

# **Memorandum of Agreement (MOA)**

**Between**

**FEDERAL AVIATION ADMINISTRATION (FAA)  
Low Altitude Authorization and Notification  
Capability (LAANC) Automation Platform (AP)**

**And**

**Skyward IO, Inc.**



**September 18, 2017**

**V1.0**

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## ***ARTICLE 1. PARTIES***

The parties to this Memorandum of Agreement (MOA) are the Federal Aviation Administration and the External User, Skyward. The parties do hereby agree and obligate themselves to abide by the rights, responsibilities, and other conditions as defined in this Agreement.

### ***1.1 Definitions.***

#### **LAANC:**

To meet the need for efficient authorization and notification processes, the FAA is creating the Low Altitude Authorization and Notification Capability (LAANC). LAANC includes a data exchange between the FAA and private UAS Service Suppliers (USSs). See the LAANC Concept of Operations document for more detail on the function and features of LAANC.

#### **LAANC AP:**

In order to support and facilitate the envisioned small UAS (sUAS) authorizations and notifications, the FAA must implement a LAANC software system (LAANC Automation Platform, LAANC AP) including internet-oriented operational coordination capabilities and an authorization and notification repository.

#### **UASFM:**

UAS Facility Maps (UASFM) are geospatial maps, produced by the FAA's aeronautical products division, that have been overlaid with a grid system for local airport controlled airspace and in addition contain maximum safe altitudes for small UAS to fly within each grid square.

#### **ArcGIS:**

ArcGIS is a commercial geographic information system (GIS) for working with maps and geographic information. The FAA is contracted with and distributes authoritative aeronautical navigation map data via ArcGIS for public use.

#### **UAS Service Supplier:**

The FAA is pursuing the provision of LAANC services using private USSs to provide services specific to sUAS operations. Such services would be accomplished through an exchange of information between the FAA and the USS, whereby the USS would be the primary interface to the operator. The USS would use FAA UAS Facility Maps (UASFMs) and the LAANC USS Operating Rules provided by the FAA to convey the automatic authorization of sUAS operations in a given area, at a particular time, under a set of conditions.

## **ARTICLE 2. SCOPE**

### **2.1 Purpose.**

This MOA is the agreement between the FAA and Skyward for the FAA to provide application program interface (API) services to Skyward, enabling Skyward to provide services to itself or its customers.

The purpose of this MOA between the FAA and Skyward is to identify the rights, responsibilities, and other conditions for both parties in order to enact the desired service connection.

### **2.2 Goals and Objectives to be accomplished.**

The FAA agrees to provide Skyward access to FAA's LAANC AP APIs. The parties are bound by a duty of good faith and best effort in achieving the goals of this Agreement. FAA also agrees to provide information in an exchange with Skyward to allow Skyward to provide services in accordance with the LAANC USS Operating Rules. Pursuant to this Agreement, the FAA and Skyward agree to the following procedures, restrictions and responsibilities:

#### **2.2.1 Description.**

This section describes and specifies the context of the information used, the purpose, and what equipment and systems will be used for distribution of LAANC AP products to Skyward and to allow Skyward to provide authorization and notification services.

2.2.1.2 General information and guidelines regarding the aforementioned provisions for connection establishment and transmission of information by Skyward to the FAA's APIs is contained in the LAANC API Onboarding Procedures.

2.2.1.3 Skyward must develop and maintain its own applications to collect and process the authorization and notification information in accordance with the LAANC USS Operating Rules.

2.2.1.4 The FAA will also provide an interface via API. The APIs are defined in the LAANC USS-FAA Authorizations and Notifications Interface Control Document.

