Penetration of Prohibited Airspace Incidents

Report Set Description.........................A sampling of reports that reference unauthorized entry into prohibited or restricted airspace.

Update Number.............................30

Date of Update..............................June 5, 2024

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

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

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

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

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

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

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

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

One thing that can be known from ASRS data is that the number of reports received concerning specific event types represents the lower measure of the true number of such events that are occurring. For example, if ASRS receives 881 reports of track deviations in 2010 (this number is purely hypothetical), then it can be known with some certainty that at least 881 such events have occurred in 2010. With these statistical limitations in mind, we believe that the real power of ASRS data is the qualitative information contained in report narratives. The pilots, controllers, and others who report tell us about aviation safety incidents and situations in detail – explaining what happened, and more importantly, why it happened. Using report narratives effectively requires an extra measure of study, but the knowledge derived is well worth the added effort.
Report Synopses
ACN: 2070923 (1 of 50)

Synopsis
Part 107 UAS pilot reported their crew flew in a TFR area without authorization. All remaining flights were grounded for the duration of the TFR.

ACN: 2065861 (2 of 50)

Synopsis
General aviation pilot reported a malfunction with the moving map instrumentation resulting in a possible entry into a restricted area airspace while flying in daylight visual conditions, and not communicating with ATC. The pilot immediately turned away from the restricted airspace and returned to the departure airport.

ACN: 2058307 (3 of 50)

Synopsis
Part 107 UAS pilot reported flying in a TFR without authorization.

ACN: 2054051 (4 of 50)

Synopsis
Part 107 UAS pilot reported flying outside of the parameters of their airspace waiver. There were no airborne conflicts and they landed safely.

ACN: 2051513 (5 of 50)

Synopsis
Skydiving plane pilot reported after reaching what appeared to be the correct location for the skydivers to disembark, the aircraft experienced a GPS map shift. The pilot stated he visually found the correct location. The pilot reported there was military maneuvers in the area.

ACN: 2034146 (6 of 50)

Synopsis
B737-700 flight crew reported a track deviation and possible encroachment of a restricted area occurred following a wake turbulence encounter departing DCA.

**ACN: 2026990 (7 of 50)**

**Synopsis**
Part 107 UAS pilot reported flying in a TFR without authorization.

**ACN: 2007199 (8 of 50)**

**Synopsis**
Recreational/hobbyist UAS pilot reported that they learned during post flight they flew within an active TFR without authorization.

**ACN: 2005236 (9 of 50)**

**Synopsis**
Center Controller reported they were instructed by a Supervisor to descend a military aircraft conducting a special operation to an altitude below the minimum IFR altitude. The aircraft entered adjacent facilities airspace without a point out and came into conflict with an air carrier.

**ACN: 1993160 (10 of 50)**

**Synopsis**
Recreational/hobbyist UAS pilot reported flying their UAS in an active TFR without authorization. The UAS was also not registered.

**ACN: 1993159 (11 of 50)**

**Synopsis**
Part 107 UAS pilot reported they flew in an active TFR without authorization.

**ACN: 1980433 (12 of 50)**

**Synopsis**
Part 107 UAS pilot learned during post-flight they inadvertently flew in a TFR without authorization.

**ACN: 1946585 (13 of 50)**

**Synopsis**
Recreational/hobby UAS pilot reported flying during an active Temporary Flight Restriction (TFR). Once they learned of the TFR the pilot exited the airspace by landing.

**ACN: 1941675 (14 of 50)**

**Synopsis**
Recreational/Hobby UAS pilot reported they flew during an active Temporary Flight Restriction (TFR) without authorization.

**ACN: 1936399 (15 of 50)**

**Synopsis**
Part 107 pilot learned after a flight they inadvertently flew in an active TFR.

**ACN: 1926318 (16 of 50)**

**Synopsis**
Pilot reported entering TFR without a clearance.

**ACN: 1925063 (17 of 50)**

**Synopsis**
Air Carrier flight crew reported an airspace violation by overflying an airspace which prohibits overflights when transporting Hazmat cargo. Captain recommends better crew briefing and training of new pilots.

**ACN: 1910447 (18 of 50)**

**Synopsis**
Part 107 pilot reported flying a UAS in an active TFR. It was during the post-flight the UAS pilot learned of the TFR.

**ACN: 1877214 (19 of 50)**

**Synopsis**
Part 107 pilot reported learning after a flight that they had flown in an active TFR.

**ACN: 1866179 (20 of 50)**

**Synopsis**
UAS pilot reported they unknowingly flew their UAS into a TFR. Reporter stated there were no TFRs prior to launch and the TFR became active during the flight.

**ACN: 1866178 (21 of 50)**

**Synopsis**
UAS pilot reported flying into an active TFR due to misunderstanding of LAANC authorization.

**ACN: 1861680 (22 of 50)**

**Synopsis**
Part 107 UAS pilot was flying in an area of a natural disaster. Prior to the flight the UAS pilot checked for NOTAMs/TFRs and saw none. Reporter learned during post flight that they flew in a TFR that had been created after takeoff.

**ACN: 1857860 (23 of 50)**

**Synopsis**
Pilot of a small aircraft reported flying through a TFR after being advised by a weather briefer and electronic flight app that the TFR applied only to UAS and not to fixed wing aircraft. The pilot stated the NOTAM verbiage wasn’t clear and may have led to the airspace incursion.

**ACN: 1843066 (24 of 50)**
<table>
<thead>
<tr>
<th>ACN: 1828544 (25 of 50)</th>
</tr>
</thead>
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**Synopsis**

Part 107 pilot reported they did not check for Temporary Flight Restrictions prior to flight and flew inside of an active TFR during an event.

<table>
<thead>
<tr>
<th>ACN: 1822464 (26 of 50)</th>
</tr>
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</table>

**Synopsis**

Recreational/Hobbyist pilot was flying UAS in an area restricted by state law.

<table>
<thead>
<tr>
<th>ACN: 1819904 (27 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**

An aerobatic pilot who has a FAA waiver for a designated Aerobatic Practice Area reported traffic routinely flies through the airspace when it is advertised in use.

<table>
<thead>
<tr>
<th>ACN: 1778853 (28 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**

A Center Controller and Supervisor reported Military Special Use airspace was implemented in their and adjoining facility airspace without complete coordination or established procedures being followed. The Controller unknowingly allowed an aircraft to fly through airspace which was being used by military aircraft not under his control.

<table>
<thead>
<tr>
<th>ACN: 1775414 (29 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**

Captain reported due to ATC workload and failed communications, Captain entered TFR.

<table>
<thead>
<tr>
<th>ACN: 1774160 (30 of 50)</th>
</tr>
</thead>
</table>

**Synopsis**

GA pilot reported inadvertently entering PHL Class B airspace without a clearance due to distraction from having to troubleshoot the GPS system on the aircraft.
**Synopsis**

Helicopter pilot reported a sporting event TFR violation.

**ACN: 1773484 (31 of 50)**

**Synopsis**

Air carrier flight crew reported the FMS not flying correctly during departure and having to manually turn the aircraft to avoid a possible airspace violation.

**ACN: 1770928 (32 of 50)**

**Synopsis**

Helicopter Captain reported getting distracted and losing situational awareness resulting in a TFR incursion.

**ACN: 1770360 (33 of 50)**

**Synopsis**

Helicopter Pilot reported a possible sporting event TFR violation. Pilot states the times of these active TFRs appear to change with little notice because COVID-19 is causing many changes to event schedules.

**ACN: 1761542 (34 of 50)**

**Synopsis**

GA pilot reported penetrating a TFR.

**ACN: 1761286 (35 of 50)**

**Synopsis**

A pilot flying VFR encountered IFR conditions due to unexpected smoke from wildfires.

**ACN: 1760917 (36 of 50)**

**Synopsis**
A light aircraft pilot reported a TFR incursion when ForeFlight was slow to display the TFR.

<table>
<thead>
<tr>
<th>ACN: 1760614 (37 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Pilot reported flying nearby an area of smoke and was unable to find an associated TFR. After the flight, pilot confirmed a TFR was active but did not post in time on EFB software.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1760311 (38 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Small aircraft pilot reported inadvertently entering a firefighting TFR that was not displayed on Foreflight.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1760308 (39 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>Pilot reported violating a sporting event TFR during the COVID-19 pandemic.</td>
</tr>
</tbody>
</table>

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<tr>
<th>ACN: 1760292 (40 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>C185 pilot reported inadvertently entering a TFR that he thought had been terminated.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1759569 (41 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>BE-36 pilot reported inadvertently entering a TFR.</td>
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</tbody>
</table>

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<thead>
<tr>
<th>ACN: 1757667 (42 of 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Synopsis</strong></td>
</tr>
<tr>
<td>GA pilot reported entering a sporting TFR and wasn't sure if these type of TFRs are still in place during the COVID-19 pandemic.</td>
</tr>
<tr>
<td>ACN: 1757623 (43 of 50)</td>
</tr>
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<td>--------------------------</td>
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<tr>
<td>GA pilot reported a possible entry into a fire related TFR which was not depicted in his EFB pre-flight, but was noted post flight as the EFB updated.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACN: 1756481 (44 of 50)</th>
<th>Synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot reported a sporting TFR airspace incursion due to not having it selected on the app being used.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>ACN: 1756411 (45 of 50)</th>
<th>Synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA pilot reported inadvertently entering a TFR when the TFR failed to display on his ForeFlight-equipped iPad.</td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>ACN: 1755243 (46 of 50)</th>
<th>Synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot reported confusion on whether a sporting TFR is in effect during the COVID-19 Pandemic when spectators are not allowed at the game.</td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>ACN: 1752803 (47 of 50)</th>
<th>Synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot reported flying over a sporting event during a game and wondered if they had violated a TFR.</td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>ACN: 1745873 (48 of 50)</th>
<th>Synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAV operator reported a TFR miscommunication that resulted in an airborne conflict with an aircraft.</td>
<td></td>
</tr>
</tbody>
</table>
**Synopsis**
UAV pilot reported a TFR incursion.

**Synopsis**
Captain of a corporate jet reported a TFR violation occurred in part because their XM subscription had expired.
Report Narratives
Time / Day
Date: 202401
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 4.5
Altitude.AGL.Single Value: 50

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

Aircraft
Reference: X
Aircraft Operator: Commercial Operator (UAS)
Make Model Name: Small UAS (At or above 0.55 lbs and less than 55 lbs)
Crew Size.Number Of Crew: 3
Operating Under FAR Part: Part 107
Flight Phase: Takeoff / Launch
Flight Phase: Landing
Flight Phase: Cruise
Airspace.TFR: ZZZ
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): N
Control Mode (UAS): Manual Control
Flying In / Near / Over (UAS): No Drone Zone
Flying In / Near / Over (UAS): Crowds
Flying In / Near / Over (UAS): Aerial Show / Event
Number of UAS Being Controlled (UAS).Number of UAS: 1

Person
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Commercial Operator (UAS)
Function.Flight Crew: Remote PIC (UAS)
Qualification.Flight Crew: Remote Pilot (UAS)
Experience.Flight Crew.Total (UAS): 1654.15
Experience.Flight Crew.Last 90 Days (UAS): 43.5
Experience.Flight Crew.Type (UAS): 26.35
ASRS Report Number.Accession Number: 2070923
Human Factors: Confusion
Human Factors: Time Pressure
Human Factors: Training / Qualification
Human Factors : Situational Awareness
Analyst Callback : Attempted

Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other
Result.General : Flight Cancelled / Delayed

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

Narrative: 1
I (RPIC) instructed Person A to execute mission to conduct a functional flight test, at XA:11AM, on Day 0. During the test the drone hovered at 50 ft. AGL for less than 15mins, during the time there was a TFR that was in place for Location X approx. 2.6 miles away from take off location. Once we landed we received a call from Person B that there was currently a TFR, after receiving the information we checked both the FAAs TFR website and air control (app) to verify the TFR and did not see any TFRs in the location, it was only till we used foreflight that we found the TFR, something not apart of our checklist. After learning about TFR our mission remained grounded for rest of day due to the length of the TFR. I believe the reason for the airspace incursion was due to need to get up and running in a quick time, and not checking TFRs and NOTAMs before the test per company rules, along with websites like 1800wxbrief. Changes to prevent airspace violations will be checking 1800wxbrief, before you fly, and foreflight, and checking for NOTAMs before flight.

Synopsis
Part 107 UAS pilot reported their crew flew in a TFR area without authorization. All remaining flights were grounded for the duration of the TFR.
**Time / Day**

Date : 202312
Local Time Of Day : 0601-1200

**Place**

Locale Reference.Airport : FLX.Airport
State Reference : NV
Relative Position.Distance.Nautical Miles : 15
Altitude.AGL.Single Value : 500

**Environment**

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

**Aircraft**

Reference : X
ATC / Advisory.UNICOM : FLX
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 : Cruise
Route In Use : Direct
Airspace.Class G : FLX

**Component**

Aircraft Component : Navigational Equipment and Processing
Aircraft Reference : X
Problem : Malfunctioning

**Person**

Location Of Person.Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function.Flight Crew : Single Pilot
Function.Flight Crew : Pilot Flying
Qualification.Flight Crew : Commercial
Qualification.Flight Crew : Instrument
Qualification.Flight Crew : Multiengine
Experience.Flight Crew.Total : 1743
Experience.Flight Crew.Type : 780
ASRS Report Number.Accession Number : 2065861
Human Factors : Troubleshooting
Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Took Evasive Action

Assessments
Contributing Factors / Situations : Aircraft
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Procedure
Contributing Factors / Situations : Human Factors
Primary Problem : Aircraft

Narrative: 1
On Day 0, at approximately XA:00, I was flying my airplane at 100-500 feet AGL around the area east of Fallon Municipal Airport, FLX. I experienced a problem with my moving map, where it seemed to lose its ability to show my exact location on the map. While I was troubleshooting this problem, I may have inadvertently flown into restricted area R-4813A. I immediately turned away from the restricted airspace, and returned to my departure airport.

Synopsis
General aviation pilot reported a malfunction with the moving map instrumentation resulting in a possible entry into a restricted area airspace while flying in daylight visual conditions, and not communicating with ATC. The pilot immediately turned away from the restricted airspace and returned to the departure airport.
**ACN: 2058307 (3 of 50)**

**Time / Day**
Date: 202311
Local Time Of Day: 0601-1200

**Place**
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 6.1
Altitude.AGL.Single Value: 350

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

**Aircraft**
Reference: X
Aircraft Operator: Commercial Operator (UAS)
Make Model Name: DJI Phantom 4 RTK
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 107
Mission: Surveying / Mapping (UAS)
Flight Phase: Climb
Airspace.TFR: ZZZ
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): Y
Control Mode (UAS): Transitioning Between Modes
Flying In / Near / Over (UAS): No Drone Zone
Type (UAS): Purchased
Number of UAS Being Controlled (UAS). Number of UAS: 1

**Person**
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Commercial Operator (UAS)
Function.Flight Crew: Remote PIC (UAS)
Function.Flight Crew: Person Manipulating Controls (UAS)
Qualification.Flight Crew: Remote Pilot (UAS)
Experience.Flight Crew.Total (UAS): 100
Experience.Flight Crew.Last 90 Days (UAS): 10
Experience.Flight Crew.Type (UAS): 100
ASRS Report Number.Accession Number: 2058307
Human Factors: Situational Awareness
Human Factors: Training / Qualification
Analyst Callback: Attempted
Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected : In-flight
Result.General : Flight Cancelled / Delayed
Result.Flight Crew : Exited Penetrated Airspace

Assessments
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Procedure
Primary Problem : Ambiguous

Narrative: 1
I, as the single pilot of the UAS failed to check for TFR prior to launching drone to fly a preprogrammed survey route over a construction site which I have flown a few times previously. I flew my UAS briefly into restricted airspace but landed the drone within a couple of minutes of learning the details of the TFR which I had violated I overrode the built-in automatic lockout feature on my Phantom 4 RTK drone as I have done many times previously to allow the drone to fly. Typically the GPS automatic lockout provided by DJI as part of the command and control software is not super precise and is more a of a 2D feature, often automatically blocking flights that are near but not technically inside or below restricted airspace. I incorrectly assumed that this lockout was the same issue on this flight as all of the others I have ever had. However as the drone was climbing to the pattern height, I did check the TFR notice that was provided by the software and saw that it was something unusual and it was for a VIP in town and extended from the ground all the way to 18,000 feet. So I landed the drone immediately and did not complete the survey. I did not attempt to relaunch after that and terminated my planned flights for the rest of the day. I explained what happened to my bother, and he recommended that I file this incident report. As a result of this incident I have downloaded a new app to my phone - b4ufly application so that I can check TFRs and NOTAMs right before I fly and not rely solely on my initial airspace checks and previous flight experience at each site. I do not expect this to ever happen again and I apologize for my mistake.

Synopsis
Part 107 UAS pilot reported flying in a TFR without authorization.
ACN: 2054051 (4 of 50)

Time / Day
Date: 202311
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 2
Altitude.AGL.Single Value: 450

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

Aircraft
Reference: X
Aircraft Operator: Commercial Operator (UAS)
Make Model Name: Small UAS (At or above 0.55 lbs and less than 55 lbs)
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 107
Mission: Photo Shoot / Video
Flight Phase: Cruise
Airspace.Class B: ZZZ
Airspace Authorization Provider (UAS): FAA Authorization
Operating Under Waivers / Exemptions / Authorizations (UAS): Y
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): Y
Control Mode (UAS): Manual Control
Flying In / Near / Over (UAS): Private Property
Flying In / Near / Over (UAS): Airport / Aerodrome / Heliport
Type (UAS): Purchased
Number of UAS Being Controlled (UAS).Number of UAS: 1

Person
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Commercial Operator (UAS)
Function.Flight Crew: Remote PIC (UAS)
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Remote Pilot (UAS)
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Multiengine
Experience.Flight Crew.Total: 4000
Experience.Flight Crew.Total (UAS): 1000
Experience.Flight Crew.Last 90 Days (UAS): 10
Experience: Flight Crew: Type (UAS): 100
ASRS Report Number: Accession Number: 2054051
Human Factors: Situational Awareness
Analyst Callback: Completed

Events

Anomaly: Airspace Violation: All Types
Anomaly: Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly: Deviation / Discrepancy - Procedural: FAR
Detector: Person: Flight Crew
When Detected: Other
Result: General: None Reported / Taken

Assessments

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

Narrative: 1

I had applied for and received an airspace authorization for the area involved with a maximum operating altitude of 500 ft. AGL, which I did not exceed. The area was also subject to a TFR during the operating period, for which I had also applied for and received a Special Governmental Interest (SGI) waiver. Even though I read the SGI waiver carefully, I did not recognize that the maximum altitude was reduced to 400 ft. AGL and did exceed that during my flight by approximately 50 ft. at one point. Normally the UAS recognizes the limits of the airspace authorization and you get accustomed to the system restricting your operation without having to continuously monitor flight parameters. This was an incorrect assumption in this case.

Callback: 1

The reporter indicated there were no airborne conflicts and the slight altitude error did not cause any other issues.

