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

Update Number ..................................................15

Date of Update ..................................................February 27, 2019

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.
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.

Becky L. Hooey, Director
NASA Aviation Safety Reporting System
CAVEAT REGARDING USE OF ASRS DATA

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

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

One thing that can be known from ASRS data is that the number of reports received concerning specific event types represents the lower measure of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 2010 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 2010. With these statistical limitations in mind, we believe that the real power of ASRS data is the qualitative information contained in report narratives. The pilots, controllers, and others who report tell us about aviation safety incidents and situations in detail – explaining what happened, and more importantly, why it happened. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.
Report Synopses
<table>
<thead>
<tr>
<th>ACN: 1608935  (1 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>SR20 pilot reported a NMAC with an unannounced aircraft at a non-towered airport.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1606463  (2 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>GA pilot reported a NMAC during final approach to ONM airport.</td>
</tr>
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<table>
<thead>
<tr>
<th>ACN: 1606349  (3 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>A CRJ Air carrier flight crew reported another carrier overshooting final approach on a parallel runway led to a NMAC and go-around.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1605549  (4 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>C172 pilot reported an NMAC in a non-towered airport traffic pattern.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1605225  (5 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>C-172 pilot reported sighting a drone close by during cruise flight.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1605209  (6 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>GA Instructor reported NMAC on departure with opposite direction traffic at a non-towered airport.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1605196  (7 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>GA instructor reported an NMAC near PMV.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1605152  (8 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Air taxi pilot reported an NMAC with another aircraft because the other crew did not follow ATC instructions.</td>
</tr>
</tbody>
</table>

| ACN: 1605014  (9 of 50) |
Synopsis
C402 pilot reported a near mid-air collision while landing with an aircraft that was departing opposite direction at a non-towered airport.

ACN: 1604531 (10 of 50)

Synopsis
Air carrier flight crew reported an NMAC with a jet aircraft performing acrobatic type maneuvers along the departure route.

ACN: 1604154 (11 of 50)

Synopsis
B737-700 flight crew reported an NMAC on descent into BWI when an aircraft passed directly below them with 200 feet of vertical clearance.

ACN: 1604091 (12 of 50)

Synopsis
Cessna Pilot reported an NMAC with a glider while climbing out of Tehachapi Municipal Airport.

ACN: 1604071 (13 of 50)

Synopsis
Cessna 172 instructor pilot reported a NMAC with opposite direction traffic attempting to land on the same runway.

ACN: 1603451 (14 of 50)

Synopsis
GA pilot reported taking evasive action for an NMAC with a helicopter during climb from MCC Airport resulted in an airspace violation.

ACN: 1603255 (15 of 50)

Synopsis
B737-700 Captain reported an NMAC while departing BUR.

ACN: 1602491 (16 of 50)

Synopsis
SR20 flight instructor reported an NMAC while operating in the pattern at a non-towered airport.

ACN: 1602077 (17 of 50)
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<tr>
<th>Synopsis</th>
<th>ACN: 1601934 (18 of 50)</th>
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<tbody>
<tr>
<td>BE-400 Captain reported an NMAC while on visual approach due to miscommunication with ATC.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1601635 (19 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA pilot reported an NMAC while operating in the pattern at a non-towered airport.</td>
<td></td>
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<table>
<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1601022 (20 of 50)</th>
</tr>
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<tbody>
<tr>
<td>Twin engine Beechcraft pilot reported an NMAC in the pattern at APA.</td>
<td></td>
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<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1599981 (21 of 50)</th>
</tr>
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<tbody>
<tr>
<td>Air carrier Captain reported an NMAC on approach with aircraft that penetrated BNA airport airspace.</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1598943 (22 of 50)</th>
</tr>
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<tbody>
<tr>
<td>Flight instructor reported they took evasive action to avoid mid air collision while on go-around.</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1598849 (23 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two flight instructors, in separate aircraft, reported a NMAC while operating on the LAX Special Flight Rules VFR transition route.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1597916 (24 of 50)</th>
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<tbody>
<tr>
<td>Military helicopter instructor reported a NMAC with a UAV in a military training area.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1597463 (25 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA-28 pilot reported an NMAC that required significant evasive maneuvering.</td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Synopsis</th>
<th>ACN: 1597463 (25 of 50)</th>
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<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td>ACN: 1597233 (26 of 50)</td>
<td></td>
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<tr>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Synopsis</strong></td>
<td></td>
</tr>
<tr>
<td>GA flight instructor reported a NMAC while maneuvering near a practice area.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1597208 (27 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>GA pilot reported a NMAC that required an evasive maneuver while operating between the ceiling of Delta airspace and the floor of Bravo airspace.</td>
</tr>
</tbody>
</table>

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<tr>
<th>ACN: 1596788 (28 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>PA-28 pilot reported an NMAC in the traffic pattern when the trailing departure pilot turned an early crosswind.</td>
</tr>
</tbody>
</table>

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<tr>
<th>ACN: 1595940 (29 of 50)</th>
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<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>MU-2 pilot reported an NMAC with another aircraft. Reporter suggested that the other aircraft did not have an operating transponder at the time of conflict.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1595590 (30 of 50)</th>
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<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Experimental aircraft pilot reported an NMAC with a small aircraft in the 2R4 airport pattern.</td>
</tr>
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<table>
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<tr>
<th>ACN: 1595587 (31 of 50)</th>
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<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>C172 instructor pilot reported an NMAC with a Cirrus in the Southwest Practice area near APA.</td>
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</tbody>
</table>

<table>
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<tr>
<th>ACN: 1595573 (32 of 50)</th>
</tr>
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<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Air Carrier flight crew reported an NMAC with a drone while on final approach to LAX.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1594678 (33 of 50)</th>
</tr>
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<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Tower Controller reported an NMAC due to Local Controller's sequence of two aircraft.</td>
</tr>
</tbody>
</table>
ACN: 1594301 (34 of 50)

Synopsis
C172 pilot reported a NMAC with another light aircraft in vicinity of FIM VOR.

ACN: 1593590 (35 of 50)

Synopsis
C172 pilot reported an NMAC with another aircraft in the vicinity of PDX.

ACN: 1593551 (36 of 50)

Synopsis
C172 instructor pilot reported a NMAC while in the traffic pattern.

ACN: 1592793 (37 of 50)

Synopsis
GA pilot reported a NMAC while on approach to CCR.

ACN: 1592693 (38 of 50)

Synopsis
Controllers and GA pilot reported a NMAC with military aircraft holding for a fly over.

ACN: 1592543 (39 of 50)

Synopsis
Air carrier Captain reported airborne conflict with a UAV on base leg into BOS.

ACN: 1592285 (40 of 50)

Synopsis
Twin Cessna pilot reported an NMAC while receiving VFR flight following but not advised of conflicting traffic.

ACN: 1591187 (41 of 50)

Synopsis
C172 flight instructor reported an NMAC with a helicopter in the pattern at SQL.

ACN: 1591110 (42 of 50)

Synopsis
Cessna 182 pilot reported an NMAC with a law enforcement helicopter.
ACN: **1590541** *(43 of 50)*

**Synopsis**
A helicopter pilot reported an NMAC while giving a New York City tour.

ACN: **1589662** *(44 of 50)*

**Synopsis**
GA pilot reported an airborne conflict as a result of ATC not providing adequate separation between aircraft.

ACN: **1589656** *(45 of 50)*

**Synopsis**
C172 instructor reported an NMAC while holding outside of the traffic pattern waiting to get in.

ACN: **1589383** *(46 of 50)*

**Synopsis**
Instructor pilot reported a NMAC with an aircraft that was not flying the correct pattern.

ACN: **1589358** *(47 of 50)*

**Synopsis**
GA pilot reported a NMAC with a helicopter doing hover work on the runway during takeoff at CPM non-towered field.

ACN: **1589197** *(48 of 50)*

**Synopsis**
B737-800 flight crew reported an NMAC in Havana airspace due to language difficulties and poor descent instructions.

ACN: **1588501** *(49 of 50)*

**Synopsis**
B787 flight crew reported being issued a go-around at low altitude.

ACN: **1588134** *(50 of 50)*

**Synopsis**
C172 instructor reported a NMAC in the vicinity of O88 airport.
Report Narratives
ACN: 1608935  (1 of 50)

Time / Day
Date: 201901
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.AGL.Single Value: 500

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

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: SR20
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Personal
Flight Phase: Landing
Route In Use: Visual Approach

Aircraft: 2
Aircraft Operator: Personal
Make Model Name: Military Trainer
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Landing
Route In Use: Visual Approach

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Private
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 230
Experience.Flight Crew.Last 90 Days : 35
Experience.Flight Crew.Type : 110
ASRS Report Number.Accession Number : 1608935
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Flight Crew

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

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

Narrative: 1
I was carrying out a visual approach in VFR conditions. I made a standard 45 degree entry to the downwind leg of the standard traffic pattern at pattern altitude, making left traffic for Runway XX, and announcing every turn and transition on the CTAF, according to standard practice. While on short final at approximately 500 feet AGL, another aircraft suddenly appeared in front and above me, cutting me off from behind and above without warning. Simultaneously, another pilot (who turned out to be holding short of the runway) called out, "aircraft on short final, go around!" I took immediate evasive action to the right, entered the upwind leg, and went around for another approach, which ended uneventfully. I caught up with the pilot of the other aircraft at the fuel station; he was being admonished by the airport manager. He apologized, but said he had never seen me and had neither made nor heard traffic announcements because he lacked a working radio in his aircraft. He also said that due to the age of his aircraft he likes to stay above standard pattern altitude and to make a very short base turn to final to stay close to the runway in the event of engine failure. Compounding this was the considerable height of his cockpit, and its location approximately over the wings, which severely restricted his downward field of vision. Because he was operating high in the pattern, he could not see traffic below him, and turning his wing high for the base turn also obscured any view of other traffic on final. Thankfully a collision was avoided due to my evasive maneuvering. I understand that it may not be a violation of the regulations, but I do not think it is wise or safe to fly at an untowered field without at least monitoring other traffic on the CTAF, and I urge the FAA at a minimum to make monitoring the CTAF a requirement for landing at an untowered field. I also think it is important that all aircraft, regardless of their age or condition, should stick to standard operating procedures and pattern altitude, especially at an untowered field.

Synopsis
SR20 pilot reported a NMAC with an unannounced aircraft at a non-towered airport.
Time / Day
Date: 201812
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: OMN.Airport
State Reference: FL
Altitude.AGL.Single Value: 1000

Environment
Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Ceiling. Single Value: 20000

Aircraft: 1
Reference: X
ATC / Advisory.Tower: OMN
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: Final Approach
Route In Use: Visual Approach
Airspace.Class D: OMN

Aircraft: 2
Reference: Y
ATC / Advisory.Tower: OMN
Make Model Name: Small Aircraft
Flight Phase: Cruise
Airspace.Class D: OMN

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: Flight Instructor
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Flight Engineer
Experience.Flight Crew.Total: 38000
Experience.Flight Crew.Last 90 Days: 250
Experience.Flight Crew.Type: 400
ASRS Report Number. Accession Number: 1606463
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events
Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 100
When Detected : In-flight
Result.General : None Reported / Taken

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

Narrative: 1
I reported to Tower 5 miles north, inbound to land. The Tower instructed me to report mid-field downwind, "your choice right or left downwind." I said I would report right downwind. I heard no other traffic on the frequency. Just as I was approaching mid-field downwind and about to report downwind, a small aircraft flying opposite direction flew directly overhead, approximately 100 feet above me. At that point the controller cleared me to land. The controller then told the other aircraft, "sorry about that." I spoke with the other pilot afterwards; he said he was breaking in an engine and flying orbits near the airport as cleared by the controller. As far as I know, we were the only aircraft in the Class D airspace at the time. The other aircraft was close enough that I could hear his engine as he passed overhead.

Synopsis
GA pilot reported a NMAC during final approach to ONM airport.
**Time / Day**

Date: 201812
Local Time Of Day: 0601-1200

**Place**
Locale Reference: Airport: DEN.Airport
State Reference: CO

**Environment**
Flight Conditions: VMC
Light: Night

**Aircraft: 1**
Reference: X
ATC / Advisory: TRACON: D01
Aircraft Operator: Air Carrier
Make Model Name: Regional Jet CL65, Undifferentiated or Other Model
Crew Size: Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Final Approach
Route In Use: Visual Approach
Airspace: Class B: DEN

**Aircraft: 2**
Reference: Y
Aircraft Operator: Air Carrier
Make Model Name: A319
Crew Size: Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Final Approach

**Person: 1**
Reference: 1
Location Of Person: Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function: Flight Crew: Pilot Not Flying
Function: Flight Crew: First Officer
Qualification: Flight Crew: Air Transport Pilot (ATP)
Qualification: Flight Crew: Multiengine
Qualification: Flight Crew: Instrument
ASRS Report Number: Accession Number: 1606349
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: Pilot Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1606356
Human Factors: Situational Awareness

Events
Anomaly.Conflict: NMAC
Anomaly.Deviation - Procedural: Clearance
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Executed Go Around / Missed Approach
Result.Flight Crew: Took Evasive Action

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

Narrative: 1
Parallel visual approaches to [Runway] 16R and [Runway] 16L. Left traffic, an A319 encroached on our side; we had them in sight as they continued to overshoot. We leveled off and executed a go-around as they flew underneath us and overshot our localizer as well. We did not hear any communication from them as they likely were already on Tower and we were still on Approach. ATC then informed us of their encroachment and asked if we wanted to go around. We told them we were in the go-around. We had an estimated separation of [approximately] 200 feet.

Narrative: 2
On visual approach to Runway 16R in Denver. ATC pointed out traffic on base for [Runway] 16L. Visually acquired traffic and saw him begin to turn for the runway. Everything appeared normal. Got a traffic alert and followed shortly afterward with a RA. The traffic was still in sight and what looked like turning for [Runway] 16L. RAs are pretty common on these two runways and having the aircraft in sight usually makes it a nonevent. However, this time the traffic continued toward us, so we executed a go around. I am guessing on the separation because I was looking out the window, but it seemed to be about 200-300 feet beneath us.

Synopsis
A CRJ Air carrier flight crew reported another carrier overshooting final approach on a parallel runway led to a NMAC and go-around.
**ACN: 1605549** (4 of 50)

**Time / Day**
- Date: 201812
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Relative Position.Distance.Nautical Miles: 100
- Altitude.MSL.Single Value: 1100

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

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

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.CTAF: ZZZ
- Aircraft Operator: Personal
- Make Model Name: DA40 Diamond Star
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Flight Phase: Landing
- Flight Phase: Final Approach
- Flight Phase: Initial Approach
- Airspace.Class E: ZZZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Single Pilot
- Function.Flight Crew: Pilot Flying
- Qualification.Flight Crew: Commercial
- Qualification.Flight Crew: Instrument
Experience.Flight Crew.Last 90 Days : 48  
Experience.Flight Crew.Type : 250  
ASRS Report Number.Accession Number : 1605549  

Human Factors : Communication Breakdown  
Human Factors : Distraction  
Human Factors : Situational Awareness  
Human Factors : Confusion  

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

**Events**

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

**Assessments**

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

**Narrative: 1**

I entered the VFR pattern from 5 to 6 miles northwest of the field when I called in my position to saying that I would at first set up for touch and go's on Runway XX. The other aircraft then called in asking if anyone was in the pattern at which realizing he didn't give me a position report I then changed and said I would over fly the airport at 1,500 feet to not only see the windsock but also to see where he would be entering from. After overflying the field and saying I would be entering a downwind to Runway XX because winds favored it I said "left downwind" at first to which I corrected myself and said I would be on a right downwind and make left closed traffic to Runway XX. This may have confused Aircraft Y as later on I found out he was not familiar with this airport. After one touch and go to Runway XX and turning my crosswind I spotted the pilot on a downwind to the airports closed runway and the pilot claimed that Runway XX was closed.

I called back saying that Runway XX was not closed but that he attempted to land at a closed runway and I offered him to follow behind me to Runway XX if he was unfamiliar with the airport and didn't have a map (I assumed he didn't have this information due to his lack of knowledge as to which runways were available even after flying over the airport) to which the pilot refused the help. I saw the aircraft on what looked like a left downwind to Runway XX and so I followed behind him to keep a visual sight on the plane. After some long downwind to Runway XX it looked as if the pilot was turning a left base to Runway XX to which I asked if he was and he responded with "I'm departing the pattern and will re-enter". After that I saw his "left base" was actually him performing a 360 degree turn about 6 miles west of the field. I then proceeded to enter my left base to Runway XX about 3 miles west while keeping some eye contact on the aircraft.

