U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

CERTIFICATE OF WAIVER

ISSUED TO

Aaron Lai Responsible Person: Aaron Lai Waiver Number: 107W-2025-01500

ADDRESS -

515 University Ave Apt 402 Madison, WI 53703

This certificate is issued for the operations specifically described hereinafter. No person shall conduct any operation pursuant to the authority of this certificate except in accordance with the provisions contained in this certificate.

OPERATIONS AUTHORIZED

Operation from a moving land borne vehicle over other than sparsely populated areas. Operation not for transportation of property for compensation or hire; operations under this Waiver are to be conducted in Class G airspace only unless specific airspace authorization or Waiver is received from the FAA in accordance with § 107.41; Small unmanned aircraft system (sUAS) operations over human beings.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

14 CFR §§ 107.25—Operation from a moving vehicle or aircraft, and 107.39—Operation over human beings

STANDARD PROVISIONS

- 1. A copy of the application made for this certificate shall be attached to and become a part hereof.
- 2. This certificate shall be presented for inspection upon the request of any authorized representative of the Administrator of the Federal Aviation Administration, or of any State or municipal official charged with the duty of enforcing local laws or regulations.
- 3. The holder of this certificate shall be responsible for the strict observance of the terms and provisions contained herein.
- 4. This certificate is nontransferable.

NOTE—This certificate constitutes a waiver of those Federal rules or regulations specifically referred to above. It does not constitute a waiver of any State law or local ordinance.

SPECIAL PROVISIONS

Special Provisions Nos. 1 to 26, inclusive, are set forth on the attached pages.

This Certificate of Waiver is effective from July 29, 2025, to July 31, 2029, and is subject to cancellation at any time upon notice by the Administrator or an authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

Emerging Technologies Division, AFS-700

SPECIAL PROVISIONS ISSUED TO

Aaron Lai

General.

The FAA's Flight Standards Service has reviewed your application to ensure compliance with the requirements of 14 CFR § 107.200 and § 107.205. Pursuant to these authorities, the Administrator finds that the proposed small unmanned aircraft (sUA) operation can be conducted safely under the provisions of this Certificate of Waiver (Waiver) as listed below because you have established adequate mitigations for risks involved with operating your sUA in the manner you described. Adherence to the provisions of this Waiver establishes the required level of safety within the national airspace system.

The Administrator may cancel this Waiver at any time. As a general rule, this Waiver may be canceled when it is no longer required, there is an abuse of its provisions, or when unforeseen safety factors develop. Failure to comply with any provision listed below is a violation of the terms of this Waiver and will serve as justification for cancellation.

List of Regulations Waived by Section and Title. The following regulations are waived:

14 CFR § 107.25, Operation from a moving vehicle or aircraft, is waived to allow sUA operations from a moving vehicle or aircraft not meeting the requirements of § 107.25;

14 CFR § 107.39, Operations over human beings, is waived to allow sUA operations over human beings who are not direct participants, necessary for the safe operation of the small unmanned aircraft.

No part of this waiver will function as an airspace authorization under 14 CFR § 107.41. The FAA's Air Traffic Organization responds directly to requests for such authorizations. The LAANC system may not be used for Airspace Authorizations for Waivered Operations.

Common Special Provisions. The Responsible Person is directly responsible for safety of operations conducted under this Waiver and will ensure the Remote Pilot in Command (remote PIC), manipulator of the controls, and visual observer(s) (VO)¹ comply with all provisions of this Waiver.

- 1. The Responsible Person listed on the Waiver is responsible to the FAA for the safe conduct of the operations. Prior to conducting operations that are the subject of this Waiver, the Responsible Person:
 - a. Must ensure the remote PIC, manipulators of the controls, and VO(s) are informed of the terms and provisions of this Waiver and strictly observe the terms and provisions herein;
 - b. Must ensure the remote PIC, manipulators of the controls, and VO(s) are informed and familiar with part 107 regulations; and
 - c. Evidence of the above (a and b) must be documented and must be presented for inspection upon request from the Administrator or an authorized representative;
- 2. This Waiver may not be combined with any other waiver(s), authorizations(s), or exemption(s) without specific authorization from the FAA;

¹ Title 14 CFR § 107.3 defines the term "visual observer." Any VO participating in operations conducted under this Waiver must meet the requirements listed in § 107.33 throughout the duration of flight operations.