Synopsis

Part 107 UAS pilot reported flying outside of the parameters of their airspace waiver. There were no airborne conflicts and they landed safely.
ACN: 2051513

Time / Day
Date: 202311
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: HDH.Airport
State Reference: HI
Altitude.MSL.Single Value: 13900

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.TRACON: HCF
ATC / Advisory.UNICOM: HDH
Aircraft Operator: FBO
Make Model Name: Small Transport
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: VFR
Mission: Skydiving
Nav In Use: GPS
Airspace.Class E: HCF

Component
Aircraft Component: GPS & Other Satellite Navigation
Aircraft Reference: X
Problem: Malfunctioning

Person
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: FBO
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Total: 1184
Experience.Flight Crew.Last 90 Days: 245
Experience.Flight Crew.Type: 484
ASRS Report Number.Accession Number: 2051513
Human Factors: Situational Awareness
Human Factors: Troubleshooting
Human Factors: Workload
Human Factors: Distraction
**Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Airspace Violation : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Detector.Automation : Aircraft Other Automation  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Exited Penetrated Airspace  
Result.Flight Crew : Became Reoriented  
Result.Aircraft : Equipment Problem Dissipated

**Assessments**

Contributing Factors / Situations : Aircraft  
Contributing Factors / Situations : Airspace Structure  
Contributing Factors / Situations : Software and Automation  
Contributing Factors / Situations : Environment - Non Weather Related  
Contributing Factors / Situations : ATC Equipment / Nav Facility / Buildings  
Primary Problem : Ambiguous

**Narrative: 1**

While conducting skydive operations over Dillingham airfield (HDH) using GPS (OBS mode) to navigate to a user waypoint identifying the drop zone, I had a GPS malfunction where my moving map froze while climbing through 6000-8000 ft. MSL the issue corrected itself and GPS seemed to be working normally again. I notified HCF (Honolulu Control Facility) of the issue and that I was unsure if it was my equipment or if the military was affecting the GPS signal since they were in the middle of a military exercise in the area. At some point while turning to intercept the 080 course inbound to the drop zone my GPS was showing me on course and the GPS time, distance and course off set seemed to be indicating normally and outside sight picture looked good as well so I shifted most of my attention inside to ensure I configured the airplane at the right time. Right after I gave the skydivers the green light to jump and a couple jumped, out my moving map suddenly shifted to show me about 1.5 miles south of the drop zone in the restricted airspace R-3110B. I immediately stopped the rest of skydivers from jumping, made a left turn to exit the airspace, and notified HCF of the issue. I positioned the aircraft back over the drop zone using outside reference only, released the rest of the skydivers, descended and landed normally.

**Synopsis**

Skydiving plane pilot reported after reaching what appeared to be the correct location for the skydivers to disembark, the aircraft experienced a GPS map shift. The pilot stated he visually found the correct location. The pilot reported there was military maneuvers in the area.
ACN: 2034146 (6 of 50)

**Time / Day**
- Date: 202309
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference: Airport: DCA
- State Reference: DC
- Relative Position: Distance. Nautical Miles: 3
- Altitude. MSL. Single Value: 1500

**Environment**
- Light: Dawn

**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: Initial Climb
- Flight Phase: Climb
- Airspace. Class B: DCA

**Aircraft : 2**
- Reference: Y
- ATC / Advisory: Tower: DCA
- Aircraft Operator: Air Carrier
- Make Model Name: Commercial Fixed Wing
- Crew Size. Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Flight Phase: Initial Climb
- Airspace. Class B: DCA

**Person : 1**
- Location Of Person: Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function: Flight Crew: Pilot Not Flying
- Function: Flight Crew: Captain
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Qualification: Flight Crew: Multiengine
- Qualification: Flight Crew: Instrument
- ASRS Report Number: Accession Number: 2034146
- Analyst Callback: Completed
Person : 2  
Location Of Person.Aircraft : X  
Location In Aircraft : Flight Deck  
Reporter Organization : Air Carrier  
Function.Flight Crew : First Officer  
Function.Flight Crew : Pilot Flying  
Qualification.Flight Crew : Air Transport Pilot (ATP)  
Qualification.Flight Crew : Instrument  
Qualification.Flight Crew : Multiengine  
Experience.Flight Crew.Last 90 Days : 55  
Experience.Flight Crew.Type : 55  
ASRS Report Number.Accession Number : 2034446

Events

Anomaly.Airspace Violation : All Types  
Anomaly.Deviation - Track / Heading : All Types  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Anomaly.Deviation / Discrepancy - Procedural : Clearance  
Anomaly.Inflight Event / Encounter : Wake Vortex Encounter  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Returned To Clearance

Assessments

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

Narrative: 1

On REBLL 5 RNAV Departure, Tower cleared us to depart shortly after a (other carrier aircraft) and told us to maintain visual separation. Shortly after cleanup, we encountered robust wake turbulence and caused a sharp right rolling action. The autopilot disconnected from LNAV mode and transitioned to CWS (Control Wheel Steering) R. The First Officer was flying and appeared to not know how to utilize the CWS R mode to come back to the left. After a brief discussion, I directed the First Officer to come back to the left immediately, due to the proximity to P-56A. To the best of my knowledge, I believe we did not infringe upon the lateral confines of P-56A, but it’s hard to discern exactly due to the non-standard shape of the P-56A airspace. We quickly corrected back to course and were not informed of any deviations by ATC. I need to be more directive and perhaps intervene when it appears the First Officer may be confused, and/or slow to correct in the vicinity of P-56A.

Callback: 1

Reporter stated the proximity to the restricted area complicated the wake response.

Narrative: 2

FO (First Officer) was PF (Pilot Flying). Upon departure from DCA, Runway 1, REBLL 5 RNAV Departure. ATC cleared us for takeoff and to maintain visual separation from recently cleared (other carrier). Near 1500 [ft.] AGL, we experienced strong wake turbulence causing a rolling moment to the right, automation was engaged, causing the
activation of CWS (Control Wheel Steering), and loss of lateral guidance. Initial course correction was delayed and could have been more abrupt. The course was corrected to the left and returned to the departure path. ATC did not mention any abnormality or divergence. As far as we know, the aircraft remained clear of the Restricted Area P-56A. More immediate and efficient crew communication would have assisted with course correction and we de-briefed lessons learned. Additionally, situational awareness would have been improved with use of additional fix info rings to help identify the restricted areas.

**Synopsis**

B737-700 flight crew reported a track deviation and possible encroachment of a restricted area occurred following a wake turbulence encounter departing DCA.
ACN: 2026990 (7 of 50)

**Time / Day**
Date: 202308  
Local Time Of Day: 1201-1800

**Place**
Locale Reference, ATC Facility: ZZZ.Tower  
State Reference: US  
Relative Position, Distance, Nautical Miles: 4  
Altitude, AGL, Single Value: 200

**Aircraft**
Reference: X  
Aircraft Operator: Commercial Operator (UAS)  
Make Model Name: DJI Mavic Air 2  
Crew Size, Number Of Crew: 1  
Operating Under FAR Part: Part 107  
Mission: Photo Shoot / Video  
Flight Phase: Hovering (UAS)  
Airspace, Class C: ZZZ  
Airspace, TFR: ZZZ  
Operating Under Waivers / Exemptions / Authorizations (UAS): N  
Weight Category (UAS): Small  
Configuration (UAS): Multi-Rotor  
Flight Operated with Visual Observer (UAS): N  
Control Mode (UAS): Manual Control  
Flying In / Near / Over (UAS): Private Property  
Flying In / Near / Over (UAS): Airport / Aerodrome / Heliport  
Flying In / Near / Over (UAS): Open Space / Field  
Flying In / Near / Over (UAS): No Drone Zone  
Type (UAS): Purchased  
Number of UAS Being Controlled (UAS), Number of UAS: 1

**Person**
Location Of Person: Outdoor / Field Station (UAS)  
Reporter Organization: Commercial Operator (UAS)  
Function, Flight Crew: Person Manipulating Controls (UAS)  
Function, Flight Crew: Remote PIC (UAS)  
Qualification, Flight Crew: Remote Pilot (UAS)  
Qualification, Flight Crew: Commercial  
Qualification, Flight Crew: Multiengine  
Qualification, Flight Crew: Instrument  
Experience, Flight Crew, Total: 2800  
Experience, Flight Crew, Total (UAS): 4  
Experience, Flight Crew, Last 90 Days (UAS): 0.20  
Experience, Flight Crew, Type (UAS): 0.14  
ASRS Report Number, Accession Number: 2026990  
Human Factors: Situational Awareness  
Analyst Callback: Completed
Events

Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other

Assessments

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

Narrative: 1

This situation is something that should not happen and is the reason why corrective actions must be taken by the pilots to avoid them. I was making the second flight of the day, the first and the second were real estate missions, only take photos of several some, nothing complicated, in the second mission as I was approximately 4 miles from the ZZZ airport I checked the normal apps such as B4UFLY and Air Control (Aloft) which did not show any TFR in the area on the map, request the normal authorization for a period of 2 hours starting at approximately XA:34 local time, for about 2 hours to anticipate that the equipment or the wind would be very strong, finish the flight in 14 minutes and upload the photos again in the post work, when it was through social networks that I realized the TFR. Taking this into consideration and how to take corrective actions, I proceeded to call the local FSDO inspector and two other pilots to discuss what happened, the main thing we can learn and the actions that should be taken is to check other applications and other systems like ForeFlight that give immediate updates, and any other app that shows you more specifically what is happening in the area, in this way to avoid this from happening again, I already have it written in my checklist, not to trust alone in third-party applications, if not also, check in the planning other pages related to this type of restrictions, it is something that can happen to anyone else if we are flying commercial missions more often, report and share this type of experience with other pilots and help them increase safety actions to avoid this type of misunderstanding. When an authorization is obtained from these third-party applications, it does not mean immediately that we are authorized, corrective actions must continue to be taken and the action of SMS (Safety Management Systems) as a report is something that all pilots must take into account, in my experience as a pilot commercial and military for more than 20 years, are things that can happen but can be avoided by increasing situational awareness, to avoid actions in the future, this for me is self-remedial training to avoid making these mistakes again, share this with the community of drone pilots within my district and known so that they not only trust third-party applications but also check all other types of applications, web pages and aids to improve the operational safety system of the missions flown.

Callback: 1

The reporter indicated they have implemented a new checklist to prevent this from happening in the future.

Synopsis

Part 107 UAS pilot reported flying in a TFR without authorization.
**ACN: 2007199**

**Time / Day**
Date: 202306
Local Time Of Day: 0601-1200

**Place**
Locale Reference.Airport: CVG.Airport
State Reference: KY
Altitude.AGL.Single Value: 400

**Environment**
Flight Conditions: VMC
Light: Dusk
Ceiling: CLR

**Aircraft**
Reference: X
Aircraft Operator: Recreational / Hobbyist (UAS)
Make Model Name: Small UAS, Multi Rotor
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Recreational Operations / Section 44809 (UAS)
Mission: Photo Shoot / Video
Flight Phase: Takeoff / Launch
Airspace.TFR: ZZZ
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): N
Control Mode (UAS): Manual Control
Flying In / Near / Over (UAS): People / Populated Areas
Flying In / Near / Over (UAS): Crowds
Flying In / Near / Over (UAS): No Drone Zone
Type (UAS): Purchased
Number of UAS Being Controlled (UAS).Number of UAS: 1

**Person**
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Recreational / Hobbyist (UAS)
Function.Flight Crew: Person Manipulating Controls (UAS)
Experience.Flight Crew.Total: .5
Experience.Flight Crew.Total (UAS): 1
ASRS Report Number.Accession Number: 2007199
Human Factors: Training / Qualification
Human Factors: Situational Awareness
Analyst Callback: Attempted

**Events**
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other
Result.General : None Reported / Taken

Assessments
Contributing Factors / Situations : Human Factors

Narrative: 1
Last night I decided to fly my drone on the other side of the river to capture some footage of the city in smoke from the Canada fires along with the stadium. Last night there was an event, and I thought I was being respectful of avoiding the stadium. However, I was not aware of the rules of it needing to be over 3 miles away an hour before and after the event. This is completely my fault and I should've done more research. However, I made sure to absolutely not go near the stadium or over the stadium. However, I was definitely within 100 yards at takeoff. This is something that I was not aware of and I'm going to go out of my way to also take the drone flying course. I did not know that recreational drone pilots needed to take the TRUST (The Recreational UAS Safety Test) course so I will be doing that as well. I will also be going out of my way to get my 107 license to learn more about the other rules that drone pilots may not know about. Overall, I would like to apologize for my recklessness, and I do realize that I have made a mistake in which I thought I was respecting, but greatly violating. I will do my best from this point forward to educate myself, and make sure that nothing like this happens again. I respect everything and all the regulations that were put in place for this event, and it is my fault for not making sure that it was perfect. This will not happen again and I do apologize.

Synopsis
Recreational/hobbyist UAS pilot reported that they learned during post flight they flew within an active TFR without authorization.
ACN: 2005236  (9 of 50)

**Time / Day**
- Date: 202305
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference.ATC Facility: ZZZ.ARTCC
- State Reference: US
- Altitude.MSL.Single Value: 20000

**Aircraft : 1**
- Reference: X
- Aircraft Operator: Military
- Make Model Name: Military
- Crew Size.Number Of Crew: 1
- Flight Plan: IFR
- Mission: Tactical
- Flight Phase: Descent
- Route In Use: None
- Airspace.Class A: ZZZ
- Airspace.Class E: ZZZ

**Aircraft : 2**
- Reference: Y
- Aircraft Operator: Air Carrier
- Make Model Name: Medium 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: Cruise
- Airspace.Class E: ZZZ

**Person : 1**
- Location Of Person.Facility: ZZZ.ARTCC
- Reporter Organization: Government
- Function.Air Traffic Control: Enroute
- Qualification.Air Traffic Control: Fully Certified
- Experience.Air Traffic Control.Time Certified In Pos 1 (yrs): 20
- ASRS Report Number.Accession Number: 2005236
- Human Factors: Communication Breakdown
- Human Factors: Confusion
- Human Factors: Distraction
- Human Factors: Time Pressure
- Human Factors: Workload
- Human Factors: Situational Awareness
- Communication Breakdown.Party1: ATC
- Communication Breakdown.Party2: ATC
Person : 2
Location Of Person.Facility : ZZZ.ARTCC
Reporter Organization : Government
Function.Air Traffic Control : Enroute
Function.Air Traffic Control : Instructor
Qualification.Air Traffic Control : Fully Certified
Experience.Air Traffic Control.Time Certified In Pos 1 (yrs) : 10
ASRS Report Number.Accession Number : 2004955
Human Factors : Workload
Human Factors : Training / Qualification
Human Factors : Distraction
Human Factors : Confusion
Human Factors : Communication Breakdown
Communication Breakdown.Party1 : ATC
Communication Breakdown.Party2 : ATC

Events
Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Inflight Event / Encounter : CFTT / CFIT
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Issued New Clearance

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

Narrative: 1
Working the TFR, the aircraft were two Aircraft X's. Monitoring Supervisor received a call to have Aircraft X fly heading 005 and descend to nine thousand ft. I gave that clearance to Aircraft X. Told the Supervisor that the altitude was below the MIA. Supervisor amended the altitude to twelve thousand which was also below the current MIA but I knew that altitude would be fine further North so I did not stop Aircraft X higher. Apparently nobody from ZZZ Approach was monitoring the situation, and I was supposed to point the Aircraft X out to ZZZ1 Approach and ZZZ which I did not. Turns out the Aircraft X tracked the wrong target and got too close to Aircraft Y. I do not know what altitude the incident happened, where it exactly happened or what target the Aircraft X was supposed to be tracking. This entire thing was an circus that started the day previous with Person A dropping off a handful papers (briefings) that were briefly discussed with the Controller in Charge (CIC) at the time. Each CIC after that glanced through those "briefings" and the area discussed and tried to "decipher" what they said, what our actual responsibilities are and what to expect. When I arrived in the area at XA:30 the mid shift informed us that the mid shift Supervisor instructed us to open sector X by itself first thing in the morning. Well, that did not make any sense as all the days "special use airspace" was in sector Y.
By that logic y would have had all the "special" operations and all high sectors in the area while sector X sat and worked in some arrivals. The opening Supervisor had little to no information about what was going on and was as confused or more than we were in the area, they did try to help as much as they could. When the aircraft arrived Aircraft X, the mid shift cleared them to operate within the confines of their "next 4 lat/long points as they did not know what else to call it or how else to clear them to do whatever it was they wanted to do. As I got to the area the aircraft arrived to hold in the "ZZZZZ track" which we could not really understand on the radio and did not know what that was. We eventually found it in one of the briefing sheets.

**Narrative: 2**

My trainee and I had just received the sector from the previous Controller. The previous Controller was working Aircraft X that was taking instructions through ZZZZZ1. My understanding when taking the sector was that the previous Controller via ZZZZZ1 had coordinated everything since the aircraft was well inside of Approach airspace (approximately 15-20 miles). The Person A was asking what frequency Approach used and I assumed that they were coordinating with ZZZZZ1 that we were going to be placing the aircraft on Approach since they were headed for a large group of limited data blocks and a track that I saw they tagged up Track of Interest (TOI). I switched Aircraft X to Approach as my trainee updated the flight plan and handed the aircraft off. This all occurred within a minute of taking the sector. Later on I was informed that there had been a loss between Aircraft X and Aircraft Y. When there will be complex operations such as this, brief the Controllers verbally. The TFR was at a special location and we had moving TFR's, a TFR for aircraft, an Organization with multiple sets of aircraft in and out, a refueling track with multiple tankers in and out. The aircraft would move between the Organization aircraft and the refueling track. The only briefing, if you called it one, was a bunch of papers that had some drawings and the textual TFRs. All of these operations were in conflict with all four of ZZZ South departures which climbed to 23000 ft. All facilities that could potentially be affected by a TFR violator should be on the ZZZZZ1 call. If someone was to violate the TFR, it would more than likely have been in ZZZ1 or ZZZ airspace and it was my understanding after the event that neither were on. If the event is preplanned and they know they will be using ZZZZZ1, brief them on the airspace and terrain. I believe they led the previous Controller down the path by instructing them to issue the aircraft an altitude 9000 ft. and a northerly heading. The MIA for that area was 16000 ft. and that put the aircraft in ZZZ1 and ZZZ airspace. If I remember right, the ZZZZZ1 training we receive is in the middle of our sectors, not through multiple facilities. Maybe update the training to a more complex situation such as this.

