

FAA Update and Introduction to LAANC – John Watkins, Review by Al Yanchak

FAA Update:

There isn't a great deal of new information this month, and none of it provides specific guidance regarding actions NCRCC needs to take in response to the Remote ID requirement. For what it's worth, here is the latest:

- The Remote ID effective date has been delayed from March 16, 2021 to April 21, 2021. This delay resulted from the Biden administration regulatory freeze and review process. This delay is not significant with regards to the compliance date that is two and a half years out, and is not expected to change the September 16, 2023 compliance date.
- Recreational flying will be partially governed by the yet to be released FAA Advisory Circular AC 91-57C, titled "Exception for Limited Recreational Operations of Unmanned aircraft" (or something similar). This Advisory Circular will cover topics such as establishment of Community Based Organizations (CBO); and the recreational UAS knowledge and safety test, now called The Recreational UAS Safety Test (TRUST). AC 91-57C is under review for final sign-off by the Office of Management and Budget. It may also experience delays due to the Biden administration regulatory freeze and review process.
- The FAA has provided some information and guidance for TRUST. Some key points:
 - TRUST is a multiple choice, no-fail test of about 25 questions.
 - Questions will cover safety guidelines and recreational flying.
 - The test only has to be taken and passed once.
 - There are no exemptions to taking the test. Commercial drone and full-size aircraft pilots, as well as minors, must take and pass this test. Minors can get assistance from an adult.
 - The test can be taken on-line.
 - The test is free.
 - Expect the test to be available in the second half of 2021.
- TRUST will be administered by organizations designated by the FAA. The FAA announced requirements for organizations that may be interested in becoming TRUST administrators. There has been some discussion within the club about NCRCC becoming a TRUST administrator. However, the requirements - which require access to certified Learning Management System software, typically available only to educational institutions - seemed beyond club resources. So, that opportunity has not been pursued. We are still waiting for clarification from the AMA regarding what role the AMA may play in test administration.
- The FAA has experienced a 50% decline in registrations and renewals. The FAA partly attributes this drop to the large number of initial registrations that have reached end of their three-year expiration date and have not been renewed. The AMA expected a high attrition rate.

Long story short, we remain in a holding pattern regarding FRIA, CBO, and TRUST.

The AMA has done a good job of keeping members informed of regulatory requirements. Most of the above can be found on-line in the AMA Government Blog. The AMA Model Aviation magazine has much of the information as well, but it's two or three months old by the time you get the magazine.

Flying in Controlled Airspace with Low Altitude Authorization & Notification Capability (LAANC):

Now that the weather is getting nicer, we are once again flying outside. What if you wanted to fly somewhere other than the NCRCC field or a location where you know you can fly? How would you check to see if you are in airspace where you can fly without authorization, or request authorization to fly in controlled airspace? Well, there are smart phone and tablet apps for that. These apps will:

- Tell you if you are in uncontrolled airspace, where UAS flying is allowed without authorization, or if you are in controlled airspace where authorization is required.
- Provide information such as distance to nearby airports, weather conditions, and if there are any flight restrictions such as military facilities or training areas, national parks, or Temporary Flight Restrictions (TFR) such as presidential visits or large sporting events.
- Allow you to request and receive authorization to fly UAS within controlled airspace at a defined location, altitude, and time, using Low Altitude Authorization & Notification Capability (LAANC) – pronounced “lance”.

Before getting into the apps, it’s important to understand how and where the FAA has accommodated UAS flying in Class B, C, and D controlled airspace near larger airports.

Figure 1 shows the Class C controlled airspace surrounding Bradley International Airport. The airspace from the surface upwards is divided into rectangles. Each rectangle is labeled with a maximum altitude UAS may be flown if authorized via LAANC or other means. At the center of the controlled airspace at or near the airport, the maximum altitude is 0-feet Above Ground Level (AGL), so UAS cannot be flown there. As the distance from the airport increases, the altitude increases, up to 400-feet AGL near the edge of Class C airspace. Figure 1 also shows the location of the NCRCC field, and the SportsWorld dome in East Windsor, where many in NCRCC fly during the colder months.

