSL.Single Value : 1500

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 8000

## Aircraft : 1

Reference : X

ATC / Advisory.Center : ZAN

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 : Cruise

Route In Use : None

Airspace.Class E : ZAN

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Airspace.Class E : ZAN

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Flight Instructor

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Experience.Flight Crew.Total : 360

Experience.Flight Crew.Last 90 Days : 70

Experience.Flight Crew.Type : 280

ASRS Report Number.Accession Number : 1849778

Human Factors : Communication Breakdown

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

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
Miss Distance.Vertical : 100  
Were Passengers Involved In Event : N  
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

Cleared area to perform ground reference maneuvers. While maneuvering, plane came up right on top of us and did not veer from our location. The other aircraft did not have ADS-B Out equipment, which is typical in the area.

## Synopsis

Flight Instructor reported taking evasive action to avoid a near midair collision with another aircraft.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.MSL.Single Value : 1300

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 8000

## 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 : Final Approach

Airspace.Class E : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Airspace.Class E : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Trainee

Function.Flight Crew : Single Pilot

Qualification.Flight Crew : Private

Qualification.Flight Crew : Instrument

Experience.Flight Crew.Total : 405

Experience.Flight Crew.Last 90 Days : 5

Experience.Flight Crew.Type : 355

ASRS Report Number.Accession Number : 1849759

Human Factors : Communication Breakdown

Human Factors : Human-Machine Interface

Human Factors : Situational Awareness

Human Factors : Confusion

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

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 300  
Miss Distance.Vertical : 100  
Were Passengers Involved In Event : N  
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

On an instrument currency flight under the hood with a safety pilot. After holding, I reported established on the inbound course. Then, I was authorized to change frequency to the CTAF at which time we were 10 miles out and I made an initial call of our location and intention to do a low pass over Runway XX. Hearing no response, I commented we should be good with no conflicts. I made a position report at the FAF as I started my descent. At a waypoint which is 2.9 miles from the runway threshold, I made a final call with our intentions. We heard no activity on the radio, which led me to believe we had no conflicts. At that time my safety pilot told me to turn left as there was an aircraft that had just departed on Runway XY. I turned left as he did also. I believe we were on the correct frequency as I had confirmed the frequency when issued the authorization to change to the CTAF frequency. The aircraft is equipped with a Garmin GTN 650Xi as Com1 and a Garmin GNC 225 on Com 2. I was using the GNC 225 to transmit our locations and intentions. The GNC 225 shows an identification of the frequency. Both my safety pilot and I recall that the correct frequency was showing. I used the same radio to obtain the ATIS at ZZZZ and for ground communication after landing and it worked correctly. I believe the radio was working at the time of the incident. I understand the pilot contacted the FBO where I rent the plane and commented that he made announcements of his intentions for departure Runway XY. We did not hear any transmissions.

## Synopsis

C172 pilot reported a communication breakdown with the other aircraft that was taking off resulted in evasive action to avoid a near midair collision while on approach to landing.



## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Altitude.AGL.Single Value : 1000

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

Ceiling.Single Value : 120

## Aircraft : 1

Reference : X

Aircraft Operator : FBO

Make Model Name : PA-44 Seminole/Turbo Seminole

Crew Size.Number Of Crew : 2

Operating Under FAR Part.Other

Flight Plan : None

Mission : Training

Flight Phase : Initial Approach

Route In Use : None

Airspace.Class E : ZZZ

Airspace.Class G : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : A-1 Husky

Crew Size.Number Of Crew : 1

Flight Phase : Initial Approach

Airspace.Class E : ZZZ

Airspace.Class G : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Instrument

Qualification.Flight Crew : Flight Instructor

Experience.Flight Crew.Total : 1285

Experience.Flight Crew.Last 90 Days : 121

Experience.Flight Crew.Type : 141

ASRS Report Number.Accession Number : 1849721

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

## Events

Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Miss Distance.Horizontal : 50  
Miss Distance.Vertical : 100  
Result.Flight Crew : Took Evasive Action  
Result.Flight Crew : Executed Go Around / Missed Approach