After my landing I lost sight of the plane and upon entering the upwind Aircraft Y said, "I'll be entering a 35 left downwind to Runway XX" and I then prepared to spot the aircraft while I was on crosswind. I extended out my upwind to create a larger downwind for some
time to spot the pilot and when the pilot of Aircraft Y said "On a left downwind for Runway XX" I then turned my downwind leg and made the radio call. After doing a visual scan I did not see the plane and I was just about to make a radio call asking where he was in relation to the airport when I spotted the aircraft about a 135 degree angle from my forward facing airplane at around 100 feet or less vertical and about the same altitude. He was behind me about 45 degrees on my right side and coming at a very fast power setting (assuming full throttle). I immediately applied full power while climbing as quickly as possible. The aircraft did not seem to have a visual on me and from my perspective his "left downwind for Runway XX" was actually a left downwind to Runway XY.

After the encounter I immediately departed the pattern and started a return back to [home] airport in which I heard the pilot of Aircraft Y make a call that he would be leaving the pattern to the south and make another attempt to land. The pilot had no idea what runways were active even after over flying the field in his attempt to land on a closed runway. I should have made a better decision earlier on to depart the pattern and wait for him to land after I noticed he was not familiar with the airport set up but I was in a calm manner and felt that if I kept a listen and eyes out for him I would be fine. I have dealt with pilots who haven't had communications in the pattern before so I figured there was not a big difference.

Synopsis

C172 pilot reported an NMAC in a non-towered airport traffic pattern.
**ACN: 1605225 (5 of 50)**

**Time / Day**
- Date: 201812
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference: ATC Facility: ZJX.ARTCC
- State Reference: FL
- Altitude.MSL.Single Value: 4500

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Light: Daylight

**Aircraft : 1**
- Reference: X
- Aircraft Operator: Personal
- Make Model Name: Skyhawk 172/Cutlass 172
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Cruise
- Airspace.Class E: ZJX

**Aircraft : 2**
- Make Model Name: UAV - Unpiloted Aerial Vehicle
- Crew Size.Number Of Crew: 0
- Operating Under FAR Part: Other
- Flight Phase: Cruise
- Airspace.Class E: ZJX

**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.Last 90 Days: 19
- Experience.Flight Crew.Type: 12
- ASRS Report Number.Accession Number: 1605225
- Human Factors: Situational Awareness

**Events**
- Anomaly.Conflict: NMAC
- Detector.Person: Flight Crew
Miss Distance.Horizontal : 150
Miss Distance.Vertical : 25
When Detected : In-flight
Result.General : None Reported / Taken

Assessments

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

Narrative: 1

We encountered a drone at our cruise altitude of 4500 feet. It was clearly identifiable as an unmanned aerial vehicle with a white/red top and black bottom. No evasive action taken because the time between seeing the drone and the drone passing about 150 feet from our left wing was too short (estimate between 0.5 and 1 second).

Synopsis

C-172 pilot reported sighting a drone close by during cruise flight.
Time / Day
Date: 201812
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: SDY.Airport
State Reference: MT
Altitude.AGL.Single Value: 200

Environment
Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Light: Daylight
Ceiling. Single Value: 9000

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: SDY
Aircraft Operator: Personal
Make Model Name: Small Aircraft
Crew Size. Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Takeoff
Route In Use: Visual Approach
Airspace. Class G: SDY

Aircraft: 2
Reference: Y
ATC / Advisory.CTAF: SDY
Make Model Name: Small Transport
Operating Under FAR Part: Part 91
Flight Phase: Final Approach
Airspace. Class G: SDY

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
Qualification. Flight Crew: Multiengine
Qualification. Flight Crew: Instrument
Experience. Flight Crew. Total: 3500
Experience. Flight Crew. Last 90 Days: 34
Experience: Flight Crew. Type: 3300
ASRS Report Number. Accession Number: 1605209
Human Factors: Communication Breakdown
Communication Breakdown. Party 1: Flight Crew
Communication Breakdown. Party 2: Flight Crew

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

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

Narrative: 1
I was instructing a student pilot and he was preforming his 4th touch and go on Runway 19. The wind was 180 at 4 KTS. We were calling on the radio our position in the pattern right downwind, right base, and final for Runway 19. On our take off roll I observed Aircraft Y on final for Runway 1. With insufficient runway to stop, we decided to take off and make an evasive maneuver to the left.

Synopsis
GA Instructor reported NMAC on departure with opposite direction traffic at a non-towered airport.
**Time / Day**
- Date: 201812
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference: Airport: PMV.Airport
- State Reference: NE
- Relative Position: Angle: Radial: 190
- Altitude: MSL: Single Value: 2700

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 20
- Light: Daylight

**Aircraft : 1**
- Reference: X
- ATC / Advisory: CTAF: PMV
- Aircraft Operator: FBO
- Make Model Name: Small Aircraft
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Mission: Training
- Flight Phase: Landing
- Airspace: Class E: PMV

**Aircraft : 2**
- Reference: Y
- ATC / Advisory: CTAF: PMV
- Aircraft Operator: Personal
- Make Model Name: Small Aircraft
- Operating Under FAR Part: Part 91
- Mission: Personal
- Flight Phase: Initial Climb
- Airspace: Class E: PMV

**Person**
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: FBO
- Function: Flight Crew: Instructor
- Function: Flight Crew: Pilot Flying
- Qualification: Flight Crew: Multiengine
- Qualification: Flight Crew: Commercial
- Qualification: Flight Crew: Flight Instructor
- Qualification: Flight Crew: Instrument
- Experience: Flight Crew: Total: 800
Narrative: 1

Approached Plattsmouth airport (PMV) from the west at 2,200 MSL with intention to practice landings with student. AWOS reported wind direction from 240, which slightly favored runway 16. Announced on CTAF (122.7) intention to enter left downwind to Runway 16 by crossing runway at midfield. An unidentified voice came over CTAF stating "Active Runway is 34." I replied on CTAF "Winds favor 16." I then saw Aircraft Y holding at the approach end of Runway 34. I announced on CTAF we would switch to Runway 34. I instructed my student to continue across the airport and climb to 2,700. We turned south approximately one mile east of the runway and turned south. We turned back to the west and passed one mile south of the airport.

We then heard the Aircraft Y pilot report "Aircraft Y...departing the pattern to the south." I immediately announced my position "Aircraft X...south of Plattsmouth at 2,700 feet." About 12 seconds later I spotted Aircraft Y below our altitude on an intersecting course. At the same time Aircraft Y pilot came on the radio and said "Aircraft X at Plattsmouth, I'll fly under you." I replied, "I see you, Aircraft Y, have a good flight." He passed under and slightly behind us. To prevent a recurrence I would query the departing aircraft as to direction of flight and plan pattern entry accordingly. Had Aircraft Y been showing a landing light, I would have seen him much sooner. A contributing factor to this occurrence was the wind direction being nearly perpendicular to the runway, making runway selection somewhat ambiguous.

Synopsis

GA instructor reported an NMAC near PMV.
Time / Day

Date: 201812
Local Time Of Day: 1201-1800

Place

Locale Reference.Airport: OPF.Airport
State Reference: FL

Environment

Flight Conditions: VMC
Weather Elements / Visibility: Visibility: 10
Light: Daylight
Ceiling: CLR

Aircraft

Reference: X
ATC / Advisory.TRACON: MIA
Aircraft Operator: Air Taxi
Make Model Name: Light Transport
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 135
Flight Plan: IFR
Flight Phase: Initial Approach

Person

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Taxi
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1605152

Events

Anomaly.Conflict: NMAC
Detector.Automation: Aircraft RA
Detector.Automation: Aircraft TA
Miss Distance.Vertical: 150
When Detected: In-flight
Result.Flight Crew: Took Evasive Action
Result.Flight Crew: FLC complied w / Automation / Advisory

Assessments

Contributing Factors / Situations: Airspace Structure
Contributing Factors / Situations: Human Factors
Contributing Factors / Situations: Procedure
Primary Problem: Human Factors
**Narrative: 1**

While on a visual approach to Runway 9L ATC advised us of traffic in our 10 o'clock southbound at that time we got a TCAS TA ATC instructed the traffic to turn east the traffic maintained his heading south at that point we got the RA to descend I followed the TCAS guidance and descended until clear of conflict. Once clear of the traffic we continued the approach maintaining a stabilized approach to a normal landing. The non-flying pilot did acquire the conflicting traffic as he passed approximately 150 feet above us. The conflicting traffic failed to follow ATC instructions.

**Synopsis**

Air taxi pilot reported an NMAC with another aircraft because the other crew did not follow ATC instructions.
Time / Day
Date: 201812
Local Time Of Day: 0601-1200

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

Environment
Flight Conditions: VMC

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Air Taxi
Make Model Name: Cessna 402/402C/B379 Businessliner/Utiliner
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 135
Flight Plan: IFR
Flight Phase: Landing
Airspace.Class G: ZZZ

Aircraft: 2
Reference: Y
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: Mooney Aircraft Undifferentiated or Other Model
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Phase: Takeoff
Airspace.Class G: ZZZ

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: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1605014
Human Factors: Communication Breakdown
Human Factors: Situational Awareness
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Crew
Events
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
Inbound to ZZZ 10 miles out I call my location and intent for left traffic for runway XX at ZZZ airport. I make my traffic pattern calls and as I call on final I hear a static on the radio and assume it is traffic at another airport on [the same frequency.] It was not till my landing flare that I see Aircraft Y rotating opposite direction on the runway approximately 2000 FT in front of me. The aircraft sidesteps to my right and over flies my right wing at approximately 75 FT. I query the aircraft and he makes a statement that they called a right base to land XY (opposite direction) but that I decided to land anyways. Assistant airport manager at ZZZ overheard the radio calls and stated to me he heard my radio calls, but none from Aircraft Y until I queried him. At no time did I hear any radio calls from Aircraft Y until I queried him.

The lack of radio calls from Aircraft Y, and decision to land opposite runway after hearing my radio call on final.

Synopsis
C402 pilot reported a near mid-air collision while landing with an aircraft that was departing opposite direction at a non-towered airport.
**Time / Day**
Date: 201812
Local Time Of Day: 1201-1800

**Place**
Locale Reference.Airport: PHX.Airport
State Reference: AZ
Altitude.MSL.Single Value: 14500

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

**Aircraft : 1**
Reference: X
ATC / Advisory.TRACON: P50
Aircraft Operator: Air Carrier
Make Model Name: Commercial Fixed Wing
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Climb
Route In Use.SID: ECLPS
Airspace.Class E: P50

**Aircraft : 2**
Reference: Y
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Operating Under FAR Part: Part 121
Mission: Aerobatics
Flight Phase: Climb
Flight Phase: Descent

**Person : 1**
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: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1604531
Human Factors: Confusion
Human Factors: Distraction
Human Factors: Human-Machine Interface
On the ECLPS departure from PHX around 10,000 feet, ATC gave us a heading for traffic 20 miles ahead maneuvering at 14,500 feet. We decided to keep our speed at 250 knots and our climb rate high to out climb the traffic and looked to identify the aircraft on TCAS. Utilizing the above and below function on TCAS we identified the traffic, by this time below us. We kept a good climb rate and when we were approaching 14,500 feet, ATC said traffic was at 12,500 FT and gave us a heading of 090 (approximately on course). We verified the altitude of the traffic as roughly 2,500 feet below us. We turned to the heading and started to accelerate while still climbing. Next thing I know we had a TA. I look down at the ND and see the TA traffic in yellow at -2,900 feet right in front of us. I look up to visually identify the traffic and see a jet vertically directly in front of us arching over the top of a loop directly towards us. The jet was looping directly toward us! Instinctively I banked to the left and dropped the nose to maintain roughly 1 G, turning away from the oncoming aircraft. The Captain informed ATC we were taking evasive actions. Once we were heading about 050, I rolled out. I do not believe the bank angle exceeded 40
degrees, and the recovery was a normal roll out and level off. ATC was apologetic, I don't think any of us expected an aircraft to gain 3,000 feet in a couple of seconds. We never received an RA, but I'm not sure the TCAS system would know how to react to an aircraft maneuver that quickly and being in a loop. A Jet aircraft was performing aerobatic maneuvers in a busy departure corridor. The aerobatic aircraft failed to properly clear the area and operated in a careless and reckless manner. The aerobatic aircraft maneuvered in an unexpected manner (I've never witnessed an aircraft maneuver with that speed and altitude gain above 10,000). Their behavior was outside my scope of experience acquired during 20 years of flying. FAR 91.303 prohibits aerobatic activity within 4 NM of a federal airway. I don't know if a departure procedure course is considered a federal airway and there were no underlying airways on that section of the ECLPS Departure. The prohibition of aerobatic activity within 4 NM of a federal airway should be expanded to include departure procedures. Additional restrictions should be placed when doing aerobatic activity above 10,000 feet.

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

Air carrier flight crew reported an NMAC with a jet aircraft performing acrobatic type maneuvers along the departure route.
Time / Day
Date: 201812
Local Time Of Day: 0601-1200

Place
Locale Reference. ATC Facility: PCT.TRACON
State Reference: VA
Altitude.MSL.Single Value: 10200

Environment
Flight Conditions: IMC
Light: Daylight
Ceiling.Single Value: 900

Aircraft : 1
Reference: X
ATC / Advisory.TRACON: PCT
Aircraft Operator: Air Carrier
Make Model Name: B737-700
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Descent
Route In Use.STAR: RAVNN
Airspace.Class B: BWI

Aircraft : 2
Reference: Y
ATC / Advisory.TRACON: PCT
Aircraft Operator: Air Carrier
Make Model Name: B737 Undifferentiated or Other Model
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Takeoff
Airspace.Class B: BWI

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)
ASRS Report Number.Accession Number: 1604154
Human Factors: Situational Awareness
**Narrative: 1**

On the RAVNN 6 Arrival into BWI, we were given a "descend via" clearance. Passing 12,000 feet, the Controller told us to level off at 12,000 feet "if able." I responded that we were passing 12,000 feet right then and asked if we needed to climb back up to 12,000 feet. The Controller said, "Disregard." I queried the Controller to determine if we were still cleared to descend via the arrival, and he instructed us to descend and maintain 10,000 feet. Descending through approximately 10,500 feet, the Controller instructed us to turn 10 degrees left for traffic, which we did. Through about 10,300 feet, we received a TCAS RA "don't descend." We immediately disengaged the autopilot and leveled off at approximately 10,200 feet, and noticed on the Navigation Display that the conflicting traffic went directly under us at 10,000 feet.

Had we not responded immediately and correctly to the RA, I firmly believe we would have collided with the traffic. I notified ATC that we were responding to the RA, and the Controller gave us instructions to proceed direct RAVNN and descend to 6,000 feet when able, with no further comment on, nor discussion of, the near mid-air collision or the RA. I heard one of our Company aircraft on the radio tell ATC that they also received a TCAS RA, which leads me to believe that they may have been our conflicting traffic. I think, as the flight crew, we handled the event very well. We had excellent communication and coordination, and the First Officer immediately applied corrective action to our flight path to avoid a collision. I think the Controller must have been task saturated due to the traffic volume, and perhaps lacked experience or knowledge to avoid this event. We continued the arrival and approach into BWI and landed without further incident.

**Narrative: 2**

[Report narrative contained no additional information.]
Synopsis
B737-700 flight crew reported an NMAC on descent into BWI when an aircraft passed directly below them with 200 feet of vertical clearance.
ACN: 1604091 (12 of 50)

Time / Day
Date: 201812
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: TSP.Airport
State Reference: CA
Relative Position.Angle.Radial: 110
Relative Position.Distance.Nautical Miles: 1
Altitude.MSL.Single Value: 5500

Environment
Flight Conditions: VMC
Weather Elements / Visibility: Turbulence
Weather Elements / Visibility. Visibility: 10
Light: Daylight
Ceiling.Single Value: 20000

Aircraft: 1
Reference: X
ATC / Advisory. UNICOM: TSP
Aircraft Operator: Personal
Make Model Name: Skylane 182/RG Turbo Skylane/RG
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Climb
Route In Use: None

Aircraft: 2
Reference: Y
Make Model Name: Sail Plane
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91

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
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Last 90 Days: 21
Experience.Flight Crew.Type: 23
ASRS Report Number.Accession Number: 1604091
**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 : Human Factors  
Primary Problem : Human Factors

**Narrative: 1**

Approximately 1 mile East of TSP (right off the departure end of Runway 11) I had an uncomfortably close encounter with a glider doing loops topping out at about 1,500 AGL. They came up and were upside down at my altitude approximately 300 feet away at my 10-11 o clock, pointed towards me. I made a turn away from the glider (though it probably wouldn't have hit me if I hadn't).

