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

Update Number..............................................12

Date of Update............................................February 28, 2017

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

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

Type of Records in Report Set..........................For each update, new records received at ASRS will displace a like number of the oldest records in the Report Set, with the objective of providing the fifty most recent relevant ASRS Database records. Records within this Report Set have been screened to assure their relevance to the topic.
TH: 262-7

MEMORANDUM FOR: Recipients of Aviation Safety Reporting System Data

SUBJECT: Data Derived from ASRS Reports

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

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

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

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

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

Linda J. Connell, 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
Synopsis
Drone pilot operating under FAR part 107 reported a NMAC with a C172 at about 400 feet AGL. Evasive action was taken by the drone operator while the C172 pilot apparently did not detect the drone.

Synopsis
An aircraft on short final reported a NMAC with a drone.

Synopsis
PA-28 pilot reported a NMAC over the Miami Beach shoreline with a helicopter flying in the opposite direction.

Synopsis
A R-22 Instructor and student pilot reported initiating an evasive action during a practice autorotation to avoid a Cessna beginning its takeoff roll. No CTAF communications were heard.

Synopsis
C172 instructor pilot reported an NMAC in the pattern at the non-towered CPT airport.

Synopsis
Helicopter pilot reported a NMAC with a banner tow aircraft while covering a news event over OSU.

Synopsis
DA20 instructor pilot reported a NMAC with a UAV east of ROA at 3000 feet. No evasive action was required.

Synopsis
Cirrus SR22 Pilot reported a low-altitude NMAC with another light aircraft on short final to HPN airport.

**ACN: 1405065 (9 of 50)**

**Synopsis**  
Air carrier flight crew reported an NMAC with a departing aircraft they encountered on their arrival into MTPP. Although the TCAS RA command was to climb, the crew felt a descent was more appropriate.

**ACN: 1404863 (10 of 50)**

**Synopsis**  
TVC Controller reported a NMAC between a helicopter and a fixed wing aircraft due to a heading change from the Local Controller and the Departure Controller. Reporter stated there is a procedure in place already to avoid this problem between Local and Departure Control.

**ACN: 1404774 (11 of 50)**

**Synopsis**  
C177 pilot reported that while on landing rollout a Piper Cherokee departed opposite direction. Reported heard no calls on the CTAF from the other aircraft.

**ACN: 1404542 (12 of 50)**

**Synopsis**  
B767 flight crew reported while cleared for takeoff and approaching the runway, a Beechcraft Bonanza flew over them and landed on the same runway.

**ACN: 1403468 (13 of 50)**

**Synopsis**  
ELP TRACON Controller reported a NMAC between a VFR and an IFR aircraft. Controller lost situational awareness while being distracted with a third aircraft.

**ACN: 1403446 (14 of 50)**

**Synopsis**  
C172 pilot and observer reported a NMAC with another light aircraft in the vicinity of LVK airport.

**ACN: 1403395 (15 of 50)**

**Synopsis**  
C560XL FO reported a NMAC with another aircraft in the vicinity of ACT airport.
<table>
<thead>
<tr>
<th>ACN: 1402826 (16 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Helicopter pilot reported a UAV in his path on short final to a helipad. The UAV pilot maneuvered away before the helicopter pilot could and was not seen again.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1402790 (17 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Beech 1900-C Captain reported taking evasive action in response to a TCAS RA during an NMAC event in the vicinity of KWANG Intersection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1402608 (18 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Local Controller trainee reported an aircraft turned in too close to the preceding aircraft it was to follow and issued go-around instructions. The preceding aircraft filed a NMAC.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1402372 (19 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>PRC Tower Controller reported a NMAC when an aircraft turned too close to the traffic it was to follow.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1402354 (20 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>PA24 pilot reported a NMAC while practicing holds with foggles on and a safety pilot monitoring for traffic. While entering the first turn, the ADS-B announced traffic at 11 O'clock and evasive action was taken.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1402347 (21 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>C172 instructor pilot reported a NMAC with a King Air in the vicinity of SSF airport.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1402333 (22 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>PA28 pilot and instructor pilot reported a NMAC in the vicinity of X35 airport.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1402115 (23 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>TVC Tower Controller reported not noticing that an aircraft entered the VFR traffic pattern at the incorrect position on downwind and had reported the incorrect helicopter to follow.</td>
</tr>
<tr>
<td>ACN: 1402113 (24 of 50)</td>
</tr>
<tr>
<td>---</td>
</tr>
</tbody>
</table>
| **Synopsis**  
D10 TRACON Controller reported not observing an intermittent target on the radar display until informed of the glider by an air taxi pilot in descent. |

<table>
<thead>
<tr>
<th>ACN: 1402107 (25 of 50)</th>
</tr>
</thead>
</table>
| **Synopsis**  
Tower Controller, flight instructor and student pilot reported a miscommunication and misidentification that led to near-mid-air-collision. |

<table>
<thead>
<tr>
<th>ACN: 1402064 (26 of 50)</th>
</tr>
</thead>
</table>
| **Synopsis**  
BE35 pilot reported a NMAC with another aircraft while on a practice ILS approach to Runway 8R at F45. |

<table>
<thead>
<tr>
<th>ACN: 1401670 (27 of 50)</th>
</tr>
</thead>
</table>
| **Synopsis**  
The pilot of a Piper Arrow reported the loss of all electrical power shortly after takeoff. While flying the downwind leg with no lights or radios, a near mid-air collision was experienced. |

<table>
<thead>
<tr>
<th>ACN: 1400989 (28 of 50)</th>
</tr>
</thead>
</table>
| **Synopsis**  
Single engine aircraft pilot reported taking evasive action on takeoff from MAN to avoid hitting an aircraft on final for the opposing direction runway. |

<table>
<thead>
<tr>
<th>ACN: 1400806 (29 of 50)</th>
</tr>
</thead>
</table>
| **Synopsis**  
The pilot of a Mooney M20 reported that after an announced take-off from an uncontrolled airport, observed a helicopter takeoff, turn and rapidly climb below him. |

<table>
<thead>
<tr>
<th>ACN: 1400567 (30 of 50)</th>
</tr>
</thead>
</table>
| **Synopsis**  
Two pilots in a PA-32R reported an NMAC at 1C5, a non-towered airport. |

<table>
<thead>
<tr>
<th>ACN: 1400550 (31 of 50)</th>
</tr>
</thead>
</table>
| **Synopsis**  

Instructor pilot reported experiencing a near miss event in the landing pattern at an uncontrolled airport.

**ACN: 1400182 (32 of 50)**

**Synopsis**
Flight Instructor reported a near miss event at a controlled airport between VFR traffic in the landing pattern and an aircraft on final for an intersecting runway from a practice instrument approach.

**ACN: 1399404 (33 of 50)**

**Synopsis**
GA pilot reported that the drop zone for skydivers at WVI is too close to the runways and traffic pattern.

**ACN: 1398198 (34 of 50)**

**Synopsis**
CRJ-900 First Officer reported sighting a UAV at 8000 feet near DREMS on the MILTON4 Arrival to LGA. No evasive action was taken, but the UAV passed within 75 feet of the aircraft.

**ACN: 1397723 (35 of 50)**

**Synopsis**
PA-28 pilot reported he experienced a NMAC while on final in the traffic pattern at an uncontrolled airport.

**ACN: 1397487 (36 of 50)**

**Synopsis**
GV First Officer experienced a NMAC with a high wing Piper during a turn to final. The Piper was not detected in time to take any evasive action and may have passed within 50 feet, both vertically and horizontally.

**ACN: 1397185 (37 of 50)**

**Synopsis**
Helicopter tour pilot experienced a NMAC with another aircraft at some towers, joining the usual tour route. Evasive action was taken. Distraction due to another helicopter in the area was cited as a factor.

**ACN: 1396857 (38 of 50)**

**Synopsis**
A Pilot of a Piper PA28R reported while setting up for a flight maneuver they nearly collided with a medical helicopter.

**ACN: 1396824** *(39 of 50)*

**Synopsis**  
A pilot of a Schweizer SGS 2-32 glider reported he preparing to land when he had a near collision with a Piper Archer.

**ACN: 1396205** *(40 of 50)*

**Synopsis**  
BE90 Captain reported experiencing a NMAC with a C172 on approach to the non-towered AAO airport.

**ACN: 1395741** *(41 of 50)*

**Synopsis**  
PA-28 pilot reported a NMAC with a helicopter. While maneuvering to avoid a collision, they strayed into PHL Class B airspace.

**ACN: 1395118** *(42 of 50)*

**Synopsis**  
A helicopter flight instructor, standing on the ramp, reported observing his student solo in a Robinson R22 helicopter practicing normal/max performance takeoffs and normal/steep approaches. He observed a Piper arrow on takeoff missing the helicopter by only a few feet.

**ACN: 1394299** *(43 of 50)*

**Synopsis**  
C-172 instructor pilot reported a near miss after he gave a misleading position report with a much faster Glasair on final. The Glasair pilot executed a go-around as the Cessna was completing a stop and go.

**ACN: 1393301** *(44 of 50)*

**Synopsis**  
CRJ-200 flight crew on approach to SBA reported an NMAC with a helicopter departing the airport. They were not alerted to the conflict by ATC.

**ACN: 1392980** *(45 of 50)*

**Synopsis**
CE-510 pilot inbound to ABR reported an NMAC with a high performance turbojet departing the airport VFR.

**ACN: 1392461 (46 of 50)**

**Synopsis**
Flight Instructor reported a near miss with a private jet while conducting a practice GPS approach.

**ACN: 1392460 (47 of 50)**

**Synopsis**
C150 student pilot reported a NMAC occurred on takeoff from OBE, a non-tower airport.

**ACN: 1392225 (48 of 50)**

**Synopsis**
A general aviation pilot reported a near mid air collision in the pattern of an uncontrolled airport.

**ACN: 1392216 (49 of 50)**

**Synopsis**
PA28 pilot on an IFR flight plan in VMC at 4,000 feet reported a NMAC with another aircraft climbing out. An onboard traffic avoidance system and ATC advised the reporter of the traffic conflict.

**ACN: 1392215 (50 of 50)**

**Synopsis**
SR22 pilot aircraft reported that during climb he saw a high winged Cessna closing up into his flight path from below. His TCAS or ATC did not give him warning.
Report Narratives
ACN: 1410141 (1 of 50)

Time / Day
Date: 201612
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: BTR.Airport
State Reference: LA
Relative Position.Distance.Nautical Miles: 15
Altitude.AGL.Single Value: 375

Environment
Flight Conditions: VMC
Weather Elements.Visibility: Visibility: 10
Light: Daylight
Ceiling.Single Value: 18000

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Corporate
Make Model Name: UAV - Unpiloted Aerial Vehicle
Operating Under FAR Part: Other
Flight Plan: VFR
Mission: Utility
Flight Phase: Cruise
Route In Use: None
Airspace.Class G: ZHU

Aircraft: 2
Reference: Y
Make Model Name: Skyhawk 172/Cutlass 172
Operating Under FAR Part: Part 91
Mission: Utility
Flight Phase: Cruise
Airspace.Class G: ZHU

Person
Reference: 1
Location Of Person: Hangar/Base
Reporter Organization: Corporate
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Student
Experience.Flight Crew.Total: 60
Experience.Flight Crew.Last 90 Days: 40
Experience.Flight Crew.Type: 25
ASRS Report Number. Accession Number: 1410141
Human Factors: Situational Awareness

**Events**

Anomaly. Conflict: NMAC
Detector. Person: Flight Crew
Miss Distance. Horizontal: 350
Miss Distance. Vertical: 75
When Detected: In-flight
Result. Flight Crew: Took Evasive Action
Result. Flight Crew: Landed As Precaution

**Assessments**

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

**Narrative: 1**

I was operating a drone under Part 107 collecting aerial photographs of a timber harvest area. I had filed a UAS operating area report with Flight Services in an effort to warn air traffic I would be operating in the area, the altitude I would be at, and the exact times of operation. We also had a hand held VHF aviation radio turned on and operating on 122.9 frequency. A visual observer was also on site and fully briefed.

Approximately 15 SM SW of BTR the drone was operating at 375 ft AGL flying a grid pattern over [area we were to photograph]. I was facing south maintaining visual contact with the drone, my visual observer was facing north in my blind spot, the drone was 692 ft laterally from my location. The visual observer yelled out an aircraft sighting report, I turned to look and saw a Cessna 172 flying at approximately the same altitude as the drone on what appeared to be a collision course approximately .4-.25 miles from the drones position. The Cessna pilot did not seem to see the drone, he was operating at or below 500 ft in my estimation, and was obscured from view on the ground behind a tree line until he cleared the trees. We did not hear his engine until after he cleared the trees. I immediately took evasive action, reducing done altitude to ground level as fast as possible (cut the engines). The drone crash landed and did not visibly impact the Cessna, the Cessna continued on without visible deviation from its flight route. It is my belief that the Cessna was operating as a pipeline patrol aircraft since a pipeline was in close proximity and the pilot was at such a low altitude.

This was a VERY high potential near miss. While I was able to see and avoid the Cessna it is debatable if he was able to see my drone. If the Cessna pilot had filed a flight plan or called flight services I feel he should have had ample warning of my intended area of operation and flight level. As a licensed SUAS operator and a current student pilot I can see conflicts between low flying aircraft and drones outside controlled airspace becoming more common, especially in cases like my experience. There needs to be a better way to freely communicate drone activities with pilots and more emphasis given to pilots to check UAS operating areas before they fly, especially when flying below or near 400 ft AGL.

**Synopsis**

Drone pilot operating under FAR part 107 reported a NMAC with a C172 at about 400 feet AGL. Evasive action was taken by the drone operator while the C172 pilot apparently did not detect the drone.
**ACN: 1407744 (2 of 50)**

**Time / Day**
- Date: 201612
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: SEA.Airport
- State Reference: WA
- Altitude.AGL.Single Value: 1300

**Environment**
- Flight Conditions: VMC

**Aircraft : 1**
- Reference: X
- ATC / Advisory.Tower: SEA
- Aircraft Operator: Air Carrier
- Make Model Name: Large Transport
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Final Approach
- Airspace.Class B: SEA

**Aircraft : 2**
- ATC / Advisory.Tower: SEA
- Make Model Name: UAV - Unpiloted Aerial Vehicle
- Airspace.Class B: SEA

**Person**
- Reference: 1
- 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: Air Transport Pilot (ATP)
- Experience.Flight Crew.Last 90 Days: 200
- Experience.Flight Crew.Type: 1802
- ASRS Report Number.Accession Number: 1407744
- Human Factors: Situational Awareness

**Events**
- Anomaly.Conflict: NMAC
- Detector.Person: Flight Crew
- When Detected: In-flight

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

**Narrative: 1**

On short final we encountered a drone approximately 1300 feet AGL just to the right of the runway centerline. I was the pilot monitoring and the flight operated normally up to the final approach fix. The Captain Pilot Flying (PF) had just directed gear down, full flaps just prior to the encounter. I saw out of the corner of my eye a dark object just the right of the aircraft, but perceived it to be either a reflection (the sun was to our left and behind a little), or possibly a balloon. I initially dismissed it, until the aircraft in front of us began talking to tower about a drone on short final at approximately 1000 feet. I estimate the drone was 2-3 feet in diameter, dark in color, and roughly 30-50 feet right and slightly above our position on final. We reported our encounter to Tower after landing.