**Synopsis**

Center Controller reported they were instructed by a Supervisor to descend a military aircraft conducting a special operation to an altitude below the minimum IFR altitude. The aircraft entered adjacent facilities airspace without a point out and came into conflict with an air carrier.
Time / Day
Date: 202304
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position. Distance. Nautical Miles: 10
Altitude.AGL. Single Value: 180

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

Aircraft
Reference: X
Aircraft Operator: Recreational / Hobbyist (UAS)
Make Model Name: DJI Mini 2
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Recreational Operations / Section 44809 (UAS)
Mission: Recreational / Hobbyist (UAS)
Flight Phase: Landing
Airspace. TFR: ZZZ
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Weight Category (UAS): Micro
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Control Mode (UAS): Manual Control
Flying In / Near / Over (UAS): Open Space / Field
Type (UAS): Purchased
Number of UAS Being Controlled (UAS). Number of UAS: 1

Person
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Recreational / Hobbyist (UAS)
Function. Flight Crew: Person Manipulating Controls (UAS)
Experience. Flight Crew. Last 90 Days (UAS): 14
Experience. Flight Crew. Type (UAS): 90
ASRS Report Number. Accession Number: 1993160
Human Factors: Confusion
Human Factors: Training / Qualification

Events
Anomaly. Airspace Violation: All Types
Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Other Person
Result.General : Police / Security Involved

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

Narrative: 1
I inadvertently operated a sUAS flight inside a TFR zone. It was a single flight that lasted 2 minutes and 49 seconds. UAS details: DJI Mini 2, Firmware version XXX.XX.XXX, FlySafe database version XXX.XXX.XX I was unaware of the TFR as no visual indications were posted at the site and normally DJI FlySafe would indicate me about any unauthorized flight zones, it just let me launch the sUAS and I proceeded to a short flight within 400 ft. AGL and not over any crowd/people. Beside the TFR zone violation, the flight operated normally without incident at all phases. Quickly after landing, I was immediately met by a security officer from an adjacent private company property who called up the local authorities to file an incident report with the FAA. The security officer educated me about the TFR which I completely ignored of its existence. These events made me reflect about FAA regulations in place and that it is my own responsibility to be aware and comply to them. This sUAS has not flown in US airspace since and I do not plan to fly it again. Additionally, I brought this Country X-registered sUAS into the United States without proper FAA registration which I now understand, it was a violation as well. Again, this event alone deters me from ever flying a sUAS device into US airspace ever again and I should had never assumed that Country X rules were similar to US ones and also that the drone manufacturer software should not be my source of truth as far as authorized flying zones go. Lots of lessons learned here.

Synopsis
Recreational/hobbyist UAS pilot reported flying their UAS in an active TFR without authorization. The UAS was also not registered.
ACN: 1993159 (11 of 50)

**Time / Day**
- Date: 202304
- Local Time Of Day: 1201-1800

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Work Environment Factor: Excessive Wind (UAS)
- Light: Daylight
- Ceiling: CLR

**Aircraft**
- Reference: X
- Aircraft Operator: Commercial Operator (UAS)
- Make Model Name: DJI Mavic 2 Pro
- Crew Size, Number Of Crew: 1
- Operating Under FAR Part: Part 107
- Mission: Surveying / Mapping (UAS)
- Flight Phase: Cruise
- Airspace, TFR: ZZZ
- Operating Under Waivers / Exemptions / Authorizations (UAS): N
- Weight Category (UAS): Small
- Configuration (UAS): Multi-Rotor
- Flight Operated As (UAS): VLOS
- Flight Operated with Visual Observer (UAS): N
- Control Mode (UAS): Waypoint Flying
- Flying In / Near / Over (UAS): People / Populated Areas
- Flying In / Near / Over (UAS): No Drone Zone
- Type (UAS): Purchased
- Number of UAS Being Controlled (UAS): Number of UAS: 1

**Person**
- Location Of Person: Outdoor / Field Station (UAS)
- Reporter Organization: Commercial Operator (UAS)
- Function, Flight Crew: Person Manipulating Controls (UAS)
- Qualification, Flight Crew: Remote Pilot (UAS)
- Experience, Flight Crew, Total (UAS): 165
- ASRS Report Number, Accession Number: 1993159
- Human Factors: Situational Awareness
- Analyst Callback: Attempted

**Events**
- Anomaly, Airspace Violation: All Types
- Anomaly, Deviation / Discrepancy - Procedural: Published Material / Policy
- Anomaly, Deviation / Discrepancy - Procedural: Unauthorized Flight Operations (UAS)
- Anomaly, Deviation / Discrepancy - Procedural: FAR
- Detector, Person: UAS Crew
- Result, General: None Reported / Taken
Assessments

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

Narrative: 1

Was flying an automated mapping mission in the city and didn't check airspace for conflicts. TFR was active during the time of the mission.

Synopsis

Part 107 UAS pilot reported they flew in an active TFR without authorization.
**ACN: 1980433 (12 of 50)**

**Time / Day**
- Date: 202303
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Relative Position.Distance.Nautical Miles: 12
- Altitude.AGL.Single Value: 127

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

**Aircraft**
- Reference: X
- Aircraft Operator: Commercial Operator (UAS)
- Make Model Name: Small UAS, Multi Rotor
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 107
- Mission: Photo Shoot / Video
- Flight Phase: Takeoff / Launch
- Flight Phase: Landing
- Flight Phase: Cruise
- Airspace.TFR: ZZZ
- Operating Under Waivers / Exemptions / Authorizations (UAS): N
- Weight Category (UAS): Micro
- Configuration (UAS): Multi-Rotor
- Flight Operated As (UAS): VLOS
- Flight Operated with Visual Observer (UAS): N
- Control Mode (UAS): Manual Control
- Flying In / Near / Over (UAS): Emergency Services
- Number of UAS Being Controlled (UAS).Number of UAS: 1

**Person**
- Location Of Person: Outdoor / Field Station (UAS)
- Reporter Organization: Commercial Operator (UAS)
- Function.Flight Crew: Person Manipulating Controls (UAS)
- Qualification.Flight Crew: Remote Pilot (UAS)
- Experience.Flight Crew.Total (UAS): 76
- Experience.Flight Crew.Last 90 Days (UAS): 0.55
- Experience.Flight Crew.Type (UAS): 11
- ASRS Report Number.Accession Number: 1980433
- Analyst Callback: Completed

**Events**
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other
Result.General : None Reported / Taken

Assessments
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Procedure
Primary Problem : Ambiguous

Narrative: 1
I wish to report an accidental violation of a TFR. I am a Part 107 Commercial Pilot working for Company X. We had an event near ZZZ over this past weekend. I checked AirMap (the app I use regularly to check airspace and have never had cause to question) for a TFR the morning of Day 0 before leaving the house and again when I arrived at the scene. There was no TFR indicated so I flew, keeping a reasonable distance and altitude as to not disturb and/or distract the working crews. I was operating from the edge of the event, plainly visible and wore a bright safety vest identifying myself as a UAS pilot. No one looked at me twice. I was in the air for about 11 minutes. Day 1 while talking to another pilot, he mentioned a TFR being in effect until XA:30, I was surprised and immediately pulled out my phone to checked AirMap again, it still showed as being unrestricted. I then opened a second app, Aloft and there it was. I cannot begin to describe how upset I am with myself. I had thought due diligence was done but I was wrong. Moving forward I will no longer trust commercial apps, I will be going to TFR.FAA.gov exclusively to ensure I have the most up to date information. Please let me know if I can provide any further information. I have taken screen shots of each app, but fully understand that AirMap is not to blame here, the mistake was my own, and it will not happen again.

Callback: 1
The reporter indicated they did not need airspace authorization for airspace when they were using AirMap. It wasn't until a day later they reviewed Aloft and the FAA TFR website that they learned of the TFR they had flown in.

Synopsis
Part 107 UAS pilot learned during post-flight they inadvertently flew in a TFR without authorization.
ACN: 1946585 (13 of 50)

Time / Day
Date: 202210
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 20
Altitude.AGL.Single Value: 75

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

Aircraft
Reference: X
Aircraft Operator: Recreational / Hobbyist (UAS)
Make Model Name: DJI Spark
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 107
Mission: Recreational / Hobbyist (UAS)
Flight Phase: Hovering (UAS)
Airspace.TFR: ZZZ
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Weight Category (UAS): Small
Control Mode (UAS): Manual Control
Flying In / Near / Over (UAS): Aerial Show / Event
Type (UAS): Purchased
Number of UAS Being Controlled (UAS).Number of UAS: 1

Person
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Recreational / Hobbyist (UAS)
Function.Flight Crew: Person Manipulating Controls (UAS)
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Commercial
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Remote Pilot (UAS)
Qualification.Flight Crew: Flight Instructor
Experience.Flight Crew.Total: 25000
Experience.Flight Crew.Last 90 Days (UAS): 0.5
Experience.Flight Crew.Type (UAS): 50
ASRS Report Number.Accession Number: 1946585
Human Factors: Situational Awareness
Human Factors: Training / Qualification
Human Factors : Confusion
Analyst Callback : Completed

Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other
Result.Flight Crew : Landed As Precaution

Assessments
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Primary Problem : Ambiguous

Narrative: 1
I was flying drone within 3 miles of the sporting event at XA:10, the game started at XB:00, I had lost track of time and didn't realize I had violated the time restriction. I was flying near my location and was not trying to fly near stadium. This was a total unintentional violation of the airspace and I will be more diligent in the future of any event going on within the proximity of an event of the stadium. I am adding this report in addition to one filed to add information that I forgot to include. I was flying my drone near my residence in ZZZ which is within a mile proximity of the stadium. I was not flying with intent of going near the stadium, I was, however, within the restricted area when it went hot [Temporary Flight Restriction (TFR)]. I lost track of time and didn't realize that I was within the 1 hour of game time. The time was XA:10 and the game started at XB:00. I can say that this was an absolute learning event regarding the fact that I had not made myself acutely aware of the time of the restricted airspace being activated while I was flying my drone. I was also surprised that my drone software didn't give me an alert to the airspace issue. I thought that the DJI drones were programmed to alert the user if it was near restricted airspace. I have had the drone for quite a while but am not a very active user of it. I am sorry for the incident and can say it will not occur again.

Callback: 1
The reporter had no additional details to share.

Synopsis
Recreational/hobby UAS pilot reported flying during an active Temporary Flight Restriction (TFR). Once they learned of the TFR the pilot exited the airspace by landing.
**ACN: 1941675 (14 of 50)**

**Time / Day**
- Date: 202210
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Relative Position.Distance.Nautical Miles: 9.55
- Altitude.AGL.Single Value: 200

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

**Aircraft**
- Reference: X
- Aircraft Operator: Recreational / Hobbyist (UAS)
- Make Model Name: DJI Mini 2
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 107
- Mission: Photo Shoot / Video
- Flight Phase: Hovering (UAS)
- Airspace.TFR: ZZZ
- Operating Under Waivers / Exemptions / Authorizations (UAS): N
- Weight Category (UAS): Micro
- Configuration (UAS): Multi-Rotor
- Flight Operated As (UAS): VLOS
- Flight Operated with Visual Observer (UAS): N
- Control Mode (UAS): Transitioning Between Modes
- Flying In / Near / Over (UAS): Open Space / Field
- Flying In / Near / Over (UAS): Aerial Show / Event
- Type (UAS): Purchased
- Number of UAS Being Controlled (UAS).Number of UAS: 1

**Person**
- Location Of Person: Outdoor / Field Station (UAS)
- Reporter Organization: Recreational / Hobbyist (UAS)
- Function.Flight Crew: Person Manipulating Controls (UAS)
- Experience.Flight Crew.Total (UAS): 150
- Experience.Flight Crew.Type (UAS): 80
- ASRS Report Number.Accession Number: 1941675
- Human Factors: Situational Awareness
- Human Factors: Training / Qualification
- Analyst Callback: Completed
**Events**

Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Other Person
When Detected.Other

**Assessments**

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

**Narrative: 1**

My name is Person A, I flew my drone within a 12 mile radius of the Event on Day 0. I flew the drone because I wanted to capture some footage of the event that was happening that night. The announcer had announced that the event was canceled because of a developing thunderstorm nearby. I made a mistake of flying so close to the event. I am wrong and I will seek official part 107 UAS training from instructors, and I will start reading the FAR Part 107 and obtain a UAS license. I will never violate a no fly zone again.

**Callback: 1**

The reporter indicated they were flying in an area with approaching thunderstorms but they were able to maintain control of the UAS. After the flight the reporter learned from a local official they had flown during an active Temporary Flight Restriction (TFR).

**Synopsis**

Recreational/Hobby UAS pilot reported they flew during an active Temporary Flight Restriction (TFR) without authorization.
**Time / Day**

Date: 202209
Local Time Of Day: 0601-1200

**Place**

Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 3.5
Altitude.AGL.Single Value: 99

**Environment**

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

**Aircraft**

Reference: X
Aircraft Operator: Commercial Operator (UAS)
Make Model Name: DJI Mavic 3
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 107
Mission: Photo Shoot / Video
Flight Phase: Takeoff / Launch
Airspace.Class B: ZZZ
Airspace.TFR: Z
Airspace Authorization Provider (UAS): Authorized Third Party
Operating Under Waivers/Exemptions/Authorizations (UAS): N
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): N
Control Mode (UAS): Manual Control
Type (UAS): Purchased
Number of UAS Being Controlled (UAS): Number of UAS: 1

**Person**

Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Commercial Operator (UAS)
Function.Flight Crew: Person Manipulating Controls (UAS)
Qualification.Flight Crew: Remote Pilot (UAS)
Experience.Flight Crew.Total (UAS): 250
Experience.Flight Crew.Last 90 Days (UAS): 50
ASRS Report Number.Accession Number: 1936399
Human Factors: Human-Machine Interface
Human Factors: Training / Qualification
Human Factors: Confusion
Analyst Callback: Attempted
Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other
Result.General : None Reported / Taken

Assessments
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Primary Problem : Ambiguous

Narrative: 1
I apparently flew in a TFR yesterday in Location. I requested and received LAANC approval authorization. There was a TFR over ZZZ as a Public Official was in the area. When you I used B4UFLY, there were overlapping graphics for that area and it appeared to have the same colorization as always. When my LAANC was automatically and immediately approved I thought there was no issue. I was flying as a certified Part 107 by the way. After posting a few pics in a private group on social media, some folks started asking and I realized I may have been in the wrong. I went back and read the email (I usually just read the text message that says you're approved) and it does clearly state that pilots are responsible for adhering to TFRs. What will I do differently? First, I won't do this again. I will learn how to subscribe to TFRs and check during my pre-flight (which I did do but didn't realize I was wrong). I will also go back and educate everyone in the group with what happened. This morning I contacted the FAA and they called me. Basically they said don't beat yourself up over it, but to report it here, use it as a teaching moment and to improve from this. If I could encourage - maybe all TFRs should be a unique color so as to not be confused with regular airspace issues. But yes, 100% the pilot is responsible for following the rules. Thank you

Synopsis
Part 107 pilot learned after a flight they inadvertently flew in an active TFR.
**ACN: 1926318 (16 of 50)**

**Time / Day**
- Date: 202208
- Local Time Of Day: 0601-1200

**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: 5000

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Cheetah, Tiger, Traveler AA5 Series
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Personal
- Flight Phase: Takeoff / Launch
- Route In Use: Direct
- Airspace.TFR: ZZZ

**Person**
- 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: 696
- Experience.Flight Crew.Last 90 Days: 3
- Experience.Flight Crew.Type: 274
- ASRS Report Number.Accession Number: 1926318
- Human Factors: Situational Awareness
- Human Factors: Human-Machine Interface

**Events**
- Anomaly.Airspace Violation: All Types
- Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
- Anomaly.Deviation / Discrepancy - Procedural: FAR
- Detector.Person: Air Traffic Control
- When Detected: In-flight
Result. Flight Crew: Exited Penetrated Airspace
Result. Air Traffic Control: Issued Advisory / Alert

Assessments
Contributing Factors / Situations: Human Factors
Contributing Factors / Situations: Software and Automation
Primary Problem: Human Factors

Narrative: 1
Prepped for a .5 hour VFR flight between ZZZ and ZZZ1. Had just drove the same route and was familiar with weather. Powered up aircraft and checked AWOS, then checked Garmin Pilot on iPad for any NOTAMs. The only NOTAM reflected for ZZZ was MISC for Radio Altimeter and N/A to my flight. Departed ZZZ and immediately rec'd call on Unicom that I was busting a TFR. Immediately contacted ATC and explained that I was inadvertently inside the TFR on a direct course to leave the TFR. ATC assigned a discrete code and requested I contact them upon arrival at ZZZ1. The TFR never appeared on my iPad. It did appear on my Garmin 760 after several minutes of flight. I can only assume there is lag with ADSB data. Arrived ZZZ1 and contacted ATC to provide information on my flight. I then took screenshots of Garmin Pilot on my iPad. The TFR did not appear as graphic, nor was it listed under NOTAM tab for ZZZ. I then opened Garmin Pilot on my iPhone to compare. The iPhone version did show the TFR, both graphically and under the NOTAM tab. I took screenshots of these displays as well. I reported this issue to Garmin and have asked how this could happen (user error, system error, version issue). Am awaiting a reply.

Synopsis
Pilot reported entering TFR without a clearance.
ACN: 1925063  (17 of 50)

Time / Day
Date: 202208
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: ZZZZ.Airport
State Reference: FO
Altitude.MSL.Single Value: 33000

Aircraft
Reference: X
Aircraft Operator: Air Carrier
Make Model Name: B747-400
Crew Size.Number Of Crew: 2
Operating Under FAR Part: Part 121
Flight Plan: IFR
Mission: Cargo / Freight / Delivery
Flight Phase: Cruise

Person: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: Pilot Not Flying
Function.Flight Crew: Captain
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1925063
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Crew

Person: 2
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Air Carrier
Function.Flight Crew: First Officer
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Qualification.Flight Crew: Instrument
ASRS Report Number.Accession Number: 1925062
Human Factors: Communication Breakdown
Human Factors: Training / Qualification
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: Flight Crew

Events
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Dispatch
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Overcame Equipment Problem

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

Narrative: 1
A few minutes prior to crossing the fix ZZZZZ, the Relief Pilot and the Relief Pilot Monitoring was asked by ATC if they would like a shortcut. The said yes and was given a direct to the fix ZZZZZ1. This caused our flight track to penetrate ZZZZ airspace and follow just north of the coastline. It appears we did not overfly any ZZZZ landmass. Around XX40Z the Relief Pilots called me in the bunk and when I came up to the cockpit, I was informed of what had happened. The Relief Pilots may have forgotten we cannot overfly ZZZZ with the [Hazmat] cargo we were carrying at the time. Better brief before departure emphasizing special cargo and the need to stay on flight plan to avoid overflying certain countries. Better brief of Relief Pilots reminding them of the need to stay out of certain airspace.

Narrative: 2
I was in the crew bunk resting when our flight may have come close to ZZZZ airspace while we were operating [a special mission] flight with Hazmat aboard. I was told that the Relief Crew had been given a "direct to" shortcut on our flight plan by ATC and that we received a question from Dispatch if we overflew [prohibited airspace]. That’s all I know of this situation. In general, I don’t think our pilots (especially FOs (First Officers)) get enough training on the potential pitfalls of operating these types of flights where overflight permits and alternate availability really have to be well thought through. I say this only in hindsight after realizing that this close-call could have happened to many crews unaware of where we are. Can we also suggest that Jeppesen put country names somewhere on the enroute/high altitude portion of the moving map so we have better special awareness of countries‘ flown over/around us and possible limitations on which countries can be flown over or not.