Before takeoff, I remember hearing a tow plane announce a glider release at 9,800 [feet] NE of the airport which I believe was the same plane, though I don't remember a distance. It made no position reports after that and I don't remember any responses by it to other aircraft in the pattern.

This is the second relatively close encounter I've had with gliders in the Tehachapi Valley and one of many times I've been uncomfortable with glider operations in the area (including several right near the traffic pattern at TSP). There is a glider port, L94, about 3 miles SE of TSP which has a fleet of rental gliders with no radios and no transponders. The tow planes will occasionally report release points on CTAF (shared between the two airports), but after that, there's nothing other pilots can do apart from keeping eyes out for them. Furthermore, with no radar coverage in the Tehachapi Valley, Bakersfield and Joshua Approach controllers will drop flight following well outside of TSP. This leads to a tight valley with traffic at two separate airports generally not talking to each other and occasionally infringing on the other airport's patterns - it seems like a recipe for a midair.

**Synopsis**

Cessna Pilot reported an NMAC with a glider while climbing out of Tehachapi Municipal Airport.
Time / Day
Date: 201812
Local Time Of Day: 0601-1200

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

Environment
Flight Conditions: VMC

Aircraft: 1
Reference: X
ATC / Advisory.UNICOM: ZZZ
Aircraft Operator: FBO
Make Model Name: Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Flight Phase: Final Approach
Airspace.Class E: ZZZ

Aircraft: 2
Reference: Y
ATC / Advisory.UNICOM: ZZZ
Aircraft Operator.Other
Make Model Name: M-20 J (201) / Allegro
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Mission.Other
Flight Phase: Final Approach
Airspace.Class E: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: FBO
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Instructor
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew: Total: 710
Experience.Flight Crew: Last 90 Days: 80
Experience.Flight Crew: Type: 650
ASRS Report Number.Accession Number: 1604071
Human Factors: Training / Qualification
Human Factors: Communication Breakdown
Events
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Vertical : 200
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
I was in Aircraft X with a student. We were doing pattern work on Runway XX at ZZZ airport along with two other aircraft and we were on final approach for [Runway] XX when Aircraft Y reported 3 mile final for [Runway] XX. He had been reporting a straight-in approach for [Runway] XX since 10 miles out, but as I came over the threshold of [Runway] XX, I noticed he was over the threshold of the opposing Runway XY. I immediately had my student do a go-around and miss going head-on into this traffic reporting the wrong runway. After we called our go-around, there was no more radio calls from Aircraft Y. This pilot clearly needs to be contacted by the proper authorities and possibly needs to go back and be retrained.

Synopsis
Cessna 172 instructor pilot reported a NMAC with opposite direction traffic attempting to land on the same runway.
ACN: 1603451

**Time / Day**
Date: 201812
Local Time Of Day: 1201-1800

**Place**
Locale Reference: Airport: MCC.Airport
State Reference: CA
Altitude: MSL. Single Value: 2000

**Environment**
Flight Conditions: VMC
Weather Elements / Visibility: Haze / Smoke
Weather Elements / Visibility: Visibility: 9
Light: Daylight

**Aircraft : 1**
Reference: X
ATC / Advisory: TRACON: NCT
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: Takeoff
Route In Use: Direct
Airspace: Class C: SMF
Airspace: Class E: MCC

**Aircraft : 2**
Reference: Y
ATC / Advisory: CTAF: MCC
Make Model Name: Helicopter
Flight Phase: Final Approach
Airspace: Class E: MCC

**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: Flight Instructor
Qualification: Flight Crew: Multiengine
Experience: Flight Crew: Total: 2930
Experience: Flight Crew: Last 90 Days: 23
Experience: Flight Crew: Type: 400
Events
Anomaly.Airspace Violation : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 100
Miss Distance.Vertical : 400
When Detected : In-flight
Result.Flight Crew : Exited Penetrated Airspace
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
I departed McClellan airport (MCC) Runway 34. I took off and flew runway heading. The airport is an ex-military field with a rather long runway because of this I waited until I got to pattern altitude before turning crosswind which would give me proper displacement in the traffic pattern. At the departure end I started a gradual left crosswind turn. I had heard a helicopter making traffic calls on the radio on a left downwind leg for Runway 34. I did not have visual contact with the helicopter when I took off. As I started the left crosswind leg, I got a visual contact with the helicopter low and to my left with about 400 feet vertical separation and about 100 feet horizontal separation. I pulled the nose up abruptly for separation which caused me to pop through the floor of the overlying class C airspace which is 1,600 feet. I reached a maximum altitude of 2,000 feet MSL and I immediately pushed the nose down to get back down out of the Class C airspace. Total time of the altitude deviation was less than 30 seconds. MCC is uncontrolled and I wasn't talking to ATC. I exited the area to the southeast and then had to immediately climb above 2,600 feet MSL to avoid Mather's (MHR) Class D airspace which is nearby. I should have reviewed the altitudes of the Class C again before departure. I should have exited the pattern with a right turn and cleared the pattern and Class C sooner. The traffic conflict in the pattern made the only option was to climb and that put me at risk for an altitude deviation. I deviated in the interest of safety and corrected as quickly as possible.

Synopsis
GA pilot reported taking evasive action for an NMAC with a helicopter during climb from MCC Airport resulted in an airspace violation.
ACN: 1603255 (15 of 50)

Time / Day
Date: 201812
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: BUR.Airport
State Reference: CA
Relative Position.Distance.Nautical Miles: 5
Altitude.MSL.Single Value: 3000

Environment
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.TRACON: SCT
Aircraft Operator: Air Carrier
Make Model Name: B737-700
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Climb
Airspace.Class B: SCT

Aircraft: 2
Reference: Y
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer

Person
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.Last 90 Days: 451
ASRS Report Number.Accession Number: 1603255

Events
Anomaly.ATC Issue: All Types
Anomaly.Conflict: NMAC
Detector.Automation: Aircraft RA
Detector.Person: Air Traffic Control
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
Departing BUR on Runway 15, we were assigned the heading of 210 degrees and an initial altitude clearance limit of 4000 ft. I believe it was just prior to 3000 ft that ATC asked us to expedite our climb to 4000 ft for traffic which was at 3000 ft. Shortly thereafter, with urgency and his voice, the Controller told us to turn immediately right to the heading of 340. The First Officer started to turn the aircraft while I was looking at TCAS. The intruder target was red and in close proximity to our aircraft. At this time, I thought it was necessary to intervene and increase the rate of turn and increase back pressure on the yoke to further increase our rate of climb, which I did. We were subsequently cleared to FL190 and on course, resuming our flight. Quite frankly, this event scared the hell out of me, and I would love to know how close we actually came. We never saw the intruder aircraft.

Synopsis
B737-700 Captain reported an NMAC while departing BUR.
ACN: 1602491 (16 of 50)

**Time / Day**

Date: 201812
Local Time Of Day: 0601-1200

**Place**

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

**Environment**

Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory.UNICOM: ZZZ
Aircraft Operator: FBO
Make Model Name: SR20
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Training
Flight Phase: Final Approach

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: FBO
Function.Flight Crew: Instructor
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Commercial
ASRS Report Number.Accession Number: 1602491
Human Factors: Situational Awareness
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Crew

**Events**

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

**Assessments**

Contributing Factors / Situations: Human Factors
Primary Problem: Human Factors
**Narrative: 1**

While on midfield downwind on left traffic for Runway XX with the Student Pilot at the controls, I, the Instructor, realize of a traffic coming from the west slightly higher than traffic pattern altitude descending and heading towards our airplane. I announce "I have control" and I commence a pitch down to avoid otherwise an impact from the other airplane. The traffic never appeared on TCAD [Traffic Collision Avoidance Device] and I presumably did not have an operational transponder since the flight was not tracked by any software. After evasive action, the traffic joins the downwind very close to us while I am inquiring in frequency to attempt to communicate with that traffic. I established communication with the traffic and I arrange the sequence for the arrival to the runway ahead of that traffic.

**Synopsis**

SR20 flight instructor reported an NMAC while operating in the pattern at a non-towered airport.
**Time / Day**
- Date: 201812
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US

**Environment**
- Flight Conditions: VMC

**Aircraft : 1**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Air Taxi
- Make Model Name: Beechjet 400
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 135
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Initial Approach
- Airspace.Class D: ZZZ

**Aircraft : 2**
- Reference: Y
- Make Model Name: Helicopter

**Aircraft : 3**
- Reference: Z
- Make Model Name: Cessna Aircraft Undifferentiated or Other Model

**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: Multiengine
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Commercial
- ASRS Report Number.Accession Number: 1602077
- 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
Anomaly.Deviation - Procedural: Clearance
Detector.Automation: Aircraft RA
Detector.Person: Air Traffic Control
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Took Evasive Action
Result.Air Traffic Control: Separated Traffic

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

Narrative: 1
Tower told us to join right downwind. Entered pattern on a high wide downwind as I was initially intending to go straight into right base. Turned right base; Tower called out traffic 300 feet below and I saw helicopter pass by on my left. Then, Tower said "I didn't tell you to turn base." He had us continue, however. We were now head on with a Cessna that was on the left base. Tower told the Cessna to turn off to the north and advised us of traffic 12 o'clock and 300 feet below. I had just initiated my descent to land normally, then I received an RA to climb. I climbed about 200 feet until clear of conflict, and watched traffic go under me about 400 feet below from right to left. Continued approach and landed normally using normal stabilized approach. Customers commented jokingly after landing about the Cessna that caused us to climb. Tower did not comment further about incident.

Tower said to join right downwind but did not say he would call the base. Main issue in my opinion was Tower's failure to tell us exactly what he needed from us. Tower will typically say "Extend/join downwind, I'll call your base." I took his initial instruction as join right traffic.

Synopsis
BE-400 Captain reported an NMAC while on visual approach due to miscommunication with ATC.
ACN: 1601934 (18 of 50)

**Time / Day**
- Date: 201812
- Local Time Of Day: 1201-1800

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

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Light: Daylight
- Ceiling.Single Value: 4000

**Aircraft : 1**
- Reference: X
- ATC / Advisory.UNICOM: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Amateur/Home Built/Experimental
- Crew Size.Number Of Crew: 1
- Mission: Personal
- Flight Phase: Final Approach
- Airspace.Class E: ZZZ

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.UNICOM: ZZZ
- Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
- Flight Phase: Initial Approach
- Airspace.Class E: ZZZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Private
- Experience.Flight Crew.Total: 1068
- Experience.Flight Crew.Last 90 Days: 24
- Experience.Flight Crew.Type: 149
- ASRS Report Number.Accession Number: 1601934
- Human Factors: Communication Breakdown
- Human Factors: Time Pressure
- Human Factors: Situational Awareness
- Communication Breakdown.Party1: Flight Crew
### Events

- **Anomaly.Conflict**: NMAC
- **Anomaly.Deviation - Procedural**: Published Material / Policy
- **Detector.Person**: Flight Crew
- **Miss Distance.Horizontal**: 50
- **Miss Distance.Vertical**: 200
- **When Detected**: In-flight

### Assessments

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

### Narrative: 1

Weather was VFR. While approaching the uncontrolled field, I heard two aircraft report inbound. There was also an aircraft on a practice instrument approach and an airplane or two in the pattern. It was unusually busy for this small airport. The airport has one runway. Planes were landing on 17. I turned on the strobes and landing light, reported inbound 4 miles out, reported crosswind, and made a third radio call on downwind.

While on downwind at midfield the other plane came out of the west and crossed over midfield below pattern altitude heading 050. I saw the low wing Piper at my 10 o'clock. It flew almost directly under me. I estimate it was 200 feet below. I lost sight of it for a few tense seconds as it went under the cowl. For evasive action, I didn't want to break left into landing traffic, or right in his direction or up thinking he may have climbed to pattern and I could now be under him and in a high wing, not see him. I climbed 50 feet. The plane reappeared at my 2 o'clock and turned downwind in front of me. I radioed "Someone just flew under me." I was now number four to land.

Afterwards, the other pilot said he thought I was further away when he crossed the field and turned downwind. He didn't see me I suspect because he was looking forward and left in anticipation of turning downwind while the converging angle was to his right. He said he was 100 feet or so below pattern altitude. I was right at pattern altitude. I estimate we were 200 feet apart.

**Recommendations:**

Pilots should be taught that flying over midfield at pattern altitude and then turning downwind is an approach that carries high risk. It should be seldom used and never when there are other aircraft in the vicinity. Even when there appears to be no traffic, there may be unseen planes in the pattern, radio calls stepped on and pilots on the wrong frequency. Safe practice is to cross the field well above pattern altitude and then fly a standard pattern or fly crosswind to a standard pattern at public airports.

Crossing over the airport at 500 feet above pattern should be changed to 800 feet because other planes may be well above pattern altitude. Planes sometimes begin their descent late and descend in the pattern. Aircraft also sometimes exceed pattern when climbing after takeoff and turning downwind.

### Synopsis

GA pilot reported an NMAC while operating in the pattern at a non-towered airport.
ACN: 1601635 (19 of 50)

Time / Day
Date: 201812
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: APA.Airport
State Reference: CO
Altitude.MSL.Single Value: 6800

Environment
Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Ceiling.Single Value: 12000
RVR.Single Value: 10000

Aircraft : 1
Reference: X
ATC / Advisory.Tower: APA
Aircraft Operator: Personal
Make Model Name: Beechcraft Twin Piston Undifferentiated or Other Model
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Landing
Route In Use: Visual Approach
Route In Use: Vectors
Airspace.Class D: APA

Aircraft : 2
Reference: Y
ATC / Advisory.Tower: APA
Make Model Name: Cessna Aircraft Undifferentiated or Other Model
Crew Size.Number Of Crew: 1
Flight Phase: Takeoff
Flight Phase: Climb
Airspace.Class D: APA

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
Experience.Flight Crew.Total: 564
Experience.Flight Crew.Last 90 Days: 78
Experience.Flight Crew.Type : 33
ASRS Report Number.Accession Number : 1601635

Events
Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Overshoot
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 50
Miss Distance.Vertical : 300
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Issued New Clearance

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

Narrative: 1
ATIS information, wind 080 at 7 altimeter 30.15. [I] was given instruction to turn left from northwest heading to intercept final approach for 17 left. Next [given] change to 17 right, contact tower on 123.75. [I] was cleared to land 17 right. [I] was on short final when the next instruction from tower (Go around right side, aircraft on runway) (Extend up wind). The aircraft on runway began take off as [I] was a beam the threshold on right. As [I] was climbing on right side single engine Cessna gained altitude very quickly and began to drift into [my] flight path. [I] turned right and climbed above pattern altitude to avoid collision with Cessna while trying to keep Cessna in view on left side. The tower restated the (instruction that [I] was to extend up wind) [I] then resumed course 17 at tower's instruction. The Cessna could not see the [my aircraft] on the right and above the wing. [I] was then instructed by the tower to turn right for downwind 17 right get back down to pattern altitude 6800 feet and get back on the east traffic pattern restriction. [I] was again given a clearance to land 17 right. Again [I] was on short final when [I] was given instruction to go around right side aircraft on runway extend up wind. [I] was then instructed to turn right for downwind 17 right. Again given clearance to land 17 right. Again on short final [I] could see an aircraft stopped on runway. [I] contacted the tower and asked if this was going to work. [I] was instructed to continue approach for a landing. [I] had already initiated a go around, when the tower gave instruction to go around right side air craft on runway. [I] went around and given instruction right turn for downwind 17 right. [I] was instructed to contact tower on 118.9. [I] was given clearance to land 17 left. [I] landed on 17 left without incident. In my option the operation of dissimilar aircraft in such tight spacing could have been a contributing factor in the near miss. The setting sun may have restricted the view of the tower to the west, not able to see the aircraft on runway to the west. Trying to make a tight turn after side stepping right for a go around doesn't allow enough room for maneuvering. [The highway] converges with the south end of 17 right narrowing that airspace considerably. With a cross wind out of the east the steep bank required to make a right turn, when aircraft are in a climbing turning slow in a steep bank should not be expected to stay east of [the highway].