2.2.1.5 This MOA covers the requirements for (i) provision of the information and (ii) use of the information.

### **2.3 Roles and Responsibilities.**

2.3.1 FAA – Supplier and maintainer of LAANC AP system and associated APIs.

2.3.1.1 The FAA is responsible for providing APIs for USS data exchange.

- 2.3.1.2 Service interruptions may occur due to operational necessity, safety and security concerns, and hardware or software failure. During occurrence of such interruptions, final authority to deny access to data services in accordance with the terms of this Agreement reside with the FAA.
- 2.3.1.3 The FAA has the sole right to relocate, upgrade, and update the LAANC AP and associated API endpoints for any reason. If any of these changes are expected to require Skyward to modify its communications or software application, the FAA must provide written notice of such changes not less than sixty (60) calendar days prior to their implementation.
- 2.3.1.4 The FAA has the sole right to identify Skyward as not in compliance with this Agreement and to direct the interruption or termination of access to LAANC AP and any APIs defining the data exchange. Non-compliance is defined as any failure to adhere to any express or reasonably implied requirement of this Agreement. The FAA will permit a fifteen (15) day period for Skyward to cure a non-compliance.
- 2.3.1.5 The FAA has the sole right to modify this MOA and any associated addenda if it is in the best interests of the United States Government, the aviation industry, or the general public. The FAA will provide written notice thirty (30) calendar days in advance absent good cause for immediate modification.
- 2.3.1.6 The FAA has the sole right to discontinue service for any reason, including but not limited to the following: the need for this service no longer exists or the FAA no longer has sufficient funding available in connection with this service. The FAA will provide written notice thirty (30) calendar days in advance absent good cause for immediate discontinuance.
- 2.3.1.7 The FAA may, at its discretion, perform basic troubleshooting activities on behalf of Skyward, but only when explicitly requested to do so by Skyward.
- 2.3.2 Skyward – An external provider of authorization and notification services, known as UAS Service Supplier (USS). USS must obtain UAS Facility Map (UASFM) data as provided via ArcGIS, the FAA’s authoritative source for aero-navigation data related map data.
  - 2.3.2.1 Skyward must not permit any other Federal, State, municipal, statutory-trust, private, corporate, individual or other user to connect to the FAA’s LAANC AP via its network.
  - 2.3.2.2 Skyward must comply with the LAANC USS Operating Rules, which are hereby incorporated as an attachment to this Agreement. The applicable version of the LAANC USS Operating Rules is the most-recent version approved by the FAA and directly or constructively provided to Skyward; this includes versions approved and provided after execution of this Agreement. Skyward

has thirty (30) calendar days following provision, directly or indirectly, of a new version of the LAANC USS Operating Rules to raise objections to changes; if none are raised within thirty (30) calendar days, the new version is automatically incorporated as an attachment to this agreement, superseding any previous version. If Skyward does raise an objection, the FAA will make a good-faith effort to resolve such objection.

- 2.3.2.5 Indemnification by Skyward: Skyward agrees to indemnify and hold harmless the Government and its agents, officers, employees, and representatives (the Indemnified Parties) from and against all claims, demands, damages, liabilities, losses, suits, and judgments (including the costs and expenses incident thereto) that may accrue against, be suffered by, be charged to, or be recoverable from the Indemnified Parties arising out of acts or omissions of Skyward or its employees, agents, affiliates, or contractors in connection with this Agreement or any related activities, except to the extent caused by the willful misconduct of the Indemnified Parties.
- 2.3.2.6 Communications service and equipment costs: Skyward agrees to provide and maintain the hardware, software, communications facilities, and any other resources needed for Skyward to exchange data with the LAANC AP API services. In the event that the LAANC AP API services are relocated, upgraded, updated, or modified, Skyward must be responsible, at its own expense, for providing and maintaining the hardware, software, communications facilities, and all other resources needed for Skyward to continue to exchange data with the alternate LAANC AP API services.
- 2.3.2.7 Skyward agrees to interact with LAANC AP API in accordance with information security requirements defined by NIST FIPS Publication 200, Minimum Security Requirements for Federal Information and Information Systems.
- 2.3.2.8 Skyward agrees to contact the responsible Point of Contact (POC) to be designated at the time of onboarding for all operational and technical-related matters.

#### ***2.4 Points of Contact.***

*Skyward POC*

[insert name and contact information]

*FAA POC*

Daniel Farrell

Contracting Officer, AAQ-630

Federal Aviation Administration

Ph: 609-485-4081 / Em: [daniel.farrell@faa.gov](mailto:daniel.farrell@faa.gov)

#### ***ARTICLE 3. TYPE OF AGREEMENT***

This Agreement is an “other transaction.” It is not intended to be, nor must it be construed as, creating a partnership, corporation, or other business organization.

***ARTICLE 4. ESTIMATED COST***

There are no costs to either party associated with this MOA.

All costs incurred in the establishment and maintenance of both the LAANC AP and associated APIs to provide data exchange are solely the responsibility of the FAA.

All developmental costs incurred in the establishment and maintenance of Skyward’s servers are solely the responsibility of Skyward.