- 3. The FAA has the authority to cancel or delay any or all flight operations if the safety of persons or property on the ground or in the air are in jeopardy or there is a violation of the terms of this Waiver;
- 4. A copy of this Waiver must be accessible and available to the remote PIC at the ground control station during sUA operations that are the subject of this Waiver;
- 5. The Responsible Person listed on this Waiver must maintain a current list of pilots by name and remote pilot certificate number used in operations under this Waiver. This list must be presented for inspection upon request from the Administrator or an authorized representative;
- 6. The Responsible Person listed on this Waiver must maintain a current list of sUA by registration number(s) used in operations under this Waiver. This list must be presented for inspection upon request from the Administrator or an authorized representative;
- 7. For the purposes of this Waiver, direct participants are the remote PICs, persons manipulating the controls, VOs, and any persons whose involvement is necessary for safety of the sUA operation. All other persons are considered non-participants;
- 8. If a discrepancy exists between the provisions in this Waiver and the waiver application, the Waiver takes precedence and must be followed;

Moving Vehicle sUAS Operations Special Provisions sUAS operations may be conducted from a land or water-borne vehicle over other than sparsely populated areas, over people. Operation not for transportation of property for compensation or hire

9. The maximum takeoff weight of the sUA and all attachments such as shielding for rotating components (i.e., prop guards), remote ID module, camera, anti-collision lights, and/or payload **must not exceed 0.88 pounds**;

SPECIAL PROVISIONS APPLICABLE TO SUA GREATER THAN 0.88 POUNDS

- 10. Prior to conducting waivered operations, the Responsible Person listed on the Waiver must ensure the remote PIC, VO, and driver have general knowledge of the topography and environment for the planned flight route and have briefed the intended flight to address matters such as vehicle route, speeds, obstacles and weather:
- 11. At least one VO is required for each operation over people. The VO(s) must understand the general concept of the operation and their specific duties.
 - a. The VO(s) must be positioned where they can immediately alert the RPIC of collision hazards. If the VO(s) is (are) not collocated with the RPIC, the VO(s) must have direct voice communication with the RPIC at all times during the flight.
 - b. If voice communication is lost between the VO(s) and the RPIC, the operation must cease until the communication issue is resolved;

- 12. sUA Operations from a Moving Vehicle
 - a. sUAS operations may be conducted from a land or water-borne vehicle;
 - b. The remote PIC and VO must have an unobstructed field of view from the moving vehicle;
 - c. The remote PIC, VO, and vehicle operator have general knowledge of the topography and environment for the planned flight route and have briefed the intended flight to address matters such as vehicle route, speeds, obstacles and weather;
 - d. Vehicle movement does not interfere with the duties and responsibilities of the remote PIC and/or VO;
 - e. The remote PIC, the VO(s), and the person operating the moving vehicle must be designated in advance of the commencement of the operation, and may serve only in a single role throughout the operation. For example, the person who operates the moving vehicle may not simultaneously act as the VO; and
 - f. The Responsible Person must ensure that the loss of data link procedures account for the dynamic location of the remote PIC. These procedures must include a safe flight termination method or a safe lost link flight path around all obstacles, adverse weather conditions, non-participating aircraft, and persons on the ground, which are encountered during the operation;
- 13. The sUAS must be equipped and operated with a mechanism to shield or prevent rotating parts from causing lacerations to human skin (e.g., prop guards);
- 14. The sUA must be equipped with anti-collision lighting to increase the conspicuity of the sUA to at least one statute mile for daytime operations and three statute miles for civil twilight and night operations, for collision avoidance purposes;
- 15. Safety Briefing: Prior to operations under this Waiver, all Direct Participants must attend a safety briefing that addresses, at minimum, the following items as applicable:
 - a. Designated positions, physical locations, responsibilities, and Crew Resource Management;
 - b. Planned flight operating area;
 - c. Designated launch and recovery areas;
 - d. Verification of geo-fence boundaries;
 - e. Verification of return home and land flight profile, and course;
 - f. Procedures for avoidance of other aircraft and obstacles;
 - g. Procedures for operating under this waiver;
 - h. Land vehicle speed;
 - i. Intended flight path;
 - j. Abnormal procedures; and
 - k. Emergency procedures;
- 16. Any electronic communication conducted by the driver or remote PIC during waivered operations must be by use of a hands-free device;