Synopsis
Twin engine Beechcraft pilot reported an NMAC in the pattern at APA.
ACN: 1601022 (20 of 50)

Time / Day
Date: 201812
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: BNA.Airport
State Reference: TN
Altitude.AGL.Single Value: 1900

Environment
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.TRACON: BNA
Aircraft Operator: Air Carrier
Make Model Name: Large Transport, Low Wing, 2 Turbojet Eng
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Flight Phase: Landing
Route In Use.Other:
Airspace.Class C: BNA

Aircraft: 2
Reference: Y
Make Model Name: Small Aircraft
Airspace.Class C: BNA

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Last 90 Days: 461
ASRS Report Number.Accession Number: 1601022

Events
Anomaly.Conflict: NMAC
Anomaly.Deviation - Procedural: Clearance
Detector.Automation: Aircraft RA
Detector.Person: Flight Crew
We were cleared for the RNAV RNP Z 20R from JOGLO. Approach Control had been advising another Company aircraft landscape north on 20L of a small aircraft that had penetrated the Class C and advised them that the aircraft's location was on final to 20L tracking west. We knew that aircraft would be an issue for us and I (PM, Pilot Monitoring) began to scan for the traffic. Approach then advised us that after 90 degrees the aircraft would be on/near our course. I spotted the aircraft and advised the PF (Pilot Flying) to arrest the rate of descent and they used V/S. As they did we got a TA and then immediately following an RA to not descend. The PF never got sight of the traffic but I felt the corrections were proper. In my estimation the traffic flew 200 feet below us on the approach course, and with Approach Control's help and the RA, this would have been a near miss. On landing we received an FAA phone number and after we had parked the aircraft I called and reported my recollection to them.

I am unable to provide insight because this was an aircraft that wasn't talking to ATC. The traffic was a threat and we all worked together to maintain safety of flight.

Synopsis

Air carrier Captain reported an NMAC on approach with aircraft that penetrated BNA airport airspace.
Time / Day
Date: 201812
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 800

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

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

Person
Reference: 1
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: FBO
Function.Flight Crew: Instructor
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 600
Experience.Flight Crew.Last 90 Days: 80
ASRS Report Number. Accession Number: 1599981
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC

Events
Anomaly.Conflict: NMAC
Detector.Person: Flight Crew
Miss Distance.Horizontal: 0
Miss Distance: Vertical : 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
We were cleared for the option number 2 behind another C172. King Air failed to contact Tower promptly at hand off from Center, claimed they were given the wrong frequency. We, myself and the student, didn't see the King Air when we turned final. Would have been at our 3 o'clock.

As aircraft on the runway in front of us missed Taxiway, Tower instructed us to go around. After we initiated the go around we were instructed to stay low as King Air was behind/above us. We never saw the King Air until we were cleared to climb up to pattern altitude and the King Air had landed after making a left turn to base and final.

Observer on the ground estimated clearance less than 100 feet.

Synopsis
Flight instructor reported they took evasive action to avoid mid air collision while on go-around.
ACN: 1598943 (22 of 50)

Time / Day
Date: 201812
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: SMO.Airport
State Reference: CA
Relative Position.Distance.Nautical Miles: 4
Altitude.MSL.Single Value: 3500

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: SMO
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: Cruise
Airspace.Class B: LAX

Aircraft: 2
Reference: Y
ATC / Advisory.CTAF: SMO
Aircraft Operator: Personal
Make Model Name: Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: None
Flight Phase: Cruise
Airspace.Class B: LAX

Person: 1
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: FBO
Function.Flight Crew: Instructor
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Last 90 Days: 240
Experience.Flight Crew.Type: 595
Person: 2

Reference: 2
Location Of Person: Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function: Flight Crew: Instructor
Function: Flight Crew: Pilot Flying
Qualification: Flight Crew: Commercial
Qualification: Flight Crew: Instrument
Qualification: Flight Crew: Private
Experience: Flight Crew: Total: 4700
Experience: Flight Crew: Last 90 Days: 50
Experience: Flight Crew: Type: 4000

Events

Anomaly: Conflict: NMAC
Detector: Person: Flight Crew
Miss Distance: Horizontal: 200
Miss Distance: Vertical: 30
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 on a cross country flight with a student to LGB and we were proceeding to the LAX special flight rules corridor. We were level at 3500 ft. northwest of the Santa Monica VOR flying eastbound to intercept the SMO 132 radial after flight following was canceled by SoCal Approach. As we were flying eastbound a few minutes later, my student reported seeing a plane on the left. He stated that the plane was converging from the left and that it turned westbound to avoid our aircraft. I did not see the aircraft until it was behind us, but my student reported that it was close to us before it turned westbound.

Narrative: 2

Climbing up to Los Angeles Special Flight Rules, the conditions were VFR and sun glare in the climb. Position was west bound and coming up on the Pacific Palisades. In the level out, a Cessna appeared in the windshield. Student was flying, and I immediately grabbed the controls and took evasive action by diving and banking to the right. Other aircraft took no evasive action.

After the near miss, we continued on with joining the Special Flight Rules. The other
aircraft in question was noticed to be joining the Special Flight Rules as well. On Special Flight Rules, I continued to make calls on the common traffic frequency and I made a call out directly to the other aircraft once he made it on the frequency. Once on I inquired if the other aircraft saw us, he replied "yes, I see you off my 3 o'clock right now". I replied back "no, I mean did you see me about a minute ago at your 12 o'clock".

**Synopsis**

Two flight instructors, in separate aircraft, reported a NMAC while operating on the LAX Special Flight Rules VFR transition route.
ACN: 1598849 (23 of 50)

Time / Day
Date: 201811
Local Time Of Day: 1201-1800

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

Environment
Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 10
Ceiling.Single Value: 10000

Aircraft: 1
Reference: X
ATC / Advisory. Military Facility: ZZZ
Aircraft Operator: Military
Make Model Name: Jet/Long Ranger/206
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Taxi
Airspace. Special Use: MILITARY AIRSPACE

Aircraft: 2
Reference: Y
ATC / Advisory. Military Facility: ZZZ
Make Model Name: UAV - Unpiloted Aerial Vehicle
Operating Under FAR Part: Part 91
Flight Phase: Cruise

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Military
Function. Flight Crew: Instructor
Function. Flight Crew: Pilot Not Flying
Qualification. Flight Crew: Instrument
Qualification. Flight Crew: Air Transport Pilot (ATP)
Qualification. Flight Crew: Flight Instructor
Qualification. Flight Crew: Multiengine
Experience. Flight Crew. Total: 3000
Experience. Flight Crew. Last 90 Days: 120
Experience. Flight Crew. Type: 2300
ASRS Report Number. Accession Number: 1598849
Human Factors: Situational Awareness
Events
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
When Detected : Taxi
Result.General : None Reported / Taken

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

Narrative: 1
While hover taxiing at a [military] training field a quadcopter drone (app. 2ft by 2ft) flew overhead of my helicopter at roughly 200 ft AGL. The training field is 1 square mile. My aircraft was in the southeast corner of the field. The drone flew over my aircraft then to the northwest until it eventually exited the training environment. There were 9 other helicopters at the field during this time. The drone flew overhead at least 3 other aircraft that were doing hover training during its transit across the field. [Military] operating altitude at this outlying field is 650 ft AGL and below. I made a call over our common training frequency to alert the other aircraft and also had the field duty officer file a report with local law enforcement.

Synopsis
Military helicopter instructor reported a NMAC with a UAV in a military training area.
**Time / Day**

Date: 201811  
Local Time Of Day: 0601-1200

**Place**

Locale Reference.Airport: ZZZ.Airport  
State Reference: CA  
Relative Position.Distance.Nautical Miles: 11  
Altitude.MSL.Single Value: 6100

**Environment**

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

**Aircraft**

Reference: X  
ATC / Advisory.TRACON: ZZZ  
Aircraft Operator: Personal  
Make Model Name: PA-28R Cherokee Arrow All Series  
Crew Size.Number Of Crew: 1  
Operating Under FAR Part: Part 91  
Flight Plan: IFR  
Mission: Personal  
Flight Phase: Initial Approach  
Route In Use: Vectors  
Airspace.Class B: 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: Flight Instructor  
Qualification.Flight Crew: Commercial  
Experience.Flight Crew.Last 90 Days: 20  
Experience.Flight Crew.Type: 150  
ASRS Report Number.Accession Number: 1597916  
Human Factors: Communication Breakdown  
Human Factors: Time Pressure  
Human Factors: Situational Awareness  
Communication Breakdown.Party1: Flight Crew  
Communication Breakdown.Party2: ATC

**Events**

Anomaly.ATC Issue: All Types  
Anomaly.Conflict: NMAC
While being vectored for the RNAV XXR approach, I was instructed to descend to 6,000 feet. During the descent I got a saw a potential conflict on my ADS-B traffic display. ATC also called the traffic, but I was unable to make visual contact. The traffic was approximately 12 o'clock at 2 miles, maintaining altitude about 400 ft below us. I stopped my descent at about 6,200 feet. I still didn't have visual contact and informed ATC. The traffic began to climb directly toward us (according to the ADS-B display, which then issues a conflict alert). I took evasive action by turning right and initiating a climb.

Strangely, the traffic turned in the same direction and continued to climb directly toward us. ADS-B showed 100 feet separation, directly below us. I went to a full-power climb and continued into a 360 degree turn. I informed ATC I was doing so. Thankfully the traffic broke off its turn and the conflict was resolved without incident. I never saw the traffic (and assume [they] never saw me).

I resumed the approach and landed without incident. I was surprised that other than an initial traffic call, ATC provided no assistance in resolving the conflict. I believe I was in Class B airspace at the time, but did not hear the controller talking to the aircraft I was in conflict with. I'm a bit puzzled that ATC provided no assistance in the conflict resolution.

From a pilot perspective, I could have taken action earlier to avoid a potential conflict. I could have asked ATC if they were talking to the other aircraft. I could have possibly looked more diligently for the other aircraft before it was in a position blocked by my own plane.

The real cause was that either ATC was not talking to the conflicting aircraft (though I believe it was in class B airspace), or if a different controller than mine was, the controllers were not communicating with each other. Also, my controller didn't offer any revised vectors to avoid a conflict.

**Synopsis**

PA-28 pilot reported an NMAC that required significant evasive maneuvering.
ACN: 1597463 (25 of 50)

Time / Day
Date: 201811
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: PDX.Airport
State Reference: OR
Altitude.MSL.Single Value: 13000

Environment
Flight Conditions: IMC
Weather Elements / Visibility: Rain

Aircraft: 1
Reference: X
ATC / Advisory.TRACON: P80
Aircraft Operator: Air Carrier
Make Model Name: A320
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Descent
Airspace.Class E: P80

Aircraft: 2
Reference: Y
ATC / Advisory.TRACON: P80
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Flight Phase: Descent

Person
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)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
ASRS Report Number.Accession Number: 1597463
Human Factors: Situational Awareness

Events
Anomaly.ATC Issue: All Types
Anomaly.Conflict: NMAC
Assessments

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

Narrative: 1

We were at assigned altitude of 13,000 FT. An aircraft began a fast descent towards us. At 500 FT away from us, we got an RA to climb. We began a climbing/ fairly steep turn to miss him. It was close enough that we saw his lights even though IMC. After calling ATC on the ground, we were told that he was given an approach clearance into a satellite airport. This should not have happened.

Synopsis

A320 Captain reported an NMAC with another aircraft in the vicinity of PDX airport.
**Time / Day**

Date : 201811

**Place**

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

**Environment**

Flight Conditions : VMC  
Light : Daylight

**Aircraft : 1**

Reference : X  
Aircraft Operator : FBO  
Make Model Name : DA40 Diamond Star  
Crew Size.Number Of Crew : 2  
Operating Under FAR Part : Part 91  
Flight Plan : VFR  
Mission : Training  
Flight Phase : Cruise  
Route In Use : None

**Aircraft : 2**

Reference : Y  
Make Model Name : Any Unknown or Unlisted Aircraft Manufacturer  
Crew Size.Number Of Crew : 2  
Operating Under FAR Part : Part 91

**Person**

Reference : 1  
Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : FBO  
Function.Flight Crew : Instructor  
Function.Flight Crew : Pilot Flying  
Qualification.Flight Crew : Flight Instructor  
Qualification.Flight Crew : Commercial  
Qualification.Flight Crew : Multiengine  
Qualification.Flight Crew : Instrument  
Experience.Flight Crew.Total : 675  
Experience.Flight Crew.Last 90 Days : 150  
Experience.Flight Crew.Type : 300  
ASRS Report Number.Accession Number : 1597233

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

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

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

Narrative: 1
I was with a student [who] made the initial call of what we were, where we were, and altitude. Did not hear the other aircraft but saw him in the distance and on TCAS. He then popped off of our TCAS and about two minutes later they popped up directly in front of us with about 400 feet and closing in. I took controls from my student and veered the plane to the right. On TCAS he appeared to be climbing and I pulled back and got us up about 300-400 feet. I then made a call and said traffic at 6500 we were right above you. The pilot then stated we had a NMAC and then descended down. My student and I finished our lesson and went back to ZZZ.

Synopsis
GA flight instructor reported a NMAC while maneuvering near a practice area.
ACN: 1597208 (27 of 50)

Time / Day
Date: 201811
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: LGB.Airport
State Reference: CA
Altitude.MSL.Single Value: 4800

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

Aircraft: 1
Reference: X
Aircraft Operator: Personal
Make Model Name: Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Climb
Airspace.Class E: SCT

Aircraft: 2
Reference: Y
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Airspace.Class E: SCT

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 955
Experience.Flight Crew.Last 90 Days: 31
Experience.Flight Crew.Type: 955
ASRS Report Number.Accession Number: 1597208
Human Factors: Time Pressure

Events
Anomaly.Conflict: NMAC
Detector.Automation: Aircraft TA
Assessments

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

Narrative: 1

Heading Eastbound at 4,800 [feet] MSL, above the LGB Delta airspace, and below the 5,000 Bravo shelf. Ceiling was unlimited at my position, clear below me, with visibility 10+ miles, except for low clouds extending eastward from the NW to SE approximately 3,000 feet laterally from my position, with tops about 4,800 MSL. As I was beginning to turn southeastward to keep cloud clearance and head for a higher Bravo floor, I received a TCAS traffic alert, 100 feet below, less than 1 mile, at my 11:00 [position]. I took immediate evasive measures including climbing and turning faster to the south. I curtailed my climb abruptly at the floor of Bravo. While I did not ever see the actual traffic conflict (in a turning climb away from target), the TCAS target appeared to cross almost directly under me, with only 300 feet separation. Knowledge of the Bravo shelf kept me from aggressively climbing to avoid the conflict. Had Bravo shelf not been there, I would have climbed much more aggressively higher.

Synopsis

GA pilot reported a NMAC that required an evasive maneuver while operating between the ceiling of Delta airspace and the floor of Bravo airspace.
Time / Day
Date: 201811
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 1100

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft: 1
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: Landing
Airspace.Class C: ZZZ

Aircraft: 2
Reference: Y
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Personal
Make Model Name: Cessna Aircraft Undifferentiated or Other Model
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Phase: Climb
Airspace.Class C: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
ASRS Report Number.Accession Number: 1596788
Human Factors: Situational Awareness

Events
Anomaly.Conflict: NMAC
Detector.Automation: Aircraft Other Automation
Detector.Person: Flight Crew
Miss Distance.Horizontal: 500
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Air Traffic Control : Provided Assistance

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

Narrative: 1
While performing touch and go's in the pattern, [I] was directed by ATC to maintain 1,100 feet pattern altitude. On one departure off Runway XX I was directed by ATC to extend my upwind 1 mile before starting crosswind turn. I complied with this ATC instruction. After I started my right turn for the right downwind leg, a Cessna departing Runway XX behind me turned crosswind and had a vector that appeared to be a collision course with me. My ADSB alerted to me to this traffic conflict as well as my Safety Pilot who is also a certified pilot. A few seconds later, the ADSB traffic conflict did not go away, and I had a visual of the conflicting traffic. I heard ATC ask the Cessna if they had me in sight, and the Cessna did not immediately respond. The Cessna continued to appear larger in size, so to avoid a potential collision, I climbed in altitude to 1,500 feet. I estimated the Cessna came within 500 feet of me. As I climbed to safety, I alerted ATC that I was climbing for a traffic conflict; the Cessna who turned into my flight path and was a threat to me. ATC advised me to just maintain VFR and at that point I heard the Cessna tell ATC they just got positive ID of me. This was after I made my escape maneuver. Continued on downwind at 1,500 feet and when ATC had the Cessna behind me maneuver to leave enough space for me to descend back to 1,100 feet, ATC advised me to descend back to pattern altitude then cleared me for touch and go. No other conflicts after this one. It can't be overstated that ADSB was a life saver today. ADSB is what first tipped me off about the conflicting traffic as well as its potential collision course.