**Synopsis**

An aircraft on short final reported a NMAC with a drone.
Time / Day
Date: 201612
Local Time Of Day: 0001-0600

Place
Locale Reference.ATC Facility: MIA.TRACON
State Reference: FL
Altitude.MSL.Single Value: 500

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

Aircraft : 1
Reference: X
ATC / Advisory.TRACON: MIA
Aircraft Operator: Personal
Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace.Class E: MIA

Aircraft : 2
Reference: Y
ATC / Advisory.TRACON: MIA
Make Model Name: Helicopter
Crew Size.Number Of Crew: 2
Flight Plan: None
Mission: Passenger
Flight Phase: Cruise
Route In Use: None
Airspace.Class E: MIA

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 1000
Experience.Flight Crew.Last 90 Days: 20
Experience.Flight Crew.Type : 800
ASRS Report Number.Accession Number : 1407682

Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
When Detected : In-flight

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

Narrative: 1
While operating VFR flight under the Miami Class B over the Miami Beach shoreline, [helicopter] flew opposite direction with less than 100 feet vertical/horizontal separation of the reporting aircraft, a Piper Warrior. At the time of the near miss, both aircraft were making position reports on the 123.05 reporting frequency. Reporting pilot was flying northbound, conflict aircraft was flying southbound. In the same area there was an aircraft towing a banner, which both aircraft were trying to avoid, and probably became a mutual distraction. Reporting aircraft is equipped with Traffic Information Services (TIS), conflict traffic was not being depicted, and no traffic alert was issued by TIS. Radio position reports may have been interrupted in error by having two helicopter pilots reporting in the area under the call sign "[helicopter]." Traffic was not in sight given that the helicopter was slightly lower and obstructed by the cowling. Situation could be avoided by establishing recommended corridors when flying under the Miami Class B, by pilots providing more frequent position announcements, and by reporting pilot continuous visual scan instead of being briefly fixated on banner towing aircraft.

Synopsis
PA-28 pilot reported a NMAC over the Miami Beach shoreline with a helicopter flying in the opposite direction.
**ACN: 1407176 (4 of 50)**

**Time / Day**

Date: 201612
Local Time Of Day: 1201-1800

**Place**

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

**Environment**

Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Light: Daylight
Ceiling. Single Value: 3800

**Aircraft : 1**

Reference: X
ATC / Advisory. CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: Robinson R22
Crew Size. Number Of Crew: 2
Operating Under FAR Part. Other
Flight Plan: VFR
Mission: Training
Flight Phase: Landing
Route In Use: Visual Approach
Airspace. Class G: ZZZ

**Aircraft : 2**

Reference: Y
ATC / Advisory. CTAF: ZZZ
Make Model Name: Cessna Aircraft Undifferentiated or Other Model
Crew Size. Number Of Crew: 1
Flight Phase: Takeoff
Route In Use: Visual Approach
Airspace. Class G: ZZZ

**Person : 1**

Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Qualification. Flight Crew: Flight Instructor
Qualification. Flight Crew: Instrument
Qualification. Flight Crew: Commercial
Experience. Flight Crew. Total: 280
Experience. Flight Crew. Last 90 Days: 70
Experience. Flight Crew. Type: 268
ASRS Report Number. Accession Number: 1407176
I performed a straight in autorotation to a power recovery with my student. I reported final for runway while a Cessna was taxiing on taxiway alpha. As we did the power recovery and were in a hover on the runway I took the controls from my student to see what the guy in the Cessna intentions were since he never made a radio call. As I applied a small pedal input I saw that the Cessna was right behind us on the runway accelerating and started to become airborne. Immediately, I applied aggressive right cyclic to the grass between Taxiway Alpha and the runway to avoid a collision. I tried to call him on the CTAF frequency with no response.
**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

A R-22 Instructor and student pilot reported initiating an evasive action during a practice autorotation to avoid a Cessna beginning its takeoff roll. No CTAF communications were heard.
ACN: 1405955 (5 of 50)

**Time / Day**
- Date: 201612
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference: Airport: CPT.Airport
- State Reference: TX
- Altitude.MSL.Single Value: 1800

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 50
- Light: Daylight
- Ceiling: Single Value: 20000

**Aircraft : 1**
- Reference: X
- ATC / Advisory.CTAF: CPT
- Aircraft Operator: Personal
- Make Model Name: Skyhawk 172/Cutlass 172
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Training
- Flight Phase: Climb
- Route In Use.Other
- Airspace.Class E: CPT

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.CTAF: CPT
- Make Model Name: Small Aircraft, Low Wing, 1 Eng, Fixed Gear
- Operating Under FAR Part: Part 91
- Flight Phase: Initial Approach
- Airspace.Class E: CPT

**Aircraft : 3**
- Reference: Z
- ATC / Advisory.CTAF: CPT
- Make Model Name: PA-44 Seminole/Turbo Seminole
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Phase: Takeoff
- Airspace.Class E: CPT

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Instructor
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 700
Experience.Flight Crew.Last 90 Days: 100
Experience.Flight Crew.Type: 300
ASRS Report Number.Accession Number: 1405955
Human Factors: Situational Awareness

Events
Anomaly.Conflict: NMAC
Anomaly.Deviation - 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
While in the pattern at CPT on my third touch and go I called myself on final for runway 15 with my intentions of [doing] another touch and go. On climb out I heard another airplane call 2 miles southwest of CPT. I then called out [my call sign] turning right crosswind for runway 15 followed by a Seminole announcing takeoff and following myself in the pattern. Upon following my turn to downwind I saw my shadow, and a low wing airplane descending near us. I once again called my position and what was this low wing doing descending into a pattern from above the traffic pattern altitude. The Seminole that had been following me diverted its pattern in order to make room for this person who thought he could just make room for them and see everyone else make room. I then descended to make sure that this person who clearly didn't observe the traffic pattern was clear of me.

Synopsis
C172 instructor pilot reported an NMAC in the pattern at the non-towered CPT airport.
ACN: 1405711

Time / Day

Date: 201611
Local Time Of Day: 0601-1200

Place

Locale Reference. Airport: CMH.Airport
State Reference: OH
Altitude. MSL. Single Value: 1500

Environment

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

Aircraft

Reference: X
ATC / Advisory. Tower: CMH
Aircraft Operator: Corporate
Make Model Name: Helicopter
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Utility
Flight Phase: Cruise
Route In Use: None
Airspace. Class C: CMH

Person

Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function. Flight Crew: Pilot Flying
Function. Flight Crew: Single Pilot
Function. Flight Crew: Captain
Qualification. Flight Crew: Commercial
Qualification. Flight Crew: Instrument
Experience. Flight Crew. Total: 16500
Experience. Flight Crew. Last 90 Days: 90
Experience. Flight Crew. Type: 360
ASRS Report Number. Accession Number: 1405711

Events

Anomaly. Conflict: NMAC
Detector. Automation: Aircraft TA
Miss Distance. Horizontal: 300
Miss Distance. Vertical: 50
When Detected: In-flight
Result. Flight Crew: Took Evasive Action
Assessments

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

Narrative: 1

Hovering OGE (Out of Ground Effect) covering news event over OSU in Columbus which is at the 6 mile mark from CMH. I was talking to CMH with assigned squawk and on tower freq. There were six banner tow aircraft over same event. I communicated with them on local traffic advisory frequency as well as their company frequency because they were not talking to CMH. They stated that they would operate at 2000 ft msl and above and I advised that I would operate at 1500 ft msl for separation. They agreed.

After operating for approx. 30 min I noticed that one of the aircraft a super cub aircraft towing a banner was getting lower with each orbit. While at a hover at 1500 msl my TCAS alerted that traffic was at 6 o'clock same alt. I did a peddle turn to see the aircraft at my altitude coming directly at me. I took evasive action and called out on advisory frequency that I was at his 12 o'clock same altitude. I had to take evasive action to side step and noted altitude at 1600 msl. His banner was 100 ft below his aircraft. I stated to the pilot that he was at 1600 msl and much lower than the other banners. After that he climbed back to 2000 msl and joined the other banner towers. I completed my operations and departed the area. No further incidents occurred.

Synopsis

Helicopter pilot reported a NMAC with a banner tow aircraft while covering a news event over OSU.
**ACN: 1405192** (7 of 50)

**Time / Day**
- **Date**: 201611
- **Local Time Of Day**: 1201-1800

**Place**
- **Locale Reference.Airport**: ROA.Airport
- **State Reference**: VA
- **Relative Position.Angle.Radial**: 090
- **Relative Position.Distance.Nautical Miles**: 4.8
- **Altitude.MSL.Single Value**: 3000

**Environment**
- **Flight Conditions**: VMC
- **Weather Elements / Visibility. Visibility**: 10
- **Light**: Dusk
- **Ceiling.Single Value**: 5000

**Aircraft : 1**
- **Reference**: X
- **ATC / Advisory.Tower**: ROA
- **Aircraft Operator**: FBO
- **Make Model Name**: DA20 Undifferentiated
- **Crew Size.Number Of Crew**: 2
- **Operating Under FAR Part**: Part 91
- **Flight Plan**: VFR
- **Mission**: Training
- **Flight Phase**: Cruise
- **Route In Use**: None
- **Airspace.Class C**: ROA

**Aircraft : 2**
- **Reference**: Y
- **Make Model Name**: UAV - Unpiloted Aerial Vehicle
- **Flight Phase**: Cruise
- **Airspace.Class C**: ROA

**Person**
- **Reference**: 1
- **Location Of Person.Aircraft**: X
- **Location In Aircraft**: Flight Deck
- **Reporter Organization**: FBO
- **Function.Flight Crew**: Instructor
- **Function.Flight Crew**: Pilot Not Flying
- **Qualification.Flight Crew**: Instrument
- **Qualification.Flight Crew**: Commercial
- **Qualification.Flight Crew**: Flight Instructor
- **Experience.Flight Crew.Total**: 4600
- **Experience.Flight Crew.Last 90 Days**: 130
Experience.Flight Crew.Type : 150
ASRS Report Number.Accession Number : 1405192

Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 100
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

Flight departed Runway 06 at ROA. Initial heading was 070 with a climb to our requested VFR altitude. A few minutes later, ROA Tower cleared us on course (south). After leveling at 3000 feet MSL, we observed what appeared to be a small unmanned aircraft of moderate size (3 feet or less), possibly a quadcopter approximately 100 feet above and 200 feet to our left (east). It appeared to be maneuvering but not converging with us. We continued on our heading and altitude and informed Tower of the sighting.

Synopsis

DA20 instructor pilot reported a NMAC with a UAV east of ROA at 3000 feet. No evasive action was required.
**ACN: 1405182 (8 of 50)**

**Time / Day**
- Date: 201611
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: HPN.Airport
- State Reference: NY
- Altitude.MSL.Single Value: 500

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Light: Daylight
- Ceiling.Single Value: 4300

**Aircraft : 1**
- Reference: X
- ATC / Advisory.Tower: HPN
- Aircraft Operator: Personal
- Make Model Name: SR22
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Final Approach
- Route In Use: Visual Approach
- Airspace.Class D: HPN

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.Tower: HPN
- Make Model Name: Cirrus Aircraft Undifferentiated
- Operating Under FAR Part: Part 91
- Flight Phase: Landing
- Airspace.Class D: HPN

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Single Pilot
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Private
- Qualification.Flight Crew: Multiengine
- Experience.Flight Crew.Last 90 Days: 50
- Experience.Flight Crew.Type: 800
Human Factors : Situational Awareness

Events
Anomaly : Conflict : NMAC
Detector : Person : Flight Crew
Miss Distance : Horizontal : 0
Miss Distance : Vertical : 20
When Detected : In-flight
Result : General : None Reported / Taken

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

Narrative: 1
My aircraft arrived in the airport environment and I contacted Tower as instructed by NY approach control who was handling my VFR flight. The frequency was very busy with arriving IFR traffic landing and departing 34 and VFR traffic landing 29. Upon receiving instructions to fly a left pattern, I turned final to 29 and was given landing clearance which I acknowledged. About 1 mile from the runway threshold at about 500 ft AGL, a Cirrus aircraft suddenly appeared at my two o'clock position and passed just below me by an estimated 20 feet. In thirty years of flying, it was the closest mid-air I have experienced. A few seconds later Tower issued go-around instructions to me which I executed and landed after the second approach uneventfully. I did not speak to Tower about the incident nor the pilot of the other aircraft who subsequently landed behind me and parked at the same FBO.

I believe (though am not sure) that the other Cirrus had been given instructions to perform a 360 for spacing and the pilot and/or Tower lost situational awareness causing him to penetrate my final approach. Why he was at that low altitude, I don't know.

Certainly, the traffic load on [that day] was a factor. My focus on landing and confidence in ATC providing separation at that late stage of landing was a factor. I don't think I would have seen the Cirrus even if I had been looking out the right side of the aircraft. He seemed to be banked either as part of a turn or as part of an evasive maneuver. The speed with which the incident occurred was remarkable. I caught only a glimpse of the offending aircraft and had no time to evade. Fortunately, we were separated (minimally) vertically.

Synopsis
Cirrus SR22 Pilot reported a low-altitude NMAC with another light aircraft on short final to HPN airport.
**Time / Day**

Date: 201611
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: MTPP.Airport
State Reference: FO
Altitude.MSL.Single Value: 7500

**Aircraft : 1**

Reference: X
ATC / Advisory.Center: MTEG
Aircraft Operator: Air Carrier
Make Model Name: Large Transport
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Descent

**Aircraft : 2**

Reference: Y
ATC / Advisory.Center: MTEG
Make Model Name: Light Transport
Crew Size.Number Of Crew: 2
Flight Plan: VFR
Flight Phase: Climb

**Person : 1**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 18100
ASRS Report Number.Accession Number: 1405065
Human Factors: Situational Awareness

**Person : 2**

Reference: 2
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: Air Transport Pilot (ATP)
Narrative: 1
I was the pilot flying on arrival into MTPP. We were cleared via the SAVAR 1D arrival landing Runway 28 descending through approximately 7,500 feet. We were advised by ATC there was a VFR aircraft that departed MTPP and would be climbing at or near our altitude. Both the copilot and I were able to identify the aircraft visually and noticed he was slightly below and climbing towards us. The TCAS alerted us with a RA "stating to climb". The intruder aircraft was approximately 200 feet below us and climbing. I immediately clicked the autopilot off and because we were in a descent and the intruding aircraft was climbing (clearly had him in sight) my judgement was to continue to descend while he was climbing. I clearly felt, had I tried to reverse my descent and comply with the RA climb, we would have had a midair collision. My estimation is we were within 200-300 feet separation.

ATC should have [had] VFR aircraft stop his climb and our descent to prevent loss of separation.

Narrative: 2
MTPP approach advised us of traffic climbing to FL190 to which the Captain and I saw on the TCAS and identified it visually at our 2 o'clock position slightly lower, climbing and projecting to cross path. Captain (PF) disconnected the autopilot and descended at a faster rate despite the TCAS alert to climb. I did not object the Captain's maneuver to descend since it clearly was the best course of action. Traffic passed above and behind at about 400 feet in clear sight.