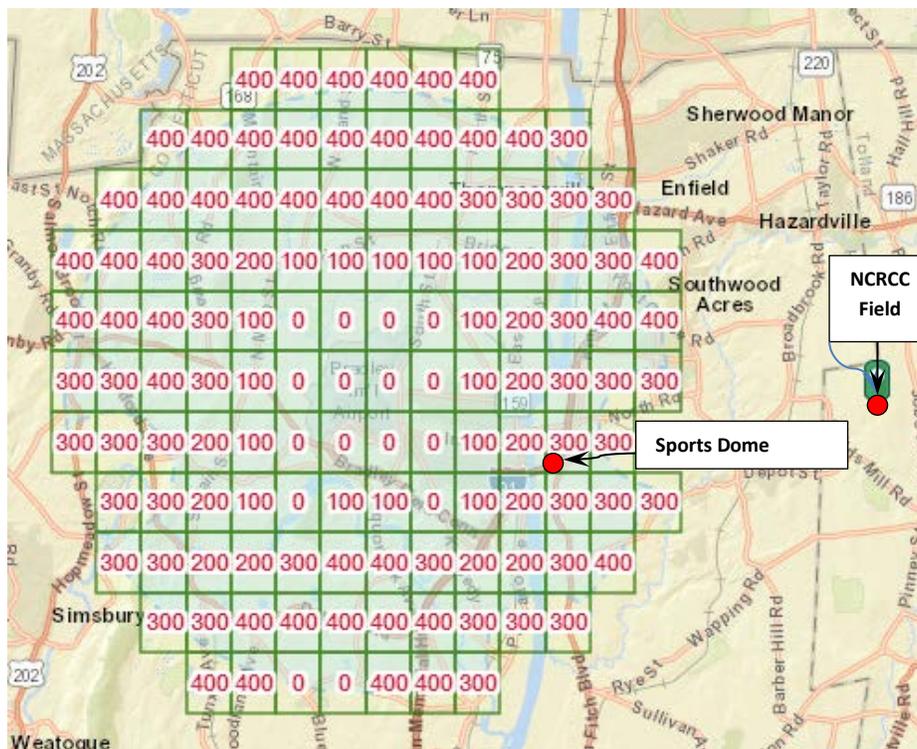


Figure 1 – Grid of UAS Altitude Limits Inside Bradley International Class C Airspace

The first app of interest is B4UFLY. This is a smartphone or tablet app developed by Kittyhawk and the FAA. It will tell you if you are in controlled airspace or not, nearby airports, etc. You can use it to find

out if airspace is controlled at a location where you would like to fly, and if there are any airspace or altitude limitations. B4UFLY also provides a link to the Kittyhawk app for LAANC authorization to fly in controlled airspace. Figure 2 is a smart phone screen shot of the B4UFLY display at the NCRCC field. This display shows we are in clear airspace, (Class G uncontrolled airspace), and can fly up to 400-feet AGL without any authorization.

Let's say you were flying in the sports dome on a nice day in the early spring, and wanted to fly on the soccer field after the indoor session. Since you had never flown outside at the sports dome before, you would check B4UFLY to see if it was okay to fly. Figure 3 shows your location is inside Bradley International Airport/Windsor Locks Class C airspace (shown in Magenta). Since this is controlled airspace, you need authorization to fly, and the maximum altitude that can be approved is 300-feet AGL. Note that the sports dome is located inside one of the 300-foot altitude limit rectangles in Figure 1.

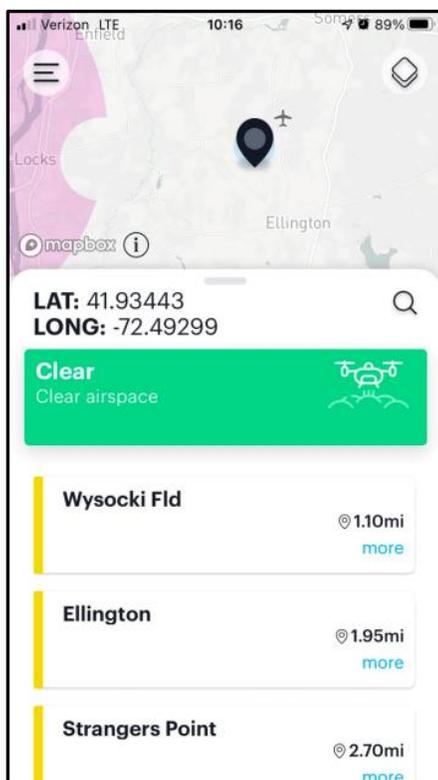


Figure 2 – B4UFLY Display at NCRCC Field

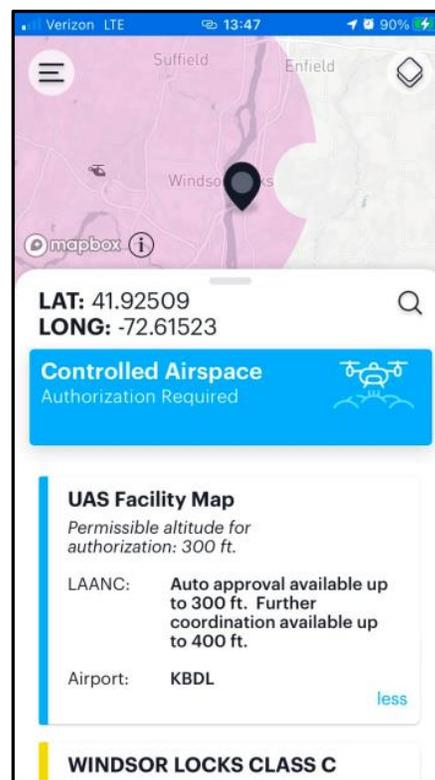


Figure 3 – B4UFLY Display at Sports World Dome, East Windsor

Now that you know you are in controlled airspace, you must request authorization to fly at this location. One of the more popular LAANC apps is [Kittyhawk Drone Ops & Airspace](#). To use it, you will first need to download the app and register. Then, you start your request by selecting a location and if the request is for Commercial or Recreational flight. Next, you will be asked to verify your cell phone number. You will receive a Kittyhawk verification code via text to that number. The verification code gives you access to complete and submit the request. Once you have that, you submit a date, starting time, and duration. You can modify the flight area and altitude as necessary. Approval is automatic for an altitude up to the altitude in the green rectangle in Figure 1. Your authorization is sent to you via text. Note that LAANC allows you to make a request for a location other than where you are, and for a future time.

Submitting a LAANC request can be confusing at first. The easiest way to begin to learn how to use LAANC is with an instructional video. Following is a link to one of the better YouTube videos:

<https://www.youtube.com/watch?v=-VKOTQj8Sys>