Synopsis
PA-28 pilot reported an NMAC in the traffic pattern when the trailing departure pilot turned an early crosswind.
ACN: 1595940  (29 of 50)

Time / Day

Date: 201811
Local Time Of Day: 0601-1200

Place

Locale Reference.ATC Facility: ZHU.ARTCC
State Reference: TX
Altitude.MSL.Single Value: 8000

Environment

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

Aircraft : 1

Reference: X
ATC / Advisory.Center: ZHU
Aircraft Operator: Government
Make Model Name: MU-2
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Passenger
Flight Phase: Climb
Route In Use.Other
Airspace.Class E: ZHU

Aircraft : 2

Reference: Y
Aircraft Operator.Other
Make Model Name: Cessna Twin Turboprop Undifferentiated or Other Model
Crew Size.Number Of Crew: 1
Mission.Other
Flight Phase.Other
Route In Use.Other

Component

Aircraft Component: Transponder
Problem: Improperly Operated

Person

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Government
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 13000
Experience.Flight Crew.Last 90 Days : 75
Experience.Flight Crew.Type : 3000
ASRS Report Number.Accession Number : 1595940
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

Events
Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Clearance
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : FLC Overrode Automation
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification
Result.Air Traffic Control : Provided Assistance

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

Narrative: 1
ON IFR clearance departing BPT, climbing as assigned on 195 radial to the 50 DME fix, I
was in the co-pilot seat (not flying). The first Houston Controller advised us of traffic off
our left with no transponder/unverified. We advise negative contact. We were headed
toward the sunrise in the bright haze. After handoff to next controller, we were told that it
was no longer observed. Approximately 7,000-8,000 feet, I saw what appeared to be a
twin Cessna of some type out of the pilot's window. (Filling the window due to the close
proximity.) It was coming from our 8-9 o'clock (under the wing tip) moving toward our 2
o'clock, and it passed directly under our nose. As soon as I saw it, I disconnected the
autopilot and made an abrupt pull up maneuver to gain some space between aircraft.
When I first saw it, he was probably 100-200 feet closing directly at us. There was no
traffic alert. We did not see any target on our traffic display until after I reported the
incident to ATC and inquired if he had a transponder. The controller apologized and said he
was showing a transponder...which we now depicted on our display (apparently he turned
it on after the near miss).

Synopsis
MU-2 pilot reported an NMAC with another aircraft. Reporter suggested that the other
aircraft did not have an operating transponder at the time of conflict.
ACN: 1595590 (30 of 50)

Time / Day
Date: 201811
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: 2R4.Airport
State Reference: FL
Altitude.AGL.Single Value: 200

Environment
Weather Elements / Visibility: Visibility: 10
Light: Daylight
Ceiling: CLR

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: 2R4
Aircraft Operator: Personal
Make Model Name: Amateur/Home Built/Experimental
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
Route In Use: None
Airspace.Class G: 2R4

Aircraft: 2
Reference: Y
ATC / Advisory.CTAF: 2R4
Aircraft Operator: FBO
Make Model Name: Small Aircraft
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Final Approach
Route In Use: None
Airspace.Class G: 2R4

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
Chain of events: After about 2 hours of cruise flight, I arrived at the pattern of 2R4, having communicated with Pensacola Approach to transit through the Navy Whiting Class C area. I arrived from the NNW and made two position reports prior to entering the left downwind for RWY 36, almost directly from my inbound path. Traffic was conveniently spaced at this point that no further maneuvering was desirable or necessary.

I called my entry onto the downwind leg, and observed traffic on the upwind just starting their crosswind turn and announcing appropriately. It appeared that they would have no trouble maintaining spacing behind me. There were at least two other aircraft in the pattern, possibly 3. One at this point on short final, and two more ahead of me in the downwind (plus the upwind traffic starting a crosswind turn). The traffic ahead of me extended his downwind leg, and made an announcement to that effect, and it is possible that was due to the traffic ahead of him being either slower or flying a similarly long final. I announced my turn to base after beginning the turn to base leg in order to follow the same flight path as the traffic ahead of me.

Nose to tail spacing was about 1.2-1.5 miles initially but as I saw myself overtaking, I slowed, called my position on final, and made a narrow S-turn on final to maintain enough spacing to assure that he could exit the runway on his full-stop landing prior to my touching down. At about a .3-.5 mile final, and between 150-250 feet AGL (not very certain because the glide path is steep due to trees and power lines), I glanced left to find a small aircraft finishing his base to final turn (roughly co-altitude, slightly above and 50-100 feet to my left), and obviously unable to see me through his floorboards.

Apparently we both had the same idea of "safe spacing" behind the traffic ahead of me, but I had failed to look for him when he called his base turn while I was on final approach, and he had failed to see me at that exact same time he started the turn to base. Because he was banked, working on finishing his turn, he was unable to see me. He then announced his position on final while still converging and I keyed the mic and said "heyyyy there buddy, you're cutting some people off in the pattern, got an [aircraft] short final
going around on the right." I wish I had thought of something wittier and shorter. Knowing he could not see me, acting was the only option, so I initiated a go-around during the transmission with an offset between the runway and parallel taxiway on the east side of RWY 36.

In approximate order, I generated lateral separation with a sufficient bank to the right while applying power to accelerate away, then retracted the speed brake as I pitched up to climb since I saw that he had continued his descent. I climbed upwind and banked as necessary to visually confirm that he had made a full stop landing and would not be a factor for my crosswind turn, then turned crosswind and landed on the next approach.

Human considerations: we both failed to maintain situational awareness of each other. While I accepted the traffic pattern deviations caused by the aircraft ahead of me (or two, since the one in front of me was deviating due to the guy in front of him) because I only planned a single landing and did not consider "re-forming the pattern properly" to be on my "to-do list" for a single pattern and landing. I simply maintained safe spacing from the traffic ahead of me and made my approach.

Had I looked earlier to verify the position of the traffic following me, I could have easily seen him given where he must have turned to arrive at the point of conflict, but I was concentrating on making sure I was on glide path and that the traffic ahead of me was vacating the runway. This was my first landing back at this airport/aircraft in 11 months with 4 landings in that plane at another airport in the past two months (3 in the past two days), it had just come out of a long period of maintenance. I am ADS-B In/Out equipped and squawking 1200 in Alt mode, but did not recognize receiving any traffic alert for this incident.

The timing of his "turning base" call made perfect sense to follow behind me but also made perfect timing to roll out on final exactly on top of me. Had I recognized that I was on a longer than usual final and looked to the normal base turn spot in the pattern, I could have seen this earlier. Speaking with the other pilot on the ground, he was apologetic for not seeing me when he turned, but I recognize that it is possible that he looked at the extended final (I don't know if he did) and did not see me if my shallow S-turn had me banked away from him at that moment. Additionally, [my aircraft type] is very hard to see from any angle but above/below, so he may not have seen me ahead of him even on downwind.

The moral of the story is this: look around constantly, and if something gets non-standard, look out for people who may not recognize how bent out of shape something might be and are doing "the usual" regardless. If the situation permits, consider changing your own plans to make things get back to standard faster because most others expect standard. Also, 2R4 has a very high volume of student traffic from the civilian schools there as well as Navy student traffic in helicopters. Many times the fixed-wing traffic will use the runway while one or more military helicopters use the parallel taxiways for their traffic patterns. The pressures here are compounded by airspace limitations due to the proximity of class C airspace around the pattern (1NM East, West, and North, also 500 feet above pattern), numerous military outlying Fields, and R-2915A close by. I would recommend that students needing to practice patterns find somewhere else to do so. I rarely do more than one takeoff and departure or one approach to a full stop at 2R4 for this reason.

**Synopsis**

Experimental aircraft pilot reported an NMAC with a small aircraft in the 2R4 airport pattern.
ACN: 1595587 (31 of 50)

**Time / Day**
- Date: 201811
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: APA.Airport
- State Reference: CO
- Relative Position.Angle.Radial: 270
- Relative Position.Distance.Nautical Miles: 10
- Altitude.MSL.Single Value: 8000

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

**Aircraft : 1**
- Reference: X
- ATC / Advisory.TRACON: D01
- Aircraft Operator: Personal
- Make Model Name: Skyhawk 172/Cutlass 172
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Mission: Training
- Flight Phase: Cruise
- Airspace.Class E: D01

**Aircraft : 2**
- Reference: Y
- Aircraft Operator: Military
- Make Model Name: Cirrus Aircraft Undifferentiated
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Mission: Training
- Flight Phase: Cruise
- Airspace.Class E: D01

**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
- Experience.Flight Crew.Last 90 Days: 200
- Experience.Flight Crew.Type: 240
Events

Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 150
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1

We were flying in the Chatfeld Practice box in the Southwest Practice area at 8,000 feet MSL performing steep turns. We performed our clearing turn and made a radio call on the practice area frequency of 122.75. Upon completion of the first 180 degrees of the steep turn, we found ourselves head-on with a Cirrus. The Cirrus made no radio call and did not seem to have us in sight. We made an immediate left and turn and descent to avoid a midair collision. The Cirrus passed over us by approximately 150-200 feet. The Cirrus proceeded to fly through the rest of our practice areas making no radio calls. I made a call over the practice area alerting other pilots of the aircraft, including location, direction of flight, and altitude. The practice area frequency is listed on the Denver sectional for both areas. There is no alert area established for this very busy training location.

Synopsis

C172 instructor pilot reported an NMAC with a Cirrus in the Southwest Practice area near APA.
ACN: 1595573 (32 of 50)

Time / Day
- Date: 201811
- Local Time Of Day: 1201-1800

Place
- Locale Reference: Airport: LAX.Airport
- State Reference: CA
- Altitude: MSL. Single Value: 2500

Environment
- Weather Elements / Visibility: Visibility: 2
- Light: Daylight

Aircraft: 1
- Reference: X
- ATC / Advisory: TRACON: ZZZ
- Aircraft Operator: Air Carrier
- Make Model Name: B787 Dreamliner Undifferentiated or Other Model
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Final Approach
- Route In Use: Other
- Airspace: Class B: ZZZ

Aircraft: 2
- Reference: Y
- ATC / Advisory: TRACON: ZZZ
- Make Model Name: UAV - Unpiloted Aerial Vehicle
- Airspace: Class B: ZZZ

Person: 1
- Reference: 1
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function: Flight Crew: Pilot Not Flying
- Function: Flight Crew: First Officer
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Qualification: Flight Crew: Multiengine
- Qualification: Flight Crew: Instrument
- ASRS Report Number: Accession Number: 1595573

Person: 2
- Reference: 2
- 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)
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
ASRS Report Number.Accession Number : 1595575

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

Narrative: 1
A large drone (approximately 2 feet high) passed the right wing during approach to LAX at glideslope intercept. Distance estimated to be about 100 meters. Reported to ATC.

Narrative: 2
A large drone passed the right wing during approach at glideslope intercept. Reported to ATC. The drone was a barrel shape, cylinder-looking type, black cylinder 2 to 3 ft height. Red light and some rotors at the top. It appeared to be as close as 100 meters from the wing of the aircraft. Seemed stationary and did not appear to react to the aircraft approaching. It appeared to be hovering.

Synopsis
Air Carrier flight crew reported an NMAC with a drone while on final approach to LAX.
ACN: 1594678 (33 of 50)

**Time / Day**
Date: 201811
Local Time Of Day: 1801-2400

**Place**
Locale Reference.
ATC Facility: ZZZ.Tower
State Reference: US
Altitude.AGL.Single Value: 2700

**Aircraft: 1**
Reference: X
ATC / Advisory.
Tower: ZZZ
Make Model Name: HS 125 Series
Crew Size.
Number Of Crew: 2
Flight Plan: IFR
Flight Phase: Descent
Route In Use.
Other
Airspace.
Class D: ZZZ

**Aircraft: 2**
Reference: Y
ATC / Advisory.
Tower: ZZZ
Aircraft Operator: Personal
Make Model Name: Skyhawk 172/Cutlass 172
Crew Size.
Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Final Approach
Flight Phase: Initial Approach
Route In Use: Visual Approach
Airspace.
Class D: ZZZ

**Person**
Reference: 1
Location Of Person.
Facility: ZZZ.Tower
Reporter Organization: Government
Function.
Air Traffic Control: Other / Unknown
Qualification.
Air Traffic Control: Fully Certified
Experience.
Air Traffic Control.
Time Certified In Pos 1 (yrs): 3
ASRS Report Number.
Accession Number: 1594678
Human Factors: Communication Breakdown
Human Factors: Situational Awareness
Communication Breakdown.
Party1: ATC
Communication Breakdown.
Party2: ATC

**Events**
Anomaly.
ATC Issue: All Types
Anomaly.
Conflict: NMAC
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Returned To Clearance
Result.Air Traffic Control : Provided Assistance

Assessments

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

Narrative: 1

Aircraft X was on a VOR/DME to Runway 34. We then had Aircraft Y, inbound from the north. LC1 had Aircraft Y cross over the field to enter the downwind for Runway 34, to avoid the wake turbulence from Aircraft X's circle. Once Aircraft Y had established himself in the downwind at 020 ft, Aircraft X was on a 1 mile final, at approximately 027 ft, and claimed to still have the runway in sight. At this point, I told the Local Controller that he was not going to be able to land, and to climb him to 030 [feet], in order to clear Aircraft Y. The LC1 controller felt it was more important to widen out Aircraft Y's downwind, to avoid Aircraft X. I instructed him again to climb Aircraft X, as he was still descending. The LC1 controller climbed him to 030, while I worked on coordinating a heading for Aircraft X. They both landed safely, after Aircraft X was vectored out for the Visual Approach, and Aircraft Y landed immediately after the go around. Aircraft Y pilot called later and informed us that Aircraft X came within 200 ft of him.

Have a cutoff point. Had we climbed Aircraft X at a 1 mile final when he was too high, he would have been no factor for Aircraft Y.

Synopsis

Tower Controller reported an NMAC due to Local Controller's sequence of two aircraft.
**Time / Day**
Date: 201811
Local Time Of Day: 1201-1800

**Place**
Locale Reference. ATC Facility: NTD.TRACON
State Reference: CA
Altitude. MSL. Single Value: 6500

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

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

**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. Last 90 Days: 63
Experience. Flight Crew. Type: 132
ASRS Report Number. Accession Number: 1594301
Human Factors: Situational Awareness

**Events**
Anomaly. Conflict: NMAC
Detector. Person: Flight Crew
Miss Distance. Horizontal: 500
Miss Distance. Vertical: 0
When Detected: In-flight
Result. Flight Crew: Took Evasive Action
Assessments
Contributing Factors / Situations: Human Factors
Primary Problem: Human Factors

Narrative: 1
[I was] on Flight Following with ATC Pt Mugu, [vicinity of FIM], 6500ft, westbound. [I was] acting as PIC, with another pilot (student) in right seat. Received warning "traffic at 1 o'clock, 6500 feet, heading northeast, type unknown". As traffic was visible, and not on intersecting course, reply was made "Traffic in sight, no factor".

Soon thereafter, the unknown traffic was observed to change course on a right turn, finishing turn on a direct intersection course with our aircraft, at the same altitude. The incoming aircraft had strobe lights active, so the intersecting course was very clear. Evasive action was taken with a standard rate turn to the right.