Synopsis
Air Carrier flight crew reported an airspace violation by overflying an airspace which prohibits overflights when transporting Hazmat cargo. Captain recommends better crew briefing and training of new pilots.
ACN: 1910447

**Time / Day**
- Date: 202206
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference. ATC Facility: ZZZ.ARTC
- State Reference: US
- Relative Position. Distance. Nautical Miles: 6.5
- Altitude. AGL. Single Value: 100

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

**Aircraft**
- Reference: X
- Aircraft Operator: Commercial Operator (UAS)
- Make Model Name: DJI M30T
- Crew Size. Number Of Crew: 1
- Operating Under FAR Part: Part 107
- Flight Plan: None
- Mission: Photo Shoot / Video
- Flight Phase: Hovering (UAS)
- Airspace. TFR: ZZZ
- Operating Under Waivers / Exemptions / Authorizations (UAS): N
- Weight Category (UAS): Small
- Configuration (UAS): Multi-Rotor
- Flight Operated As (UAS): VLOS
- Control Mode (UAS): Manual Control
- Flying In / Near / Over (UAS): Emergency Services
- Type (UAS): Purchased
- Number of UAS Being Controlled (UAS). Number of UAS: 1

**Person**
- Location Of Person: Outdoor / Field Station (UAS)
- Reporter Organization: Commercial Operator (UAS)
- Function. Flight Crew: Person Manipulating Controls (UAS)
- Qualification. Flight Crew: Remote Pilot (UAS)
- Experience. Flight Crew. Last 90 Days (UAS): 4
- Experience. Flight Crew. Type (UAS): 2
- ASRS Report Number. Accession Number: 1910447
- Human Factors: Situational Awareness
- Analyst Callback: Completed

**Events**
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other
Result.General : None Reported / Taken

Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Procedure
Primary Problem : Ambiguous

Narrative: 1
I accidentally flew in a TFR. There was a fire yesterday evening just outside of ZZZ. I sometimes do free video and pictures, of news events, for a local news organization. I checked sky vector app on my phone to see if there's any restrictions. It did not say that there was. I also checked Flightradar24 to see if there were any aircraft in the area. There was not. I was south of the road and flew for about 10 minutes. As I got done and was leaving a Public Official that I know pulled up and said that I shouldn't be flying and that the Public Information Officer wanted to talk to me. When I got over to the other side where the Public Information Officer was he informed me of the TFR. And search-and-rescue we fly in and deal with TFRs all the time. So I know the importance of them. The Information Officer name was Person A. He stated that he would probably not report it, since there were no aircraft in the area. But I want to make sure that I'm doing everything by the book. I apologize to him and his guys for any issues that it may have caused. I do fly in conjunction with law enforcement and other emergency service agencies so am very well aware of what needs to happen and thought my bases were covered when I checked the apps.

Callback: 1
The reporter indicated the UAS was brand new and had not been connected to the internet. The UAS was unable to load information about TFR's.

Synopsis
Part 107 pilot reported flying a UAS in an active TFR. It was during the post-flight the UAS pilot learned of the TFR.
ACN: 1877214 (19 of 50)

Time / Day

Date: 202202
Local Time Of Day: 0601-1200

Place

Locale Reference.Airport: CLE.Airport
State Reference: OH
Relative Position.Distance.Nautical Miles: 15
Altitude.AGL.Single Value: 100

Environment

Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 6
Work Environment Factor: Excessive Wind (UAS)
Light: Daylight
Ceiling.Single Value: 1000

Aircraft

Reference: X
Aircraft Operator: Commercial Operator (UAS)
Make Model Name: Small UAS, Multi Rotor
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 107
Flight Plan: None
Mission: Utility / Infrastructure
Flight Phase: Hovering (UAS)
Route In Use: None
Airspace.TFR: ZZZ
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): N
Control Mode (UAS): Manual Control
Flying In / Near / Over (UAS): Private Property
Flying In / Near / Over (UAS).Other
Type (UAS): Purchased
Number of UAS Being Controlled (UAS).Number of UAS: 1

Person

Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Commercial Operator (UAS)
Function.Flight Crew: Person Manipulating Controls (UAS)
Qualification.Flight Crew: Remote Pilot (UAS)
Experience.Flight Crew.Last 90 Days (UAS): 4
Experience.Flight Crew.Type (UAS): 22
ASRS Report Number.Accession Number: 1877214
Human Factors: Situational Awareness
Analyst Callback: Completed

Events
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: UAS Crew
When Detected.Other
Result General: None Reported / Taken

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

Narrative: 1
On Date at XA:25 AM I flew a UAV to do a roof inspection in Ohio. I was unaware of the temporary flight restriction. I trusted that the drone would not fly in a restricted zone. In the future I will utilize an FAA authorized app to identify temporary flight restrictions. This was a replacement drone for one that had a battery problem and has not yet been registered. The UAV will be registered within 24 hours.

Callback: 1
The reporter had no additional information to share.

Synopsis
Part 107 pilot reported learning after a flight that they had flown in an active TFR.
ACN: 1866179 (20 of 50)

**Time / Day**
- Date: 202112
- Local Time Of Day: 0601-1200

**Place**
- Altitude.AGL.See Single Value: 200

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility: Visibility: 10
- Light: Dawn
- Ceiling: CLR

**Aircraft**
- Reference: X
- Aircraft Operator: Commercial Operator (UAS)
- Make Model Name: DJI Mavic 3
- Crew Size: Number Of Crew: 2
- Operating Under FAR Part: Part 107
- Flight Plan: None
- Mission: Photo Shoot / Video
- Flight Phase: Cruise
- Route In Use: None
- Airspace.TFR: ZZZ
- Operating Under Waivers / Exemptions / Authorizations (UAS): N
- Weight Category (UAS): Small
- Configuration (UAS): Multi-Rotor
- Flight Operated As (UAS): VLOS
- Control Mode (UAS): Manual Control
- Flying In / Near / Over (UAS): Emergency Services
- Type (UAS): Purchased
- Number of UAS Being Controlled (UAS): Number of UAS: 1

**Person**
- Location Of Person: Outdoor / Field Station (UAS)
- Reporter Organization: Commercial Operator (UAS)
- Function: Flight Crew: Remote PIC (UAS)
- Function: Flight Crew: Person Manipulating Controls (UAS)
- Qualification: Flight Crew: Remote Pilot (UAS)
- Experience: Flight Crew: Total (UAS): 1400
- Experience: Flight Crew: Last 90 Days (UAS): 34
- Experience: Flight Crew: Type (UAS): 22
- ASRS Report Number: Accession Number: 1866179
- Human Factors: Confusion
- Analyst Callback: Completed

**Events**
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : UAS Crew
When Detected.Other
Result.General : None Reported / Taken

**Assessments**

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

**Narrative: 1**

Got prior authorization through the Aloft App. Confirmed no TFR on B4Ufly app. Flight started at XA:45am. TFR went into effect at XB:00am. I landed at XB:24am and unknowingly violated the TFR as flight was in progress when TFR went into effect. I checked two official sources and the DJI geofence did not notify when a TFR went up. I made every attempt to fly legally. There were no active fire operations, no active air operations and the airspace was clear of all aircraft. Upon realization, I opted to self report.

**Callback: 1**

Reporter stated they looked at B4UFLY and the DJI app prior to launch to check for TFRs and NOTAMs. There were none showing at the time of launch nor planned in the several hours after the launch. Several hours after landing the UAS, the Pilot learned of the TFR. The UAS Pilot spoke with the FAA and learned the TFR was issued directly from a nearby ATC Tower and this is why it wasn't posted prior to becoming active.

**Synopsis**

UAS pilot reported they unknowingly flew their UAS into a TFR. Reporter stated there were no TFRs prior to launch and the TFR became active during the flight.
Time / Day
Date: 202112
Local Time Of Day: 0601-1200

Place
Locale Reference. ATC Facility: ZZZ. Tower
State Reference: US
Altitude.AGL.Single Value: 99

Environment
Flight Conditions: VMC
Weather Elements / Visibility: Cloudy
Weather Elements / Visibility Visibility: 6.0
Light: Daylight
Ceiling.Single Value: 3000

Aircraft
Reference: X
Aircraft Operator: Personal
Make Model Name: DJI Mavic 3
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Recreational Operations / Section 44809 (UAS)
Flight Plan: None
Mission: Photo Shoot / Video
Flight Phase: Takeoff / Launch
Route In Use: None
Airspace.TFR: ZZZ
Airspace Authorization Provider (UAS): Authorized Third Party
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Airworthiness Certification (UAS): Standard
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): N
Control Mode (UAS): Manual Control
Flying In / Near / Over (UAS): Natural Disaster
Type (UAS): Purchased
Number of UAS Being Controlled (UAS). Number of UAS: 1

Person
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Personal
Function.Flight Crew: Person Manipulating Controls (UAS)
Qualification.Flight Crew: Remote Pilot (UAS)
Experience.Flight Crew.Total: 0
Experience.Flight Crew.Total (UAS): 1
Experience.Flight Crew.Last 90 Days (UAS): 1
Experience.Flight Crew.Type (UAS): 1
ASRS Report Number. Accession Number: 1866178
Human Factors: Training / Qualification
Human Factors: Confusion
Analyst Callback: Completed

Events
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: UAS Crew
When Detected.Other
Result.General: None Reported / Taken

Assessments
Contributing Factors / Situations: Chart Or Publication
Contributing Factors / Situations: Human Factors
Contributing Factors / Situations: Software and Automation
Contributing Factors / Situations: Procedure
Primary Problem: Ambiguous

Narrative: 1
This morning, I hoped to fly my DJI Mavic 3 and check on some houses [in a] development. I used the Aloft app to check for TFR's and NOTAM's and noticed the restriction due to the fire. I was a bit confused by the wording in the Operating Restriction and Requirements section where it stated, "except as described". The app allowed me to apply for LAANC authorization which was granted. My drone will not fly without approval, and it was not until permission was granted that my drone would even take off. I came back to my office and asked a colleague about the incident and he educated me that even though the app granted me permission it was inadequate in providing a waiver of the TFR.

Callback: 1
UAS pilot indicated the ALOFT LAANC app provided approval to fly in an area within the TFR. After further review there was small fine print towards the bottom of the approval which indicated a need to confirm and not fly in TFRs.

Synopsis
UAS pilot reported flying into an active TFR due to misunderstanding of LAANC authorization.
ACN: 1861680

Time / Day
Date: 202112
Local Time Of Day: 1201-1800

Place
Locale Reference. Airport: ZZZ.Airport
State Reference: US
Relative Position. Distance. Nautical Miles: 3
Altitude.AGL.Single Value: 50

Environment
Flight Conditions: VMC
Light: Daylight
Ceiling: CLR

Aircraft
Reference: X
Aircraft Operator: Commercial Operator (UAS)
Make Model Name: Small UAS, Multi Rotor
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 107
Flight Plan: None
Mission: Photo Shoot / Video
Flight Phase: Hovering (UAS)
Route In Use: None
Airspace.TFR: ZZZ
Operating Under Waivers / Exemptions / Authorizations (UAS): N
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flying In / Near / Over (UAS): Open Space / Field
Flying In / Near / Over (UAS): Natural Disaster
Type (UAS): Purchased
Number of UAS Being Controlled (UAS). Number of UAS: 1

Person
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Corporate
Function. Flight Crew: Person Manipulating Controls (UAS)
Function. Flight Crew: Remote PIC (UAS)
Qualification. Flight Crew: Flight Instructor
Qualification. Flight Crew: Remote Pilot (UAS)
Qualification. Flight Crew: Commercial
Qualification. Flight Crew: Instrument
Qualification. Flight Crew: Multiengine
Experience. Flight Crew. Total: 3500
Experience. Flight Crew. Total (UAS): 1500
Experience. Flight Crew. Last 90 Days (UAS): 100
Experience. Flight Crew. Type (UAS): 200
ASRS Report Number. Accession Number: 1861680
Narrative: 1

I had been operating the UAS from early morning through approximately XA:00 am, providing news coverage of the tornado disaster in City, State. I had been checking periodically for TFR's using Foreflight on my cell phone and none were being imposed. I resumed flying at approximately XC:00 and again checked for TFR's using the same method. Upon returning to the hotel that evening I checked again when online as I was preparing for flights the next day and also to see if a VIP TFR may be upcoming, and saw to my surprise that a TFR had been imposed for the area that I had been flying in that took effect at XB:30 that day. I do not know why it did not appear on Foreflight other than I was in an area of poor cell coverage and perhaps the map loaded but the application was not communicating for updates. In the future when doubt is cast on the reliability of internet based mapping applications, a phone call to FSS is in order. Then there is no doubt.

Callback: 1

Reporter had no additional information to share.

Synopsis

Part 107 UAS pilot was flying in an area of a natural disaster. Prior to the flight the UAS pilot checked for NOTAMs/TFRs and saw none. Reporter learned during post flight that they flew in a TFR that had been created after takeoff.
ACN: 1857860 (23 of 50)

Time / Day
Date: 202111
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: PNE.Airport
State Reference: PA
Altitude.MSL.Single Value: 1100

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
Aircraft Operator: Personal
Make Model Name: Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew: 1
Flight Plan: VFR
Mission: Personal
Flight Phase: Cruise
Airspace.Class E: NYC

Person
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 110
Experience.Flight Crew.Last 90 Days: 10
Experience.Flight Crew.Type: 100
ASRS Report Number.Accession Number: 1857860
Human Factors: Confusion

Events
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Flight Crew
When Detected.Other
Result.General: None Reported / Taken

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

Narrative: 1
On Date, XB:30am I was scheduled to depart PNE airport and fly to the special flight rules area over Hudson river for the tour of Manhattan; fly through it once and then return back to PNE airport. I was the PIC (Pilot in Command). Before departing I called 1-800-WxBrief at XA:42am to get the latest information about weather in-flight and possible TFRs. The briefer responded with the weather (all VMC) and informed me about TFR over Manhattan and Hudson river that does NOT apply to me. TFR was only concerning usage of drones due to [event] and only restricted usage of drones in that area; did not apply to aircraft. Having received that information, I departed PNE per plan and flew through the Hudson River SFRA as planned on 1100 ft. altitude and provided calls as instructed by the training on SFRA. I noticed that one airplane made a 180 turn before that TFR and did not fly into the area through Hudson river. I flew through that area having been informed that there is no active TFR for manned aircraft. I'm reporting this event because I want to make sure that I have not accidentally flown through the aircraft TFR that was active not only for drones, but was active for aircraft as well at the time. ForeFlight did not show anything except UAS restriction; neither did the briefer told me about any restrictions. That airplane making a 180 turn and avoiding the area made me think that there might have been another active TFR that briefer or ForeFlight did not inform me of. As a recommendation, may I suggest that FAA publishes TFRs with a bit more clear language of who they apply and do not apply to: e.g., stating clearly "Following TFR applies only to UAS" or "TFR applies to all manned and unmanned aircraft".

**Synopsis**

Pilot of a small aircraft reported flying through a TFR after being advised by a weather briefer and electronic flight app that the TFR applied only to UAS and not to fixed wing aircraft. The pilot stated the NOTAM verbiage wasn't clear and may have led to the airspace incursion.
ACN: 1843066 (24 of 50)

Time / Day
Date: 202109
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 2
Altitude.AGL.Single Value: 300

Environment
Flight Conditions: VMC
Weather Elements / Visibility.Visibility: 4
Light: Daylight
Ceiling: CLR

Aircraft
Reference: X
Aircraft Operator: Commercial Operator (UAS)
Make Model Name: Small UAS (At or above 0.55 lbs and less than 55 lbs)
Crew Size.Number Of Crew: 1
Flight Plan: None
Mission: Surveying / Mapping (UAS)
Flight Phase: Cruise
Flight Phase: Landing
Flight Phase: Takeoff / Launch
Airspace.TFR: ZZZ
Airspace Authorization Provider (UAS): Authorized Third Party
Operating Under Waivers / Exemptions / Authorizations (UAS): Y
Waivers / Exemptions / Authorizations (UAS): Blanket COA
Airworthiness Certification (UAS): Special Authorization / Section 44807
Weight Category (UAS): Small
Configuration (UAS): Multi-Rotor
Flight Operated As (UAS): VLOS
Flight Operated with Visual Observer (UAS): N
Control Mode (UAS): Waypoint Flying
Flying In / Near / Over (UAS): No Drone Zone
Flying In / Near / Over (UAS): Aerial Show / Event
Type (UAS): Purchased
Number of UAS Being Controlled (UAS).Number of UAS: 1

Person
Location Of Person: Outdoor / Field Station (UAS)
Reporter Organization: Commercial Operator (UAS)
Function.Flight Crew: Person Manipulating Controls (UAS)
Function.Flight Crew: Remote PIC (UAS)
Qualification.Flight Crew: Remote Pilot (UAS)
Experience.Flight Crew.Total: 130
Experience.Flight Crew.Total (UAS): 100
Experience.Flight Crew.Last 90 Days (UAS) : 30
Experience.Flight Crew.Type (UAS) : 120
ASRS Report Number.Accession Number : 1843066
Human Factors : Other / Unknown
Human Factors : Situational Awareness
Human Factors : Training / Qualification
Analyst Callback : Attempted

Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Other Person
When Detected.Other
Result.General : Police / Security Involved

Assessments
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors

Narrative: 1
I have been flying a weekly mission for a company. They have contracted with
Construction company and have hired me to fly for mapping purposes. The mission was [in
an area] which is controlled airspace near ZZZ. The company applied for a COA which I’ve
been using and will last until the end of the year. Last Date I unlocked the app like usual
and flew the mission. It's at 300 feet, and usually takes an hour. At the end of the mission
I was approached by a Sheriff's officer. I was advised that a TFR was in place. I failed to
look for any TFR’s and should have known better since there was an active air show in
progress. I have now learned to use tfr.faa.gov and will do so from now on.