All costs associated with the connection and communications lines required to access the LAANC AP API services are solely the responsibility of Skyward.

***ARTICLE 5. PERIOD OF AGREEMENT AND EFFECTIVE DATE***

This Agreement will be effective on the date of the last signature below and will terminate five (5) years from the date of execution unless the parties affirmatively agree to continue it and modify the end date accordingly. Both parties must review this agreement annually to determine whether it is still needed; Skyward must provide an annual written statement of its continuing need for this agreement at least ninety (90) calendar days prior to the anniversary of the effective date of this agreement.

***ARTICLE 6. LEGAL AUTHORITY***

This Agreement is entered into under the authority of 49 U.S.C. § 106(1) and (m), which authorizes agreements and other transactions on such terms and conditions as the Administrator determines necessary.

***ARTICLE 7. REIMBURSEMENT AND ACCOUNTING ARRANGEMENTS***

*N/A*

***ARTICLE 8. CHANGES AND MODIFICATIONS***

Changes and modifications to this Agreement must be made by written amendment and signed by the FAA Contracting Officer and an authorized representative of Skyward. A unilateral modification by the FAA is effective upon the FAA Contracting Officer’s signature, regardless of whether an authorized representative of Skyward has signed. No oral statement by any person must be interpreted as modifying or otherwise affecting the terms of this Agreement.

***ARTICLE 9. TERMINATION***

In addition to any other termination rights provided by this Agreement, either party may terminate this Agreement with or without cause at any time prior to its expiration date by giving the other party at least thirty (30) calendar days prior written notice of termination.

#### ***ARTICLE 10. ORDER OF PRECEDENCE***

In the event of any inconsistency between the terms of this Agreement and its attachments, the inconsistency must be resolved by giving preference in the following order:

A. The Agreement

B. The Attachments

#### ***ARTICLE 11. CONSTRUCTION OF THE AGREEMENT***

This Agreement is an “other transaction” authorized by 49 U.S.C § 106 (1) and (m) is not a procurement contract, grant, or cooperative agreement. Nothing in this Agreement must be construed as incorporating by reference or implication any provision of Federal acquisition law or regulation.

Each party acknowledges that all parties hereto participated equally in the negotiation and drafting of this Agreement and any amendments thereto and that, accordingly, this Agreement must not be construed more stringently against one party than against the other.

#### ***ARTICLE 12. DISPUTES***

Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any disagreement through good-faith negotiations, the dispute will be referred to the Office of Dispute Resolution for Acquisition (ODRA) for non-binding mediation (see 14 C.F.R. Part 17).

#### ***ARTICLE 13. WARRANTIES***

The FAA makes no express or implied warranties as to any matter arising under this Agreement, including but not limited to the accuracy of information included in the LAANC AP API services, or as to the ownership, merchantability, or fitness for a particular purpose of any property, including any equipment, device, software, or data that may be provided under this Agreement.

#### ***ARTICLE 14. INSURANCE***

Skyward must arrange by insurance or otherwise for the full protection of itself from and against all liability to third parties arising out of, or related to, its performance of this Agreement. The FAA assumes no liability under this Agreement for any losses arising out of any action or inaction by Skyward, Skyward’s employees or contractors, or any third party acting on the behalf of Skyward or Skyward’s employees or contractors.



***ARTICLE 15. LIMITATION OF LIABILITY***

Skyward agrees to reimburse the FAA for any damage to or destruction of FAA property caused by Skyward or its representatives arising out of work under this Agreement to the extent permitted by law.

Claims for damages against the FAA of any nature whatsoever pursued under this Agreement must be limited to direct damages only up to the aggregate amount of the funding obligated under this Agreement at the time the dispute arises. In no event must the FAA be liable for claims for consequential, punitive, special, or incidental damages; lost profits; or other indirect damages.

***ARTICLE 16. CIVIL RIGHTS ACT***

Skyward must comply with Title VI of the Civil Rights Act of 1964 relating to nondiscrimination in federally assisted programs.

***ARTICLE 17. OFFICIALS NOT TO BENEFIT***

AMS Clause 3.2.5-1, "Officials Not to Benefit," and Clause 3.2.5-7, "Disclosure Regarding Payments to Influence Certain Federal Transactions," are incorporated by reference into this Agreement.