## Assessments

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

## Narrative: 1

Student and I turned left crosswind and then left downwind to Runway XX at ZZZ at pattern altitude following a go-around from Runway XX. At the same time, we observe Aircraft Y on our ADS-B about 500 ft. above pattern altitude, crossing over the airport from east to west, assuming he was planning to maneuver to enter the traffic pattern via 45 entry. Once established on downwind we saw the traffic begin to descend, so I called over the radio to alert the pilot that we were already on downwind if he was planning to turn downwind. I could not hear his response but as I lost sight of him overhead us, our ADS-B showed him beginning a turn onto downwind and continued descent. I immediately descended and turned left base as soon as possible to create additional space - I did not want to turn right as he was only 100 ft. above us and slightly to the right based on ADS-B. Once I had sufficient space, I performed a go-around and completed another traffic pattern to land. If I had realized the traffic was closing on our position earlier, I would have turned away from the airport immediately and re-entered the pattern. But from our relative positions I am not sure this was possible.

## Synopsis

PA-44 flight Instructor reported an NMAC occurred while turning downwind in the traffic pattern when another aircraft entered the pattern on downwind and descended overhead the instructor's aircraft. The Flight Instructor descended immediately and performed a go-around to a landing.

## Time / Day

Date : 202110

Local Time Of Day : 1201-1800

## Place

Locale Reference.ATC Facility : ATL.ARTCC

State Reference : GA

Relative Position.Angle.Radial : 030

Relative Position.Distance.Nautical Miles : 10

Altitude.MSL.Single Value : 15500

## Environment

Flight Conditions : VMC

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.Center : ZTL

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : VFR

Mission : Photo Shoot / Video

Flight Phase : Cruise

Airspace.Class E : ATL

## Aircraft : 2

Reference : Y

Make Model Name : UAV: Unpiloted Aerial Vehicle

Airspace.Class E : ATL

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

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Function.Flight Crew : First Officer

Qualification.Flight Crew : Commercial

Qualification.Flight Crew : Multiengine

Qualification.Flight Crew : Instrument

ASRS Report Number.Accession Number : 1849662

Human Factors : Situational Awareness

Human Factors : Distraction

Human Factors : Training / Qualification

## Events

Anomaly.Airspace Violation : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : Unauthorized Flight Operations (UAS)

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

Anomaly.Deviation / Discrepancy - Procedural : FAR

Detector.Person : Flight Crew

Miss Distance.Horizontal : 200

Miss Distance.Vertical : 200

When Detected : In-flight

Result.General : None Reported / Taken

## Assessments

Contributing Factors / Situations : Environment - Non Weather Related

Contributing Factors / Situations : Human Factors

Primary Problem : Ambiguous

## Narrative: 1

Flying photo mission at 15,500 ft, First Officer (FO) saw drone pass by and below right wing by about 200-300 ft. was red in color and about 2 feet in diameter. Notified ATC, no other aircraft saw it. Other crew members saw it as well.

## Synopsis

A First Officer reported seeing a drone pass by their aircraft while flying at 15,500 feet and advised ATC.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

Relative Position.Angle.Radial : 300

Relative Position.Distance.Nautical Miles : 3

Altitude.MSL.Single Value : 2500

## Environment

Flight Conditions : VMC

Weather Elements / Visibility.Visibility : 10

Light : Daylight

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : Personal

Make Model Name : Bonanza 33

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : None

Mission : Training

Flight Phase : Initial Climb

Route In Use : None

Airspace.Class D : ZZZ

## Aircraft : 2

Reference : Y

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Flight Phase : Initial Approach

Airspace.Class D : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : Personal

Function.Flight Crew : Instructor

Function.Flight Crew : Pilot Not Flying

Qualification.Flight Crew : Air Transport Pilot (ATP)