The incoming aircraft was observed to initiate a left turn, thereby remaining on intersecting course. At this point I increased bank of turn, pulled power and initiated a steep descent. Incoming aircraft was now observed to be on a shallow descent, and very nearly intersecting our course despite evasive actions. It is my judgment that if I had not initiated a steep descent, collision was probable. Estimate that the incoming aircraft passed <500 feet behind, and +/- 200 feet of our altitude. GPS data onboard shows that we descended 300 feet in 15 seconds and altered course by 60deg.

Incoming aircraft observed as probable to be a twin engine, low wing General Aviation type aircraft. Original course and altitude was resumed, and finally ATC was informed that traffic became a factor and evasive actions were taken.

Contributing Factors:
Both aircraft navigating over a TFR (Surface to 5500 feet).
Due to TFR and recent high winds, minimal GA traffic expected to be operating in the airspace
Incoming aircraft was (I understand) not on Flight Following and not in contact with ATC.

Synopsis
C172 pilot reported a NMAC with another light aircraft in vicinity of FIM VOR.
ACN: 1593590 (35 of 50)

**Time / Day**

Date: 201811
Local Time Of Day: 1201-1800

**Place**

Locale Reference.ATC Facility: P80.TRACON
State Reference: OR
Altitude.MSL.Single Value: 3000

**Environment**

Flight Conditions: VMC
Weather Elements/Visibility. Visibility: 50
Light: Daylight
Ceiling.Single Value: 25000

**Aircraft: 1**

Reference: X
ATC / Advisory.TRACON: P80
Make Model Name: Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Cruise
Route In Use.Other
Airspace.Class E: P80

**Aircraft: 2**

Reference: Y
ATC / Advisory.TRACON: P80
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Airspace.Class E: P80

**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
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 400
Experience.Flight Crew.Last 90 Days: 100
Experience.Flight Crew.Type: 320
ASRS Report Number.Accesion Number: 1593590
Human Factors: Situational Awareness

**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
Aircraft of unknown type overtook me. In cruise, I looked out my right window and saw the aircraft approaching from my 4 o'clock at a range of 200 feet, approximately 100 feet below me. Before I ever had the chance to take evasive action, the aircraft had already passed behind me, nearly striking my empennage with approximately 50 feet between the two aircraft.

Synopsis
C172 pilot reported an NMAC with another aircraft in the vicinity of PDX.
**ACN: 1593551 (36 of 50)**

**Time / Day**
- Date: 201811
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 1600

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Light: Daylight
- Ceiling.Single Value: 7000

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

**Aircraft: 2**
- Reference: Y
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Skyhawk 172/Cutlass 172
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Mission: Other
- Flight Phase: Cruise
- Airspace.Class D: ZZZ

**Aircraft: 3**
- Reference: Z
- 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: Other
- Flight Phase: Initial Approach
- Airspace.Class D: ZZZ
**Person**

Reference : 1
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Instructor
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Flight Instructor
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Multiengine
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 323
Experience.Flight Crew.Last 90 Days : 46
ASRS Report Number.Accession Number : 1593551
Human Factors : Situational Awareness
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC

**Events**

Anomaly.Conflict : NMAC
Anomaly.Deviation - Altitude : Excursion From Assigned Altitude
Anomaly.Deviation - Procedural : Published Material / Policy
Anomaly.Deviation - Procedural : FAR
Detector.Person : Flight Crew
Miss Distance.Vertical : 100
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

**Assessments**

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

**Narrative: 1**

This was my first dual given flight. My private student and I were conducting landings to finish off lesson 15 at ZZZ. We came from practice area. The first 3 patterns were okay, traffic was not too busy and the flow was manageable. During these patterns, ZZZ Tower was having a conversation with [another aircraft], about performing 360 over [a reporting point] outside the Class D airspace and how that could cause an issue with traffic coming into the airspace. When the conversation ended, at about my third pattern on upwind, I see a Skyhawk over [another reporting point], and the controller was yelling "[Aircraft Y], are you on frequency!" That crew replied, "yes, we are," Tower replied, "you entered the Delta without contacting me." I believe during that conversation, initially there was an Archer heading southbound outside the pattern to enter traffic pattern for [Runway] XXL. The crew's actions resulted in the pattern flow disturbed. The crew in the Aircraft Z heading south turned and climbed into the pattern to avoid Aircraft Y. We continued our upwind. By the time we were downwind, I saw Aircraft Z above right us about 100 feet. I immediately reacted and descended.
[A solution is to] increase situational awareness and stop teaching if I have to due to the business of congested airspace, and fly the airplane first to maintain safety of the flight.

**Synopsis**

C172 instructor pilot reported a NMAC while in the traffic pattern.
ACN: 1592793 (37 of 50)

Time / Day
Date: 201811
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: CCR.Airport
State Reference: CA

Environment
Flight Conditions: Marginal
Weather Elements / Visibility: Haze / Smoke
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.Tower: CCR
Make Model Name: Light Transport, Low Wing, 2 Turbojet Eng
Operating Under FAR Part: Part 135
Flight Plan: IFR
Mission: Passenger
Nav In Use: GPS
Flight Phase: Final Approach
Route In Use: Visual Approach
Airspace.Class D: CCR

Aircraft: 2
Reference: Y
ATC / Advisory.Tower: CCR
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Flight Phase: Cruise
Airspace.Class D: CCR

Aircraft: 3
Reference: Z
ATC / Advisory.Tower: CCR
Make Model Name: Helicopter
Flight Phase: Final Approach
Airspace.Class D: CCR

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Fractional
Function.Flight Crew: Captain
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Air Transport Pilot (ATP)
ASRS Report Number.Accession Number: 1592793
Human Factors: Communication Breakdown
Human Factors: Situational Awareness
Communication Breakdown. Party1: Flight Crew
Communication Breakdown. Party2: ATC

Events
Anomaly. ATC Issue: All Types
Anomaly. Conflict: NMAC
Anomaly. Inflight Event / Encounter: Weather / Turbulence
Detector. Automation: Aircraft RA
Detector. Person: Flight Crew
Miss Distance. Vertical: 100
When Detected: In-flight
Result. Flight Crew: Executed Go Around / Missed Approach
Result. Flight Crew: FLC complied w/ Automation / Advisory
Result. Flight Crew: Took Evasive Action
Result. Flight Crew: Requested ATC Assistance / Clarification

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

Narrative: 1
While conducting RNAV 19R, circle 01L at CCR during low visibility due to smoke, we noted traffic 100 feet higher than us but directly in our flight path. I was about to query ATC when they called out the traffic to me. I told ATC that we were likely to have a TCAS/RA and as soon as I said that, we got a "Traffic, Traffic" followed by "Climb, Increase Climb" instruction. We immediately turned off the autopilot and began climbing, following the TCAS/RA climb instructions. We executed a missed approach and returned for another circling approach. During the second attempt, we encountered yet another aircraft 100' above us and again in our flight path. During the second attempt, we encountered yet another aircraft 100' above us and again in our flight path. We did not get a TCAS alert but we had to wait until they were clear before making the base [turn] for the approach. I asked Ground Control what had happened and they offered no explanations. I called the tower chief and informed him of what took place. He was unaware of what transpired. We spoke to the Captain of the first plane we encountered and he was pretty shaken up and said "we were very close." I never heard back from the Tower [Manager]. ATIS was reporting 7 miles with smoke but it was likely less than 3 miles. I told the Tower [Manager] this information and noted the beacon was turned on shortly thereafter (IFR). Ceiling was clear.

Synopsis
GA pilot reported a NMAC while on approach to CCR.
**Time / Day**

Date: 201811
Local Time Of Day: 0001-0600

**Place**

Locale Reference. ATC Facility: PAO. Tower
State Reference: CA
Altitude. MSL. Single Value: 1300

**Aircraft: 1**

Reference: X
ATC / Advisory. Tower: PAO
Aircraft Operator: Personal
Make Model Name: Small Aircraft, Low Wing, 1 Eng, Retractable Gear
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: IFR
Flight Phase: Final Approach
Route In Use. Other
Airspace. Class D: PAO

**Aircraft: 2**

Reference: Y
ATC / Advisory. Tower: NUQ
Aircraft Operator: Government
Make Model Name: Military
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Tactical
Flight Phase. Other
Route In Use: None
Airspace. Class D: NUQ

**Aircraft: 3**

Reference: Z
ATC / Advisory. Tower: PAO
Aircraft Operator: Personal
Make Model Name: Small Aircraft, Low Wing, 1 Eng, Retractable Gear
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: IFR
Airspace. Class D: PAO

**Person: 1**

Reference: 1
Location Of Person. Facility: PAO. Tower
Reporter Organization: Government
Function. Air Traffic Control: Local
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1592693
Human Factors : Communication Breakdown
Human Factors : Situational Awareness
Human Factors : Distraction
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Person : 2
Reference : 2
Location Of Person.Facility : NCT.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) : 12
ASRS Report Number.Accession Number : 1592694
Human Factors : Situational Awareness
Human Factors : Confusion
Human Factors : Distraction

Person : 3
Reference : 3
Location Of Person.Facility : NCT.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) : 15
ASRS Report Number.Accession Number : 1592696
Human Factors : Distraction
Human Factors : Situational Awareness

Person : 4
Reference : 4
Location Of Person.Facility : PAO.Tower
Reporter Organization : Government
Function.Air Traffic Control : Local
Qualification.Air Traffic Control : Fully Certified
ASRS Report Number.Accession Number : 1592697
Human Factors : Confusion
Human Factors : Situational Awareness

Person : 5
Reference : 5
Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Private
Qualification.Flight Crew : Instrument
Experience.Flight Crew.Total : 884
Experience.Flight Crew.Last 90 Days : 33
Experience.Flight Crew.Type : 63
Events

Anomaly.ATC Issue : All Types
Anomaly.Conflict : NMAC
Detector.Person : Flight Crew
Detector.Person : Air Traffic Control
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
Contributing Factors / Situations : Procedure
Primary Problem : Procedure

Narrative: 1

Aircraft X was inbound IFR on the GPS Runway 31 approach. Aircraft Y, a VFR flight of 3 [military aircraft], was holding over Moffett Field (NUQ) in a left orbit at approximately 1,100 feet waiting for the appropriate time to overfly Levi Stadium. I issued traffic to Aircraft X when the flight of 3 were approximately 3 NM away and he reported the traffic insight. The [flight of 3] turned left directly towards Aircraft X on the approach at a similar altitude. Aircraft X continued his transmission reporting them insight and said he was turning to avoid them as they turned into him around a 3NM final to Runway 31. After he passed the traffic I asked if Aircraft X had the airport in sight, he replied he did. He then mentioned wanting to talk about the jets passing him and I replied that I would give him the tower number to call once he landed. After Aircraft X landed without incident, I gave him the tower number and when he called he wanted to report the NMAC.

This was the second NMAC report I had to file with one of my IFR arrivals and Aircraft Y [flight] orbiting over Moffett Field in less than 15 minutes. I had tried earlier to coordinate with Moffett to ensure the [flight of 3] wouldn't be a conflict with Aircraft X inbound and still a situation developed. I was given an impression that Moffett was having some difficulty with holding instructions to flight, but not something I can confirm. Either way, the speed the [flight of 3] were orbiting over NUQ made it very hard for me to miss with my slower traffic. If I had a better idea of what they were doing, I could then issue better advisories to my pilots to avoid the unsafe proximity they got into.

On occasion there was military fly over/bys at Levi Stadium. It might help if in the planning phases for these events that a representative from Moffett, San Jose, Palo Alto, NorCal Approach and the flight all have a conference call or in person meeting to discuss the operation so that everyone can get on the same page and avoid anything like this from happening again.

Narrative: 2

Aircraft Z was on the VOR approach to PAO. While Aircraft Z was on a 3 mile final to PAO at 1,500, [flight of 3 military aircraft] were in the VFR pattern at NUQ at 1,600 over flew Aircraft Z.
The weather in the area was smoky and visibility was not good. There was an aircraft operating over the stadium of the departure end of SJC airport dropping streamers and parachute jumpers. It was a lot of coordination and a lot of detail to keep that situation safe and not to delay SJC departures too much.

The whole situation had a lot of things line up for something to happen. We hardly ever have [aircraft] holding in the NUQ pattern let alone parachute operation [nearby]. Aircraft hardly ever do the PAO VOR approach. In addition the was a lot of smoke in the area due to the [local] Fire [activity].

Maybe we could have held the [military aircraft] some other place other than over an IFR final approach course.

The [military aircraft] were talking with NUQ tower and Aircraft Z was on a different frequency talking to PAO tower.

**Narrative: 3**

I was working the Licke and Hooks arrival sectors in to the South Bay. I cleared Aircraft X for the GPS approach into PAO, pointed the aircraft out to NUQ tower, advised the pilot that NUQ had [a flight of 3 military aircraft] in the pattern and transferred communications to PAO tower. I witnessed Aircraft X and Aircraft Y flight in very close proximity over NUQ. I assumed the tower was providing separation in their airspace. I later learned that Aircraft X was filing a NMAC. About 20 minutes earlier a coworker experienced a similar NMAC with Aircraft Z and Aircraft Y [military aircraft flight].

It was a strange evening with the smoke from the [nearby] fires greatly limiting visibility, creating IFR weather. Traffic was unusually busy. Aircraft Y flight was holding over NUQ for the flyby.

We should not have fly overs at [local sports] stadium. The stadium was built in a horrendous place for air traffic. The FAA should not accommodate these requests.

In order to accomplish these requests San Jose, NUQ, PAO, and maybe SQL should be shut down. We have tried at least 3 places to hold aircraft for these fly overs and each one has had a safety related issue. I also recommend the flights demonstrations arrive later. Aircraft Y flight showed up almost 45 minutes prior to the fly over. That's asking for trouble. The airspace over NUQ is extremely congested.

**Narrative: 4**

Aircraft Z was IFR inbound to Palo Alto on the VOR approach to Runway 31. Aircraft Y, a flight of 3 [military aircraft] was VFR inbound to Moffett Field (NUQ) to hold over the airport in preparation for a flyby over [local sports stadium]. I observed the course of the [flight of 3] on approach to NUQ and issued traffic to Aircraft Z. As the aircraft got closer without Aircraft Z spotting the traffic, I called Moffett on a shout line and asked if they had my traffic in sight. Moffett replied negative and I said I am going to issue the traffic and got off the line. I then issued a safety alert to Aircraft Z who reported seeing the [flight of 3] fly by in close proximity. The pilot was able to continue the approach and landed without incident. The pilot then heard another traffic conflict with the [military aircraft] and another aircraft inbound to Palo Alto and decided he wanted to call Palo Alto Tower and file a NMAC report.

This was a difficult situation for me to try and resolve as the aircraft was IFR on approach
and nobody coordinated with me what the [military aircraft] were doing. I tried reaching out to Moffett to inquire and due to the speed of the [military aircraft] it quickly became a traffic alert/NMAC before I could recommend a safe action to Aircraft Z. Moffett seemed unaware there was traffic in their airspace landing Palo Alto. After the [military aircraft] passed Aircraft Z, I inquired if they were able to continue the approach, which they did and landed without further incident. I did review that Aircraft Z had not been pointed out to Moffett Field via the automated feature, I do not know if NCT had otherwise coordinated with NUQ.

The weather at Palo Alto at the time was below VFR due to smoke, with visibility at 2 and 1/2 statute miles.

I cannot speak to how much information was given to Moffett Field or when regarding Aircraft Z transitioning IFR on the VOR approach to Palo Alto, or when they give communications on Aircraft Y flight to figure out what they were doing. That information needs to be shared earlier to all parties, whether by NCT of Moffett Tower, so that appropriate traffic calls can be issued and if needed control instructions issued to ensure separation.

**Narrative: 5**

I was flying on an active IFR flight plan to PAO, with a clearance for GPS 31. During the approach, PAO Tower advised me of a "Flight of 3" circling over Moffett (NUQ) and passing beneath me at the PUDBY intersection. I looked, but did not visually make contact. Tower advised they were about 1000 feet below me and not a factor, as they were heading southeast.

I crossed PUDBY at 2000 MSL and configured the aircraft for final approach. Visibility was about 2 miles and I did not have the field in sight. At about 1000 MSL, during the final approach, Tower suddenly advised me of "Traffic one o'clock, three miles, one thousand one hundred, and flight of three crossing right to left." At this point I made visual contact with the aircraft and noted that they were actually flying in a turn towards my location. I made an evasive turn of about 20 degrees right, and the aircraft passed in front of me and about 1000 feet off my left wing in the opposite direction of my flight at my same altitude.