Synopsis
Part 107 pilot reported they did not check for Temporary Flight Restrictions prior to flight
and flew inside of an active TFR during an event.
ACN: 1828544  (25 of 50)

**Time / Day**
- Date: 202107
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference
  - ATC Facility: OLM.Tower
- State Reference: WA
- Relative Position
  - Distance: Nautical Miles: 4
  - Altitude: AGL: Single Value: 330

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

**Aircraft**
- Reference: X
- Aircraft Operator: Recreational / Hobbyist (UAS)
- Make Model Name: Small UAS (At or above 0.55 lbs and less than 55 lbs)
- Crew Size
  - Number Of Crew: 1
- Operating Under FAR Part: Recreational Operations / Section 44809 (UAS)
- Flight Plan: None
- Mission: Recreational / Hobbyist (UAS)
- Flight Phase: Other
  - Route In Use: None
- Weight Category (UAS): Small
- Configuration (UAS): Multi-Rotor
- Flight Operated As (UAS): VLOS
- Flight Operated with Visual Observer (UAS): N
- Control Mode (UAS): Manual Control
- Flying In / Near / Over (UAS): Open Space / Field
- Flying In / Near / Over (UAS): No Drone Zone
- Flying In / Near / Over (UAS): Critical Infrastructure
- Number of UAS Being Controlled (UAS): Number of UAS: 1

**Person**
- Location Of Person: Outdoor / Field Station (UAS)
- Reporter Organization: Recreational / Hobbyist (UAS)
- Function
  - Flight Crew: Person Manipulating Controls (UAS)
  - Flight Crew: Remote PIC (UAS)
- Experience
  - Flight Crew: Total (UAS): 50
  - Flight Crew: Last 90 Days (UAS): 6
  - Flight Crew: Type (UAS): 6
- ASRS Report Number: Accession Number: 1828544
- Human Factors: Training / Qualification
- Analyst Callback: Attempted

**Events**
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Detector.Person: Flight Crew
When Detected.Other
Result.General: None Reported / Taken

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

Narrative: 1
On Date at approximately XA:00 Hrs, I was in Olympia, WA for an unrelated event and decided to see if I could fly my drone on the Capitol complex to take videos or photos of the legislative building for recreational purposes. I checked the airspace using the ALOFT B4UFLY app, and could see that the airspace near the Capitol was Class G, but very close to Class E airspace for OLM to the south. I saw no signs or warnings of NO DRONE flying Zones. The areas for which I would take off and land were either flat, mowed grass, or empty concrete sidewalks. The temperature was in the high XA's, low XB's, and the skies were clear with a light breeze out of the south. There were very few vehicles or people in the area because the State Legislature is not in session currently. I parked on N Diagonal road and took off from the sidewalk area there. I completed 4 flights. I maintained VLOS for all my flights. The first I took off from the sidewalk near where I parked, and I elevated to 200 feet AGL, and then flew a path to the Winged Victory Monument and circled it before I returned to the area I took off from. I also walked down to the area in between the Legislative Building and the Temple of Justice and took off from the flag pole area directly in between. I elevated to approximately 330 feet AGL and completed about a 100 degree panning video to the north side around the dome of the Legislative building and then centered the drone and landed in the same spot I took off from. I did this twice for video purposes. Again, I landed safely back where I started. I then took off from mostly the same spot in between the buildings facing towards the Temple of Justice. My focus was on taking a video of the Temple of Justice from the south side of the building while I placed the drone at the same height as the tallest flag pole on the building, then scanning down the front. My last flight I walked back to where I originally parked my vehicle on N Diagonal, then I took off again from the sidewalk area and flew around the Tivoli fountain over the grassy areas, never going higher than approximately 150 feet AGL. I had no problems or concerns at the time during these flights. Now, 5 days later, I am speaking to a friend who is also a drone operator, but also a commercial pilot about my recent drone flights. After discussing these flights, he stated that it was not authorized to fly a drone on the Capitol complex. I said I checked the B4UFLY app, and did not see any signs or postings while on the grounds of the campus. Following our conversation, I then went and did more research now looking at non-aviation sites, as well as searching Sectional Aeronautical Charts on a commercial website and found that it is indeed not authorized to fly on the Capitol grounds and apparently numerous areas around there. I also then went an checked an aeronautical section chart (learning to read them) and do now see that there is airspace restrictions over the Capitol complex. My friend advised me I should report this incident to help ensure others like me potentially won’t make this same mistake. As a recreational pilot, who is working on getting my Part 107 certification, I have been attending training using the FAASafety.gov site, and am operating under the understanding that any airspace restrictions, would be listed on the B4UFLY app. This is
obviously NOT accurate. Following my friends notification that I may have violated airspace, I checked again on the B4UFLY app and again found no Special Use Restrictions, no TFR's, or any indication of not being able to fly on the Capitol grounds in the areas I flew. It was an open area and clear weather. The Class E restrictions appear to start to the south of the building. I would have never even considered flying if the Legislature was in session due to the amount of people on the ground and in the area. I will continue learning where to best get information about the areas for which I am permitted to fly and abide by the restrictions I am aware of, or should be aware of. I think this can be avoided for others in the future if the training for recreational or Part 107 pilots via the FAA, included ALL the locations to gather flight data prior to flight. Additionally training on the clear expectation that flying a drone requires you to know, use and understand Sectional Aeronautical Charts, as well as placing that information in the most accessible place to Recreational pilots. I have downloaded and used all the apps for flying a drone that have been pushed to use by the FAA on their websites. In my course of attempting to earn my Part 107 certification, I have taken the classes through the FAA websites to prepare me, and I feel very unprepared given this mistake I apparently made. I of course want to do the right thing, fly safely, and abide by the rules. I will continue to make efforts to learn and improve.

**Synopsis**

Recreational/Hobbyist pilot was flying UAS in an area restricted by state law.
**Time / Day**

Date: 202107
Local Time Of Day: 1801-2400

**Place**

Locale Reference. ATC Facility: PCT.TRACON
State Reference: VA
Relative Position. Angle. Radial: 345
Relative Position. Distance. Nautical Miles: 6.4
Altitude. AGL. Single Value: 2500

**Environment**

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

**Aircraft**

Reference: X
ATC / Advisory. TRACON: PCT
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: VFR
Mission: Aerobatics
Flight Phase: Cruise
Flight Phase: Descent
Flight Phase: Climb
Route In Use: None
Airspace. Class E: ZDC

**Person**

Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function. Flight Crew: Single Pilot
Function. Flight Crew: Pilot Flying
Qualification. Flight Crew: Instrument
Qualification. Flight Crew: Commercial
Experience. Flight Crew. Total: 2800
Experience. Flight Crew. Last 90 Days: 25
Experience. Flight Crew. Type: 50
ASRS Report Number. Accession Number: 1822464
Human Factors: Communication Breakdown
Human Factors: Situational Awareness
Human Factors: Workload
Human Factors: Distraction
Communication Breakdown.Party1 : Flight Crew
Communication Breakdown.Party2 : Ground Personnel

Events
Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Conflict : Airborne Conflict
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
Miss Distance.Horizontal : 0
Miss Distance.Vertical : 1000
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Software and Automation
Contributing Factors / Situations : Human Factors
Primary Problem : Chart Or Publication

Narrative: 1
I was practicing my aerobatic routine in Aerobatic Practice Area (APA) waivered airspace just north of HGR and had a ground observer. The airspace NOTAM was active and the area is depicted on a sectional chart and is in software for current navigational systems. However, my concern is that I’m getting traffic coming through the airspace. I feel there are a few things that could be done to enhance the safety of my current operation. I’m writing you because I’m concerned the FAA will just close it down if I suggest there is a safety issue. The current waiver requires me to monitor Potomac Approach during my operation. That possibly may help, but sometimes there is so much chatter that it would be difficult to catch a call and their main purpose is to keep IFR traffic out of my waivered airspace. In the past I would monitor HGR Tower and they were more helpful because they would look for traffic and be able to warn VFR traffic that they were communicating with also. My aircraft does not have the ability to monitor 2 frequencies simultaneously, so I’m currently only monitoring Potomac Approach as required by the waiver. As you know, TFR's are depicted boldly on digital navigational software devices. Could "Hot" APA's also be depicted boldly like TFR's? That would be a more obvious warning to other aircraft than just a drawing on a chart. Obviously, all pilots should be familiar with published NOTAMS in their route of flight, but we know that doesn't always happen. Also allowing HGR Tower to call out possible traffic conflicts would be helpful but please don't let the FAA close the area again for months until they have time to amend the paperwork! I did contact a representative from Potomac Approach about my concern and am waiting for a reply. Even if he is able to allow me to monitor HGR Tower instead of Potomac Approach, it would still be helpful if Hot APA's could show up as obvious as TFR's on digital navigational aids. Your consideration in this matter would be greatly appreciated. Thank you.

Synopsis
An aerobatic pilot who has a FAA waiver for a designated Aerobatic Practice Area reported traffic routinely flies through the airspace when it is advertised in use.
**ACN: 1819904** (27 of 50)

**Time / Day**
- Date: 202107
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference
- ATC Facility: ZOB.ARTCC
- State Reference: OH

**Aircraft: 1**
- Reference: X
- ATC/Advisory Center: ZOB
- Aircraft Operator: Military
- Make Model Name: Heavy Transport, Low Wing, 4 Turbojet Eng
- Crew Size/Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Descent
- Route In Use: Vectors
- Airspace/Class A: ZOB

**Aircraft: 2**
- Reference: Y
- ATC/Advisory Center: ZOB
- Aircraft Operator: Military
- Make Model Name: Fighter
- Crew Size/Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: IFR
- Mission: Tactical
- Airspace/Class A: ZOB

**Aircraft: 3**
- Reference: Z
- ATC/Advisory Center: ZOB
- Aircraft Operator: Military
- Make Model Name: Stratotanker 135
- Crew Size/Number Of Crew: 2
- Operating Under FAR Part: Part 91
- Flight Plan: IFR
- Mission: Refueling
- Flight Phase: Cruise
- Airspace/Class A: ZOB

**Aircraft: 4**
- Reference: A
- ATC/Advisory Center: ZOB
- Aircraft Operator: Military
- Make Model Name: E-3 Sentry (AWACS)
Crew Size: Number Of Crew: 5
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Tactical
Flight Phase: Cruise
Airspace.Class A: ZOB

**Person: 1**
Location Of Person: Facility: ZOB.ARTCC
Reporter Organization: Government
Function.Air Traffic Control: Enroute
Qualification.Air Traffic Control: Fully Certified
Experience.Air Traffic Control: Time Certified In Pos 1 (yrs): 2
ASRS Report Number: Accession Number: 1819904
Human Factors: Communication Breakdown
Human Factors: Confusion
Human Factors: Troubleshooting
Human Factors: Workload
Human Factors: Distraction
Communication Breakdown.Party1: ATC
Communication Breakdown.Party2: ATC

**Person: 2**
Location Of Person: Facility: ZOB.ARTCC
Reporter Organization: Government
Function.Air Traffic Control: Supervisor / CIC
Qualification.Air Traffic Control: Fully Certified
Experience.Air Traffic Control: Time Certified In Pos 1 (yrs): 7
ASRS Report Number: Accession Number: 1819906
Human Factors: Workload
Human Factors: Troubleshooting
Human Factors: Time Pressure
Human Factors: Communication Breakdown
Human Factors: Confusion
Communication Breakdown.Party1: ATC
Communication Breakdown.Party2: ATC

**Person: 3**
Location Of Person: Facility: ZOB.ARTCC
Reporter Organization: Government
Function.Air Traffic Control: Enroute
Qualification.Air Traffic Control: Fully Certified
Experience.Air Traffic Control: Time Certified In Pos 1 (yrs): 6
ASRS Report Number: Accession Number: 1819911
Human Factors: Communication Breakdown
Communication Breakdown.Party1: ATC
Communication Breakdown.Party2: ATC

**Events**
Anomaly.Airspace Violation: All Types
Anomaly.ATC Issue: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.No Specific Anomaly Occurred : Unwanted Situation
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Air Traffic Control : Provided Assistance
Result.Air Traffic Control : Issued New Clearance

Assessments
Contributing Factors / Situations : 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

This is once again another report about the Steelhead MOA/ATCAA. Area X Controllers were briefed that the Steelhead ATCAA (Air Traffic Control Assigned Airspace) was going to be active from 29,000 feet to 31,000 feet from XA:00-XD:00. There would be numerous military aircraft in the MOA (Military Operations Area) due to the VIP being in TVC. When I sat down at the sector, there was already confusion. There were 3 tanker aircraft wanting a clearance into the MOA but it was not yet active. I tried to call the Minneapolis Center military desk and Black Talon (as I've repeatedly been told to do after these reports). Cleveland Center's "fix" is to call those two facilities. There was no answer at either line. I tried having my Assist call. No answer. I had the Supervisor call. No answer. I called the Minneapolis Center controller at TVC high sector to try to coordinate a new altitude block of 25,000 to 31,000 feet and was denied. The tankers were given vectors until the airspace went active. At that time, I cleared the tankers into the MOA. During this live operation, the tankers repeatedly asked for more vertical airspace. The supervisor coordinated it and it was granted. I told the Operations Manager (OM) that a dangerous situation was occurring and has been occurring with the Steelhead MOA/ATCAA. He stated that he didn't really know how it worked, but the aircraft controlled the airspace and that he did not think there was an air traffic controller working the airspace. Later on, the OM talked to my supervisor who spoke to me. The supervisor said that Black Talon is only the coordinating agency and they simply schedule the airspace but are not controllers. As the day went on, the tankers were asking to join up and were asking for permission to climb and descend. This is not the procedure for military airspace. In MOA/ATCAA, the aircraft are not under the FAA's control. Whose control are they under? I am still unclear. However, they were soliciting separation services. I didn't even have flight plans for these aircraft any longer. Their radar services had been terminated. I advised them that they are responsible for separating themselves and I was not providing separation services. They informed me that Aircraft Y told them that they had to ask my permission for altitude changes inside the Steelhead ATCAA. There were also several spillouts involving these aircraft. At least 2, I personally saw. After another break I came back to a cap and anchor drawn on the screen. Cleveland Center's military guy had come in and drawn a cap and anchor but had told the controllers it "wasn't official". Basically, what it seems happened is someone made a cap and anchor in the Steelhead MOA at 29,000 to 31,000 feet. Cap and anchors are typically inclusive vertical altitudes. The cap and anchor, however, were not in the confines of the Steelhead MOA hence the spillouts. To be clear, the Steelhead ATCAA was active just apparently with a cap and anchor that no one forwarded down the line. The aircraft were making altitude and time adjustments real time, not in advance. It went from FL290B310 to FL200B310 and from XA:00-XD:00 to now XA:00-XG:00. Very last minute
changes. To make this matter even worse was that I was controlling the VIP aircraft. I had sent the VIP aircraft through this (at the time) unknown cap and anchor because I wasn’t told about it. Every pilot and every aircraft is important to me, but the VIP aircraft was placed in an unsafe proximity to randomly maneuvering military aircraft that were not radar identified, who I no longer had flight plan information on, and who were not on my frequency. It was only after the VIP aircraft flew through that a "not official" cap and anchor was drawn which not only penetrated Cleveland, but Minneapolis and Toronto Centers as well. The Steelhead MOA/ATCAA seems strangely still very confusing. My supervisor and Operations Manager were unclear, and still are unclear, about it. Does Black Talon coordinate it through the Minneapolis military desk? Does Aircraft Y control it? I give pilots a frequency for Black Talon so maybe there is a controller there? Someone needs to find this stuff out. I personally volunteer for the mission. I will be medically disqualified for weeks and I would spend that time and my own money to travel to wherever or Zoom meeting whoever to figure this out. This has been an on-going issue that was especially perverse today. I have been raising the alarm for quite some time and am passionate about it and would like to personally get/set the record straight so that all aircraft and pilots are safe. I hope this will be met with the serious spirit with which it's written.

Narrative: 2

As a Supervisor in Area X at Cleveland Center, I spent my morning attempting to coordinate and discover why the aircraft were not following what we were briefed on. Area X was briefed that due to the TFR for VIP at Traverse City, Steelhead ATCAA would be activated from 29,000 to 31,000 feet for tanker and E3 activity. These altitudes and ATCAA (Air Traffic Control Assigned Airspace) were supposed to encompass all AEW (airborne early warning) and supporting activity. The ATCAA was activated from approximately XA:45Z to XE:00Z, however aircraft showed up before it was active and then requested it to remain active past it’s finish time. From the start, every single aircraft requested different altitudes than what was coordinated. I attempted to get information from Minneapolis Center, our military desk and Black Talon and was unable to get any answers. Eventually, we extended the Steelhead ATCAA from 23,000 to 31,000 feet to accommodate. Later, a tanker aircraft requested a block altitude of 20,000 to 22,000 feet and a controller gave him those until established in the lateral boundaries of Steelhead, at which point the controller understood the aircraft would climb to within the altitude limits of Steelhead (FL230-FL310). The aircraft never climbed. The controller then coordinated with Minneapolis Center blocking 20,000 to 23,000 feet to accommodate the aircraft. I then coordinated with our military coordinator to extend Steelhead to include these altitudes. When any aircraft are cleared into the Steelhead complex, radar service is terminated and the aircraft track gets dropped. This occurred during this session, as we were briefed to treat the aircraft as we normally would with Steelhead. However, while Steelhead was active, we had multiple occasions where an aircraft went outside of the lateral bounds of the Steelhead complex. After trying repeatedly to find out why this was happening, we discovered that the Sentry track was not fully inside of the Steelhead complex as we were briefed. At this point I called on the phone to Minneapolis Center supervisors desk, Toronto Center sectors Hamilton and Centralia to warn and pass along that we discovered that our information was incorrect. VIP Aircraft traveled through our airspace around XB:00 Local time estimated. Having no Controller in Charges on the entire day shift, I asked the Operations Manager to cover the Supervisor position while I plugged in and monitored the VIP movement. VIP Aircraft’s course traveled about 4 to 5 miles west of the Steelhead ATCAA. During this time we kept a close eye on any tracks within Steelhead due to their previous spillover events (We were not aware at this point that the Sentry was not fully enclosed within Steelhead). All tracks were on the East side of Steelhead and not in conflict with the VIP aircraft, however that potential did exist due to
the Sentry course that we were not aware of. In addition, multiple aircraft called at the Peck sector to request join ups and altitude changes while within the Steelhead ATCAA. The aircraft stated that Aircraft Y told them to do so. I had the controller inform the aircraft calling that Cleveland Center could not provide control instructions within Steelhead ATCAA. I also told the controller to state that they were not providing any separation services within Steelhead and that it was Aircraft control. At this point the floor walker was involved as well and verified that what we were doing was correct and was able to inform us why aircraft were spilling out of Steelhead. Also, we discovered around XD:00Z that the end time of XE:00Z would not be correct. This was only because I prompted my controller to ask detailed and blunt questions about if the aircraft within Steelhead would want it open longer. The aircraft’s intention was at XD:45Z to ask to extend Steelhead which in no way is enough time for coordination and planning! It was only because I pressed the controller to ask about an ambiguous statement from an aircraft within Steelhead that we discovered this! There is probably more that I have left out, this was all very fluid and unorganized. Nothing occurred how we were briefed it was to occur and answers/information were slow and hard to get. [Recommend] Coordination/communication. The military did not do anything that was expected. They did not request any of the altitudes that were originally blocked for Steelhead. They did not communicate far enough in advance to extend Steelhead. Once their abnormal requests were received, there was nobody to call to get answers. Black Talon is the controlling agency, there were no Whiskey alerts called and information was very slow and untimely to be of use to us. I recommend that if Steelhead is active, Black Talon needs to be monitoring the airspace. We need a direct call/shout line for them to inform us of any Whiskey events, or us to ask questions and perform point outs in case of weather, deviations, emergencies or TCAS events.

**Narrative: 3**

We had military come to the Steelhead MOA/ATCAA. There was a crazy amount of miscommunication on the aircraft and controllers not knowing what was going on. They were supposed to go into the Steelhead and in certain altitudes, then the altitudes had to be corrected, and Whisky alerts were happening. Also the aircraft stayed in the airspace longer than coordinated and the Steelhead went cold with aircraft still in the airspace not talking to ATC. There needs to be better coordination when stuff is happening and what is actually happening. More coordination before aircraft get there and what is going to be happening.