Synopsis
Air carrier flight crew reported an NMAC with a departing aircraft they encountered on their arrival into MTPP. Although the TCAS RA command was to climb, the crew felt a descent was more appropriate.
**ACN: 1404863 (10 of 50)**

**Time / Day**
- Date: 201611
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference: ATC Facility: TVC.Tower
- State Reference: MI
- Altitude MSL Single Value: 2300

**Environment**
- Light: Night

**Aircraft: 1**
- Reference: X
- ATC / Advisory: Tower: TVC
- Aircraft Operator: Air Taxi
- Make Model Name: Helicopter
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 135
- Flight Plan: IFR
- Flight Phase: Initial Approach
- Route In Use: None
- Airspace: Class D: TVC

**Aircraft: 2**
- Reference: Y
- ATC / Advisory: Center: ZMP
- Aircraft Operator: Personal
- Make Model Name: Small Aircraft, Low Wing, 1 Eng, Fixed Gear
- Crew Size: Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: IFR
- Mission: Personal
- Flight Phase: Climb
- Route In Use: Vectors
- Airspace: Class D: TVC

**Person**
- Reference: 1
- Location Of Person: Facility: TVC.Tower
- Reporter Organization: Government
- Function: Air Traffic Control: Other / Unknown
- Qualification: Air Traffic Control: Fully Certified
- ASRS Report Number: Accession Number: 1404863
- Human Factors: Communication Breakdown
- Human Factors: Confusion
- Human Factors: Distraction
- Human Factors: Workload
- Human Factors: Situational Awareness
Communication Breakdown: Party1: ATC  
Communication Breakdown: Party2: Flight Crew  
Communication Breakdown: Party2: ATC

**Events**

- Anomaly.ATC Issue: All Types
- Anomaly.Conflict: NMAC
- Anomaly.Deviation - Track / Heading: All Types
- Anomaly.Deviation - Procedural: Clearance
- Anomaly.Deviation - Procedural: Published Material / Policy
- Detector.Person: Flight Crew
- Detector.Person: Air Traffic Control
- Miss Distance.Horizontal: 0
- Miss Distance.Vertical: 200
- When Detected: In-flight
- Result.Air Traffic Control: Issued Advisory / Alert

**Assessments**

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

**Narrative: 1**

Aircraft X VFR inbound from south, landing TVC. Local recommends Aircraft X to alter course to fly a northeast heading to deconflict an impending IFR departure off runway 18. Aircraft Y calls ready, IFR departure off runway 18. ZMP releases Aircraft Y. Standard release is runway heading to climb and maintain 3000 MSL. Local reasoned that this would allow the two aircraft to safely pass each other. After frequency change to ZMP, Aircraft X was issued traffic on the departing Aircraft Y on the climbout. Aircraft X pilot started descent and looked for Aircraft Y traffic. Radar indicated Aircraft X at 2300 MSL as Aircraft Y turned towards the helicopter on a converging course, altitude indicated 2500 MSL. Aircraft Y was clearly still within class delta airspace when turn took place. When queried Aircraft X pilot said he had Aircraft Y in sight.

It's really very simple. Follow the procedures that are already in place. That is the basis for actions on both the tower side as well as the radar side of the relationship. Besides that, why as a radar controller would you turn your aircraft towards a target you could avoid in another 1 or 2 miles? In speaking with the Aircraft X pilot on the telephone, he said once he got the Aircraft Y in sight, that he estimated the vertical distance between the two aircraft near 2-300 ft.

**Synopsis**

TVC Controller reported a NMAC between a helicopter and a fixed wing aircraft due to a heading change from the Local Controller and the Departure Controller. Reporter stated there is a procedure in place already to avoid this problem between Local and Departure Control.
**ACN: 1404774 (11 of 50)**

**Time / Day**
- Date: 201611
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: PAN.Airport
- State Reference: AZ

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

**Aircraft : 1**
- Reference: X
- ATC / Advisory.CTAF: PAN
- Aircraft Operator: Personal
- Make Model Name: Cardinal 177/177RG
- Crew Size. Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Landing
- Airspace. Class G: PAN

**Aircraft : 2**
- Reference: Y
- Aircraft Operator: FBO
- Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
- Crew Size. Number Of Crew: 1
- Flight Phase: Takeoff
- Flight Phase: Climb
- Airspace. Class G: PAN

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Flight Instructor
- Qualification.Flight Crew: Multiengine
- Experience.Flight Crew.Total: 6000
- Experience.Flight Crew.Last 90 Days: 25
- Experience.Flight Crew.Type: 800
- ASRS Report Number. Accession Number: 1404774
Events
Anomaly.Conflict : NMAC
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
As we approached PAN to land, an aircraft later identified as [a] Cherokee, took off on runway 6 without any communication while I was landing on runway 24. Prior to landing, I listened to the ASOS which stated that the winds were variable at 5 gust 11 (observed as a direct crosswind) and that the preferred no wind runway is 24. I called the CTAF at 10 miles, 5 miles, downwind, base, and final, on the CTAF frequency. I later confirmed that 122.8 was the correct frequency, and that it was the frequency used in all my transmissions. I asked my [passenger] to keep vigilant as we landed as PAN is an uncontrolled field. I cleared all the way to the end of the runway while on final, and saw no aircraft on the runway on short final. About 5 seconds after touchdown, about 1500 feet down runway 24, I saw the Piper Cherokee taking off (already airborne) and it veered to the right side of the runway as I veered to the right as well (opposite direction). At this point it was between 50-100 feet in the air and between 75-100 feet to my left. I taxied further down the runway about 700 feet and turned off at the center. At this point I called out to the aircraft on CTAF and received no-response. I later spoke to witnesses who identified the aircraft. They also noted that they heard my calls, and heard none from the other aircraft (there is an outdoor speaker). A few minutes later, after I shut down, three aircraft took off in opposite directions in close order. I did note that the self-serve fuel is located at the approach end of runway 6, while the preferred calm wind runway is 24. My aircraft is ADS-B in/out equipped but no traffic appeared on the scope.

Synopsis
C177 pilot reported that while on landing rollout a Piper Cherokee departed opposite direction. Reported heard no calls on the CTAF from the other aircraft.
**ACN: 1404542 (12 of 50)**

**Time / Day**
- Date: 201611
- Local Time Of Day: 0601-1200

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

**Environment**
- Flight Conditions: VMC

**Aircraft : 1**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B767 Undifferentiated or Other Model
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Taxi

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Beechcraft / Beech Aircraft Corp Undifferentiated or Other Model
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Mission: Personal
- Flight Phase: Landing

**Person : 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Not Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Experience.Flight Crew.Total: 8504
- Experience.Flight Crew.Type: 528
- ASRS Report Number.Accession Number: 1404542
- Human Factors: Communication Breakdown
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: ATC

**Person : 2**
Reference: 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: Air Transport Pilot (ATP)
Experience.Flight Crew.Type: 2320
ASRS Report Number.Accession Number: 1404553
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC

Events
Anomaly.Conflict: NMAC
Anomaly.Ground Incursion: Runway
Detector.Person: Flight Crew
Miss Distance.Vertical: 100
When Detected: Taxi
Result.Flight Crew: Took Evasive Action

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

Narrative: 1
We held short XXR for traffic, heard somewhere prior a GA aircraft was cleared right traffic to XXR, hadn't seen anyone land in front of us so was on alert, subsequently cleared line up wait XXR saw single engine Bonanza on approximately 1 mile final at first thought he must have been cleared to land and was landing on XXL as started moving forward made comment to First Officer that it looked like he was lined up on our runway, so stopped aircraft was over hold short line with all lights on, but approximately 50 feet short of runway edge, runway threshold is displaced so bonanza passed us about 100 to 200 feet altitude, but did not self-initiate a go around, he landed beyond displaced threshold, First Officer made call to ATC and stated aircraft landed over us, controller did not notice apparently, but immediately stated that GA Bonanza was cleared to land on the left, I cannot verify this as I did not notice a clearance change or a clearance for the aircraft to land on XXL.

Narrative: 2
We taxied up to and held short of Runway XXR. Tower Controller cleared a Bonanza to land on XXL. The controller then cleared us into position and hold on Runway XXR. The Captain and I verified the correct runway then verified position and hold, and he began taxing on to the runway.

As we started to take the runway we saw the Bonanza aircraft turning from base to a short final onto our runway and not Runway XXL as they were cleared. The aircraft did not go around, and the Tower Controller did not say anything. We stopped the aircraft with about half our aircraft across the hold short line, clearly on the runway. We immediately stopped the aircraft and queried the controller about the landing aircraft. The Bonanza flew right over us and proceeded to land on our runway. I told the controller that he is landing right
over us and he proceeded to say "yeah, he was supposed to land on the left side" with zero urgency. Fortunately, the runway threshold was displaced and the aircraft was high enough to clear over the top of our aircraft.

The controller cleared the aircraft off the runway and hold short of XXL then cleared us for takeoff on runway XXR. We departed with no further events. On climb out the Captain asked Departure Controller about the event and that we received no explanation about the incursion. The controller said he would notify the manager, took the Captain’s number, and said they would call and update him on the event. We have yet to receive any feedback from Tower.

**Synopsis**

B767 flight crew reported while cleared for takeoff and approaching the runway, a Beechcraft Bonanza flew over them and landed on the same runway.
**Time / Day**

Date : 201611
Local Time Of Day : 1801-2400

**Place**

Locale Reference.ATC Facility : ELP.TRACON
State Reference : TX
Altitude.MSL.Single Value : 9000

**Aircraft : 1**

Reference : X
ATC / Advisory.TRACON : ELP
Aircraft Operator : Air Carrier
Make Model Name : Medium Transport
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 121
Flight Plan : IFR
Mission : Passenger
Flight Phase : Cruise
Route In Use : Vectors
Airspace.Class E : ELP

**Aircraft : 2**

Reference : Y
ATC / Advisory.TRACON : ELP
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 : VFR
Flight Phase : Cruise
Airspace.Class E : ELP

**Person**

Reference : 1
Location Of Person.Facility : ELP.TRACON
Reporter Organization : Government
Function.Air Traffic Control : Approach
Qualification.Air Traffic Control : Developmental
ASRS Report Number.Accession Number : 1403468
Human Factors : Confusion
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness
Human Factors : Workload
Human Factors : Distraction

**Events**

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Assessments

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

Narrative: 1

Working the Radar East position, [I] told Aircraft X to turn right to a 140 heading to avoid traffic and descend to nine thousand. I was having issues with another aircraft and my attention was on that situation. Aircraft Y was 10 miles west of ELP and his altitude had been changing between 8,500 and 9,000. When I realized that Aircraft X and Aircraft Y had only 300 feet apart vertically and their lateral separation was diminishing I turned Aircraft X to a 070 heading to avoid Aircraft Y. Aircraft X said he was responding to an RA and climbed to 9,300.

I think a better scan would have helped me realize the situation sooner. Also, assigning a higher altitude would have given me more control over the situation.

Synopsis

ELP TRACON Controller reported a NMAC between a VFR and an IFR aircraft. Controller lost situational awareness while being distracted with a third aircraft.
ACN: 1403446 (14 of 50)

Time / Day
Date: 201611
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: LVK.Airport
State Reference: CA
Altitude.MSL.Single Value: 4500

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.Tower: LVK
Aircraft Operator: Personal
Make Model Name: Skyhawk 172/Cutlass 172
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace.Class E: NCT

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Last 90 Days: 45
ASRS Report Number.Accession Number: 1403446
Human Factors: Situational Awareness

Person: 2
Reference: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Student
Experience.Flight Crew.Total: 45
Experience.Flight Crew.Last 90 Days: 15
Experience.Flight Crew.Type: 45
ASRS Report Number: Accession Number: 1402571
Human Factors: Situational Awareness

Events
Anomaly: Conflict: NMAC
Detector: Automation: Aircraft TA
Detector: Person: Flight Crew
Miss Distance: Horizontal: 300
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
During a Navigational Flight Competition that I was participating in, cruising at a proper VFR cruise altitude of 4,500 feet. My G650 GPS picked up a target 12 o'clock same altitude less than 1 mile on a collision course with me and a safety observer. Since it was Day VFR, I turned on all my lights, and even started flashing my landing light to see if the traffic would move. He did not. The intruder was a Cirrus SR-22 that maintained its course and went straight for us. I veered off the left 30 degrees and made sure to scan for other traffic before doing so. I understand that I was not talking to ATC in the LVK valley where IFR/VFR traffic meet, but I had one com tuned into LVK tower and one with NorCal 125.35. I believe that we are not at fault and were more cautious than the other pilot.

Narrative: 2
[Report narrative contained no additional information.]

Synopsis
C172 pilot and observer reported a NMAC with another light aircraft in the vicinity of LVK airport.
Date : 201611
Local Time Of Day : 1201-1800

Locale Reference.Airport : ACT.Airport
State Reference : TX
Relative Position.Angle.Radial : 045
Relative Position.Distance.Nautical Miles : 8
Altitude.MSL.Single Value : 5000

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

Reference : X
ATC / Advisory.TRACON : ACT
Aircraft Operator : Corporate
Make Model Name : Citation Excel (C560XL)
Crew Size.Number Of Crew : 2
Operating Under FAR Part : Part 91
Flight Plan : IFR
Mission : Passenger
Flight Phase : Initial Climb
Route In Use : Vectors
Airspace.Class D : ACT

Reference : Y
Make Model Name : Small Aircraft
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 91
Flight Plan : VFR
Flight Phase : Cruise
Airspace.Class D : ACT

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Corporate
Function.Flight Crew : First Officer
Function.Flight Crew : Pilot Not Flying
Qualification.Air Traffic Control : Fully Certified
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Air Transport Pilot (ATP)
Experience.Flight Crew.Total : 7970
Experience.Flight Crew.Last 90 Days : 75
Experience.Flight Crew.Type : 2500
ASRS Report Number.Accession Number : 1403395
Human Factors : Situational Awareness

Events
Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Automation : Aircraft RA
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
On initial climb off runway 01 at ACT, cleared runway heading to 3000'. Cleared then to climb to 5000' and turn to an assigned heading, which I don't remember. Before leveling at 5000' I saw TCAS traffic (yellow) showing +300'. Started looking about same time we leveled off at 5000'. Called aircraft to pilot flying (on autopilot). He looked and about that time it turned red with instructions to dive. He continued on several more seconds, then I demanded that he do something. As I was about to take over, he turned off A/P and dove. As we cleared the conflict, the TCAS showed 200'. After clearing and correcting altitude, I quizzed the controller about whether he was talking to the other aircraft. He said he was, but that aircraft was at 5500'. No way. I told him that we showed 200' as we passed under it. The pressure was extremely high today, 30.40 when we took off. I checked and we had it set correctly on all three altimeters. I have no way of knowing what the VFR traffic had set. I am not sure whether we were talking to Waco Approach or Ft. Worth Center.

Synopsis
C560XL FO reported a NMAC with another aircraft in the vicinity of ACT airport.
Time / Day
Date: 201611

Place
Locale Reference.Airport: ATL.Airport
State Reference: GA
Altitude.AGL.Single Value: 500

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Helicopter
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 135
Flight Plan: VFR
Mission: Passenger
Flight Phase: Final Approach
Route In Use: Visual Approach
Airspace.Class E: A80

Aircraft: 2
Reference: Y
Make Model Name: UAV - Unpiloted Aerial Vehicle
Flight Phase: Cruise
Airspace.Class E: A80

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Rotorcraft
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1402826

Events
Anomaly.Conflict: NMAC
Detector.Person: Flight Crew
Miss Distance.Horizontal: 150
Miss Distance.Vertical: 100
Assessments
Contributing Factors / Situations: Human Factors
Primary Problem: Human Factors

Narrative: 1
Flying into [a helicopter pad in Atlanta] on short final we encountered a drone on our direct flight path for landing. I announced to crew I was taking evasive action, before I could initiate evasive action the drone dropped down and to the right out of our flight path. It was not seen again.