PAO advised "If you need to climb up or maneuver it's completely your discretion" as I was making the evasive turn. At about this point I did finally get the PAPI lights in sight and reported the airport in sight. I was able to continue and safely land from my deviated procedure.

I find it highly questionable what the [military aircraft] were doing flying "VFR" across an active final approach course at an IFR airport during low visibility. I am thankful that they coincidentally happened to pass in front of my aircraft, allowing me to take evasive action. Since military aircraft do not participate properly in the NAS with ADS-B, I had no information on their speed, altitude, or intentions until the moment of finding myself precariously close to them.

I feel this incident put the lives of myself and my family at risk. I telephoned PAO tower on the ground, and the tower controller advised me he was filing an incident report about it as well.

**Synopsis**

Controllers and GA pilot reported a NMAC with military aircraft holding for a fly over.
ACN: 1592543

Time / Day
Date: 201811
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: BOS.Airport
State Reference: MA
Altitude.MSL.Single Value: 3000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft: 1
Reference: X
Aircraft Operator: Air Carrier
Make Model Name: Commercial Fixed Wing
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Initial Approach

Aircraft: 2
Reference: Y
Make Model Name: UAV - Unpiloted Aerial Vehicle
Operating Under FAR Part: Part 91
Flight Phase: Cruise

Person
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: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1592543

Events
Anomaly.Conflict: NMAC
Anomaly.Inflight Event / Encounter: Object
Detector.Person: Flight Crew
When Detected: In-flight

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

Narrative: 1

On arrival into BOS, on what was effectively base leg prior to turning final for Runway 22L, just as we were beginning a descent out of 3000 feet, I saw a blue and white UAV pass directly under the nose of the aircraft. I would estimate the distance below us to have been 300 feet. The encounter lasted less than 2-3 seconds from initial sighting to the UAV passing out of sight beneath our aircraft. Blue and white and 4-rotor, I think, though I only caught the brief glimpse of it. No action was taken on our part as the device was gone before we could do anything. I notified ATC of the encounter. I transferred control of the aircraft briefly to the First Officer so I could concentrate on the communication as any danger was past. The First Officer had been "heads down" for that brief moment "sequencing the approach", so she never saw anything. Her first knowledge of the event was when I started talking to ATC. The controller asked the usual questions, and then cleared us for the approach. Normal approach and landing. Taxied to the gate. No further action was taken. Neither the First Officer nor I had any contact with anyone other than company people about the incident. An idiot with a drone. Nothing we could have done. No way for the ATC people to know about it. Ban all drone use within 50 miles of any airport. Arrest and jail anyone caught violating this rule.

Synopsis

Air carrier Captain reported airborne conflict with a UAV on base leg into BOS.
**Time / Day**

Date: 201811  
Local Time Of Day: 0601-1200

**Place**

Locale Reference: ATC Facility: MDT.TRACON  
State Reference: PA  
Altitude: MSL. Single Value: 6500

**Environment**

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

**Aircraft: 1**

Reference: X  
ATC / Advisory: TRACON: MDT  
Aircraft Operator: Corporate  
Make Model Name: Cessna 425/441 Conquest I/Conquest II  
Operating Under FAR Part: Part 91  
Flight Plan: None  
Mission: Test Flight  
Flight Phase: Cruise  
Route In Use: None  
Route In Use: VFR Route  
Airspace: Class E: MDT

**Aircraft: 2**

Reference: Y  
ATC / Advisory: TRACON: MDT  
Make Model Name: Twin Otter DHC-6  
Airspace: Class E: MDT

**Person**

Reference: 1  
Location Of Person: Aircraft: X  
Location In Aircraft: Flight Deck  
Reporter Organization: Corporate  
Function: Flight Crew: Captain  
Function: Flight Crew: Pilot Flying  
Function: Flight Crew: Single Pilot  
Qualification: Flight Crew: Commercial  
Qualification: Flight Crew: Multiengine  
Qualification: Flight Crew: Instrument  
Experience: Flight Crew: Total: 8217  
Experience: Flight Crew: Last 90 Days: 93  
Experience: Flight Crew: Type: 1421  
ASRS Report Number: Accession Number: 1592285
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.Person : Flight Crew
Miss Distance.Horizontal : 20
Miss Distance.Vertical : 0
When Detected : In-flight
Result.Flight Crew : Took Evasive Action
Result.Flight Crew : Requested ATC Assistance / Clarification

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

Narrative: 1
I was maneuvering in the practice area conducting a routine maintenance check flight in Cessna Conquest II at 6,500 feet. This flight was conducted using radar flight following services from Approach Control. While on an east bound heading south of the airport and north of the mountain ridges, a DHC6 Twin Otter appeared at my 12 o'clock position in a steep climb west bound. I made an immediate left turn to avoid impact as the Twin Otter was just slightly to the right of my centerline of travel. If I would have made a right turn, impact would have been imminent. From the time the Twin Otter appeared in my sight, there was less than five seconds to impact of the two planes. As I made the left turn I was still concerned that the Twin Otter might strike the belly of the Conquest II. The Twin Otter made no attempt to maneuver to avoid the converging paths. I immediately advised Approach of the near miss and was advised that it is not their responsibility to avoid collisions during VFR operations. The Twin Otter was in contact with Approach and receiving VFR flight advisories. At no time did Approach notify either aircraft of collision advisory warnings. I called Approach and spoke with a Supervisor who was very helpful in reviewing the incident and assured me he would be filing an incident report through the ATC system.

There were three individuals responsible for ensuring safety of flight during these operations. There was a failure in two of these three individuals. Though very traumatic, luckily no one was hurt. If these failures occur again, it could be very deadly and not restricted to small aircraft. I am willing to speak in detail about this incident.

Synopsis
Twin Cessna pilot reported an NMAC while receiving VFR flight following but not advised of conflicting traffic.
**ACN: 1591187** (41 of 50)

**Time / Day**

Date: 201811
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: SQL.Airport
State Reference: CA
Relative Position.Distance.Nautical Miles: 1
Altitude.MSL.Single Value: 850

**Aircraft : 1**

Reference: X
ATC / Advisory.Tower: SQL
Aircraft Operator: FBO
Make Model Name: Skyhawk 172/Cutlass 172
Operating Under FAR Part: Part 91
Mission: Training
Flight Phase: Initial Climb
Airspace.Class D: SQL

**Aircraft : 2**

Reference: Y
ATC / Advisory.Tower: SQL
Make Model Name: Helicopter
Mission: Photo Shoot
Flight Phase: Cruise
Airspace.Class D: SQL

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Instructor
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Total: 1300
Experience.Flight Crew.Last 90 Days: 150
Experience.Flight Crew.Type: 1100
ASRS Report Number.Accession Number: 1591187
Human Factors: Situational Awareness

**Events**

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

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

Narrative: 1

A helicopter contacted San Carlos tower requesting to do photo work over the Oracle campus at 1,000 feet. The Oracle campus is NW of the SQL airport and is right under the standard traffic pattern. It is roughly positioned at the crosswind leg of the traffic pattern. Traffic pattern altitude at SQL is 805 MSL. The helicopter was in this area for approximately 15-20 minutes. I was with a student in the traffic pattern at SQL. We were cleared for takeoff with no restrictions on altitude or traffic pattern turns. As we were in the takeoff climb we had visual contact of the helicopter directly ahead. Due to noise abatement procedures, the upwind/departure leg is flown nearly to the Oracle campus.

As we were approaching the location where we could turn crosswind, we still had visual contact with the helicopter. The distance between our airplane and the helicopter at that time is estimated to be about 200 feet vertically and approximately 400 feet horizontally. As we turned crosswind we lost sight of the helicopter but could catch glimpses of it at our 6 o'clock. At that time the student climbed slightly above pattern altitude to around 900 feet and we were probably within 100 feet of the helicopter. The onboard traffic display showed the traffic at 100 feet above us. It was only at this point that the Tower Controller direct us to extend the crosswind leg, which we did. It appeared that this caused our airplane and the helicopter to be on the same course and separated by only 100 feet.

In hindsight it would have been safer to have taken different actions. For example, we could have ignored the noise abatement procedure and turned crosswind earlier to avoid the path of the helicopter or the Tower could have told the helicopter to climb to a higher altitude or move out of the traffic pattern area.

We were depending on that helicopter to not descend below 1,000 feet and maintain visual separation from us all while it was performing a photo mission. In hindsight, that was likely not the safest thing to do.

Synopsis
C172 flight instructor reported an NMAC with a helicopter in the pattern at SQL.
**Time / Day**

Date: 201811
Local Time Of Day: 1201-1800

**Place**

Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 10
Altitude.MSL.Single Value: 1600

**Environment**

Weather Elements / Visibility.Visibility: 10
Light: Daylight

**Aircraft : 1**

Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Personal
Make Model Name: Skylane 182/RG Turbo Skylane/RG
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Personal
Flight Phase: Descent
Route In Use: Direct
Airspace.Class C: ZZZ

**Aircraft : 2**

Reference: Y
Aircraft Operator: Government
Make Model Name: Helicopter
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Phase: Cruise
Route In Use.Other

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 2400
Experience.Flight Crew.Last 90 Days: 30
Experience.Flight Crew.Type: 1500
ASRS Report Number.Accession Number: 1591110
Human Factors: Communication Breakdown
Narrative: 1

Returning to ZZZ from the south at 4500 feet (low to avoid the strong north wind) with flight following, I advised Approach I was beginning descent to ZZZ. I have an iPad with ForeFlight on my control yoke and this displays the ADS-B information. At 2200 feet in descent, just south of the ZZZ1 area, the controller told me to hold at 2000 feet. I didn't know why until I saw a target westbound from ZZZ1, as if on takeoff/departure. It appeared it would intersect with my path, but it didn't climb above about 1400 feet. I expected to be cleared to descend again after the other aircraft crossed my path. But the aircraft turned north just before my path and went north, paralleling my path. I figured he must be making a right-traffic return to ZZZ1. But he didn't turn, he kept heading north. I turned about 20 degrees left (to about 310 degrees) to diverge from the other aircraft and coincidentally, to be directly aligned with the ZZZ runway. And because I was too high, getting close to ZZZ, I slowed to approach speed and dropped flaps in preparation for a quick descent. This also allowed me to drop back behind the other aircraft so I could descend behind him. ATC cleared me to descend and I immediately started down.

The other aircraft then turned left, to the west, and presented a collision hazard. I turned about 30 degrees right to go behind the aircraft. He turned south, headed directly at me. I turned east in a steep turn and either leveled off or climbed a bit. The other aircraft went under my plane and seemed to be only 200 to 300 feet below me. It was a law-enforcement helicopter and it apparently had decided to circle there. I made a minor, not strong-enough complaint to ATC and he told me to change to local frequency (He was very busy). I was panicking and I don't remember how I got away from the jerk, but I remember making a steep, full-flap descent and normal landing at ZZZ.

There are two possible ways to interpret this. One is that the helicopter pilot knew where I was all the time and was having fun bullying me. The other, more likely, is that this guy didn't look at all for other aircraft and was focused on events on the ground. I can't believe that someone who flies all the time in busy airspace like [here] would not be using ADS-B to be aware of other traffic, but if this guy had it, he didn't look at it any more than he
looked around for traffic visually. Helicopters operating regularly in busy areas should be required to have ADS-B In and they should be trained to look for other aircraft. Or they should be in a patrol car instead of doing dangerous things in the air over populated areas.

**Synopsis**

Cessna 182 pilot reported an NMAC with a law enforcement helicopter.
ACN: 1590541 (43 of 50)

**Time / Day**
- Date: 201810
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.Airport: EWR.Airport
- State Reference: NJ
- Altitude.MSL.Single Value: 1000

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

**Aircraft : 1**
- Reference: X
- ATC / Advisory.TRACON: N90
- Aircraft Operator: Air Taxi
- Make Model Name: Bell Helicopter 407
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Passenger
- Flight Phase: Climb
- Airspace.Class B: NYC
- Airspace.Class E: N90

**Aircraft : 2**
- Reference: Y
- ATC / Advisory.Tower: EWR
- ATC / Advisory.TRACON: N90
- Make Model Name: Skyhawk 172/Cutlass 172
- Flight Phase: Cruise
- Airspace.Class B: NYC
- Airspace.Class E: N90

**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
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Flight Instructor
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Total: 6140
Experience.Flight Crew.Last 90 Days : 130
Experience.Flight Crew.Type : 3700
ASRS Report Number.Accession Number : 1590541
Human Factors : Confusion
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : ATC
Analyst Callback : Completed

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

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

Narrative: 1
I had just finished a left turn in a climb from a westerly heading in front of the Statue of Liberty from 500 feet.

In the turn I contacted EWR tower and asked for an alpha tour. Newark clears me in and tells me there are numerous other aircraft in the vicinity so I look around everywhere to see if there are more than what I already have seen which is about 3 other helicopters between statue of Liberty and Governors Island. I also look to the south and above me and I see no additional aircraft which will affect me.

As I'm heading northbound just south and slightly west of Governors Island I notice a fixed Wing which looked like a white Cessna 172 above and to the left of me about 50 feet above. I'm climbing through 900 feet-1,000 feet as I see this. I immediately stop climbing and slow down my speed to around 90 KT from a 100 KT and turn slightly right. It looks like he's passing over me and turning to the left either to avoid me or just because he has just decided to make a turn to the left to follow the Hudson left of freedom tower.

I'm not speaking to him and I'm busy listening to Newark for other traffic and also looking out for other traffic. The Cessna is probably on river frequency and continues ahead of me and I continue my climb behind the Cessna to 1,500 feet which Newark has cleared me to.

Callback: 1
Reporter stated that no further information was available beyond what is provided in the ASRS report that was submitted.

Synopsis
A helicopter pilot reported an NMAC while giving a New York City tour.
**ACN: 1589662 (44 of 50)**

**Time / Day**
- Date: 201810
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Altitude.MSL.Single Value: 1500

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

**Aircraft**
- Reference: X
- ATC / Advisory.Tower: ZZZ
- Aircraft Operator: Personal
- Make Model Name: PA-28 Cherokee/Archer/Dakota/Pillan/Warrior
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Flight Phase: Final Approach
- Route In Use: Visual 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
- Experience.Flight Crew.Total: 14000
- Experience.Flight Crew.Last 90 Days: 65
- Experience.Flight Crew.Type: 1000
- ASRS Report Number.Accession Number: 1589662
- Human Factors: Time Pressure
- Human Factors: Situational Awareness

**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: 150
- Miss Distance.Vertical: 100
- When Detected: In-flight
- Result.Flight Crew: Became Reoriented
Result: Flight Crew: Took Evasive Action
Result: Air Traffic Control: Issued Advisory / Alert

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

Narrative: 1
I advised Tower of my position 7 miles to the Northeast of the airport which coincidentally aligns me with the final approach. On my flight path to ZZZ, tower advised me to join over the [VFR waypoint] which was approximately in my 10 o'clock position. At the time I noticed another aircraft on my ADS-B screen at a co-altitude in that area. That aircraft was cleared for the left base. I advised tower that I am in a 6 mile final and that turning would put me head-on with that traffic on the wide left base. Tower controller with an unprofessional manner said that he did not want me on final. I complied with his instructions, and after rolling out on a heading to the [VFR waypoint] I was then forced to execute a hard turn back to the right to avoid a head-on collision with the traffic that I previously pointed out to the controller. The concern that I have here is that this same controller on more than one occasion has given me vectors that conflict with other traffic and at times seems to have a loss of situational awareness.