**Synopsis**

A Center Controller and Supervisor reported Military Special Use airspace was implemented in their and adjoining facility airspace without complete coordination or established procedures being followed. The Controller unknowingly allowed an aircraft to fly through airspace which was being used by military aircraft not under his control.
Time / Day
Date: 202012
Local Time Of Day: 1801-2400

Place
Locale Reference. ATC Facility: ZZZ.ARTCC
State Reference: US

Environment
Flight Conditions: Mixed

Aircraft
Reference: X
ATC / Advisory.Center: ZZZ
Aircraft Operator: Corporate
Make Model Name: Light Transport
Crew Size. Number Of Crew: 2
Operating Under FAR Part: Part 91
Flight Plan: IFR
Mission: Passenger
Flight Phase: Descent
Route In Use. STAR: ZZZZZ
Airspace. TFR: Y

Person: 1
Location Of Person. Facility: ZZZ.ARTCC
Reporter Organization: Government
Function. Air Traffic Control: Enroute
Qualification. Air Traffic Control: Fully Certified
Experience. Air Traffic Control. Time Certified In Pos 1 (yrs): 12
ASRS Report Number. Accession Number: 1778853
Human Factors: Communication Breakdown
Human Factors: Confusion
Human Factors: Workload
Human Factors: Time Pressure
Communication Breakdown. Party 1: ATC
Communication Breakdown. Party 2: ATC

Person: 2
Location Of Person. Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Corporate
Function. Flight Crew: Pilot Flying
Function. Flight Crew: Captain
Qualification. Flight Crew: Multiengine
Qualification. Flight Crew: Instrument
Qualification. Flight Crew: Air Transport Pilot (ATP)
Experience. Flight Crew. Total: 8869
Experience. Flight Crew. Last 90 Days: 35
Events

Anomaly.Airspace Violation : All Types
Anomaly.ATC Issue : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Air Traffic Control
When Detected : In-flight
Result.Flight Crew : Requested ATC Assistance / Clarification

Assessments

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

Narrative: 1

This aircraft called asking for lower, they were no longer on my scope, I did not know who was calling. The sector was completely out of control, we had a tracker, and D side. The level of traffic at the same time was unheard of, uncalled for and completely irresponsible. There was no in trail spacing for ZZZ1 and ZZZ2 arrivals, the departures out of ZZZ2, ZZZ3, And ZZZ1 were not stopped. The sector was not split. I do not belief we had the staffing to split the sector. Supervisors did not do enough to slow the sector down, TMU did not do enough to slow the sector down. This is one of the worst situations I have been put in in my XX years as a controller. People should be held responsible for the out of control sector. This event should not have happened. This event was damaging to my health. I think something like this should never be allowed to happened again, and there should be an investigation into how so many airplanes can be allowed in a sector that was already overloaded with traffic. I often asked for a couple minutes to stop the traffic and let me catch up. I several times asked for help from the D side and the Tracker neither one seemed to have any idea what was happening. There should be national flow initiatives to slow the traffic down to these saturated airports. Planes should have to wait safely on the ground. This can not be that hard to figure out. They can safely flow planes to all the ZZZ4 airports, they sure as hell can figure out how to do it to South ZZZ5 airports. Staffing needs to be returned to normal ASAP. TMU needs to get their act together. If the chief of the facility gets this, he does not need to look any further then this session to see that TMU is broken in this building.

Narrative: 2

I was flying Aircraft X, at this time. During our arrival into ZZZ6 we were on the ZZZZZZ STAR talking to ZZZ Center. The controller was very busy and I would say over loaded. He instructed us to descend to 10,000 ft. so we did as we were approaching the inner 10 mile ring on the TFR we radioed many times asking for lower and waiting to be handed off to ZZZ7 Approach. When he finally handed us off we apparently entered the 10 mile ring just as ZZZ7 approach replied to us. We were instructed to turn right I believe to a 250 heading and descend to 8,000 ft. As I started the turn I got a RA and was told I was being followed by the Aircraft Y. I was then asked to descend to 5,000 ft. and he radioed the fighter that he now had radio contact with me and was released. He continued to vector us to land at ZZZ6 and told me to call Phone Number. When I parked the aircraft I called and
told him what had happened. I then had a interview with the government agency and told them what had happened. We were in and out of the clouds on the arrival and with as busy as the controller was he never gave us the hand off until it was too late. Knowing we were close to the TFR and the airspace and controller was saturated we could not make any abrupt turns to avoid the situation and could not get the controller to answer us in time to get properly vectored around.

**Synopsis**

Captain reported due to ATC workload and failed communications, Captain entered TFR.
ACN: 1775414 (29 of 50)

**Time / Day**
- Date: 202012
- Local Time Of Day: 1201-1800

**Place**
- Locale Reference.Airport: PHL.Airport
- State Reference: PA
- Altitude.MSL.Single Value: 3500

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

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: PHL
- 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
- Nav In Use: GPS
- Flight Phase: Cruise
- Route In Use: Direct
- Airspace.Class B: PHL

**Component**
- Aircraft Component: GPS & Other Satellite Navigation

**Person**
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Commercial
- Qualification.Flight Crew: Multigene
- Qualification.Flight Crew: Instrument
- Experience.Flight Crew.Total: 1700
- Experience.Flight Crew.Last 90 Days: 27
- Experience.Flight Crew.Type: 1300
- ASRS Report Number.Accession Number: 1775414
- Human Factors: Human-Machine Interface

**Events**
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Exited Penetrated Airspace

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

Narrative: 1
While flying a VFR flight to LOM, I may have entered the Philadelphia Bravo airspace without clearance. I was communicating with PHL ATC on 124.35 for flight following. I was told to climb from 3,000 to 3,500 to avoid a TFR but don't remember specifically being cleared into the bravo airspace. Normally I would verify with ATC before entering the bravo if I was unsure. However, on this flight, my GPS equipment lost the GPS signal near Wilmington and I got distracted troubleshooting it. I was a few miles into the Bravo airspace when I realized I had not double checked the clearance. I was still talking with PHL ATC and they did not express any concerns with my location.

Synopsis
GA pilot reported inadvertently entering PHL Class B airspace without a clearance due to distraction from having to troubleshoot the GPS system on the aircraft.
ACN: 1774160 (30 of 50)

Time / Day
Date: 202011
Local Time Of Day: 0001-0600

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 7.7
Altitude.MSL.Single Value: 1200

Environment
Flight Conditions: VMC
Light: Night

Aircraft
Reference: X
ATC / Advisory.Tower: ZZZ
Aircraft Operator: Personal
Make Model Name: Helicopter
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Passenger
Flight Phase: Cruise
Route In Use: None
Airspace.TFR: ZZZ

Person
Location Of Person.Aircraft: X
Function.Flight Crew: Single Pilot
Function.Flight Crew: Pilot Flying
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 1304
Experience.Flight Crew.Last 90 Days: 14
Experience.Flight Crew.Type: 716
ASRS Report Number.Accession Number: 1774160
Human Factors: Distraction
Human Factors: Confusion

Events
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Air Traffic Control
When Detected: In-flight
Result.Flight Crew: Returned To Clearance
Result.Air Traffic Control: Issued Advisory / Alert
Assessments
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Primary Problem : Human Factors

Narrative: 1
I have X years of experience flying helicopters both IFR and VFR in the area. I know the area well. I know the rhythm of sporting TFRs and where to find the information (usually ForeFlight). Unfortunately, COVID in 2020 has effectively eliminated almost all of the normal sporting events. I actually thought that since fans couldn't go to sporting events that there would not be any active sporting event TFR's at all since they wouldn't meet the people density standard. Tonight, while en-route to ZZZ1 from ZZZ2, I learned that is not the case. While following my normal routing from ZZZ1 to ZZZ2 following Interstate-number Southbound and asking for a ZZZ transition over the south field to ZZZZZZ, I called ZZZ Tower to ask for the transition when the Controller asked me if I knew that I was in a TFR. I apologized and informed the Controller that I didn't and that I didn't see the TFR on my Garmin GTN nor on ForeFlight. Another pilot chimed in on freq and also said that he didn't see the TFR. The Controller simply said copy and gave me the transition without mentioning the issue further. I then saw that I did not have the TFR layer on my iPad (ForeFlight) turned on. As soon as I landed in ZZZ2 I turned on the layer and sure enough there was the TFR. I must have clipped the edge of it on my track inbound just north of ZZZ. This issue really stems from unacceptable complacency to sporting event TFR's during the COVID year and also the fact that they don't populate to my Garmin GTN via XM like normal TFRs do. I really wish they would standardize the delivery of TFRs so that we can see them across all services. Regardless, it was unacceptable to not have fully reviewed the flight path for all TFRs prior to departing ZZZ1. ...a mistake I won't be making again.

Synopsis
Helicopter pilot reported a sporting event TFR violation.
**ACN: 1773484 (31 of 50)**

**Time / Day**
- Date: 202011
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference. ATC Facility: DCA. Tower
- State Reference: DC

**Aircraft : 1**
- Reference: X
- ATC / Advisory. Tower: DCA
- Aircraft Operator: Air Carrier
- Make Model Name: Commercial Fixed Wing
- Crew Size. Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Initial Climb
- Airspace. Class B: DCA

**Aircraft : 2**
- Reference: Y
- ATC / Advisory. Tower: DCA
- Aircraft Operator: Air Carrier
- Make Model Name: Commercial Fixed Wing
- Crew Size. Number Of Crew: 2
- Operating Under FAR Part: Part 121
- Flight Plan: IFR
- Mission: Passenger
- Flight Phase: Taxi
- Airspace. Class B: DCA

**Person : 1**
- Location Of Person. Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Air Carrier
- Function. Flight Crew: Pilot Not Flying
- Function. Flight Crew: Captain
- Qualification. Flight Crew: Multiengine
- Qualification. Flight Crew: Air Transport Pilot (ATP)
- Qualification. Flight Crew: Instrument
- ASRS Report Number. Accession Number: 1773484
- Human Factors: Time Pressure
- Human Factors: Situational Awareness
- Human Factors: Distraction

**Person : 2**
Takeoff and initial climb from DCA, Runway 01. Captain Pilot Monitoring, First Officer Pilot Flying. Pre-flight duties completed and route review completed at gate. Engine start and taxi was normal to Runway 01, before takeoff checklist completed to the line before crossing Runway 04, below the line after crossing Runway 04. As we taxied to runway, Aircraft Y was cleared to cross Runway 04 before us on another taxiway then into the box. As we were approaching Runway 01, Tower Controller asked Aircraft Y if they were ready for departure, Aircraft Y responded they needed 2 minutes. Tower asked if we were ready for departure and we responded we were ready, completed final checklist items. We lined up on Runway 01 and were cleared for takeoff. I do not recall checking FMA for NAV annunciation as we taxied on to the runway and checked final for traffic. Light passenger load/light takeoff weight. After takeoff, aircraft climb was rapid with a quick change to Departure frequency. We were at clean-up altitude quickly after takeoff. After thrust set to climb power and frequency change to departure (prior to check-in on frequency with departure) I noticed FMA annunciation was RWY TRK and we had not yet initiated a left turn for the departure. I told the First Officer to turn left, which he accomplished, initially coming left to approximately a 290-300 degree heading. I cross checked Nav Display for 1 NM circle around point PLVIA and outside references. I do not believe we entered Prohibited Area 56A or Prohibited Area 56B. After initial left turn, we then turned back to the right to rejoin the departure. A turn to point ADAXE would have required an aggressive right turn, so we turned to rejoin the departure between ADAXE and BEBLE After turning to rejoin departure I checked-in with departure control when they asked if we were on frequency. Remainder of the flight was uneventful. This was my (Captain) first flight back on the line after several months away due to combination of leave of absence and
quarantine for close contact with [someone] with COVID-19. I had just completed recurrent training the week before this flight. In the pre-flight briefing the First Officer had noted that with light passenger loads the aircraft takeoff and climb would happen quickly. Given my lack of recent flying, I should not have accepted departure prior to the aircraft in front of us on the ground, even though I felt I was in the green. I was slow to notice we had not initiated left turn on the departure where I would normally expect to begin a turn, possibly due to lack of recent line flying experience, the combination of quick climb after takeoff to acceleration altitude and frequency change slowing my monitoring and recognition of aircraft not being in NAV mode. Though I did direct the pilot flying to make a left turn, if I had done so earlier we would have been able to maintain the departure track without tracking close to Prohibited Area 56. The time from takeoff to overshooting the departure turn on takeoff from Runway 01 at DCA happens fast! I would like to see a similar event during simulator training to illustrate just how quickly you can get close to Prohibited Area 56 after takeoff from DCA when combining a timely distraction with lack of aircraft going in to NAV mode. PLVIA with 1 NM ring on NAV display did assist me as a barrier for this event.

**Narrative: 2**

Takeoff and initial climb from DCA, Runway 01. Captain Pilot Monitoring, First Officer Pilot Flying. Pre-flight duties completed and route review completed at gate. Engine start and taxi was normal to Runway 01, before takeoff checklist completed to the line before crossing Runway 04, below the line after crossing Runway 04. As we taxied to runway, Aircraft Y was cleared to cross Runway 04 before us on another taxiway then into the box. As we were approaching Runway 01, Tower Controller asked Aircraft Y if they were ready for departure, Aircraft Y responded they needed 2 minutes. Tower asked if we were ready for departure and we responded we were ready, completed final checklist items. We lined up on Runway 01 and were cleared for takeoff. I do not recall checking FMA for NAV annunciation as we taxied on to the runway. Light passenger load/light takeoff weight. After takeoff, aircraft climb was rapid with a quick change to departure frequency. We were at clean-up altitude quickly after takeoff. After thrust set to climb power and frequency change to departure (prior to check-in on frequency with departure) PM noticed FMA annunciation was RWY TRK and we had not yet initiated a left turn for the departure. PF was focused on aircraft control since it was a light aircraft and I did notice the PLVIA circle rapidly approaching with no direction to turn by the Flight Directors. I also noticed the route was dashed and started a shallow turn to the left primarily due to the PLVIA circle. The PM/Captain having SA told me to turn left, which I accomplished, initially coming left to approximately a 290-300 degree heading. I cross checked Nav Display for 1 NM circle around point PLVIA and outside references. I do not believe we entered Prohibited Area 56A or Prohibited Area 56B. After initial left turn, we then turned back to the right to rejoin the departure. A turn to point ADAXE would have required an aggressive right turn, so we turned to rejoin the departure between ADAXE and BEBLE. After turning to rejoin departure PM checked-in with departure control when they asked if we were on frequency. Remainder of the flight was uneventful. I used a technique taught in the school-house of Red over Blue, Climb/NAV, Flight Dir 1 and 2 while at the gate. I do this on every flight. We are supposed to check NAV again prior to departure and due to the rushed situation and proficiency I don’t recall either PM or PF saying anything about NAV. We had briefed the departure in full to include Prohibited Area 56 and the EO SID. I still don't know why it was not in NAV after takeoff roll. I had seen a technique of starting the turn regardless of the flight directors in DCA but up until now I have always used the flight directors. In this case the PLVIA circle was a timely final barrier that prevented me from going into Prohibited Area 56 along with the PM’s callout. The time from takeoff to overshooting the departure turn on takeoff from RWY 01 at DCA happens fast! I would like to see a similar event during simulator training to illustrate just how quickly you can get
close to Prohibited Area 56 after takeoff from DCA when combining a timely distraction with lack of aircraft going in to NAV mode. Keep the PLVIA circle in the 10-7 and emphasize in training, it is a critical last barrier.

Synopsis

Air carrier flight crew reported the FMS not flying correctly during departure and having to manually turn the aircraft to avoid a possible airspace violation.
**Time / Day**
- Date: 202010
- Local Time Of Day: 0001-0600

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

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: ZZZ
- Aircraft Operator: Air Taxi
- Make Model Name: Helicopter
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 135
- Flight Plan: None
- Mission: Ambulance
- Flight Phase: Landing
- Flight Phase: Cruise
- Airspace.TFR: 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)
- ASRS Report Number: Accession Number: 1770928
- Human Factors: Distraction
- Human Factors: Situational Awareness
- Human Factors: Time Pressure

**Events**
- Anomaly.Airspace Violation: All Types
- Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
- Anomaly.Deviation / Discrepancy - Procedural: FAR
- Detector.Person: Air Traffic Control
- When Detected.Other
- Result.General: None Reported / Taken

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

**Narrative: 1**
I flew into the boundary and landed with a patient during a TFR without notifying ZZZ TRACON of my departure or route. I was fully aware of the TFR. I read the NOTAM. I had the phone number for ZZZ TRACON on speed dial. I received the notification for the flight via phone and text. The extenuating circumstance that I let allow me to lose situational awareness was when the office told me that this patient was COVID positive. I started concerning myself with securing the proper PPE and the steps necessary to complete the flight. I missed a crucial step of notifying TRACON.

I have been thinking about this since the moment that I was notified. I have flown during many TFRs. On a personal level what I can do is take the time and create printed reminders all around the office. I had briefed the crew to help, however; they were fairly new and were concerned with critical patient care. It is of course my responsibility to make sure all steps are completed before, during and after the flight.

Synopsis

Helicopter Captain reported getting distracted and losing situational awareness resulting in a TFR incursion.
**Time / Day**
Date: 202010
Local Time Of Day: 1201-1800

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

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

**Aircraft**
Reference: X
Aircraft Operator: Air Taxi
Make Model Name: Helicopter
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 135
Flight Plan: VFR
Mission: Passenger
Flight Phase: Landing
Flight Phase: Final Approach
Route In Use: Direct
Airspace.Class E: ZZZ
Airspace.TFR: ZZZ

**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: Single Pilot
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 3600
Experience.Flight Crew.Last 90 Days: 15
Experience.Flight Crew.Type: 500
ASRS Report Number.Accession Number: 1770360
Human Factors: Communication Breakdown
Human Factors: Confusion
Human Factors: Time Pressure
Human Factors: Other / Unknown
Human Factors: Human-Machine Interface
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC

**Events**
I accepted a flight request for a patient transfer flight to ZZZ. I completed my preflight planning which included a review of possible sporting event TFRs on my route of flight, I saw none.

I departed from our base and flew to the hospital. We then loaded the patient and we departed for ZZZ. I began my decent from cruise down to approximately 500 feet AGL while about 5 miles from the hospital, we landed on top of the hospital without incident.

We were at the hospital for about 35 minutes, and I then began my flight planning for the leg home. I opened my FOREFLIGHT app to double check Weather on my phone and immediately saw that we were inside a TFR. It said the TFR was active although it listed a "Warning," "that the start time for this event could not be determined." It was a TFR for a sporting event. I am unsure whether or not this TFR was Active when we entered the Vicinity of ZZZ and landed at the hospital. I also began to wonder why No information on my G500 or G650 with TFR warnings (turned On) had Not activated. I turned my avionics On while on the roof and again there was NO red circle or any indication of a TFR being displayed.

I called ZZZ Controllers and told them I was located on top of at ZZZ Hospital roof as a medical helicopter and am requesting clearance to depart the TFR with a squawk code back enroute to ZZZ1. The Controller gave me a squawk code and said I could depart at any time and simply squawk 1200 when I was well clear of the TFR. I programmed my transponder with the code and we departed ZZZ back to ZZZ1.

Later the same day we had another flight request back to the hospital in ZZZ, I contacted ZZZ Controllers and was again given a squawk code, we entered and exited the TFR without incident. It is also noteworthy that when I departed the hospital for the second time that the TFR was showing ACTIVE on FOREFLIGHT and ZZZ1 Controllers said it was no longer active. And again, no indication of a TFR on my G500 or G650.