***ARTICLE 18. PROTECTION OF INFORMATION***

FAA reserves the right to share all data and information with appropriate international interests and other state, local, and Federal agencies. The FAA also reserves the right to share all data and information as necessary for analysis and performance of all National Airspace System (NAS) contracts and agreements, subject to FAA use and disclosure provisions. The FAA will process any request under the Freedom of Information Act (FOIA), 5 U.S.C. § 552, for any data or information maintained in this system to which the FAA maintains control in accordance with the FOIA.

- a) Skyward and its contractors agree to abide by any restrictive use conditions on any data and information and not to: (1) knowingly disclose such data and information to others without written authorization from the FAA Contracting Officer, unless the Government has made the data and information available to the public; or (2) Use for any purpose other than that described in this agreement any data or information which bears a restrictive marking or legend. For the sole purpose of this article, "information" means any communication or representation of knowledge such as facts, data, or opinions in any medium or form, including textual, numerical, graphic, cartographic, narrative, or visual form.
- b) For purposes of this clause, Skyward's and its contractors' parent companies, agents, subsidiaries, and affiliates are considered "third parties" and may be provided access to the data and information mentioned above only if allowable to any third party under paragraph (a).

c) In the event Skyward requires access to proprietary data and information of other companies, the contractor must obtain agreement from such other companies. Any such data and information, whether obtained by Skyward pursuant to the aforesaid agreement or from the Government, must be protected from unauthorized use or disclosure to any individual, corporation, or organization so long as it remains proprietary.

d) Skyward agrees to hold the Government harmless and indemnify the Government as to any cost or loss resulting from the unauthorized use or disclosure of third party data and information or software by Skyward or its employees, contractors, or agents.

e) Skyward agrees to include the substance of this clause in all contracts involved with this agreement. The FAA will consider case-by-case exceptions to this requirement for individual contracts in the event that: (1) Skyward considers this clause to be inappropriate and unnecessary in the case of a particular contract or (2)(a) Skyward provides a written statement affirming absolute unwillingness of a contractor to perform, absent some relief from the substance of this prohibition and (b) use of an alternate contract source would unreasonably detract from the quality of effort. In either case, Skyward must provide the FAA Contracting Officer timely written advance notice of these and any other extenuating circumstances.

f) Except as the FAA Contracting Officer specifically authorizes in writing, upon cessation of this agreement, Skyward must return to the FAA all such data and information obtained from the Government, including all copies, modifications, adaptations, or combinations thereof. Data and information obtained from another company must be disposed of in accordance with Skyward's agreement with that company or, if the agreement makes no provision for disposition, must be returned to that company. Skyward must further certify in writing to the FAA Contracting Officer that all copies, modifications, adaptations, or combinations of such data and information that cannot reasonably be returned to the FAA (or to the appropriate company) have been deleted from Skyward's (and any contractor's) records and destroyed.

These restrictions do not limit Skyward's (or any contractor's) right to use and disclose any data and information obtained from another source without restriction.

#### ***ARTICLE 19. SECURITY***

Skyward must abide by all security regulations and procedures specified or implied within this MOA and FAA orders and guidance.

#### ***ARTICLE 20. GOVERNING LAW***

This Agreement shall be governed and interpreted by Federal Law.

#### ***ARTICLE 21. PUBLICITY AND PUBLICATION***

Skyward and the FAA reserve the right to publicly disclose and to publish the results of activities produced as a result of the LAANC AP API based services obtained under this Agreement. However, before public disclosure or submission for publication, Skyward

must notify the FAA of its intention to publish and must submit the request and manuscript to the FAA for review and approval. The FAA has thirty (30) calendar days from receipt of the request to approve the request. The disclosure of results or the publication must be delayed at FAA's written request.

**ARTICLE 22. ENTIRE AGREEMENT**

This document is the entire agreement of the parties, who accept the terms of this Agreement as shown by their signatures below. In the event the parties duly execute any amendment to this Agreement, the terms of such amendment must supersede the terms of this Agreement to the extent of any inconsistency.

AGREED:

**Skyward IO, Inc.**

BY:   
\_\_\_\_\_  
Mariah Scott, Co-President, Skyward IO, Inc.  
(Skyward Representative)

DATE: 10/16/2017

**Federal Aviation Administration**

(U. S. Government Service Provider)

BY: \_\_\_\_\_  
Daniel Farrell, FAA Contracting Officer, AAQ-630  
(U. S. Government Representative)

DATE: 10/18/2017

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SIGNED

**10/16/2017**  
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COMPLETED

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The document has been completed.