Synopsis
GA pilot reported an airborne conflict as a result of ATC not providing adequate separation between aircraft.
ACN: 1589656 (45 of 50)

Time / Day
  Date: 201810
  Local Time Of Day: 1201-1800

Place
  Locale Reference.Airport: AVX.Airport
  State Reference: CA
  Relative Position.Distance.Nautical Miles: 5
  Altitude.MSL.Single Value: 2600

Environment
  Flight Conditions: VMC
  Light: Daylight

Aircraft
  Reference: X
  ATC / Advisory.TRACON: SCT
  Make Model Name: Skyhawk 172/Cutlass 172
  Crew Size.Number Of Crew: 2
  Operating Under FAR Part: Part 91
  Flight Plan: None
  Mission: Training
  Flight Phase: Descent
  Route In Use: Direct

Person
  Reference: 1
  Location Of Person.Aircraft: X
  Location In Aircraft: Flight Deck
  Reporter Organization: Personal
  Function.Flight Crew: Pilot Not Flying
  Function.Flight Crew: Instructor
  Qualification.Flight Crew: Commercial
  Qualification.Flight Crew: Flight Instructor
  Qualification.Flight Crew: Instrument
  ASRS Report Number.Accession Number: 1589656
  Human Factors: Training / Qualification
  Human Factors: Situational Awareness

Events
  Anomaly.Conflict: NMAC
  Anomaly.Deviation - Procedural: Published Material / Policy
  Anomaly.Deviation - Procedural: Clearance
  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 : Aircraft
Contributing Factors / Situations : Human Factors
Primary Problem : Aircraft

Narrative: 1
On a VFR training flight to Catalina Airport, we were receiving flight following from SoCal Approach. The Approach Controller advised that there were multiple aircraft approaching Catalina Airport and to change to advisory frequency. Due to the high volume of traffic, I had the student remain clear of the traffic pattern and hold at pattern altitude, 5 NM North of the airport. Three (3) aircraft reported 45-degree entry to the downwind for runway 22 almost simultaneously.

I instructed the student to continue holding until we could sequence into the traffic pattern behind the number 3 aircraft. As we continued holding with all lights on the aircraft illuminated, Aircraft Y reported entering the pattern downwind. All of the traffic was indicated on the Traffic Information Service Broadcast. As the student continued holding north, I observed Aircraft Y with the landing light illuminated climbing straight at our aircraft on about a 340 heading at our 2 o’clock position. It was converging as it appeared stationary in the wind screen. Aircraft Y did not begin to alter its course so I realized the pilot did not see us.

As Aircraft Y neared, I quickly took the controls and immediately initiated a diving left turn away from the traffic. The aircraft lost separation, however, I was able to see and avoid the conflicting traffic. I am not sure if Aircraft Y was departing or arriving as it was 4NM north of the field. We sequenced into the number 3 position and landed at Catalina without complications. The problem arose when multiple aircraft began converging on Catalina Island on a [busy] afternoon. The traffic pattern and CTAF became congested very quickly. In the future, when multiple aircraft are arriving, I will hold 5-10NM away from the airport and wait until the pattern clears. Additionally, I will maintain see and avoid scanning procedures, monitor TIS-B, and monitor aircraft position reports broadcast on CTAF.

Synopsis
C172 instructor reported an NMAC while holding outside of the traffic pattern waiting to get in.
ACN: 1589383 (46 of 50)

Time / Day
Date: 201810
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: O69.Airport
State Reference: CA
Relative Position.Distance.Nautical Miles: 1
Altitude.MSL.Single Value: 600

Environment
Weather Elements / Visibility.Visibility: 10
Weather Elements / Visibility.Other
Light: Daylight

Aircraft: 1
Reference: X
ATC / Advisory.CTAF: O69
Make Model Name: Small Aircraft
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Landing
Route In Use: None
Airspace.Class G: O69

Aircraft: 2
Reference: Y
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Flight Phase: Final Approach
Airspace.Class G: O69

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: FBO
Function.Flight Crew: Instructor
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 6000
Experience.Flight Crew.Last 90 Days: 180
Experience.Flight Crew.Type: 1000
ASRS Report Number.Accession Number: 1589383
Human Factors: Training / Qualification
Human Factors: Communication Breakdown
Communication Breakdown.
Party1 : Flight Crew
Communication Breakdown.
Party2 : Flight Crew

Events
Anomaly.Conflict : NMAC
Anomaly.Deviation - Procedural : Published Material / Policy
Detector.Person : Flight Crew
Miss Distance.Horizontal : 300
Miss Distance.Vertical : 0
Result.Flight Crew : Took Evasive Action

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

Narrative: 1
The active runway was 29. I was on base leg with my student, there were 3 other planes in the pattern and 4 waiting for takeoff at the end of the runway when Aircraft Y did an apparent go around from [Runway] 11 and cut right in front of me. This distance was 300 ft or less and caused me to use evasive action. They had not used the radio at all. Then they asked what was the active runway. I told them, then they lined up for Runway 23 which we do not have, for landing. The pattern was very busy and if they had flown over the field they easily could have seen what runway was the active. This was witnessed by all the planes at the 29 end that were waiting for takeoff.

Synopsis
Instructor pilot reported a NMAC with an aircraft that was not flying the correct pattern.
Time / Day
  Date : 201810
  Local Time Of Day : 0601-1200

Place
  Locale Reference.Airport : CPM.Airport
  State Reference : CA
  Altitude.AGL.Single Value : 50

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

Aircraft
  Reference : X
  ATC / Advisory.CTAF : CPM
  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 : None

Person
  Reference : 1
  Location Of Person.Aircraft : X
  Location In Aircraft : Flight Deck
  Reporter Organization : Personal
  Function.Flight Crew : Single Pilot
  Qualification.Flight Crew : Commercial
  Qualification.Flight Crew : Instrument
  Experience.Flight Crew.Total : 2775
  Experience.Flight Crew.Last 90 Days : 10
  Experience.Flight Crew.Type : 1430
  ASRS Report Number.Accession Number : 1589358
  Human Factors : Situational Awareness
  Human Factors : Communication Breakdown
  Communication Breakdown.Party1 : Flight Crew
  Communication Breakdown.Party2 : Flight Crew

Events
  Anomaly.Conflict : NMAC
  Anomaly.Deviation - Procedural : Published Material / Policy
  Detector.Person : Flight Crew
  Miss Distance.Horizontal : 100
Miss Distance.Vertical : 50
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments

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

Narrative: 1
I waited for a helicopter to land. After it did and it was no longer visible on the runway, I announced my takeoff, taxied on the runway, and started my takeoff run. The helicopter was still at the far end of the runway, apparently practicing hovering, and had not been apparent to me. [Due to the paint color, it] disappeared in the background clutter. I climbed away to the left and it veered off to the right.

Helicopters are asked not to hover taxi on the runways, but they do. When done at the far end of a 3,300-foot runway they are difficult to see against the background. In this case, I should have repeated my calls and specifically asked for verification that the helicopter was clear of the runway.

Synopsis
GA pilot reported a NMAC with a helicopter doing hover work on the runway during takeoff at CPM non-towered field.
**Time / Day**
- Date: 201810
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference
- ATC Facility: MUFH.ARTCC
- State Reference: FO
- Altitude.MSL.Single Value: 36000

**Environment**
- Flight Conditions: VMC

**Aircraft**
- Reference: X
- ATC / Advisory.Center: MUFH
- Aircraft Operator: Air Carrier
- Make Model Name: B737-800
- Crew Size.Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Cruise

**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)
- Qualification.Flight Crew: Instrument
- Qualification.Flight Crew: Multiengine
- ASRS Report Number.Accession Number: 1589197
- Human Factors: Communication Breakdown
- Human Factors: Situational Awareness
- Human Factors: Workload
- 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: Pilot Not Flying
- Function.Flight Crew: First Officer
- Qualification.Flight Crew: Air Transport Pilot (ATP)
- Qualification.Flight Crew: Instrument
Events

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

Assessments

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

Narrative: 1

At FL360 over Cuba flying northbound, my FO (First Officer) was leaving the cockpit on a restroom break before our planned descent when Havana Center began issuing instructions "for spacing." I understood a left turn to heading 330 which was approximately a 50 degree west course change. I asked the Controller four times to repeat the rest of the clearance. He was extremely difficult to understand, and I thought he was either telling me about traffic at FL350 (which might explain the hard spacing turn), or maybe he was telling me to descend to FL350. I started looking for an airplane visually. Also the cockpit exchange was happening and the Flight Attendant settled in behind me with questions about our arrival time. After repeatedly questioning the Controller, Havana Center eventually told me to descend to FL320 and something about 1,000 feet per minute. Without being able to understand every word of his clearances, I assumed he wanted at least 1,000 feet per minute so he could turn me back on course at a new lower altitude. At this point I'm flying single pilot on autopilot with the oxygen mask while trying to visually spot traffic. I dialed in FL320 and pressed Flight Level Change. I was too busy to program VNAV, and I don't like using Vertical Speed at high altitude because it doesn't offer speed protection. At approximately 32,800 feet I received an RA warning on my TCAS. I immediately disconnected the autopilot and leveled the airplane. My co-pilot felt the abrupt level off from the forward lavatory and began calling the cockpit shortly thereafter. It was then that I saw the other aircraft right below me and barely a wing span to my left just appear from under my aircraft. I broadcast my level off and the RA warning to the Controller who incredulously told me to continue descent to FL300, and something about the other aircraft also descending at 1,000 feet per minute. In the moment, considering the Controller had turned me off course and on top of the other aircraft and then issued not just a descent, but further descent even after the RA began, I felt he was deliberately trying to make our airplanes collide. I refused to continue descent and he continued with his 1,000 feet per minute explanation. At some point [another] controller took over, hopefully a supervisor, who handled our aircraft briefly then handed us over to Miami Center.

I have been flying commercial aircraft for over 30 years and I have never had a controller deliberately stack two aircraft and then issue a simultaneous clearance to descend through the same altitudes and expect the descent rate to keep them apart. That's what I think he tried to do in retrospect. In the moment, even deciphering his English was a huge challenge (and I'm semi-fluent in Spanish). It is my experience that aircraft are to be
given hard altitude separation and stepped down appropriately, or turned and given lateral separation. It appears this Havana Controller removed lateral separation with his vectoring, and then removed vertical separation by issuing descent clearances through common altitudes.

**Narrative: 2**

[Report narrative contained no additional information.]

**Synopsis**

B737-800 flight crew reported an NMAC in Havana airspace due to language difficulties and poor descent instructions.
**Time / Day**

Date: 201810
Local Time Of Day: 0601-1200

**Place**

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

**Environment**

Flight Conditions: VMC
Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Air Carrier
Make Model Name: B787 Dreamliner Undifferentiated or Other Model
Crew Size.Number Of Crew: 3
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Passenger
Nav In Use: FMS Or FMC
Flight Phase: Landing
Flight Phase: Final Approach
Airspace.Class B: ZZZ

**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: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 11428
Experience.Flight Crew.Last 90 Days: 130
Experience.Flight Crew.Type: 174
ASRS Report Number.Accession Number: 1588501
Human Factors: Distraction
Human Factors: Situational Awareness
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 : Instrument
Qualification : Flight Crew : Multiengine
Qualification : Flight Crew : Air Transport Pilot (ATP)
Experience : Flight Crew : Total : 8779
Experience : Flight Crew : Last 90 Days : 250
Experience : Flight Crew : Type : 3614
ASRS Report Number : Accession Number : 1588797
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Communication Breakdown : Party 1 : Flight Crew
Communication Breakdown : Party 2 : ATC

Person : 3
Reference : 3
Location Of Person : Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Air Carrier
Function : Flight Crew : First Officer
Function : Flight Crew : Pilot Not Flying
Qualification : Flight Crew : Instrument
Qualification : Flight Crew : Multiengine
Qualification : Flight Crew : Air Transport Pilot (ATP)
Experience : Flight Crew : Total : 10257
Experience : Flight Crew : Last 90 Days : 250
Experience : Flight Crew : Type : 4564
ASRS Report Number : Accession Number : 1588799
Human Factors : Situational Awareness
Human Factors : Distraction
Human Factors : Communication Breakdown
Communication Breakdown : Party 1 : Flight Crew
Communication Breakdown : Party 2 : ATC

Events
Anomaly : ATC Issue : All Types
Anomaly : Conflict : Airborne Conflict
Anomaly : Conflict : NMAC
Detector : Person : Air Traffic Control
Detector : Person : Flight Crew
When Detected : In-flight
Result : Flight Crew : Requested ATC Assistance / Clarification
Result : Flight Crew : Executed Go Around / Missed Approach
Result : Air Traffic Control : Issued New Clearance
Result : Air Traffic Control : Separated Traffic
Result : Air Traffic Control : Issued Advisory / Alert

Assessments
Contributing Factors / Situations: Airport
Contributing Factors / Situations: Airspace Structure
Contributing Factors / Situations: Chart Or Publication
Contributing Factors / Situations: Company Policy
Contributing Factors / Situations: Human Factors
Contributing Factors / Situations: Procedure
Primary Problem: Procedure

Narrative: 1

Approach Control cleared us for a Visual Approach to the right runway. We contacted Tower. At 1,500 feet, I noted that a taxiway between the runways was occupied and instructed the First Officer to continue the approach. At 200 feet, we were instructed by Tower to go-around. We executed the go-around and were instructed to fly runway heading and maintain 2000 ft. ATC alerted us to traffic directly ahead of us that had just departed. We acknowledged the traffic, which had drifted into our flight path approximately less than a mile and at our altitude. The traffic eventually turned away to the left. We were then instructed to turn right to 5,000 feet and contact Approach. The second approach was uneventful with the exception that the taxiway was again occupied. In my opinion this was a dangerous and unacceptable incident.

First, a go-around at low altitude (in this case 200 feet) should only be executed in extreme circumstances. Maneuvering a heavy aircraft that low to the ground is dangerous. I assume we were sent around because the taxiway was occupied. On our second approach the taxiway was again occupied and we were allowed to land. If Tower's concern on the first approach was that the second aircraft on the taxiway was not clear of our runway a simple query would have prevented an unnecessary go-around.

Second, during the go-around Tower issued several instructions and made at least two traffic call outs on the aircraft that they had just cleared to takeoff. I answered all of the radio calls, but those radio calls distracted/interrupted my normal flow of procedures and responses to the flying pilot during a critical phase of flight. At one point after answering a radio call I retorted "we're busy up here." I needed that time to ensure we had properly configured the aircraft for a go-around as well as set the correct altitude and heading in the MCP.

Third, we had the potential for a midair accident. A conflict aircraft had been cleared for takeoff from the left runway just before our aborted landing. This could have easily been avoided when we were five miles out from our runway had Tower cleared the two aircraft holding between the runways to cross the left runway rather than clearing the eventual conflict aircraft to taxi on to and takeoff from the left runway.

I am perplexed as to why this incident occurred. Company has issued a bulletin advising that ZZZ has lost a waiver allowing aircraft B757 or larger to hold between runways. On our aborted landing two aircraft were holding and on our successful landing a 777 was holding. Included in this bulletin is the following statement "This does not apply to every flight and the restriction is based on the aircraft orientation." In other words, included in the loss of the waiver, is a new waiver...HUH!? If ZZZ lost its waiver to hold large aircraft between runways then I assume it was rescinded for safety concerns. Those safety concerns should not be compromised by ridiculous doublespeak for the sole purpose of increasing arrival/departure rates.

Narrative: 2
Narrative: 3
[Report narrative contained no additional information.]

Synopsis
B787 flight crew reported being issued a go-around at low altitude.
ACN: 1588134 (50 of 50)

Time / Day
Date: 201810
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: O88.Airport
State Reference: CA
Altitude.MSL.Single Value: 600

Environment
Weather Elements / Visibility. Visibility: 10

Aircraft
Reference: X
ATC / Advisory.CTAF: O88
Aircraft Operator: FBO
Make Model Name: Skyhawk 172/Cutlass 172
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Training
Flight Phase: Final Approach
Airspace.Class G: O88

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
Experience.Flight Crew.Total: 1200
Experience.Flight Crew.Last 90 Days: 140
Experience.Flight Crew.Type: 900
ASRS Report Number.Accession Number: 1588134
Human Factors: Situational Awareness

Events
Anomaly.Conflict: NMAC
Anomaly.Deviation - Procedural: Published Material / Policy
Detector.Person: Flight Crew
Miss Distance.Horizontal: 100
Miss Distance.Vertical: 90
When Detected: In-flight
Result.Flight Crew: Took Evasive Action
Result.Flight Crew: Executed Go Around / Missed Approach

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

Narrative: 1
We were on a training flight shooting an instrument approach into O88. We were at our MDA, making all the calls and looking for traffic, and we had to do a circle to land. We were on short final, about to touch down, and then we saw an aircraft on the right, and he was not on [the] radio. We did a go around, turned back to the left and climbed out, and warned other pilots coming in to the airport about this aircraft.

Synopsis
C172 instructor reported a NMAC in the vicinity of O88 airport.