



## AiRXOS: Frequently Asked Questions

### Low Altitude Authorization and Notification Capability (LAANC)

- **What exactly is LAANC?**

The FAA's Low Altitude Authorization and Notification Capability (LAANC) is the agency's first step in an initiative for airspace data sharing between government and industry. It provides access to controlled airspace near airports through near real-time processing of airspace authorizations below approved altitudes.

- **Why is LAANC so important?**

The primary function of LAANC is to facilitate automatic Part 107 airspace authorizations at prescribed altitudes for operations within close proximity to airports. In urban areas especially, most operations will occur well within the allowed proximity from airports, so these automated authorizations are key for facilitating commercial urban UAS operations. Specific facility maps and grids showing airspace authorization around airports is available from the FAA [here](#).

- **And what about Further Coordination? Why is that significant?**

As operations get close to or onto airport grounds, the altitudes allowable for LAANC automated authorization are below 0 ft., which equates to no automated approvals being available. This may sound appropriate when dealing with on-airport operations, but often these 0 ft. limit areas extend well into nearby urban areas. For example, the 0 ft. limit grid around Boston's Logan airport includes East Boston, Charlestown, Boston's Back Bay neighborhood, and Cambridge's Kendall Square. In these areas, construction is booming, and construction sites can be within controlled areas – this is the reason Part 107 commercial drone inspections are becoming much more common. And Boston being a seaport town, the 0 ft. limit area includes no less than 9 bridges, the maintenance of which could benefit from Part 107 UAS inspections. However, this is not to say that Part 107 operation in these 0 ft. limit urban areas is impossible under LAANC.

The FAA has built into the LAANC capability a process called LAANC Further Coordination whereby the FAA will facilitate sending requests of this nature to the local Air Traffic Control (ATC) for review and approval. The process can take substantially longer than auto-approval, taking days or weeks rather than seconds or minutes, *but* the benefit can be significant over the current manual process of airspace authorizations, especially when similar flights are being performed repeatedly day after day. The key is in the number of operations. With LAANC Further Coordination, the process for submitting the application for approval is significantly more automated. For a single application you may not gain much time, but **if you are working toward a potential waiver application and need to perform dozens or hundreds of operations, it will be critical to have an automated process**, especially if the operations are very similar or even identical. In addition, Further Coordination applications are routed directly to the local Air Traffic Control (ATC) for approval, so for recurring operations the approval process is likely to be much shorter than the traditional process.

# **AiRXOS: Frequently Asked Questions**

## **Low Altitude Authorization and Notification Capability (LAANC)**

- **Who is going to be most impacted by LAANC – what industries or professions?**

Those impacted most by LAANC are the Part 107 commercial operators operating in urban areas, which likely overlap with controlled airspace. Example professions would be aerial photography or news outlets, or urban construction inspection. These operations can be setup to be not over people, conforming to Part 107 and still be within close proximity to airports.

- **How will LAANC help operators?**

LAANC will allow operators to perform operations with less lead time, meaning more operations can be performed, leading to more revenue for commercial operators.

- **What kind of future opportunities does LAANC open up? What's next?**

In the near-term future LAANC can provide an avenue for performing operations to develop longer term waiver applications. This would provide a shorter path toward commercial operations that require longer term airspace waivers or even Part 107 waivers in combination with airspace authorizations, meaning a more efficient and less costly ramp up for businesses.

- **How much does LAANC cost?**

Right now, simple approvals can cost an operator next to nothing. Connecting these approvals with other flight planning and flight operation capabilities like waypoint route planning, conformance monitoring, and data reporting will increase subscription fees, but will also provide a more efficient process for users performing operations frequently. In addition, for those using LAANC as a stepping stone toward other waivers or authorizations, additional capabilities such as data logging and reporting would be crucial for putting together safety justifications.

- **How does it work for airports that don't have LAANC?**

For airports that are not yet LAANC-ready, traditional airspace authorization is required through the FAA's DroneZone portal. This process can take up to 90 days.

- **Does the implementation of LAANC affect authorization of flights BVLOS?**

No. BVLOS operations still require a waiver. However, if an operator was looking eventually to perform BVLOS operations within controlled airspace, they could potentially use LAANC approvals for operations in preparation for a waiver application.

- **Does LAANC require an update to Part 107?**

No, LAANC approvals are for those flying under Part 107, and no updates to Part 107 are needed for the current operation of the LAANC system.

- **In what other ways is the FAA accelerating commercial UAS operations?**

Other programs the FAA is using to shape the evolution of the UAS integrations into the NAS include the UAS Integration Pilot Program (IPP) and the UAS Traffic Management Pilot Program (UPP). These programs focus on advanced UAS operations and USS intercommunication, but could also require airspace authorizations. As participants in both the UAS IPPs and the UPPs, AiRXOS can now provide both accelerated airspace authorization via the LAANC system, and also gain and provide valuable feedback between the programs.

## **AiRXOS: Frequently Asked Questions**

### **Low Altitude Authorization and Notification Capability (LAANC)**

- **Explain a use case where these pilot programs would be used with LAANC.**

In the UAS IPPs, commercial entities are proving out real world Unmanned Aerial System operations, some of which occur near, or even on, airport grounds. For example, UAS operations could be used on-airport for taxiway foreign object and debris (FOD) detection – a problem associated with the Concorde incident in July 2000 – or for aircraft damage inspection. Long term solutions for providing near or on-airport UAS services would likely eventually need controlled airspace waivers, which cover up to 24-months of operations. The process to obtain an airspace waiver is quite lengthy, though, and involves extensive risk assessment and safety justifications which would only result from data collected through past operations. So, to perform these operations on the path toward commercial operations shorter term airspace authorizations are key, which is where LAANC can be crucial.

###