Synopsis
Helicopter pilot reported a UAV in his path on short final to a helipad. The UAV pilot maneuvered away before the helicopter pilot could and was not seen again.
**Time / Day**

- Date: 201611
- Local Time Of Day: 1201-1800

**Place**

- Locale Reference: SBA.TRACON
- State Reference: CA
- Altitude: MSL. Single Value: 6000

**Environment**

- Flight Conditions: VMC
- Light: Daylight

**Aircraft**

- Reference: X
- ATC / Advisory: TRACON: SBA
- Aircraft Operator: Air Taxi
- Make Model Name: Beech 1900
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 135
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Cruise
- Airspace: Class E: SBA

**Person**

- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Taxi
- Function: Flight Crew: Captain
- Function: Flight Crew: Pilot Flying
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number: Accession Number: 1402790
- Human Factors: Situational Awareness

**Events**

- Anomaly: Conflict: NMAC
- Anomaly: Deviation - Altitude: Excursion From Assigned Altitude
- Detector: Automation: Aircraft RA
- When Detected: In-flight
- Result: Flight Crew: Took Evasive Action

**Assessments**

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

**Narrative: 1**
While operating in cruise at 6000 ft with the autopilot engaged ATC called traffic out to me, 12 o'clock 5 miles maneuvering, restricted at 5500 ft. I called the traffic in sight when I saw the aircraft. As I closed on the other aircraft's position I received a callout from the TCAS of "Traffic" which I expected due to the close proximity. When I was about 2 miles away from the aircraft I could see he was doing what looked to be steep turns and he passed directly in front of me, causing me to lose sight of him under the nose. About that same time the TCAS gave me a "Climb" command. I saw on the TCAS display the traffic was no longer level 500 ft below me but had started to climb into my path. The RA given was to climb between 2000-2500 FPM. I disconnected the autopilot, pitched the nose up to about 20 degrees, and increased to climb power. I also notified ATC that I was complying with an RA. When I received the "Clear of Conflict" callout, I leveled off and asked ATC for further instructions. The rest of the flight was completed without incident. I believe at the closest point I was 0 ft horizontally and 200 ft vertically apart from the intruder aircraft.

I believe TCAS is one of the most important safety features that can be installed in an aircraft. This incident shows that even if ATC is monitoring aircraft and you can see the other plane, it is still possible to lose separation. Without TCAS being installed, I would have never known the other plane was climbing toward me and the possibility of a mid-air collision would have greatly increased. There has been some discussion of removing the TCAS systems from our aircraft to save on costs and I think that would be a huge mistake. I think instead the company should be looking at ways to have all of our aircraft equipped with TCAS.

Synopsis

Beech 1900-C Captain reported taking evasive action in response to a TCAS RA during an NMAC event in the vicinity of KWANG Intersection.
ACN: 1402608 (18 of 50)

**Time / Day**

Date: 201611
Local Time Of Day: 1801-2400

**Place**

Locale Reference. ATC Facility: PRC.Tower
State Reference: AZ

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft : 1**

Reference: X
ATC / Advisory. Tower: PRC
Aircraft Operator: Personal
Make Model Name: Cessna 310/T310C
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Initial Approach
Route In Use: Visual Approach
Airspace. Class D: PRC

**Aircraft : 2**

Reference: Y
ATC / Advisory. Tower: PRC
Aircraft Operator: FBO
Make Model Name: Cessna Single Piston Undifferentiated or Other Model
Crew Size. Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Flight Phase: Initial Approach
Airspace. Class D: PRC

**Person**

Reference: 1
Location Of Person. Facility: PRC.Tower
Reporter Organization: Government
Function. Air Traffic Control: Local
Qualification. Air Traffic Control: Developmental
ASRS Report Number. Accession Number: 1402608
Human Factors: Confusion
Human Factors: Situational Awareness
Human Factors: Training / Qualification

**Events**
Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Air Traffic Control
Result.Flight Crew : Executed Go Around / Missed Approach
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Separated Traffic

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

Narrative: 1
I was working the Local Control position. Aircraft X was given number two, follow a Cessna on a left base to a three mile final. Aircraft X was looking for traffic. Aircraft Y was given Runway 21L cleared for touch and go. Aircraft X reported the traffic in sight. Aircraft X was given Runway 21L cleared for touch and go. I noticed Aircraft X's target turned base quickly so I picked up the binoculars to look for both aircraft. I noticed Aircraft X was close behind Aircraft Y and instructed Aircraft X to go around offset left. Aircraft X read back go around. Aircraft X appeared to be offset on the left. Aircraft Y reported the Twin Cessna flew under him 50 feet. Aircraft X was on upwind ahead of Aircraft Y. Aircraft Y reiterated the Twin Cessna flew under him 50 feet and said he wanted to report NMAC. I didn't understand the acronym he gave. My instructor keyed up and said roger. I later found out in our debrief that Aircraft Y said "NMAC" and that it was a near midair collision.

Synopsis
Local Controller trainee reported an aircraft turned in too close to the preceding aircraft it was to follow and issued go-around instructions. The preceding aircraft filed a NMAC.
ACN: 1402372

**Time / Day**
- Date: 201611
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference: ATC Facility: PRC.Tower
- State Reference: AZ
- Altitude: MSL: Single Value: 5300

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

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

**Aircraft : 2**
- Reference: Y
- ATC / Advisory: Tower: PRC
- Aircraft Operator: Corporate
- Make Model Name: Small Aircraft, Low Wing, 2 Eng, Retractable Gear
- Crew Size: Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Mission: Passenger
- Flight Phase: Final Approach
- Route In Use: None
- Airspace: Class D: PRC

**Person**
- Reference: 1
- Location Of Person: Facility: PRC.Tower
- Reporter Organization: Government
- Function: Air Traffic Control: Local
- Function: Air Traffic Control: Instructor
- Qualification: Air Traffic Control: Fully Certified
- Experience: Air Traffic Control: Time Certified In Pos 1 (yrs): 18
- ASRS Report Number: Accession Number: 1402372
- Human Factors: Communication Breakdown
- Human Factors: Confusion
- Human Factors: Training / Qualification
Human Factors : Situational Awareness
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : Flight Crew
Communication Breakdown.Party2 : ATC

Events
Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 50
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach

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

Narrative: 1
Aircraft Y was sequenced number 2 to follow Aircraft X. They reported traffic in sight and were cleared touch and go. After Aircraft Y turned final it was obvious that they had turned too close and the Developmental training on LC1 sent Aircraft Y around and told them to offset to the left. Aircraft X said something that I didn't hear and I asked them to repeat it. The instructor pilot said that Aircraft Y had flown 50 feet below them on final, I said Roger.

During the OJT debrief the Developmental said that the pilot used an acronym that she didn't know what it was. I asked if it was NMAC and she said possibly. We listened to the tapes and that is what the pilot said so I notified management. The conflict happened on a one and a half mile final which is two and a half miles from the tower. It was hard to tell how close the planes got but I didn't see them overfly one another. If the pilot thought that they were that close to the preceding airplane then they should have initiated a go around. Unfortunately the Falcon playback didn't track the aircraft on final to see what really happened.

Synopsis
PRC Tower Controller reported a NMAC when an aircraft turned too close to the traffic it was to follow.
ACN: 1402354 (20 of 50)

**Time / Day**

Date: 201601
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: JWY.Airport
State Reference: TX
Altitude.MSL.Single Value: 2500

**Environment**

Flight Conditions: VMC
Weather Elements / Visibility: Visibility: 15
Light: Daylight

**Aircraft : 1**

Reference: X
Aircraft Operator: Personal
Make Model Name: PA-24 Turbo Comanche
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Flight Phase: Climb
Route In Use: Direct
Airspace.Class E: D10

**Aircraft : 2**

Reference: Y
Aircraft Operator: Personal
Make Model Name: Cessna Single Piston Undifferentiated or Other Model
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Mission: Passenger
Flight Phase: Cruise
Airspace.Class E: D10

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 505
Experience.Flight Crew.Last 90 Days: 60
Experience.Flight Crew.Type: 125
ASRS Report Number.Accession Number : 1402354
Human Factors : Other / Unknown

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

Narrative: 1
I was flying for instrument currency with a safety pilot. The plan [was] to do one hold after an initial departure from JWY, then to depart to the south for more approaches at other airports. We departed runway 36 at JWY and elected to fly the missed approach upon departure and proceeded to CHMPZ (the missed approach RNAV 36 holding fix). The entire missed approach would keep us clear of the Dallas Class B. 30 seconds before reaching the fix, I put on the view limiting device, and called to my safety pilot, "you're outside the plane," and he responded with "I'm outside the plane" Upon reaching the holding fix, CHMPZ, and rolling into the first holding turn, as my aircraft is ADS-B in/out equipped, we had a traffic alert traffic, 'less than a mile, 11 o'clock, same altitude.' I immediately took off the foggles, and began scanning. I was able to spot the aircraft, a grey Cessna taildragger, facing us head on. I immediately rolled hard right and watched the Cessna pass behind me and under my left wing as I turned. I was able to see other aircraft flying almost in a staggered formation in the same direction. The Cessna never flinched, turned, or changed altitude. We climbed as far as we could without infringing upon the Class B airspace above us, turned south, kept the Cessna in sight and departed the area without further incident.

The next day on social media, a friend had posted event photos. He'd posted a photo of the flight plan for the pilots to follow as a part of their pre-flight brief I'd assume. Their route practically intersected CHMPZ. We'd flown right through the path of a train of maybe a dozen aircraft. My hypothesis was confirmed when someone else posted a video on social media of the mass of aircraft taxiing out and I recognized the grey taildragger we almost collided with on the video. I did not recall seeing anything in the NOTAMs for JWY. I went back and double checked the NOTAM archives and did not see anything noted for JWY or the airport [the event] was occurring that day. Didn't see anything regarding the volume and route of aircraft. The ADS-B alert broke the accident chain and prompted us to get 2 sets of eyes scanning the horizon before taking evasive action. Had I known I was flying into their route of flight, I'd never have contemplated flying the missed approach or anywhere near their flight path. It seems like this volume of traffic occurring all day long at an otherwise relatively slow airport should be something that could warrant the issuance of a NOTAM.

Only other thing I could have done was to call approach control and let them know what I was up to. I'm not afraid of approach and practically learned how to fly at ADS, so Class B
and radio work is something I'm really pretty good at. I didn't call them up because it was a busy day and I was going to be departing the area almost immediately anyway. The irony is, that in hindsight, my reasoning for not calling up approach was exactly why I should have called approach. Near misses will happen on their own, but when there's this kind of volume coming in and out of an airport, I think if a NOTAM can be issued, it should be issued.

Synopsis

PA24 pilot reported a NMAC while practicing holds with foggles on and a safety pilot monitoring for traffic. While entering the first turn, the ADS-B announced traffic at 11 O'clock and evasive action was taken.
**ACN: 1402347** (21 of 50)

**Time / Day**
- Date: 201611
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: SSF.Airport
- State Reference: TX
- Relative Position.Distance.Nautical Miles: 10
- Altitude.MSL.Single Value: 3500

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility. Visibility: 8
- Light: Dusk

**Aircraft : 1**
- Reference: X
- ATC / Advisory.TRACON: SAT
- 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: Direct
- Airspace.Class E: SAT

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.TRACON: SAT
- Aircraft Operator: Military
- Make Model Name: King Air C90 E90
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Mission: Training
- Flight Phase: Cruise
- Airspace.Class E: SAT

**Component**
- Aircraft Component: Transponder
- Aircraft Reference: X
- Problem: Malfunctioning

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 50
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
I was flying to SSF with my transponder going in and out according to ATC. I saw everything on my end working the way it was supposed to be working. (Getting a little light that flashes on the transponder). I was trying to get flight following to SSF when I could not get a word in to request it as the Controller was busy working the traffic in the current sector. I did hear him make a call out to the King Air and heard him call our position out to them. I started to look in all directions but could not see. They were moving in a southwest direction while we were heading due north. I saw the King Air just in time to react by turning left and diving in order to make it away from the airplane. I had about 2 seconds to see that they were making no action to change direction and so I took the plane from my student and made a dive away from them.

Contributing factors: Cessna 172 transponder intermittent, Flight Following was not possible due to controller's workload and equipment malfunction, King Air facing dusk sun.

Synopsis
C172 instructor pilot reported a NMAC with a King Air in the vicinity of SSF airport.
Time / Day
Date: 201611
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: OCF.Airport
State Reference: FL
Relative Position.Distance.Nautical Miles: 11
Altitude.MSL.Single Value: 2500

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

Aircraft: 1
Reference: X
Aircraft Operator: Personal
Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Climb
Route In Use: Direct
Airspace.Class G: X35

Aircraft: 2
Reference: Y
Make Model Name: Piper Single Undifferentiated or Other Model
Airspace.Class G: X35

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 250
Experience.Flight Crew.Last 90 Days: 30
Experience.Flight Crew.Type: 100
ASRS Report Number.Accession Number: 1402333
Human Factors: Situational Awareness

Person: 2
Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 10
Miss Distance.Vertical : 400
When Detected : In-flight
Result.General : None Reported / Taken

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

Narrative: 1
Our flight had just departed Marion County/Dunnellon (X35). As we were reaching the top of the climb at 2500 ft, the passenger in the right seat spotted a single engine low-wing aircraft passing beneath us with a separation of around 400 to 500 ft. No evasive actions were taken on the part of either aircraft. The aircraft was approaching from the southwest out of the sun.

In the future, I will utilize ATC advisory services even on short flights. Furthermore, I will take extra care to be alert to potential traffic conflicts originating from areas where vision is obscured (as in the case, late afternoon sun and haze).

Narrative: 2
[Report narrative contained no additional information.]

Synopsis
PA28 pilot and instructor pilot reported a NMAC in the vicinity of X35 airport.
**ACN: 1402115 (23 of 50)**

**Time / Day**

Date: 2016111
Local Time Of Day: 1801-2400

**Place**

Locale Reference. ATC Facility: TVC. Tower
State Reference: MI

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft : 1**

Reference: X
ATC / Advisory. Tower: TVC
Make Model Name: Helicopter
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Final Approach
Route In Use: None
Route In Use: VFR Route
Airspace. Class D: TVC

**Aircraft : 2**

Reference: Y
ATC / Advisory. Tower: TVC
Aircraft Operator: FBO
Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Initial Approach
Route In Use: VFR Route
Airspace. Class D: TVC

**Aircraft : 3**

Reference: Z
ATC / Advisory. Tower: TVC
Aircraft Operator: Government
Make Model Name: Helicopter
Crew Size. Number Of Crew: 2
Operating Under FAR Part: Part 91
Mission: Training
Flight Phase: Final Approach
Airspace. Class D: TVC

**Person**
Reference: 1
Location Of Person.Facility: TVC.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: 1402115
Human Factors: Human-Machine Interface
Human Factors: Situational Awareness
Human Factors: Training / Qualification
Human Factors: Confusion

Events

Anomaly.ATC Issue: All Types
Anomaly.Conflict: NMAC
Anomaly.Deviation - Track / Heading: All Types
Anomaly.Deviation - Procedural: Clearance
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Requested ATC Assistance / Clarification
Result.Air Traffic Control: Issued New Clearance

Assessments

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

Narrative: 1

Several aircraft inbound from the south to arrive Runway 36, at least two in the VFR pattern. Aircraft X inbound to the VFR pattern, to report 3 mile left base. Aircraft X enters base and is cleared for the option Runway 36, then left traffic. Local Control issues traffic to multiple aircraft to the south all entering the Class D surface area to arrive Runway 36. Aircraft Y inbound from Northwest is issued Runway 36, left traffic, and to report entering departure end left downwind for traffic in the pattern. Pilot does not advise student pilot. Aircraft X now on left cross wind, is sequenced to follow a Aircraft Z on a practice approach, straight in to a full stop. As Local Control is issuing upwind extension for an aircraft in the pattern because of Aircraft Y inbound to the departure end downwind, Local Control notices Aircraft Y assumed target on the Tower Radar Display near midfield. Local Control told Aircraft Y to enter the downwind, sequence and told to expect to follow Aircraft X on approach end left downwind. Local Control makes several transmissions for other traffic, including the landing clearance for Aircraft Z. Local control asked Aircraft Y if he is following Aircraft Z, and the pilot response is that he has Aircraft Z in sight. Immediately after that transmission ends, Aircraft Z advises they observe Aircraft Y above and would like to just come back to land at a taxiway near the ramp. No mention was made by any pilot of a near mid-air collision, all aircraft were VFR.