Qualification.Flight Crew : Flight Instructor

ASRS Report Number.Accession Number : 1849653

Human Factors : Communication Breakdown

Human Factors : Situational Awareness

Communication Breakdown.Party1 : Flight Crew

Communication Breakdown.Party2 : Flight Crew

## Events

Anomaly.ATC Issue : All Types

Anomaly.Conflict : NMAC

Anomaly.Deviation / Discrepancy - Procedural : Clearance

Detector.Automation : Air Traffic Control

Detector.Person : Flight Crew

Miss Distance.Vertical : 500

When Detected : In-flight

Result.Air Traffic Control : Issued Advisory / Alert

## Assessments

Contributing Factors / Situations : Human Factors

Primary Problem : Human Factors

## Narrative: 1

Upon takeoff the Pilot told the Tower that we would fly westbound off Runway XXL. Shortly after liftoff and climbing out, the pilot, without saying anything to me, turned the airplane to a northwest heading. An inbound airplane in close proximity passed below us going the opposite direction. We saw it but at the same time it startled the Tower Controller who showed it as a conflict on his radar in the Tower. He was disturbed at the fact that we turned to the northwest instead of heading west as he had expected.

## Synopsis

BE-33 Flight Instructor reported the trainee turned to a heading that was different from what they had communicated to the Tower Controller and caused an NMAC.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.ATC Facility : I90.TRACON

State Reference : TX

Altitude.MSL.Single Value : 11000

## Aircraft : 1

Reference : X

ATC / Advisory.TRACON : I90

Make Model Name : Small Transport

Crew Size.Number Of Crew : 2

Flight Plan : IFR

Flight Phase : Descent

Airspace.Class A : ZHU

Airspace.Class E : I90

## Aircraft : 2

Reference : Y

ATC / Advisory.Center : ZHU

Aircraft Operator : Military

Make Model Name : Military Trainer

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Mission : Training

Flight Phase : Descent

Airspace.Class A : ZHU

## Aircraft : 3

Reference : Z

ATC / Advisory.Center : ZHU

ATC / Advisory.TRACON : I90

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

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Flight Plan : IFR

Airspace.Class A : ZHU

## Person

Location Of Person.Facility : I90.TRACON

Reporter Organization : Government

Function.Air Traffic Control : Approach

Function.Air Traffic Control : Departure

Qualification.Air Traffic Control : Fully Certified

Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 13

ASRS Report Number.Accession Number : 1849190

Human Factors : Communication Breakdown  
Human Factors : Distraction  
Human Factors : Workload  
Human Factors : Situational Awareness  
Communication Breakdown.Party1 : ATC  
Communication Breakdown.Party2 : ATC

## Events

Anomaly.Airspace Violation : All Types  
Anomaly.ATC Issue : All Types  
Anomaly.Conflict : NMAC  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Air Traffic Control  
When Detected : In-flight  
Result.Air Traffic Control : Issued New Clearance  
Result.Air Traffic Control : Separated Traffic