In the future I will be more diligent during my preflight planning and multiple Legs and stops to check Multiple sources to confirm if a TFR is on my route of Flight. I also think with COVID-19 game day schedules are more fluid and subject to change and this has made the preflight planning more challenging in determining whether or not a TFR is active or not.

Synopsis
Helicopter Pilot reported a possible sporting event TFR violation. Pilot states the times of these active TFRs appear to change with little notice because COVID-19 is causing many changes to event schedules.
Time / Day
Date: 202009
Local Time Of Day: 0601-1200

Place
Locale Reference: ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude: MSL, Single Value: 12000

Environment
Flight Conditions: VMC
Weather Elements / Visibility: Visibility: 10
Light: Daylight
Ceiling: Single Value: 30000

Aircraft
Reference: X
CTAF: 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: Cruise
Route In Use: None
Route In Use: VFR Route
Airspace: Class E: ZZZ
Airspace: TFR: ZZZ

Component
Aircraft Component: Laptop Computer (performance, planning, etc.)
Aircraft Reference: X
Problem: Malfunctioning

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: 410
Experience: Flight Crew: Last 90 Days: 31
Experience: Flight Crew: Type: 250
ASRS Report Number: Accession Number: 1761542
Human Factors: Human-Machine Interface
Human Factors: Situational Awareness
Human Factors: Distraction
Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : FAR
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Became Reoriented
Result.Flight Crew : Exited Penetrated Airspace

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

Narrative: 1
I briefed my flight with Garmin Pilot on my iPhone and noted the fire TFR. While enroute I was using my iPad to follow my route. Because the TFR was not yet displayed I thought I was still outside of the Southern boundary. I realized there was an error somewhere. I had recently had issues with Garmin Pilot on my iPad so I had unloaded and reloaded the program to fix the problem. Unfortunately, I had neglected to turn the TFR display back on. When I discovered this I immediately enabled the TFR display and to my dismay realized I was already approximately four miles into the TFR. I immediately turned ninety degrees east to exit the TFR as quickly as possible. Fortunately a recent snowstorm had greatly dampened the fire and there was no air traffic fighting the fire at that time. This was very educational experience for me. I learned I must be more in tune with my navigational equipment at all times. Pilot error!

Synopsis
GA pilot reported penetrating a TFR.
ACN: 1761286 (35 of 50)

Time / Day
Date: 202009
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 2700

Environment
Flight Conditions: IMC
Weather Elements / Visibility: Haze / Smoke
Weather Elements / Visibility.Visibility: 1
Light: Daylight
Ceiling.Single Value: 2000

Aircraft
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: Small Aircraft, High Wing, 1 Eng, Fixed Gear
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace.Class E: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Multiengine
Qualification.Flight Crew: Air Transport Pilot (ATP)
Experience.Flight Crew.Total: 2800
Experience.Flight Crew.Last 90 Days: 10
Experience.Flight Crew.Type: 800
ASRS Report Number.Accession Number: 1761286
Human Factors: Distraction
Human Factors: Situational Awareness
Human Factors: Time Pressure
Human Factors: Confusion

Events
Anomaly.Airspace Violation: All Types
Anomaly.Inflight Event / Encounter: Weather / Turbulence
A pilot flying VFR encountered IFR conditions due to unexpected smoke from wildfires.
**ACN: 1760917 (36 of 50)**

**Time / Day**

Date: 202009  
Local Time Of Day: 1201-1800

**Place**

Locale Reference.ATC Facility: S46.TRACON  
State Reference: WA  
Altitude.MSL.Single Value: 2800

**Environment**

Weather Elements / Visibility: Haze / Smoke  
Weather Elements / Visibility.Visibility: 10  
Light: Daylight

**Aircraft**

Reference: X  
Aircraft Operator: Personal  
Make Model Name: Light Sport Aircraft  
Crew Size.Number Of Crew: 1  
Operating Under FAR Part: Part 91  
Flight Plan: None  
Mission: Personal  
Flight Phase: Cruise  
Route In Use: Direct

**Component**

Aircraft Component: Electronic Flt Bag (EFB)  
Aircraft Reference: X  
Problem: Malfunctioning

**Person**

Reference: 1  
Location Of Person.Aircraft: X  
Location In Aircraft: Flight Deck  
Reporter Organization: Personal  
Function.Flight Crew: Pilot Flying  
Function.Flight Crew: Single Pilot  
Qualification.Flight Crew: Multiengine  
Qualification.Flight Crew: Flight Instructor  
Qualification.Flight Crew: Instrument  
Qualification.Flight Crew: Flight Engineer  
Experience.Flight Crew.Total: 33000  
Experience.Flight Crew.Last 90 Days: 125  
Experience.Flight Crew.Type: 300  
ASRS Report Number.Accession Number: 1760917  
Human Factors: Situational Awareness  
Human Factors: Confusion
**Events**

Anomaly.Aircraft Equipment Problem : Less Severe  
Anomaly.Airspace Violation : All Types  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Exited Penetrated Airspace  
Result.Flight Crew : Became Reoriented

**Assessments**

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

**Narrative: 1**

Prepped for a short flight to TDO, approx 55 nm. Plugged route into Foreflight on my iPad. Route came up CLEAN, I saw no TFRs. I did this as engine was warming up. After runup, departed and climbed rapidly to 2,800 feet to stay below the floor of Class B airspace. Leveled, set cruise, glanced at my iPad, and to my shock and horror found myself inside a firefighting TFR, and 200 feet into the ceiling of it!! I promptly turned away and exited it, continued on to TDO. THAT TFR WAS NOT ON MY IPAD SCREEN WHEN I BEGAN MY TAKEOFF ROLL. It either was transmitted shortly after my takeoff, OR there was some kind of snag with Foreflight in the download. I don't know. The Foreflight TFR has always been prompt and accurate for me in the past. Upon my return, 3 hours later, the TFR was on screen the moment it came up to speed.

**Synopsis**

A light aircraft pilot reported a TFR incursion when ForeFlight was slow to display the TFR.
ACN: 1760614 (37 of 50)

Time / Day
Date: 202009
Local Time Of Day: 1201-1800

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Relative Position.Distance.Nautical Miles: 9
Altitude.MSL.Single Value: 2500

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

Aircraft
Reference: X
Aircraft Operator: Personal
Make Model Name: Small Aircraft, Low Wing, 1 Eng, Retractable Gear
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Descent
Route In Use: Direct
Airspace.Class E: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 1366
Experience.Flight Crew.Last 90 Days: 22
Experience.Flight Crew.Type: 871
ASRS Report Number.Accession Number: 1760614
Human Factors: Situational Awareness

Events
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Flight Crew
When Detected: In-flight
Result: Flight Crew: Took Evasive Action

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

Narrative: 1
During a personal flight, I observed smoke associated with a fire, and lots of aerial traffic swarming around that area, according to ADS-B. The location of the fire was approximately X NM NW of ZZZ1, while I was flying a line between ZZZ and ZZZ1. My EFB software was not showing a TFR in this location, but did show other TFR's. The activity suggested there was a TFR, so I adjusted my position to be further east. Checking the FAA TFR site on my phone upon landing ZZZ1 showed there was a TFR created since my preflight briefing at home, but before entering the area in the flight. I believe I remained clear, but very close.

Contributing factors:
TFR was created in that window of time between briefing and flight. In-flight data is relied on for these updates, but the TFR did not post in time. ATC has been difficult to get flight following since Pandemic made them busier, so I stopped trying for short flights.

Discovery was recognizing the situation, and corrective action was making room for fire fighting.

Synopsis
Pilot reported flying nearby an area of smoke and was unable to find an associated TFR. After the flight, pilot confirmed a TFR was active but did not post in time on EFB software.
**ACN: 1760311** (38 of 50)

**Time / Day**
- Date: 202009
- Local Time Of Day: 0601-1200

**Place**
- Locale Reference: Airport: CCB.Airport
- State Reference: CA
- Relative Position: Angle: Radial: 293
- Relative Position: Distance: Nautical Miles: 10
- Altitude: MSL: Single Value: 9000

**Environment**
- Flight Conditions: Marginal
- Weather Elements / Visibility: Haze / Smoke
- Weather Elements / Visibility: Visibility: 5
- Light: Daylight

**Aircraft**
- Reference: X
- Aircraft Operator: Personal
- Make Model Name: Small Aircraft, Low Wing, 1 Eng, Retractable Gear
- Crew Size: Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: None
- Mission: Training
- Flight Phase: Initial Climb
- Route In Use: Direct

**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 Engineer
- Qualification: Flight Crew: Air Transport Pilot (ATP)
- Qualification: Flight Crew: Flight Instructor
- Qualification: Flight Crew: Multiengine
- Qualification: Flight Crew: Instrument
- Experience: Flight Crew: Total: 31000
- Experience: Flight Crew: Last 90 Days: 250
- Experience: Flight Crew: Type: 610
- ASRS Report Number: Accession Number: 1760311
- Human Factors: Situational Awareness

**Events**
- Anomaly: Airspace Violation: All Types
- Anomaly: Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
When Detected : In-flight
Result.General : None Reported / Taken

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

Narrative: 1
Used Foreflight to flight plan [and] used Foreflight to check fire TFR's. Only fire TFR shown 10 mins prior to flight was [not along our planned route]. Visibility in area obscured by smoke from fires. Climbing through 9000 observed fire at our 11 o'clock position [and] took corrective action to avoid fire area [with] right 90 degree turn. Altitude 11,500 climbing to 16,500. Called tower to check on TFR, they first said no TFR, then said there was a TFR surface to 9000 msl we still didn't show a TFR on Foreflight or XM weather. Upon arrival TFR appeared on Forelight. Possible TFR intrusion due to slow dissemination of TFR info.

Synopsis
Small aircraft pilot reported inadvertently entering a firefighting TFR that was not displayed on Foreflight.
ACN: 1760308 (39 of 50)

Time / Day
Date: 202009
Local Time Of Day: 1801-2400

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 2500

Environment
Flight Conditions: VMC
Weather Elements / Visibility: Turbulence
Weather Elements / Visibility.Visibility: 10
Light: Night
Ceiling.Single Value: 8000

Aircraft
Reference: X
ATC / Advisory.TRACON: ZZZ
Aircraft Operator: Personal
Make Model Name: Small Aircraft, Low Wing, 1 Eng, Fixed Gear
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use.Other
Airspace.TFR: 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: Private
Qualification.Flight Crew: Instrument
Experience.Flight Crew.Last 90 Days: 11
Experience.Flight Crew.Type: 280
ASRS Report Number.Accession Number: 1760308
Human Factors: Distraction
Human Factors: Situational Awareness
Human Factors: Communication Breakdown
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC

Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation - Track / Heading : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Exited Penetrated Airspace

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

Narrative: 1
I was level at 2,500 MSL along ZZZ1 X route northbound under ZZZ Class B airspace. Light haze, light to moderate turbulence and a strong 30 kt crosswind from about 220. I have flown this route several times. ZZZ Controllers kept me out of B airspace which begins at 3,000 MSL as they always do. After crossing XYZ I noticed bright lights of sporting field and thought about a possible TFR. I had ForeFlight running on my iPad but had accidentally disabled TFR layer. I switched on the TFR layer and found that I was in the middle of the airspace. I decided to remain on present heading noting that the sporting event was completely empty due to COVID-19, not wanting to turn out to a large area of inland water, and realizing that I would clear the TFR in less than a minute on heading. ZZZ Controllers with whom I was in constant contact did not advise of TFR nor did they seem to notice that I'd busted the airspace.

I should have been more thorough on the flight briefing. Obviously I did not consider possible TFRs in my planning. Originally I had planned on flying around Class B to the west but the winds aloft were quite strong and I realized minutes before departing that I could take the X route and cut 10-15 minutes off my enroute time. Additionally I had passengers aboard whom I thought would (and did) appreciate the scenic view of the X route at night. This caused me to change my route at the last minute. I had flown this route several times so I felt comfortable which led to some degree of complacency and corner cutting in my planning. I'm well aware that sporting events are common drivers of TFRs and I know about and have considered in the past TFRs in the area.

Synopsis
Pilot reported violating a sporting event TFR during the COVID-19 pandemic.
ACN: 1760292 (40 of 50)

Time / Day
Date: 202009
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US
Altitude.MSL.Single Value: 4000

Environment
Flight Conditions: VMC
Weather Elements / Visibility: Haze / Smoke
Weather Elements / Visibility. Visibility: 6
Light: Daylight

Aircraft
Reference: X
ATC / Advisory.CTAF: ZZZ
Aircraft Operator: Personal
Make Model Name: Skywagon 185
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace.Class E: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Instrument
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 4000
Experience.Flight Crew.Last 90 Days: 30
Experience.Flight Crew.Type: 1750
ASRS Report Number.Accession Number: 1760292
Human Factors: Situational Awareness

Events
Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Other Person
When Detected: Aircraft In Service At Gate
Result.General: None Reported / Taken

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

Narrative: 1
Using the aviation layer of an app called "MyRadar" I noted the previously existing TFR was no longer displayed though a nearby TFR was. As I am a member of the local Fire Protection District this made sense because no planes were flying and the helitack crews that were formally stationed at our airport were no longer present or flying.

Feeling comfortable, I certainly won't give it credibility in the future, with the lack of TFR on MyRadar as well as my observations and knowledge about aerial firefighting activities being suspended I proceeded into the TFR on the assumption it was terminated.

When I landed a friend notified me that he thought he saw the TFR on another app. I called Flight Service and discovered the TFR was indeed still in effect. In the future I will cross check several apps and/or flight service directly.

Synopsis
C185 pilot reported inadvertently entering a TFR that he thought had been terminated.
**Time / Day**

Date: 202009
Local Time Of Day: 0601-1200

**Place**

Locale Reference. ATC Facility: ZDV. ARTCC
State Reference: CO
Altitude. MSL. Single Value: 13500

**Environment**

Flight Conditions: VMC
Weather Elements / Visibility. Visibility: 50
Light: Daylight

**Aircraft**

Reference: X
ATC / Advisory. Center: ZDV
Aircraft Operator: Personal
Make Model Name: Bonanza 36
Crew Size. Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace. TFR: ZDV

**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: Flight Instructor
Qualification. Flight Crew: Commercial
Qualification. Flight Crew: Multiengine
Qualification. Flight Crew: Instrument
Experience. Flight Crew. Total: 7800
Experience. Flight Crew. Last 90 Days: 100
Experience. Flight Crew. Type: 524
ASRS Report Number. Accession Number: 1759569
Human Factors: Situational Awareness
Human Factors: Human-Machine Interface
Human Factors: Distraction

**Events**

Anomaly. Airspace Violation: All Types
Anomaly. Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
When Detected : In-flight
Result.Flight Crew : Exited Penetrated Airspace

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

Narrative: 1
Inadvertent TFR incursion: ZDV

I was on a photo flight from ZZZ in CAVU (Ceiling and Visibility Unlimited) conditions using visual navigation and maintaining situational awareness with the Foreflight moving map. Heading southbound over Granby, the Foreflight app froze and I was forced to reboot my iPad. When I restarted Foreflight a few minutes later, it immediately warned me of TFR entry for the firefighting TFR southwest of GNB. I executed an immediate 180 turn and exited the TFR to the north. The extent of incursion on the 190 heading was approximately 2-3 nm before turning northbound.

I was aware of the existence of the TFR from my preflight planning and as shown on Foreflight's moving map in the cockpit, but the absence of any visual indication of smoke in the air and/or active fire on the ground, coupled with my distraction due to the temporary loss of Foreflight's moving map led to the incursion.

Synopsis
BE-36 pilot reported inadvertently entering a TFR.
**ACN: 1757667 (42 of 50)**

**Time / Day**
- Date: 202008
- Local Time Of Day: 1801-2400

**Place**
- Locale Reference.Airport: ZZZ.Airport
- State Reference: US
- Relative Position.Angle.Radial: 100
- Relative Position.Distance.Nautical Miles: 15
- Altitude.MSL.Single Value: 1600

**Environment**
- Flight Conditions: VMC
- Weather Elements / Visibility.Visibility: 30
- Light: Night
- Ceiling.Single Value: 10000

**Aircraft**
- Reference: X
- ATC / Advisory.TRACON: ZZZ
- Aircraft Operator: Personal
- Make Model Name: Small Aircraft, Low Wing, 1 Eng, Fixed Gear
- Crew Size.Number Of Crew: 1
- Operating Under FAR Part: Part 91
- Flight Plan: VFR
- Mission: Personal
- Flight Phase: Cruise
- Route In Use: None
- Airspace.TFR: ZZZ

**Person**
- Reference: 1
- Location Of Person.Aircraft: X
- Location In Aircraft: Flight Deck
- Reporter Organization: Personal
- Function.Flight Crew: Pilot Flying
- Function.Flight Crew: Single Pilot
- Qualification.Flight Crew: Private
- Experience.Flight Crew.Total: 700
- Experience.Flight Crew.Last 90 Days: 15
- Experience.Flight Crew.Type: 600
- ASRS Report Number.Accession Number: 1757667
- Human Factors: Situational Awareness
- Human Factors: Troubleshooting
- Human Factors: Confusion

**Events**
- Anomaly.Airspace Violation: All Types
- Anomaly.Deviation - Track / Heading: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Detector.Person: Flight Crew
When Detected: In-flight
Result.Flight Crew: Exited Penetrated Airspace

**Assessments**

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

**Narrative: 1**

This flight was a sightseeing flight along the ZZZ Skyline with two passengers; at the location at issue I was operating at 1,600 feet MSL underneath the outer shelf of ZZZ Class B Airspace (which begins at 3,600 feet MSL). Upon reaching the southeast edge of the 3 NM ring of the sporting TFR, I noticed that the lights were illuminated. Due to the issues regarding coronavirus I was not sure whether this TFR would be considered active even if a game was playing, given the fact that the games are currently being played with the facility empty. Notwithstanding that, I made an immediate turn to the east to exit that airspace, however, it is possible that I was within the outer limits of that TFR.

Because of the media hysteria regarding coronavirus, and my belief that many games have been cancelled or postponed, I was lulled into a sense of complacency regarding my usual check of active games prior to giving sightseeing flights of the ZZZ skyline.

Although I accept responsibility for this possible regulation violation, I really do not like the idea of having permanent TFRs from one hour prior to the start of an event to one hour after it ends. Regarding the latter, it is very hard to know when a game ends as there is no fixed ending time (and the websites for applicable sports teams often do not report the ending time of a game). I do not believe that having permanent TFRs of this sort do anything to enhance the safety of the fans who attend these particular events--if anyone was heck-bent on causing a serious incident at an event, using an aircraft, he/she would not care about the rules. I would urge the readers of this report to try to influence the FAA to lift these restrictions altogether, or at the very least, pass a regulation prohibiting excessive loitering (for example, continually circling around an event).