Aircraft Y student pilot's instructor should re-visit VFR pattern procedures with student.

Synopsis
TVC Tower Controller reported not noticing that an aircraft entered the VFR traffic pattern at the incorrect position on downwind and had reported the incorrect helicopter to follow.
ACN: 1402113 (24 of 50)

Time / Day
Date: 201609
Local Time Of Day: 1201-1800

Place
Locale Reference.ATC Facility: D10.TRACON
State Reference: TX
Altitude.MSL.Single Value: 6500

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.TRACON: D10
Aircraft Operator: Air Taxi
Make Model Name: Medium Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Passenger
Flight Phase: Descent
Route In Use: Vectors
Airspace.Class E: D10

Aircraft: 2
Reference: Y
Aircraft Operator: Personal
Make Model Name: Sail Plane
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace.Class E: D10

Person
Reference: 1
Location Of Person.Facility: D10.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): 1.9
ASRS Report Number.Accession Number: 1402113
Human Factors: Situational Awareness
Human Factors: Human-Machine Interface

Events
Narrative: 1

I was working Meacham South when Aircraft X checked in. I issued the aircraft a descent to 5000 feet. During this time there was an intermittent radar target that I was not aware of. When Aircraft X was over CPT he advised that there was a glider out there. I then noticed a target directly over CPT. I placed a heading indicator on it to track it. It dropped off the screen and several miles later it would reappear.

I asked the pilot what altitude the glider was at and he said about 6500 feet and that he was pretty close. I apologized to the pilot that I did not see it. He said that it is not my fault or not much that I could really do about it. I do not remember the exact statement. Also, if I remember correctly he said that his equipment did not pick it up either. I them advised the Operational Manager of the situation, and showed him the intermittent target. Once I was relieved I stopped by the Operations Manager desk. He had just gotten off the phone with the pilot, he said the pilot was pretty cool about the situation. He then showed me the statement referring to the intermittent target.

The Operations Manager told me not to worry there was not anything I really could have done since the target was intermittent. The reason I never previously filed a report was due to the Operations Manager telling me that there was nothing I could have done. However, today I am called into Quality Control to give a controller statement in regards to a near midair collision. It is my understanding that only a pilot may declare a NMAC, and to my knowledge the pilot did not do this. I really do not have any recommendations for this type of situation, prior to the situation I believed all possible conflicts where resolved. Maybe all aircraft are required to have a transponder.

Synopsis

D10 TRACON Controller reported not observing an intermittent target on the radar display until informed of the glider by an air taxi pilot in descent.
ACN: 1402107 (25 of 50)

Time / Day
Date: 201611
Local Time Of Day: 1201-1800

Place
Locale Reference. ATC Facility: PRC.Tower
State Reference: AZ
Altitude. MSL. Single Value: 6000

Environment
Flight Conditions: VMC
Light: Daylight
Ceiling: CLR

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

Aircraft: 2
Reference: Y
ATC / Advisory. Tower: PRC
Aircraft Operator: FBO
Make Model Name: Small Aircraft, High Wing, 1 Eng, Fixed Gear
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Initial Approach
Route In Use: None
Airspace. Class D: PRC

Person: 1
Reference: 1
Location Of Person. Facility: PRC. 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): 5
ASRS Report Number. Accession Number: 1402107
Human Factors: Situational Awareness
Human Factors: Communication Breakdown
Communication Breakdown. Party1: ATC
Communication Breakdown. Party2: Flight Crew

**Person: 2**
Reference: 2
Location Of Person. Aircraft: Y
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function. Flight Crew: Trainee
Qualification. Flight Crew: Student
Experience. Flight Crew. Total: 20
Experience. Flight Crew. Last 90 Days: 20
Experience. Flight Crew. Type: 20
ASRS Report Number. Accession Number: 1402351
Human Factors: Training / Qualification
Human Factors: Distraction
Human Factors: Situational Awareness

**Person: 3**
Reference: 3
Location Of Person. Aircraft: Y
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
Experience. Flight Crew. Total: 22000
Experience. Flight Crew. Last 90 Days: 20
Experience. Flight Crew. Type: 500
ASRS Report Number. Accession Number: 1402315
Human Factors: Situational Awareness
Human Factors: Distraction
Human Factors: Training / Qualification

**Events**
Anomaly. ATC Issue: All Types
Anomaly. Conflict: NMAC
Detector. Person: Flight Crew
When Detected: In-flight
Result. Flight Crew: Became Reoriented
Result. Flight Crew: Requested ATC Assistance / Clarification

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

**Narrative: 1**
Aircraft X was upwind from Runway 21R in the pattern doing short approaches. Aircraft X reported turning crosswind at the campus. Aircraft Y was following Aircraft X in the
pattern. Aircraft Y was having problems with his transmissions being cut out during his entire pattern work and I did advise him of this problem. Aircraft Y was told to follow Aircraft X abeam the campus on right crosswind. Aircraft Y replied with a broken transmission. I advised Aircraft Y of this issue. About 30 seconds later I told Aircraft Y the aircraft he was following was ahead to his right turning downwind. He reported the traffic in sight. There was another aircraft passing Aircraft Y directly behind him on the downwind. I returned to the runway and final and cleared another aircraft. Right after that Aircraft X declared a NMAC.

**Narrative: 2**

[Report narrative contained no additional information.]

**Narrative: 3**

Upwind after touch and go at Prescott's Runway 21R Tower advised us of traffic. We commented that we didn't see it because of the sun in our face. After extending upwind we saw an aircraft at our 2 o'clock position and said we had traffic. Told to follow traffic and we turned crosswind, then downwind.

After completing our training session we were notified to contact the Tower. Tower informed us that there had been a 'near miss' with an aircraft. Biggest problem was looking into the sun initially and finally seeing what we thought was the traffic. To prevent this from happening again and making it a learning moment, we will verify with Tower that we have the correct traffic in sight.

**Synopsis**

Tower Controller, flight instructor and student pilot reported a miscommunication and misidentification that led to near-mid-air-collision.
**ACN: 1402064** (26 of 50)

**Time / Day**

Date: 201611
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: F45.Airport
State Reference: FL
Relative Position.Distance.Nautical Miles: 6
Altitude.MSL.Single Value: 1600

**Environment**

Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 15
Light: Daylight
Ceiling.Single Value: 20000

**Aircraft: 1**

Reference: X
ATC / Advisory.CTAF: F45
Aircraft Operator: Personal
Make Model Name: Bonanza 35
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Nav In Use.Localizer/Glideslope/ILS: Runway 8R
Flight Phase: Initial Approach
Airspace.Class E: PBI

**Aircraft: 2**

Reference: Y
ATC / Advisory.CTAF: F45
ATC / Advisory.TRACON: PBI
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Operating Under FAR Part: Part 91
Mission: Training
Nav In Use.Localizer/Glideslope/ILS: Runway 8R
Flight Phase: Initial Approach
Airspace.Class E: PBI

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Private
Experience.Flight Crew.Total : 1200
Experience.Flight Crew.Last 90 Days : 20
Experience.Flight Crew.Type : 900
ASRS Report Number.Accession Number : 1402064

Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 10
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
Following a validation flight for a newly installed ADS-B system I was flying as safety pilot while my partner flew practice approaches for IFR currency. We were inbound for the ILS 8R approach to Palm Beach County (Florida) airport F45. We were inbound and level at 1600 ft. at approximately 6 miles. We were broadcasting our position and intentions continuously on the CTAF frequency. During my scan I saw an aircraft approach from our right at approximately the same altitude on an intercepting heading. Initial visual contact was when the other aircraft was approximately 200 ft to our right. I immediately instructed the pilot flying to turn left and remove his foggles. As we banked left the other aircraft passed in front of us and continued his approach. At that point in time he broadcast (his first on CTAF) that he was also flying a practice approach to the same runway and volunteered that he was receiving vectors from Palm Beach approach control. This airport is out of the PBI class C airspace but certainly within their radar coverage area. We had no reason to be in contact with approach and certainly expected approach to have us on radar/ADS-B and not vector another aircraft into us, especially one that was not on the CTAF frequency.

Synopsis
BE35 pilot reported a NMAC with another aircraft while on a practice ILS approach to Runway 8R at F45.
ACN: 1401670 (27 of 50)

Time / Day
Date: 201611
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 1200

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

Aircraft
Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Personal
Make Model Name: PA-28R Cherokee Arrow All Series
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Initial Climb
Route In Use: Visual Approach
Airspace.Class D: ZZZ

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

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 244
Experience.Flight Crew.Last 90 Days: 14
Experience.Flight Crew.Type: 244
ASRS Report Number.Accession Number: 1401670
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC
Events
Anomaly. Aircraft Equipment Problem : Critical
Anomaly. Conflict : NMAC
Detector. Person : Flight Crew
Miss Distance. Horizontal : 400
Miss Distance. Vertical : 300
When Detected : In-flight
Result. Flight Crew : Took Evasive Action

Assessments
Contributing Factors / Situations : Aircraft
Primary Problem : Aircraft

Narrative: 1
Prior to takeoff for night currency practice in the pattern, the airplane had a normal run-up and systems check. After takeoff, the interior lights dimmed at about 400 ft AGL and I realized that my alternator was going. The radio started to malfunction by the time I turned crosswind. By the time I turned from crosswind to the downwind for runway 18, I had a total electrical failure, no lights or radio. The tower had initially asked me to call out a midfield downwind for runway 18 on left traffic. I was not able to reach them after turning downwind. As I crossed the midfield point, I noticed an airplane coming toward me from the right side and below. He passed below and behind me by only several hundred feet. He was coming in for a midfield crosswind for right traffic on runway 18. I kept him in sight and extended my downwind to follow him in on final.

After landing, I took the first available turn off and cleared the hold short line. I then called the tower on my cell phone to report what had happened. They asked if I needed assistance, I did not, so they cleared me to taxi back to my hangar. In hindsight, the only thing that I can think of that may have helped me would be to have a backup hand held radio in the cockpit in case of a radio failure, especially at night.

Synopsis
The pilot of a Piper Arrow reported the loss of all electrical power shortly after takeoff. While flying the downwind leg with no lights or radios, a near mid-air collision was experienced.
**Time / Day**

Date: 201611
Local Time Of Day: 1201-1800

**Place**

Locale Reference. Airport: MAN.Airport
State Reference: ID

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft : 1**

Reference: X
ATC / Advisory. CTAF: MAN
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
Route In Use: Direct
Airspace. Class G: MAN

**Aircraft : 2**

Reference: Y
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: Final Approach
Airspace. Class G: MAN

**Person**

Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
 Reporter Organization: Personal
Function. Flight Crew: Single Pilot
Function. Flight Crew: Pilot Flying
Qualification. Flight Crew: Sea
Qualification. Flight Crew: Private
Qualification. Flight Crew: Multiengine
Qualification. Flight Crew: Instrument
Experience. Flight Crew. Total: 4300
Experience. Flight Crew. Last 90 Days: 25
Experience.Flight Crew.Type : 1240
ASRS Report Number.Accession Number : 1400989

Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 200
Miss Distance.Vertical : 20
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
I was departing from MAN. 45 minutes earlier I had flown in and landed on Runway 29 with the other light traffic at the airport. When it came time for my departure, I noticed traffic was now using Runway 11. I commenced the long parallel taxi to the end of Runway 11. As I taxied down I noticed an aircraft depart 11 followed soon after by another aircraft. That pilot told the previous pilot there was another airplane trying to land on Runway 29 and to look out. He departed and I noticed Aircraft Y go around. He never spoke on the radio. I reached the end of Runway 11 and did my normal runup. I taxied up to the hold line to get ready to depart. I called in the blind and asked Aircraft Y if he was still in the pattern? There was no response from him but the first pilot reported he could not see him any longer. I looked long and hard at the approach end of runway 29 and could not see Aircraft Y. I turned on my four taxi, landing and wingtip position LED lights.

I announced I was departing on Runway 11 and taxied on the runway and firewalled my throttle. At about 40 kts into my takeoff run I spotted the wing lights of Aircraft Y landing on Runway 29 and coming straight at me. I waited another couple of seconds and "horsed" my plane into the air and turned right over the taxiway. Aircraft Y went around to his right. I estimate we missed each other by 200 feet. I again tried to contact him with no response. I did not check the AWOS or observe the windsock prior to my departure since Runway 11 was being used.

Synopsis
Single engine aircraft pilot reported taking evasive action on takeoff from MAN to avoid hitting an aircraft on final for the opposing direction runway.
ACN: 1400806 (29 of 50)

Time / Day
Date: 201611
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 200

Environment
Weather Elements / Visibility.

Visibility: 10
Ceiling.Single Value: 7000

Aircraft
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: M-20 Series Undifferentiated or Other Model
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Initial Climb
Route In Use: None
Airspace.Class E: ZZZ1

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Total: 1100
Experience.Flight Crew.Last 90 Days: 20
Experience.Flight Crew.Type: 500
ASRS Report Number.Accession Number: 1400806
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Crew

Events
Anomaly.Conflict: NMAC
Detector.Person: Flight Crew
Miss Distance.Horizontal: 0
Miss Distance.Vertical: 50
When Detected: In-flight
Result.Flight Crew: Took Evasive Action
Assessments
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1
I called "ZZZ traffic, Mooney [tail number], departing 27, northbound", and started my takeoff roll.Shortly after that (< 15 seconds), I heard a call from a medivac helicopter that he was taking off and would parallel 27, then turn north. The helicopter was taking off about 2/3 of the way toward the west end of the runway and south of it. I figured he had heard or seen me and would wait until I passed to turn north. As I was climbing, he took off westward, then suddenly turned north under me, climbing rapidly. I got on the radio and said "helicopter do you see me? I'm 50 feet over your head". He said that he didn't see me and hadn't heard a call. I said that I had made the departure call.

I'm not sure what all to do differently myself. You can't repeat or clarify every traffic call. His call was consistent with what I expected him to do (wait to go north), but also consistent with what he actually did (go north immediately). When I did notice the conflict, I should have given him unambiguous instructions ("helicopter, don't climb").

I might have turned south, but that would have been a non-intuitive turn-towards-the-threat maneuver. Options were alarmingly limited when low, at best climb rate, and being crowded from below.

I think the helicopter was depending too much on the radio calls, he should have looked down the runway before crossing it.