## Assessments

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

## Narrative: 1

I will start out by saying that all three of these aircraft go to the same point and descend to the same altitude, I then give them all to the same controller within our core airspace. I got Aircraft X at 11,000 to cross BLUBL at 9,000, there were at 11,000 about 7 miles from the fix. I then see Aircraft Y start to flash and turn into BLUBL at 11,000, keep in mind my Aircraft X is just off their left still showing 11,000. I then see the Aircraft Z that they have right behind the Aircraft Y also lower but I can't recall their altitude. At this point Aircraft X and Aircraft Y are going to merge and might almost hit, remember Aircraft Y is a flight of two. I called the Center to and at this point I'm vomiting words to get them to pry Aircraft Y away from my Aircraft X and I'm trying to get control of the Aircraft X because it's still in the center's airspace. I thought about just cranking the Aircraft X to the EAST but then I saw Aircraft Y turn to the EAST. At this point the Aircraft Z is a mess with the Aircraft Y. The center never acknowledged what was happening and never answered the line when I was begging for control of the Aircraft X. I ended up descending them expeditiously. I finally got the center on the line, she wanted a hand off of the Aircraft Y who was now showing 8,800, which is in my airspace, I told her to slow them to 210 kt, because they had to follow the Aircraft X. The Aircraft Y checked in and were showing 270kt, I feel like they were never slowed, I told the center controller to slow them. This was a total, complete mess. I guarantee the center controller switched the Aircraft X and completely forgot about it. Then proceeded to crank the Aircraft Y in and then saw the Aircraft X. This happens all the time, where the first aircraft goes in to Never Neverland once they are switched to us. I'M SICK AND TIRED OF THE CENTER PUTTING AIRPLANES IN UNSAFE SITUATIONS AND NO ONE IN MANAGEMENT DOING ANYTHING ABOUT IT. Have the center understand that they MUST sequence to BLUBL and not forget about the first aircraft. Have the center understand that speeds have to be taken into consideration on the arrival. They will put a fast moving jet right behind a prop with the crossing, thinking the first aircraft will keep their speed up because they are high. Once the first one starts down their speed goes to nothing with a jet eating them up. This exact scenario happens all the time. It's unsafe. The controllers that work U are sick and tired of it. Once again, I'm sick and tired of sitting in briefings where the FAA tells us to not insert risk into the NAS. Here



is an example of the center inserting risk into the NAS and it doesn't stop. Why can't they learn how to do air traffic control? Another example of management not doing their job, they need to manage their people. Problem is, most of the FLM's over there do not know how to work planes in the areas they are suppose to be managing.

## Synopsis

Houston I90 TRACON Controller reported an NMAC and stated handoff communication issues with ZHU Center contributed to the event.

## Time / Day

Date : 202110

Local Time Of Day : 0601-1200

## Place

Locale Reference.Airport : ZZZ.Airport

State Reference : US

## Aircraft : 1

Reference : X

ATC / Advisory.Tower : ZZZ

Aircraft Operator : FBO

Make Model Name : DA40 Diamond Star

Crew Size.Number Of Crew : 2

Operating Under FAR Part : Part 91

Mission : Training

Airspace.Class C : ZZZ

## Aircraft : 2

Reference : Y

ATC / Advisory.Tower : ZZZ

Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer

Crew Size.Number Of Crew : 1

Airspace.Class C : ZZZ

## Person

Location Of Person.Aircraft : X

Location In Aircraft : Flight Deck

Reporter Organization : FBO

Function.Flight Crew : Instructor

Qualification.Flight Crew : Flight Instructor

ASRS Report Number.Accession Number : 1848605

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

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

Detector.Person : Flight Crew

When Detected : In-flight

Result.Flight Crew : Took Evasive Action

## Assessments

Contributing Factors / Situations : Human Factors

Contributing Factors / Situations : Procedure

Primary Problem : Ambiguous

## Narrative: 1

On approach to ZZZ, approach gave my student and I [in] Aircraft X a 130 heading and told us to enter right base XXL. Aircraft Y was behind us and given a heading of 140. We switched to Tower as instructed and Tower instructed us to fly through final for departing traffic and he'd call our turn back. Aircraft Y checked on and since they were now on a collision course with us, was given a 090 heading to fly. They did not read the instruction back, Tower repeated the instruction but was stepped on partially. Aircraft Y asked if that was for them. By this time Tower had turned us back toward the runway and told us to enter left base. This put us head on with Aircraft Y with only 100 feet of separation. I intervened and executed a descending left turn to avoid traffic. Only after this did Tower successfully give instruction to Aircraft Y to turn away fly downwind for XXL. Make sure to listen for your call sign when ATC calls you. If you're not sure if it was for you, ask. Eyes outside especially operating in vicinity of many other aircraft in a busy arrival corridor.

## Synopsis

Flight Instructor reported an NMAC during approach when another inbound aircraft did not acknowledge ATC instructions and the Tower Controller turned the first aircraft head on to the other.