**Synopsis**

GA pilot reported entering a sporting TFR and wasn't sure if these type of TFRs are still in place during the COVID-19 pandemic.
Time / Day
Date: 202008
Local Time Of Day: 0601-1200

Place
Locale Reference, ATC Facility: ZZZ.TRACON
State Reference: US
Altitude, MSL, Single Value: 2500

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

Aircraft
Reference: X
ATC / Advisory, TRACON: ZZZ
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: Cruise
Route In Use: None
Airspace, Class E: ZZZ
Airspace, TFR: ZZZ

Component
Aircraft Component: Electronic Flt Bag (EFB)
Aircraft Reference: X
Problem: Malfunctioning

Person
Reference: 1
Location Of Person, Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function, Flight Crew: Pilot Flying
Function, Flight Crew: Single Pilot
Qualification, Flight Crew: Private
Experience, Flight Crew, Total: 650
Experience, Flight Crew, Last 90 Days: 25
Experience, Flight Crew, Type: 400
ASRS Report Number, Accession Number: 1757623
Human Factors: Human-Machine Interface

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : Clearance
Detector.Person : Other Person
When Detected.Other
Result.General : None Reported / Taken

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

Narrative: 1
I was flying to observe a friend's home after a wildfire. I was using my EFB for navigation and was very aware of the presence of multiple TFRs. According to my visual landmarks and the perimeter of the TFR according my EFB, I was clearly outside of the TFR perimeter as it paralleled the coast and was slightly inland.

I was contacted by another pilot that he thought I may have violated a TFR. I assured him I was very careful using my EFB and very identifiable landmarks. His comment was the the TFR had expanded and encompassed my course of flight.

At XM:00 pm the evening of my flight when I opened my EFB, the TFR had indeed expanded. Even though the active time was listed as XA:00, my EFB updated nearly 12 hours later.

I am Respectful of the firefighting TFRs and am grateful that the fire was nearly out and there were no fire fighting aircraft in the vicinity. I will follow up with my EFB vendor to report this incident.

Synopsis
GA pilot reported a possible entry into a fire related TFR which was not depicted in his EFB pre-flight, but was noted post flight as the EFB updated.
ACN: 1756481 (44 of 50)

Time / Day
Date: 202008
Local Time Of Day: 1801-2400

Place
Locale Reference, ATC Facility: ZZZ.TRACON
State Reference: US
Altitude, MSL, Single Value: 1600

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory, TRACON: ZZZ
Aircraft Operator: Personal
Make Model Name: Small Aircraft, High Wing, 1 Eng, Fixed Gear
Crew Size, Number Of Crew: 1
Flight Plan: VFR
Flight Phase: Cruise
Airspace, TFR: ZZZ

Person
Reference: 1
Location Of Person, Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function, Flight Crew: Pilot Flying
Function, Flight Crew: Single Pilot
Qualification, Flight Crew: Private
Experience, Flight Crew, Total: 107
Experience, Flight Crew, Last 90 Days: 21
ASRS Report Number, Accession Number: 1756481
Human Factors: Confusion
Human Factors: Distraction

Events
Anomaly, Airspace Violation: All Types
Anomaly, Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly, Deviation / Discrepancy - Procedural: FAR
Detector, Person: Flight Crew
When Detected, Other
Result, General: None Reported / Taken

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

**Narrative: 1**

I had a possible unintentional TFR violation by clipping the corner of a sporting TFR in ZZZ. I assumed the TFR wasn't active due to COVID-19 and there not being over 30,000 people in attendance in the event. I make my flight plans on Foreflight and didn't see an active TFR in the area. However, I later realized I didn't see the TFR because I didn't have TFR's turned on on Foreflight. I now have that setting turned on on my iPad. I will prevent another occurrence like this by making sure my settings are turned on properly and by being more diligent in my flight planning both on the ground and in air.

**Synopsis**

Pilot reported a sporting TFR airspace incursion due to not having it selected on the app being used.
Time / Day
Date : 202007

Place
Locale Reference : ATC Facility : ZZZ.TRACON
State Reference : US

Environment
Flight Conditions : VMC
Light : Dusk

Aircraft
Reference : X
ATC / Advisory : TRACON : ZZZ
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 : Cruise
Route In Use : Direct
Airspace : TFR : ZZZ

Component
Aircraft Component : Electronic Flt Bag (EFB)
Aircraft Reference : X
Problem : Malfunctioning

Person
Reference : 1
Location Of Person : Aircraft : X
Location In Aircraft : Flight Deck
Reporter Organization : Personal
Function : Flight Crew : Pilot Flying
Function : Flight Crew : Single Pilot
Qualification : Flight Crew : Commercial
Qualification : Flight Crew : Multiengine
Qualification : Flight Crew : Instrument
Experience : Flight Crew : Total : 750
Experience : Flight Crew : Last 90 Days : 20
Experience : Flight Crew : Type : 70
ASRS Report Number : Accession Number : 1756411
Human Factors : Human-Machine Interface
Human Factors : Situational Awareness

Events
Anomaly.Aircraft Equipment Problem : Less Severe
Anomaly.Airspace Violation : All Types
Detector.Person : Air Traffic Control
When Detected : In-flight

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

Narrative: 1
I packed my ForeFlight trip on my iPad and headed from ZZZ1 to ZZZ. I picked up flight following as I left ZZZ1 in order to climb through ZZZ2 airspace. I leveled off at 4,500 feet and stayed with ZZZ Approach for about 50 miles. I proceeded to cancel flight following and flew down the X River en route to ZZZ. ForeFlight did not notify me of the TFR. When I landed at ZZZ airport, the Airport Manager gave me a number to call for intruding on the TFR. I've flown this exact route dozens of times and filed flight plans or picked-up flight following every time a TFR was in effect. When I called the number given to me by the airport manager, I was told that I was the second person that night that said ForeFlight was not reporting/displaying TFRs. I'm concerned that there may be a bug in ForeFlight that is causing the software to fail to display TFRs. I will cross check with WingX Pro to ensure TFR status before flying this route again, and I'll maintain VFR flight filing to mitigate this risk in the future. I'm filing this report in case there's an issue with ForeFlight not connecting with the TFR database and properly displaying TFRs on the ForeFlight map.

Synopsis
GA pilot reported inadvertently entering a TFR when the TFR failed to display on his ForeFlight-equipped iPad.
Time / Day
Date: 202007
Local Time Of Day: 1801-2400

Place
Locale Reference. ATC Facility: ZZZ.TRACON
State Reference: US
Altitude.MSL. Single Value: 1000

Environment
Flight Conditions: VMC
Light: Daylight

Aircraft
Reference: X
ATC / Advisory. TRACON: ZZZ
Aircraft Operator: Personal
Make Model Name: Any Unknown or Unlisted Aircraft Manufacturer
Crew Size.Number Of Crew: 1
Operating Under FAR Part: Part 91
Flight Plan: None
Mission: Personal
Flight Phase: Cruise
Route In Use: None
Airspace.TFR: ZZZ

Person
Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 250
Experience.Flight Crew.Last 90 Days: 20
Experience.Flight Crew.Type: 133
ASRS Report Number.Accession Number: 1755243
Human Factors: Situational Awareness
Human Factors: Confusion

Events
Anomaly.Airspace Violation: All Types
Anomaly.ATC Issue: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: None Reported / Taken
Assessments
Contributing Factors / Situations: Airspace Structure
Contributing Factors / Situations: Environment - Non Weather Related
Contributing Factors / Situations: Human Factors
Contributing Factors / Situations: Procedure
Primary Problem: Airspace Structure

Narrative: 1

I was operating in the ZZZ SFRA and may have inadvertently violated a sporting TFR. The sporting event in question was played without fans due to the COVID-19 pandemic.

Prior to the flight, and as part of my preflight planning, I reviewed current TFRs for the intended flight path using the FAA's TFR website (tfr.faa.gov). Sporting TFRs do not appear on this list, however they historically have appeared in EFB applications, including Garmin Pilot which I reviewed prior to this flight. Garmin Pilot did not show any TFRs over this sporting event either prior to the flight or during the flight.

The flight operation took place in the ZZZ SFRA. I was not contacted during the flight by ATC, nor was I notified by ATC or the FBO at the destination airport of any issues with the flight.

To add to the confusion, another pilot also operating in the vicinity during the time of the game was in contact with ZZZ1 Tower and was notified that there was no TFR because there were no spectators.

A few days later, I received notification from Garmin that sporting TFRs were not appearing in the Garmin Pilot application due to an issue with Garmin's data supplier related to COVID-19.

I felt this report was prudent since even prior to COVID-19, these sporting TFRs were already difficult to find. During the COVID-19 pandemic, they are even more difficult to find since the typical data sources may or may not accurately display them.

To help avoid any issues with these TFRs in the future. I have joined a local industry group who among other services, provides notifications to pilots about sporting TFRs and other TFRs. I will also be reviewing local teams' schedules directly in addition to using the 3rd party EFB applications.

Synopsis
Pilot reported confusion on whether a sporting TFR is in effect during the COVID-19 Pandemic when spectators are not allowed at the game.
ACN: 1752803 (47 of 50)

**Time / Day**

Date: 202007
Local Time Of Day: 0001-0600

**Place**

Locale Reference.ATC Facility: ZZZ.TRACON
State Reference: US
Altitude.MSL.Single Value: 1800

**Environment**

Flight Conditions: VMC
Light: Dusk

**Aircraft**

Reference: X
ATC / Advisory.TRACON: ZZZ
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: Passenger
Flight Phase: Cruise
Route In Use: None
Airspace.Class E: ZZZ

**Person**

Reference: 1
Location Of Person.Aircraft: X
Location In Aircraft: Flight Deck
Reporter Organization: Personal
Function.Flight Crew: Pilot Flying
Function.Flight Crew: Single Pilot
Qualification.Flight Crew: Flight Instructor
Qualification.Flight Crew: Commercial
Experience.Flight Crew.Total: 1.6
Experience.Flight Crew.Last 90 Days: 51
Experience.Flight Crew.Type: 51
ASRS Report Number.Accession Number: 1752803
Human Factors: Confusion
Human Factors: Situational Awareness

**Events**

Anomaly.Airspace Violation: All Types
Anomaly.Deviation / Discrepancy - Procedural: Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural: FAR
Detector.Person: Flight Crew
When Detected: In-flight
Result.General: None Reported / Taken
Assessments
Contributing Factors / Situations : Airspace Structure
Contributing Factors / Situations : Environment - Non Weather Related
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Airspace Structure

Narrative: 1
I conducted a demonstration flight leaving ZZZ (home base) northbound for a scenic tour.

I checked for TFRs on tfr.faa.gov and weather pertaining to my route of flight and timing, I did not notice anything unusual.

While above a field I noticed the lights were on but the field was empty. I was approximately 1,800 feet MSL.

Upon landing, I checked the field's website and noticed a game took place that evening. I am concerned that even though the venue did not have near 30,000 people present as a result of the COVID pandemic, the TFR was still in effect. I may have conflated a venue capacity of 30,000 people with 30,000 people present at the venue, a very distinct difference that could be a point of confusion for other pilots during the COVID pandemic.

My preflight action going forward will include a review of all major venues and scheduled events along my route of flight should I not be in contact with an Air Traffic Control Facility.

Synopsis
Pilot reported flying over a sporting event during a game and wondered if they had violated a TFR.
ACN: 1745873 (48 of 50)

Time / Day
Date: 202006
Local Time Of Day: 1801-2400

Place
Locale Reference.ATC Facility: ZZZ.ARTCC
State Reference: US
Altitude.MSL.Single Value: 7500

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

Aircraft
Reference: X
Make Model Name: UAV - Unpiloted Aerial Vehicle
Crew Size.Number Of Crew: 1
Flight Plan: VFR
Mission: Photo Shoot / Video
Flight Phase: Takeoff / Launch
Route In Use: None

Person
Reference: 1
Location Of Person: Hangar / Base
Reporter Organization: Government
Function.Flight Crew: Pilot Not Flying
Qualification.Flight Crew: Private
Experience.Flight Crew.Total: 3200
Experience.Flight Crew.Last 90 Days: 3
Experience.Flight Crew.Type: 26
ASRS Report Number.Accession Number: 1745873
Human Factors: Communication Breakdown
Human Factors: Situational Awareness
Communication Breakdown.Party1: Flight Crew
Communication Breakdown.Party2: ATC

Events
Anomaly.Airspace Violation: All Types
Anomaly.Conflict: Airborne Conflict
Detector.Person: Flight Crew
Miss Distance.Horizontal: 1
Miss Distance.Vertical: 1000
When Detected: In-flight
Result.Flight Crew: Took Evasive Action
Result.Flight Crew: Became Reoriented

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

**Narrative: 1**

[We were] requested to fly to map the perimeter of the fire. PIC was informed that the TFR was in place and clearance was issued to launch. The aircraft was launched and began to climb to its mission altitude.

Within minutes of takeoff traffic was observed inside the boundary of the TFR. Since this was not expected the crew and PIC took measures to avoid conflict with the traffic and made slight adjustments in course and altitude to avoid. Positive visual separation was achieved with the use of a ground observer and the UAS camera system.

Once conflict was mitigated further effort was made to determine if an incursion had occurred. It was identified that an error was made and that the TFR was not activated as claimed.

Immediate recovery of the UAS was conducted and the aircraft was safely landed at the intended landing site.

In order to correct and avoid another instance of this event we have implemented a procedure to confirm valid activation of the TFR before every flight operation is conducted.

**Synopsis**

UAV operator reported a TFR miscommunication that resulted in an airborne conflict with an aircraft.
Time / Day
Date : 202005
Local Time Of Day : 0601-1200

Place
Altitude.AGL.Single Value : 300

Environment
Flight Conditions : VMC
Light : Dawn

Aircraft
Reference : X
Aircraft Operator : Personal
Make Model Name : UAV - Unpiloted Aerial Vehicle
Crew Size.Number Of Crew : 1
Operating Under FAR Part.Other
Flight Plan : None
Mission : Photo Shoot / Video
Flight Phase : Cruise
Route In Use : None

Person
Reference : 1
Location Of Person : Hangar / Base
Reporter Organization : Personal
Function.Flight Crew : Pilot Flying
Function.Flight Crew : Single Pilot
Qualification.Flight Crew : Commercial
Experience.Flight Crew.Total : 1000
Experience.Flight Crew.Last 90 Days : 30
Experience.Flight Crew.Type : 500
ASRS Report Number.Accession Number : 1745072
Human Factors : Situational Awareness

Events
Anomaly.Airspace Violation : All Types
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy
Anomaly.Deviation / Discrepancy - Procedural : FAR
Detector.Person : Flight Crew
When Detected.Other
Result.General : None Reported / Taken

Assessments
Contributing Factors / Situations : Chart Or Publication
Contributing Factors / Situations : Human Factors
Contributing Factors / Situations : Procedure
Primary Problem : Human Factors
**Narrative: 1**

I arrived at the scene of the police station. I checked my flight apps and saw that there was no TFR and so I started filming. In my mind I thought that I was clear as the rioting occurred at night and so I suspected that if another TFR was going to be put in place it wouldn't be enacted until later that day.

I already had the LAANC grid clearances for the airspace for drone flight. I had secured these the previous evening.

I consulted with the police and National Guard that were at the location and they said they were fine with me filming.

My goal was to document some of the destruction that had occurred the previous evening.

There were several fires actively burning, lots of soldiers and police moving around, loud speakers blaring - it was not a calm environment. I was focused on flying safely and filming.

I pretty much filmed a building or location and then hurried to the next one. There was a lot of stuff happening and I was very busy trying to capture it.

Although I did check for a TFR when I arrived, I did not check for one at each location that I filmed. Often I was moving one or two blocks and then taking off again with the drone, often without even turning the drone off and then on again.

I finished filming [about 3 hours later]. It was at this point when I had a chance to sit down that I looked at my aviation app and noticed that a TFR for the area had gone up [several hours earlier].

I had an officer with me - at no time where we anywhere near other manned aircraft. There were a few helicopters in the air but we stayed well clear of them.

I often go to a location and start filming. I always check for TFR's at the beginning, but the lesson from this I think is that in a tense situation I will check more frequently.

**Synopsis**

UAV pilot reported a TFR incursion.
**Time / Day**

Date: 202005  
Local Time Of Day: 1801-2400

**Place**

Locale Reference.ATC Facility: SJT.Tower  
State Reference: TX  
Relative Position.Angle.Radial: 180  
Relative Position.Distance.Nautical Miles: 10  
Altitude.MSL.Single Value: 5000

**Environment**

Flight Conditions: VMC  
Weather Elements / Visibility. Visibility: 10  
Light: Night  
Ceiling.Single Value: 250

**Aircraft : 1**

Reference: X  
Aircraft Operator: Corporate  
Make Model Name: Small Transport, Low Wing, 2 Turbojet Eng  
Crew Size.Number Of Crew: 2  
Operating Under FAR Part: Part 91  
Flight Plan: VFR  
Mission: Personal  
Flight Phase: Climb  
Route In Use.Other

**Aircraft : 2**

Reference: Y  
Aircraft Operator: Military  
Make Model Name: UAV - Unpiloted Aerial Vehicle

**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  
Qualification.Flight Crew: Instrument  
Qualification.Flight Crew: Air Transport Pilot (ATP)  
Qualification.Flight Crew: Flight Instructor  
Qualification.Flight Crew: Multiengine  
Experience.Flight Crew.Total: 12856  
Experience.Flight Crew.Last 90 Days: 58  
Experience.Flight Crew.Type: 1213  
ASRS Report Number.Accession Number: 1743912  
Human Factors: Situational Awareness
**Events**

Anomaly.Airspace Violation : All Types  
Anomaly.Deviation / Discrepancy - Procedural : FAR  
Anomaly.Deviation / Discrepancy - Procedural : Published Material / Policy  
Detector.Person : Flight Crew  
When Detected : In-flight  
Result.Flight Crew : Became Reoriented  
Result.Flight Crew : Took Evasive Action

**Assessments**

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

**Narrative: 1**

Upon IFR departure from SJT tried to pickup IFR clearance from both FSS frequency listed and DFW frequency. Unable to get clearance on ground. At this time local Tower and Approach/Departure Control had closed. [I] decided to depart VFR and pick up clearance in the air. It was a clear night with no reported traffic so departed VFR off of Runway 18. Set initial climb alt to 17,500 ft. At about 10 NM noticed alert from iPad that TFR was ahead. Ended up clipping NW corner. As soon as error was noticed immediate corrective action was taken to clear TFR. Time in TFR estimated at less than 20 seconds.

Tower/Approach states "When you're talking with us, you can proceed through the TFR." We are normally talking to ATC, and routinely fly through the TFR without thinking about it - developed complacency toward the TFR.

Tower/Approach control had just closed. Just before Tower closed, we heard an arriving aircraft ask about the TFR, and Tower reported that the area was not in-use and allowed the aircraft to fly through the TFR.

Was unable to reach FSS or Center on the ground to open flight plan/talk to ATC. Elected to depart VFR and pick up IFR enroute.

Had TFR displayed on moving maps on both iPads. Did not get our attention (factors: complacency mentioned above, fatigue after long flying day, just a ferry home). The TFR should have been displayed graphically on the aircraft’s moving map, but the XM weather subscription recently expired. "TFR" option was selected for display but not receiving XM data.

Saw another aircraft in TFR; didn't occur to us it was a military drone until they called on radio. Having never operated there at night, maybe had assumption they wouldn't be flying when Tower closed.

**Synopsis**

Captain of a corporate jet reported a TFR violation occurred in part because their XM subscription had expired.