Synopsis
The pilot of a Mooney M20 reported that after an announced take-off from an uncontrolled airport, observed a helicopter takeoff, turn and rapidly climb below him.
**Time / Day**

Date: 201611
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: 1C5.Airport
State Reference: IL
Relative Position.Distance.Nautical Miles: 2
Altitude.AGL.Single Value: 650

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft : 1**

Reference: X
ATC / Advisory.CTAF: 1C5
Aircraft Operator: Personal
Make Model Name: PA-32 Cherokee Six/Lance/Saratoga/6X
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Passenger
Flight Phase: Landing
Route In Use: Visual Approach
Airspace.Class G: 1C5

**Aircraft : 2**

Reference: Y
Make Model Name: Beechcraft Single Piston Undifferentiated or Other Model
Flight Phase: Takeoff

**Person : 1**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 80
Experience.Flight Crew.Last 90 Days: 5
Experience.Flight Crew.Type: 15
ASRS Report Number.Accession Number: 1400567
Human Factors: Situational Awareness

**Person : 2**
Events
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
Flying in for landing at Clow (1C5). I was just beyond mid-field downwind for runway 18 when an aircraft on the ground announced that if any aircraft were on final for 18 then heads up, because there was a plane sitting at the end of 36. I continued my pattern and preparation for landing, turning base, and announcing location along the way. Aircraft on the ground were still communicating that there was a plane sitting on the runway. My attention was diverted a bit from flying the airplane to looking for this plane that was somewhere that it really shouldn't have been. I overshot the final turn just a bit with concentration interrupted, and was getting back in line for runway 18. [The pilot in the other seat] told me to fly the aircraft and he would watch for traffic. Aircraft on the ground announced that there was a Mooney rolling on 36. It was actually a Bonanza. I initiated a standard go around and announced that as well. I was at 650 AGL. Someone announced that the Bonanza was coming right toward us. I initiated a standard go around and announced that as well. I was at 650 AGL. Someone announced that the Bonanza was coming right toward us. A few seconds after I put in full mixture/throttle for the standard go around, [the pilot in the other seat] banked the plane hard right having seen the aircraft and hearing the warnings from the other aircraft on the ground. Within seconds, I saw the plane, wings level, in the path that we were just on under my banked left wing. I then went around and landed the aircraft. On the ground, [a ground employee] had seen the incident. He called it the closest that he had seen 2 aircraft to one another.

Narrative: 2
The plane holding short yelled again, "plane on final, you've got a Mooney coming straight at you! Get out of the way quickly!!" He was climbing very quickly, and just as I looked I saw him in a split second coming straight at us. Without hesitation I grabbed the yoke and jerked it to the right to sidestep the upwind line as quickly as I could. Straightened out
just to see him shoot past the left pilot window. He was no more than 100 feet away from us. Turns out it was a Bonanza.

**Synopsis**

Two pilots in a PA-32R reported an NMAC at 1C5, a non-towered airport.
**ACN: 1400550 (31 of 50)**

**Time / Day**
- Date: 201611
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: DLZ.Airport
- State Reference: OH
- Altitude.MSL.Single Value: 1800

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

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

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.CTAF: DLZ
- Make Model Name: Small Aircraft
- Operating Under FAR Part: Part 91
- Flight Phase: Initial Approach
- Airspace.Class E: DLZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Instructor
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Flight Instructor
- Qualification.Flight Crew: Commercial
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Total: 375
- Experience.Flight Crew.Last 90 Days: 45
- Experience.Flight Crew.Type: 250
Instructor pilot reported experiencing a near miss event in the landing pattern at an uncontrolled airport.
ACN: 1400182 (32 of 50)

Time / Day
- Date: 201611
- Local Time Of Day: 0601-1200

Place
- Locale Reference.Airport: PRC.Airport
- State Reference: AZ
- Altitude.MSL.Single Value: 6000

Environment
- Flight Conditions: VMC
- Light: Daylight

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

Aircraft: 2
- Reference: Y
- ATC / Advisory.Tower: PRC
- Make Model Name: Helicopter
- Flight Phase: Initial Approach
- Airspace.Class D: PRC

Person
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: FBO
- Function.Flight Crew: Instructor
- Function.Flight Crew: Pilot Not Flying
- Qualification.Flight Crew: Flight Instructor
- Qualification.Flight Crew: Commercial
- Qualification.Flight Crew: Multiengine
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Total: 800
- Experience.Flight Crew.Last 90 Days: 150
- Experience.Flight Crew.Type: 400
- ASRS Report Number.Accession Number: 1400182
- Human Factors: Communication Breakdown
Communication Breakdown. Party1 : Flight Crew
Communication Breakdown. Party2 : ATC

Events
Anomaly. ATC Issue : All Types
Anomaly. Conflict : NMAC
Anomaly. Deviation - Procedural : Published Material / Policy
Detector. Person : Flight Crew
Detector. Person : Air Traffic Control
Miss Distance. Horizontal : 100
Miss Distance. Vertical : 100
When Detected : In-flight
Result. Flight Crew : Took Evasive Action

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

Narrative: 1
Was cleared to enter traffic pattern on a left downwind. Descended to traffic pattern altitude on way to airport. Was told by tower traffic on an instrument approach for the intercepting runway off the right at 6,600 feet. Couldn't see traffic as my aircraft was at 6,000 feet and is high wing blocking the view. As student rolled out of intercepting downwind the traffic (Helicopter) had descended and was crossing right in front of us. I immediately took over controls and made an evasive maneuver to prevent collision. Most of the time Tower will not allow instrument approaches to the intersecting runway of the active. Or if they do they will make the aircraft either stay at or above at least 500 feet above the traffic pattern or while make the aircraft terminate the approach before entering the airport vicinity. That way the aircraft on the approach will not be flying right through the traffic pattern for the active runway.

Synopsis
Flight Instructor reported a near miss event at a controlled airport between VFR traffic in the landing pattern and an aircraft on final for an intersecting runway from a practice instrument approach.
ACN: 1399404 (33 of 50)

Time / Day
Date: 201611
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: WVI.Airport
State Reference: CA
Altitude.AGL.Single Value: 500

Environment
Flight Conditions: VMC
Ceiling: CLR

Aircraft
Reference: X
ATC / Advisory.Tower: WVI
Aircraft Operator: Personal
Make Model Name: Small Aircraft
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Landing
Route In Use: Visual Approach
Airspace.Class E: WVI

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Sea
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 15031
Experience.Flight Crew.Last 90 Days: 181
Experience.Flight Crew.Type: 716
ASRS Report Number.Accession Number: 1399404

Events
Anomaly.Conflict: NMAC
Detector.Person: Flight Crew
Miss Distance.Horizontal: 300
When Detected: In-flight
Result.General: None Reported / Taken
Assessments
Contributing Factors / Situations : Airport
Primary Problem : Airport

Narrative: 1
Today skydivers were allowed to land on the airport at Watsonville. I was doing pattern work in my [aircraft] using left traffic for runway 9 at Watsonville, CA. The new drop zone on the airport property is WAY TOO CLOSE to the runways and traffic patterns. While on short final I was very close to the skydivers that were just touching down about the same time I was landing. It worked today only because the weather was perfect, the wind light, and very little traffic. On another day with helicopters, student pilots, fog, and other factors that are common at Watsonville, there will be an accident I believe.

Synopsis
GA pilot reported that the drop zone for skydivers at WVI is too close to the runways and traffic pattern.
**ACN: 1398198 (34 of 50)**

**Time / Day**
- Date: 201610
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.Airport: LGA.Airport
- State Reference: NY
- Altitude.MSL.Single Value: 8000

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

**Aircraft : 1**
- Reference: X
- ATC / Advisory.TRACON: N90
- Aircraft Operator: Air Carrier
- Make Model Name: Regional Jet 900 (CRJ900)
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Nav In Use: FMS Or FMC
- Nav In Use: GPS
- Flight Phase: Initial Approach
- Route In Use.STAR: MILTON4
- Airspace.Class E: N90

**Aircraft : 2**
- Reference: Y
- Make Model Name: UAV - Unpiloted Aerial Vehicle
- Flight Phase: Cruise
- Airspace.Class E: N90

**Person**
- Reference: 1
- 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: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1398198

**Events**
- Anomaly.Conflict: NMAC
- Detector.Person: Flight Crew
- Miss Distance.Horizontal: 75
Assessments

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

Narrative: 1

Spotted a drone during turn from DREMS intersection to APPLE intersection at 8000 feet. Silver drone, size of maybe a small bag was about 50-100 feet on the starboard side same altitude moving east to West. No evasive action was necessary. Flight continued normally.

Informed approach control. After landing ground control gave us a phone number. Provided all the information to this number and they said they will put in a report. After arriving at hotel contacted chief pilot and informed him of what happened also.

Synopsis

CRJ-900 First Officer reported sighting a UAV at 8000 feet near DREMS on the MILTON4 Arrival to LGA. No evasive action was taken, but the UAV passed within 75 feet of the aircraft.
**ACN: 1397723** (35 of 50)

**Time / Day**
- Date: 201610
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 6500

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

**Aircraft : 1**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Personal
- Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Mission: Personal
- Flight Phase: Final Approach
- Airspace.Class D: ZZZ

**Aircraft : 2**
- Reference: Z
- ATC / Advisory.Tower: ZZZ
- Make Model Name: Cessna Single Piston Undifferentiated or Other Model
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Phase: Final Approach
- Airspace.Class D: ZZZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Student
- Experience.Flight Crew.Total: 40
- ASRS Report Number.Accession Number: 1397723
- Human Factors: Communication Breakdown
- Human Factors: Situational Awareness
- Communication Breakdown.Party1: Flight Crew
- Communication Breakdown.Party2: ATC

**Events**
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance

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

Narrative: 1
I was on a solo flight doing touch and goes at my home airport, which is a busy general aviation airport. I was instructed to follow a Cessna and cleared to land. I must have missed that I was #3 cleared to land in the pattern rather than #2 and continued to follow a Cessna that I had in my line of site. There was an another Cessna in the pattern that I did not see. I turned final, then heard on the radio that I had cut off the aircraft that was cleared in front of me. The aircraft that I had cut off went around. I then clarified whether I should go around or continue to land. I was cleared for touch and gos, and I continued in the pattern without further incident. After the incident I was informed by my instructor, who was observing, that there was roughly 100 feet of horizontal separation between my aircraft and the aircraft I had cut off.

Contributing factors: The pattern was busier than my previous solo flights and it was a bit bumpier than I was expecting. There was probably an element of nerves involved. It had been a while since my last solo flight. I was so focused on making the landing, listening for "cleared," and which runway, that I wasn't paying enough attention to the sequencing.

In the future I need to pay closer attention to the ATC sequencing and avoid the "tunnel vision" that led me to believe I was following the correct aircraft.

I need to ensure that I visually check final before turning. In retrospect I may have seen the other aircraft and assumed it was on the parallel approach. If there's any question in mind I need to contact ATC and confirm.

Synopsis
PA-28 pilot reported he experienced a NMAC while on final in the traffic pattern at an uncontrolled airport.
**ACN: 1397487 (36 of 50)**

**Time / Day**
- Date: 201610
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Relative Position.Distance.Nautical Miles: 6
- Altitude.MSL.Single Value: 2000

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

**Aircraft: 1**
- Reference: X
- ATC / Advisory.CTAF: ZZZ
- Aircraft Operator: Corporate
- Make Model Name: Gulfstream V / G500 / G550
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Final Approach
- Route In Use: Visual Approach
- Airspace.Class E: ZZZ

**Aircraft: 2**
- Reference: Y
- ATC / Advisory.CTAF: ZZZ
- Make Model Name: Piper Single Undifferentiated or Other Model
- Operating Under FAR Part: Part 91
- Airspace.Class E: ZZZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Corporate
- Function.Flight Crew: First Officer
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Multiengine
- Experience.Flight Crew.Total: 5800
- Experience.Flight Crew.Last 90 Days: 100
- Experience.Flight Crew.Type: 600
ASRS Report Number: Accession Number: 1397487
Human Factors: Other / Unknown

Events
Anomaly.Conflict: NMAC
Detector.Person: Flight Crew
Miss Distance.Vertical: 50
When Detected: In-flight
Result.General: None Reported / Taken

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

Narrative: 1
During a VFR, visual approach to ZZZ airport, we experienced a near mid-air collision with an aircraft that did not show up on our TCAS. After crossing the field at 3000 feet MSL, we entered a left downwind for runway 18 and saw 4 aircraft on TCAS in the area. We stayed at 3000 due to the fact that 1 aircraft was at 2500 feet MSL to the north of the field and another aircraft was at 2000 feet MSL to the east that announced he would be entering a left downwind. After passing the aircraft that was at 2000, we began a descent to 2000. Approximately 6 miles from the airport on a left downwind, I initiated a left turn to base that continued into a left turn to final. While level at 2000 and in a left turn, I looked out of the left cockpit window and saw an aircraft between our wing and fuselage and only slightly below us. The aircraft appeared to be a single engine, cloth covered piper, such as a Tri-Pacer or Cub, that was white with a large blue stripe towards the bottom. I believe that the aircraft was 50 feet below our wing but quite possibly could have been much closer. At no point before or after seeing this aircraft did it ever show up on our TCAS, although several other aircraft were still being displayed at this time. I assume that this aircraft did not have an active transponder. We continued the approach and landed without incident. I spoke with the flight attendant who had been sitting on the left side of the aircraft and she saw the aircraft as well. She said she didn't see the aircraft until it was right next to us and thought we were going to collide.

Synopsis
GV First Officer experienced a NMAC with a high wing Piper during a turn to final. The Piper was not detected in time to take any evasive action and may have passed within 50 feet, both vertically and horizontally.
Time / Day
Date : 201610
Local Time Of Day : 0601-1200

Place
Locale Reference.Airport : ZZZ.Airport
State Reference : US
Altitude.MSL.Single Value : 5000

Environment
Flight Conditions : VMC
Light : Daylight

Aircraft : 1
Reference : X
Aircraft Operator : Air Taxi
Make Model Name : Helicopter
Crew Size.Number Of Crew : 1
Operating Under FAR Part : Part 135
Flight Plan : None
Mission : Passenger
Flight Phase : Cruise

Aircraft : 2
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer
Operating Under FAR Part : Part 91

Person
Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Taxi
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Rotorcraft
Experience.Flight Crew.Total : 2970
Experience.Flight Crew.Last 90 Days : 240
Experience.Flight Crew.Type : 2700
ASRS Report Number.Accession Number : 1397185
Human Factors : Situational Awareness
Human Factors : Distraction

Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1
I was conducting an air tour and I had entered [a] canyon and announced my intentions of joining the [route] at the towers. I noticed a white helicopter about a mile or so to the North west (my 10 or 11) heading to our merging point (towers), we had enough separation where our aircraft were not going to conflict with each other but I maintained an eye on him anyway. I was dividing my attention between that aircraft and my route of flight not noticing another aircraft in front of it. We merged at the towers coming within approximately 100 feet of each other. Upon noticing the second aircraft I immediately steepened my turn to the right, slowed down and descended for avoidance.

Synopsis
Helicopter tour pilot experienced a NMAC with another aircraft at some towers, joining the usual tour route. Evasive action was taken. Distraction due to another helicopter in the area was cited as a factor.
**ACN: 1396857 (38 of 50)**

**Time / Day**
- Date: 201610
- Local Time Of Day: 1801-2400

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

**Aircraft : 1**
- Reference: X
- Aircraft Operator: Personal
- Make Model Name: PA-28R Cherokee Arrow All Series
- Flight Plan: None
- Mission: Training
- Flight Phase: Cruise
- Route In Use.Other
- Airspace.Class D: ZZZ
- Airspace.Class E: ZZZ

**Aircraft : 2**
- Reference: Y
- Make Model Name: Helicopter
- Mission: Ambulance
- Airspace.Class D: ZZZ
- Airspace.Class E: ZZZ

**Person**
- Reference: 1
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Private
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Total: 275
- Experience.Flight Crew.Last 90 Days: 60
- Experience.Flight Crew.Type: 20
- ASRS Report Number.Accession Number: 1396857
- Human Factors: Training / Qualification
- Human Factors: Situational Awareness
- Analyst Callback: Completed

**Events**
- Anomaly.Conflict: NMAC
- Detector.Person: Flight Crew
- Miss Distance.Horizontal: 250
- Miss Distance.Vertical: 50
- When Detected: In-flight
- Result.Flight Crew: Took Evasive Action
Assessments

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

Narrative: 1
Near mid air collision.

Callback: 1
The reporter stated that he was in a practice area just outside of a class "D" airspace, with a flight instructor doing some training. They were setting up for some flight maneuvers when he saw a Medical Helicopter coming up on him on a collision course. He took evasive action to avoid hitting the helicopter. The reporter stated that he believes the helicopter pilot never saw them at all. The reporter also stated that there was never any communication with ATC or the helicopter pilot. He said he was aware of a helicopter in the area, but believed the helicopter was much farther north from their position.

Synopsis
A Pilot of a Piper PA28R reported while setting up for a flight maneuver they nearly collided with a medical helicopter.
**ACN: 1396824 (39 of 50)**

**Time / Day**
- Date: 201610
- Local Time Of Day: 0601-1200

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

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility. Visibility: 10
- Light: Daylight
- Ceiling. Single Value: 18000

**Aircraft : 1**
- Reference: X
- ATC / Advisory.CTAF: ZZZ
- Aircraft Operator: FBO
- Make Model Name: Sail Plane
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Training
- Flight Phase: Initial Approach
- Route In Use: None
- Airspace.Class G: ZZZ

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.CTAF: ZZZ
- Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
- Airspace.Class G: ZZZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: FBO
- Function.Flight Crew: Instructor
- Qualification.Flight Crew: Flight Instructor
- Qualification.Flight Crew: Commercial
- Experience.Flight Crew.Total: 5500
- Experience.Flight Crew.Last 90 Days: 100
- Experience.Flight Crew.Type: 5500
- ASRS Report Number.Accession Number: 1396824
- Human Factors: Communication Breakdown
- Communication Breakdown.Party1: Flight Crew
Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 300
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
I was at 3000 MSL, preparing to land, traveling East, when I saw an Archer on a head on collision course. I turned right and dove to avoid collision and then switched my radio from our airport frequency of 122.9 to the practice area frequency of 122.XYZ. I called the Archer pilot on 122.XYZ and asked him if he had seen me before my evasive action. He said that he hadn’t. I have talked to the people many times and asked them to please monitor our airport frequency when they are flying in our pattern area but obviously they aren’t always doing that.

Synopsis
A pilot of a Schweizer SGS 2-32 glider reported he preparing to land when he had a near collision with a Piper Archer.
Time / Day
Date: 201610
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: AAO.Airport
State Reference: KS
Relative Position.Distance.Nautical Miles: 8
Altitude.MSL.Single Value: 4000

Environment
Flight Conditions: VMC
Light: Dusk

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: AAO
Aircraft Operator: Air Taxi
Make Model Name: King Air C90 E90
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Ambulance
Nav In Use.Localizer/Glideslope/ILS: Runway 19
Flight Phase: Initial Approach
Route In Use: Vectors
Airspace.Class E: ICT

Aircraft: 2
Reference: Y
ATC / Advisory.CTAF: AAO
Aircraft Operator: Personal
Make Model Name: Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Mission: Personal
Flight Phase: Initial Approach
Airspace.Class E: ICT

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Multiengine
Narrative: 1

I was flying left seat as pilot in command with a second in command pilot in the right seat. We were on an IFR flight plan in VFR conditions and were receiving vectors from Wichita [TRACON] to intercept the ILS for Runway 19 AAO which was our final destination. After clearance to descend to 4000 and vectors to intercept the inbound course the controller advised traffic, a primary target at our location as I was turning and descending to intercept the localizer. Then the controller advised us to change to the advisory frequency. At that point I was turning inbound in the course and immediately stopped the descent while looking for the reported traffic. The SIC changed to the advisory frequency, and established radio contact with the pilot of the C172. As that pilot was advising us that our aircraft was passing overhead of his aircraft, I noticed the TCAS system display a target within 300 ft of our aircraft. The SIC radioed the pilot of the C172 we were on an active Medevac flight and asked if he would clear the area while we completed our approach and landing into AAO. He agreed and we were able to complete our approach and landing into AAO without further incident or delay. At the time of this incident the aircraft flight and navigation systems were operating properly to the best of my recollection.

In my opinion the controller should have had us remain on the [TRACON] frequency to assist us in remaining clear of that primary target.

Synopsis

BE90 Captain reported experiencing a NMAC with a C172 on approach to the non-towered AAO airport.
ACN: 1395741 (41 of 50)

**Time / Day**
- Date: 201610
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.Airport: PHL Airport
- State Reference: PA
- Relative Position.Angle.Radial: 270
- Relative Position.Distance.Nautical Miles: 4
- Altitude.MSL.Single Value: 2000

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

**Aircraft : 1**
- Reference: X
- Aircraft Operator: Personal
- Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Mission: Personal
- Flight Phase: Cruise
- Route In Use: Direct
- Airspace.Class B: PHL
- Airspace.Class E: PHL

**Aircraft : 2**
- Reference: Y
- Make Model Name: Helicopter
- Crew Size.Number Of Crew: 1
- Flight Phase: Climb
- Airspace.Class E: PHL

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Private
- Experience.Flight Crew.Total: 120
- Experience.Flight Crew.Last 90 Days: 28
- Experience.Flight Crew.Type: 30
- ASRS Report Number.Accession Number: 1395741
Human Factors : Training / Qualification
Human Factors : Situational Awareness

Events
Anomaly.Airspace Violation : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : FAR
Detector.Automation : Aircraft TA
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Exited Penetrated Airspace
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Became Reoriented

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

Narrative: 1
After initial climb out (after taking off from PNE) I turned west on heading and maintained 1800 to stay under 2000 ft Class B airspace. I received a traffic warning from both the onboard nav system and by my iPad connected with an ADSB receiver (Stratus 2). The traffic was converging from a 5 o'clock position, placing it out of sight under my right wing, and the traffic system information showed it to be climbing to my altitude. I immediately turned left and climbed to reduce the rate of closure to try to get out of the way. The aircraft, a helicopter, passed directly beneath me at roughly 200 feet of vertical separation. After the danger had passed I realized I had strayed into the PHL class B airspace. I was at 2400 ft in the 7000/2000 ring. I reduced my altitude immediately and proceeded directly out of the airspace on a northwesterly course.

Synopsis
PA-28 pilot reported a NMAC with a helicopter. While maneuvering to avoid a collision, they strayed into PHL Class B airspace.
**Time / Day**

Date: 201610
Local Time Of Day: 1201-1800

**Place**

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

**Environment**

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

**Aircraft : 1**

Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: Robinson R22
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Flight Phase: Takeoff
Route In Use: None
Airspace.Class G: ZZZ

**Aircraft : 2**

Reference: Y
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: FBO
Make Model Name: Helicopter
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Mission: Training
Airspace.Class G: ZZZ

**Person : 1**

Reference: 1
Location Of Person: Gate / Ramp / Line
Reporter Organization: Personal
Function.Other
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 550
Experience.Flight Crew.Last 90 Days: 100
ASRS Report Number.Accession Number: 1395118
Narrative: 1

Student on SOLO flight. I (CFI) endorsed the student and watched the student fly from the ground. Student is an experienced airplane pilot and had 8 hrs of solo helicopter time prior to this flight. Student had been in the pattern for approximately 50 minutes practicing normal/max performance takeoffs and normal/steep approaches. Student was using both the Runway 14 and Taxiway A as airplane traffic allowed. On this particular scenario, an airplane was taxiing from the end of Runway 32 to the end of Runway 14 for takeoff. Student made proper radio calls to explain a steep approach would be conducted to the ground. Then a max. performance takeoff would follow. Student was on the ground, had made a radio to announce max. takeoff, and had pulled half collective in preparation for maneuver. Then, the student heard airplane noise. Not knowing where it was coming from, student reversed collective and pushed it all the way down, to stop pick up. Subject airplane (a Piper Arrow) flew right over the subject helicopter (approximately 20 feet over and 5-10 feet to the left) without making any announcements. Student believes hearing
the subject airplane making radio calls earlier in flight; however, did not hear any radio calls recently. Although the student looked for traffic even when radio calls were not being made, the student did not see any traffic. The student assumed the subject airplane had departed the pattern.

Upon taking off, the student told the taxiing airplane to be aware of the non-radio calling airplane. Taxiing airplane acknowledged. Subject airplane made a radio call asking the FBO for a radio check past mid-field left downwind for Runway 14. Student replied with a "loud and clear, is this the Piper?" Subject airplane acknowledged and said they were having trouble with the radio. Subject airplane performed a full stop landing. Student did one more pattern and a full stop landing on the second one. Once on the ground, both student and I walked over to the subject airplane to understand what happened and avoid it in the future. Subject pilots were very defensive (of their situation) and verbally aggressive (of our reaction to want an explanation and want to prevent the situation from occurring again).

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

A helicopter flight instructor, standing on the ramp, reported observing his student solo in a Robinson R22 helicopter practicing normal/max performance takeoffs and normal/steep approaches. He observed a Piper arrow on takeoff missing the helicopter by only a few feet.
**ACN: 1394299 (43 of 50)**

**Time / Day**
- Date: 201610
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.AGL.Single Value: 600

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility. Visibility: 50
- Light: Daylight
- Ceiling.Single Value: 12000

**Aircraft : 1**
- Reference: X
- ATC / Advisory.CTAF: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Skyhawk 172/Cutlass 172
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Mission: Training
- Flight Phase: Initial Climb
- Airspace.Class G: ZZZ

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.CTAF: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Amateur/Home Built/Experimental
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Mission: Personal
- Flight Phase: Initial Climb
- Flight Phase: Landing
- Route In Use: Visual Approach
- Airspace.Class G: ZZZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Not Flying
- Function.Flight Crew: Instructor
- Qualification.Flight Crew: Flight Instructor
I was entering the traffic pattern with a student; we were training in a complex airplane at an uncontrolled airport. He began to get behind the airplane, and as a result we ended up well outside of the pattern on about a two mile final approach. I was not concerned as it gave me time to talk to the student about why he ended up behind the airplane, and there was no other traffic in the pattern at the moment. As we got established on final we heard a Glasair call on the radio that he was on a 7 mile final to the same runway we were using. My student and I were going to practice a short field approach, and I was doing the first demonstration once he was on final. I knew we were going to do a stop and go, but out of habit I said we were on a two mile final for a touch and go, over the radio. Another aircraft then called and said he wanted to use a parallel runway to back-taxi into position. Knowing that the chart supplement for our airport stated that no parallel operations are allowed, I keyed the mic and said we would be touching down in about 30 seconds and asked if he could wait, to which he acknowledged. In actuality, we were then still on a mile final at 70 kts. It would be another minute before we touched down.

At that point, several things should have been playing through my head: first, we briefed on the radio that we would be doing a touch and go, not a stop and go. Second, the Glasair is a much faster aircraft than we are, especially at our short field approach speed in a Cessna 172. Finally, I had given the illusion that we would be touching down sooner than we actually were, and therefore, leaving the runway sooner. All these things
combined most likely caused the Glasair to continue his straight-in approach without worry. I touched down, did the short field technique, stopped, reconfigured the aircraft for a short field takeoff, my student took the controls and away we went. We didn't hear any other radio calls during that time, and as we climbed through 600 feet, about ready to turn crosswind I was wondering where the Glasair was and if he was still on final or on the runway, and that's when I saw him - about 100 feet or less off our right wing and 100 feet above and making a shallow bank away to the right. The traffic pattern for that runway is also right hand traffic. Fortunately, I was with a commercial student who held us on the extended runway centerline during climb-out, and we both looked before turning right crosswind. After that, the pilot on the ground who was about to back-taxi called up the Glasair on the radio and told him that his horizontal separation from us during his go-around was not sufficient, to which the Glasair pilot acknowledged. The Glasair got in front of us on the downwind and landed, and the rest of our flight went by without incident.

Now, could that Glasair pilot have performed a little better go-around? Yes. He could have executed a go-around by pushing in power, raising the nose to Vy, offsetting to the side of the runway opposite the traffic pattern and communicating his go-around. From my perspective, that's not the point. We learn as pilots to always be ready for a go-around and we need to be proficient at executing them, but the real kicker here is that my student and I set him up from the beginning with our faulty communication and sloppy pattern work. I am quite sure he believed we would be on and off the runway before he was on short final. Unfortunately, we put him in a situation where he had to react with a go-around. I'm just glad that he didn't hit us.

Fortunately, this was a learning opportunity for both me and my student. We debriefed what occurred and why it occurred. We discussed the importance of communicating our true intentions of what we plan to do to other pilots. We discussed the benefits and risks of straight-in approaches. We talked about staying ahead of the airplane with our mind and actions. We saw firsthand why we do our best to climb out straight then always look ahead to the next leg of the traffic pattern. Finally, after recognizing our own flaws, we debriefed what his go-around should have looked like. Again, I'm glad it turned out to be a learning experience for all involved rather than a very, very bad day.

**Synopsis**

C-172 instructor pilot reported a near miss after he gave a misleading position report with a much faster Glasair on final. The Glasair pilot executed a go-around as the Cessna was completing a stop and go.
ACN: 1393301 (44 of 50)

**Time / Day**
- Date: 201610
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: SBA.Airport
- State Reference: CA

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

**Aircraft: 1**
- Reference: X
- ATC / Advisory.Tower: SBA
- 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: Initial Approach
- Airspace.Class C: SBA

**Aircraft: 2**
- Reference: Y
- Make Model Name: Helicopter
- Flight Phase: Takeoff
- Airspace.Class C: SBA

**Person: 1**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function.Flight Crew: Captain
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- ASRS Report Number.Accession Number: 1393301
- Human Factors: Communication Breakdown
- Communication Breakdown.Party1: ATC

**Person: 2**
- Reference: 2
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
Events

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

Assessments

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

Narrative: 1

While on final approach to landing runway, noted a helicopter that had departed was on a collision course with our aircraft. We received a TCAS Traffic Advisory (TA) and took the necessary evasive maneuvers to avoid collision and were able to re-stabilize for a safe landing. There was no ATC warning of the traffic conflict.

Helicopter was departing across an active landing approach corridor. Better traffic separation.

Narrative: 2

[Report narrative contained no additional information.]

Synopsis

CRJ-200 flight crew on approach to SBA reported an NMAC with a helicopter departing the airport. They were not alerted to the conflict by ATC.
Time / Day
Date: 201610
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ABR.Airport
State Reference: SD
Relative Position.Angle.Radial: 310
Relative Position.Distance.Nautical Miles: 10
Altitude.MSL.Single Value: 7000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.Center: ZMP
Aircraft Operator: Corporate
Make Model Name: Cessna Citation Mustang (C510)
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Passenger
Flight Phase: Initial Approach
Route In Use: Visual Approach
Airspace.Class E: ZMP

Aircraft: 2
Reference: Y
Aircraft Operator: Personal
Make Model Name: Military Trainer
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Mission: Personal
Flight Phase: Climb
Airspace.Class E: ZMP

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 4900
Experience.Flight Crew.Last 90 Days: 90
Experience.
Flight Crew.Type: 950
ASRS Report Number. Accession Number: 1392980
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 - Procedural: Published Material / Policy
Detector. Automation: Aircraft TA
Detector. Person: Flight Crew
Miss Distance. Vertical: 200
When Detected: In-flight
Result. Flight Crew: Took Evasive Action

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

Narrative: 1
I reported ABR in sight to Minneapolis center. I was 15 miles to the NW. He then cleared me for the visual and to cancel IFR and switch to advisories. I then asked him twice if I could get him on the ground on 120.6 and no response was heard. I then got a traffic alert 10 miles NW of ABR from an aircraft that was at 5500 ft and climbing rapidly traveling head-on at me. My altitude was 7000 ft MSL at the time. I then initiated a full power left hand climbing turn to 9000 ft to the left to avoid the aircraft. I then switched back to Center and asked him if he had that aircraft and he stated that he departed VFR and just popped up.

After landing I learned that the aircraft was a [military trainer] capable of a 4000 fpm climb and 400 kts. I believe the event could have been avoided if he had filed an IFR flight plan or contacted Center on the ground for a flight following. Having a Towered airport would have also avoided this incident. An aircraft operating at that kind of performance under VFR is a risk to others because he did not see me till he was right under my aircraft. Very little time to make a course correction.

Another issue was the Controller never confirmed my IFR cancellation or gave me a warning as the departing aircraft was climbing right at me. Radar coverage is higher at around 4500 ft so the controller had only 2500 ft to warn me, which was seconds. The Controller must have got a traffic alert and I feel that I should have had some kind of warning operating under IFR. I [was] in fear for my life and my passengers.

Synopsis
CE-510 pilot inbound to ABR reported an NMAC with a high performance turbojet departing the airport VFR.
Time / Day
Date: 201609
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 3

Environment
Weather Elements / Visibility.Visibility: 10

Aircraft: 1
Reference: X
ATC / Advisory.UNICOM: 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
Nav In Use: GPS
Flight Phase: Final Approach
Airspace.Class E: ZZZ

Aircraft: 2
Reference: Y
ATC / Advisory.UNICOM: ZZZ
Make Model Name: Light Transport
Flight Phase: Final Approach
Airspace.Class E: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Instructor
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 3000
Experience.Flight Crew.Last 90 Days: 50
Experience.Flight Crew.Type: 1500
ASRS Report Number.Accession Number: 1392461
Human Factors: Communication Breakdown
Human Factors: Situational Awareness
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 50
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Executed Go Around / Missed Approach

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

Narrative: 1
With student on board on practice GPS approach we experienced a near miss of a private jet. After departure we headed east with the intention of conducting practice vectors for the GPS approach. Very shortly after departing we began to monitor Unicom as we flew east and set up the approach. I had my student intercept the approach course just outside of the final approach fix and told him to make an announcement on the Unicom that we were 6 miles out on the GPS XY Approach. We then continued on, hearing no other traffic. We intercepted the glideslope and began down. At 3 miles out, I had the student make a second announcement of our position. At that time, the traffic alert sounded showing an aircraft less than 1 mile directly behind us and under us by 100 feet. I looked for the traffic on both sides as well as behind us and my student stopped descending on the glideslope. As I looked back at the GPS Traffic it had gone to zero at which point a private jet passed us on the left side of the aircraft less than 50 feet under us with no lateral separation. We executed a go around and we watched the jet land. I confirmed the radio frequency and volume. I then attempted to call the aircraft, twice and received no reply. I then called the FBO who answered right away and did a radio check. The FBO then called the jet taxing to the ramp that answered only after several calls.

Synopsis
Flight Instructor reported a near miss with a private jet while conducting a practice GPS approach.
Time / Day

Date: 201609
Local Time Of Day: 0601-1200

Place

Locale Reference.Airport: OBE.Airport
State Reference: FL
Altitude.AGL.Single Value: 100

Environment

Flight Conditions: VMC
Light: Daylight

Aircraft

Reference: X
ATC / Advisory.CTAF: OBE
Aircraft Operator: Personal
Make Model Name: Cessna 150
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Takeoff
Route In Use: Direct
Airspace.Class G: OBE

Person

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Student
Experience.Flight Crew.Total: 47
Experience.Flight Crew.Last 90 Days: 14
Experience.Flight Crew.Type: 47
ASRS Report Number.Accession Number: 1392460
Human Factors: Situational Awareness

Events

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

ACN: 1392460 (47 of 50)
Assessments
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1

I am a student pilot. I was in line for takeoff at Okeechobee, FL, an un-towered field. When I first lined up there were 5 planes in line for takeoff not including myself, along with a pretty clobbered pattern. I started getting a little nervous. It eventually gets to be my turn, and I turn my plane short of the hold-short line towards the final leg to watch for traffic. One plane lands, and I immediately spot another on final, so I wait for it as well. This plane lands, and I do not see another plane on final, so I turn to watch the plane that just landed. This plane taxis all the way down the runway before turning off, contributing to my impatience to depart. By the time this plane exits the runway, I have heard a call for a final turn and see the plane on approach. This plane lands, and I hear another plane call a base turn. At this point someone else, I assume someone behind me suggests I lineup and hold on the runway to expedite departure. This makes me feel even more impatient, like I'm holding all of these people up. The landing plane departs the runway promptly, so I begin rolling out to the runway, over the hold-short line. As I'm rolling out to the runway, I hear a call for a final turn. I hadn't called for entering the runway yet due to a clobbered frequency so I make that call. At this point, I hadn't seen anyone on the final or base leg just earlier, so I'm almost rolling onto the runway, so I elect to depart, as I believe the traffic that just called final is adequately far back.

At this point I'm recalling the experience I had on my initial approach to this same field, where a plane lined up and held on the runway as I was turning final, and held until I was nearly on short final before departing. I figured this kind of close-in traffic is the way a super-busy uncontrolled airspace is (I typically fly out of TIX, a controlled field). I understand now, that that should not be the case (lining up and holding prevents the PIC from seeing traffic behind them to a large degree...)

As I hit my takeoff speed, I see a yellow biplane appear off my right, 100 to 200 feet up, having apparently been on short final when calling final. This is my first time at this airfield and have never performed a high-speed takeoff abort, so at this point I elect to continue flying and divert slightly left to provide space, but continue on heading so as to not-complicate the situation further. I continue out and depart the airspace, unclear where the biplane deviated off of my right side. At that point I was highly upset.

I believe the combination of factors contributed to my choice to take off. First being my experience on approach to the airfield, where I got uncomfortably (for me) close to departing traffic which was holding on the runway while I was on my final leg. Second was my overall nerves, I hadn't been to this airfield before, and had not experienced this amount of traffic before either. Thirdly, the people behind me calling (seemingly) impatiently for my departure. Finally, my assumption about the position of the traffic making radio calls.

As far as corrective actions, I will no longer let other people and pressure affect my decision to depart. Additionally, I will even more earnestly visually verify the position of traffic in the pattern. Finally, if I ever feel uncomfortable departing in a clobbered pattern like that, I will request that traffic in pattern extend the downwind to give me a little extra time.

Synopsis
C150 student pilot reported a NMAC occurred on takeoff from OBE, a non-tower airport.
**Time / Day**
- Date: 201610
- Local Time Of Day: 0601-1200

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

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Haze / Smoke
- Light: Daylight

**Aircraft : 1**
- Reference: X
- ATC / Advisory: UNICOM: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Cessna 150
- Crew Size: Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Final Approach
- Route In Use: Visual Approach
- Airspace: Class E: ZZZ

**Aircraft : 2**
- Reference: Y
- ATC / Advisory: UNICOM: ZZZ
- Make Model Name: Cessna 150
- Operating Under FAR Part: Part 91
- Flight Phase: Other
- Airspace: Class E: ZZZ

**Person**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function: Flight Crew: Single Pilot
- Qualification: Flight Crew: Instrument
- Qualification: Flight Crew: Commercial
- Qualification: Flight Crew: Multiengine
- Experience: Flight Crew: Total: 3790
- Experience: Flight Crew: Last 90 Days: 16
- Experience: Flight Crew: Type: 980
- ASRS Report Number: Accession Number: 1392225
- Human Factors: Communication Breakdown
Communication Breakdown. Party1: Flight Crew
Communication Breakdown. Party2: Flight Crew

**Events**

Anomaly.Conflict: NMAC  
Detector.Person: Flight Crew  
Miss Distance.Horizontal: 50  
Miss Distance.Vertical: 25  
When Detected: In-flight  
Result.Flight Crew: Took Evasive Action

**Assessments**

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

**Narrative: 1**

Surface wind from SSE 3 knots BZN 25000. Some haze due to agricultural fires, viz >10, but smoke drifting across the mid and southern end of the pattern - not significantly restrictive to vision, but unpleasant to breath.

Approaching from NW at 3W 3000 announced on UNICOM intention, traffic permitting, enter RH Base 16. My aircraft had strobes, beacon and high-intensity wingtip pulse lights (all on).

Instructor on ground in Piper with student preparing for flight mid-field replied that "Looked good to him, as no one in pattern and they would be another 5 minutes".

Called "1.5 m RB 16 2200, planning long landing" (to allow the Piper to back-taxi if they were ready).

Another aircraft, a C150, then called "Entering Downwind."

I looked to downwind and saw nothing.

Called C150 asked "What is your position?"

Reply: "Just departed the runway and am turning downwind."

Not seeing him on the expected 16 RH XWIND asked "What runway did you depart from?"

Reply: "34"

I banked sharply away from base to the north, belatedly looking for an aircraft about in my position.

As the wing came up I saw a C150 turning 34 LH XWIND to Downwind less than 50 feet horizontally and less than a wingspan above my altitude.

We were turning away from each other. I called "Have C150 turning downwind 34 in sight - do you have me 16 Base?"
He replied, "No, but am looking."

I advised him that I was now at his 8 o'clock, not a factor.

Landed 16 and cleared at the first exit, next to the Piper as the C150 continued in pattern for 34. The Piper decided to hold, and so advised the C150.

The C150 landed 34 and attempted to make the first turnout as was evident by the smoke coming from what must have been locked mains. Sliding past the turnout, he made a 180 so the Piper could take the runway.

The instructor with the student on the ground was unaware of the C150 until the "turning downwind" call. It is possible that the C150 - based on the landing I observed - had waved off from a first approach and was never low enough for the IP to be aware of. This would also fit with his being at pattern altitude on 34 XWIND about 3/4 mile N of the field (remarkable performance for a C150). All Speculation.

The C150 was a transient aircraft flown by pilot who had not briefed properly as to the traffic flow at ZZZ (16 Being the Calm Wind Runway). As I had been listening since 10 miles out, also do not believe he had made any calls until "entering downwind" in response to my second call.

My own flying was not optimal. Given the mid-field smoke, it may have been better to have made a straight-in to 16, for then I could have seen traffic on either 16 or 34. However, do not like straight-in approaches, and did not want to fly in the thin, but pungent, smoke - thus chose, and announced the RB entry.

I was lulled into a lack of vigilance by it being early on a [weekend] at my rural home field when little traffic was expected and which expectation had mistakenly been confirmed by another based aircraft.

When I became aware of another aircraft near the airport I made the serious error of looking where I expected it to be based upon his ambiguous radio call, not, as I should have, to first see if there was any immediate threat in the vicinity of my aircraft.

That was a near-fatal error.

**Synopsis**

A general aviation pilot reported a near mid air collision in the pattern of an uncontrolled airport.
**ACN: 1392216 (49 of 50)**

### Time / Day
- Date: 201610
- Local Time Of Day: 0001-0600

### Place
- Locale Reference
- ATC Facility: A80.TRACON
- State Reference: GA
- Altitude.MSL.Single Value: 4000

### Environment
- Flight Conditions: VMC
- Weather Elements / Visibility
  - Visibility: 10
- Light: Daylight
- Ceiling.Single Value: 5500

### Aircraft
- Reference: X
- ATC / Advisory.TRACON: A80
- Aircraft Operator: Personal
- Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: IFR
- Mission: Training
- Nav In Use: GPS
- Flight Phase: Descent
- Route In Use: Vectors
- Airspace.Class E: A80

### Person
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Single Pilot
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Private
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Total: 140
- ASRS Report Number.Accession Number: 1392216

### Events
- Anomaly.Conflict: NMAC
- Detector.Automation: Aircraft TA
- Detector.Person: Flight Crew
- Miss Distance.Horizontal: 0
- Miss Distance.Vertical: 300
- When Detected: In-flight
Result. Flight Crew: Took Evasive Action
Result. Air Traffic Control: Issued Advisory / Alert

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

Narrative: 1
Flight on an IFR flight plan in VMC conditions. I was level at 4000, being vectored to final
on the RNAV 07, north of the field. The onboard traffic avoidance system alerted us to
traffic approximately 300 feet below us, just off to the left. It was climbing and heading on
approximately a 45 degree intercept course. The craft was near enough to both read the
tail number and see into the cockpit. Atlanta Approach ATC gave a call advising of another
aircraft in the area, which they believed to be approximately 500 feet below us. By this
time that was no longer the case, and I had already begun maneuvering to avoid a
collision. I simply responded with "traffic in sight," while I focus on maneuvering. I climbed
about 400 feet, and the traffic passed directly beneath us about 300 feet below. Once we
visually confirmed no factor, I returned to my assigned altitude and heading. There were
no more calls from ATC regarding the traffic, so I continued with the flight.

Synopsis
PA28 pilot on an IFR flight plan in VMC at 4,000 feet reported a NMAC with another aircraft
climbing out. An onboard traffic avoidance system and ATC advised the reporter of the
traffic conflict.
**ACN: 1392215 (50 of 50)**

**Time / Day**
- Date: 201610
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference: Airport: MHR.Airport
- State Reference: CA
- Altitude: MSL. Single Value: 3500

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Light: Daylight
- Ceiling: Single Value: 5500

**Aircraft**
- Reference: X
- ATC / Advisory: Tower: MHR
- Aircraft Operator: Personal
- Make Model Name: SR22
- Crew Size: Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Initial Climb
- Route In Use: Direct
- AirspaceCLASS D: MHR

**Component**
- Aircraft Component: Traffic Collision Avoidance System (TCAS)
- Aircraft Reference: X
- Problem: Failed

**Person**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function: Flight Crew: Pilot Flying
- Function: Flight Crew: Single Pilot
- Qualification: Flight Crew: Multiengine
- Qualification: Flight Crew: Commercial
- Qualification: Flight Crew: Instrument
- Experience: Flight Crew: Total: 650
- Experience: Flight Crew: Last 90 Days: 45
- Experience: Flight Crew: Type: 260
- ASRS Report Number: Accession Number: 1392215
- Human Factors: Communication Breakdown
Communication Breakdown.Party1 : Flight Crew  
Communication Breakdown.Party2 : ATC

**Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Conflict : NMAC  
Detector.Person : Flight Crew  
Miss Distance.Horizontal : 100  
Miss Distance.Vertical : 0  
When Detected : In-flight  
Result.Flight Crew : Took Evasive Action

**Assessments**

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

**Narrative: 1**

I was given the takeoff clearance from RWY 22R by Tower with "maintain runway heading" limitation. Upon rotation and at around 200 AGL, Tower directed me to begin a left turn out. I verified with tower that my previous clearance was to maintain runway heading. Tower controller acknowledged that he was aware but required me to begin the left turn out. I initiated a climbing left turn out to an approximate heading of 190. Airplane was equipped with L3 systems Skywatch active Traffic Collision Advisory System (TCAS) which is connected to my Avidyne EX5000 MFD. The plane is also capable of receiving TIS-B traffic on the Avidyne IFD440 NAV/Com 1/2. Both Skywatch and TIS-B painted multiple targets around the vicinity of the airport and hence there was no reason to believe that either systems were malfunctioning at the time of this incident.

At about 5 NM from the airport at about the same heading of 190 Deg, while climbing through 3500 MSL, Tower approved a frequency change to Enroute (Approach). I acknowledged and began to tune that frequency on my COM 1. Upon successful tuning, I looked up to my left to find a high winged Cessna closing up into my flight path from below. I immediately initiated a climbing right turn away from the Cessna. I estimated the Cessna to be no more than 100 feet from my left wing and I could clearly see the pilot who did not seem to have noticed my plane at that time. ATC had not called out this traffic before frequency change approval and no TCAS warning from either systems (skywatch or TIS-B) was ever received. Once the evasive maneuver was completed, the rest of flight continued without any further incidence.

**Synopsis**

SR22 pilot aircraft reported that during climb he saw a high winged Cessna closing up into his flight path from below. His TCAS or ATC did not give him warning.