- 17. Operations over people attending sporting events, concerts, crowds, political events, races, controlled access events, and other open-air assemblies of people is prohibited, unless, prior to sUAS operations conducted under this Waiver, the responsible person coordinates the sUAS operations with the event's security planner or venue's designee. For this Waiver, "coordinates" means contacting the venue designee or event's security planner and
 - a. Providing a copy of this Waiver,
 - b. Providing a schedule of planned sUAS operation(s) times,
 - c. Providing the location the remote PIC will be operating the sUAS from,
 - d. Providing the remote PIC's phone number where they can be contacted during sUAS operations, and
 - e. Receiving written confirmation from the event security planner or venue's designee that the above information has been provided to him/her;
- 18. The route of flight must be planned and flown to minimize the time the sUA is over people;
- 19. Prior to each flight a checklist must be used to aid in identifying potential ground and air hazards along the route of flight and in the immediate vicinity, completed by the RPIC, and briefed to the VO(s) and the person flying the drone. The checklist must cover the following items at a minimum:
 - a. Identify areas or routes of low-level helicopter and airplane operations such as helipads, grass airstrips, airports, military operations areas below 500 feet above ground level (AGL), tour operator flights, and farmland suitable for agricultural aircraft operations, within one statute mile of the intended operating area or route;
 - b. Identify locations of expected pedestrian and vehicular traffic in the immediate vicinity of the operating area or route of flight; and
 - c. Identify the highest obstacle or obstruction in the operating area that may be encountered between the takeoff/home location and anywhere along the planned route of flight should a pre-programmed return-to-home (RTH) flight be initiated;
- 20. Prior to takeoff, the sUAS must be programmed to execute a pre-programmed RTH command if the signal is lost or disrupted for more than 5 seconds. The RPIC must program a RTH altitude that avoids any obstructions along the RTH route, limited to no higher than 400 feet AGL;
- 21. ADS-B out (1090/978 MHz) may not be transmitted from the sUAS when operating pursuant to this Waiver;
- 22. Ground Control Station, Control and Communications (C2) System:
 - a. Telemetry: The sUAS ground control station must display in real-time the sUA altitude, position, direction of flight, ground speed, C2 signal strength, GPS or navigation system signal condition, battery condition, and sUA distance from the control station as described in the Waiver application;
 - b. Alerting: The remote PIC must ensure the GCS is configured to audibly and/or visually alert the remote PIC of degraded system performance, geofence loss of containment, loss of Control link with the sUA, and intrusion alerts as described in the Waiver application;
 - c. Emergency Profiles: The remote PIC must ensure the GCS is configured for automated emergency actions (e.g. RTL/RTH, altitude descend, position hold etc.) as described in the Waiver application; and
 - d. Sensors: the remote PIC must ensure any installed collision/obstacle avoidance sensors are operational;

- 23. UAS Maintenance: All sUAS operations conducted in accordance with this Waiver must comply with all manufacturer recommendations and limitations for the sUAS:
 - a. The Responsible Person must maintain each sUAS and its components in accordance with manufacturer's instructions and recommendations. sUAS maintenance includes scheduled and unscheduled overhaul, repair, inspection, modification, replacement, and system software upgrades of the sUAS and its components necessary for flight;
 - b. A log of all maintenance performed must be kept for each aircraft operated under this waiver. This log must be available to the remote PIC for review prior to conducting operations that are the subject of this waiver. Each sUAS maintenance log must be presented to the Administrator when requested. The log must contain the following information for each maintenance activity:
 - 1) A description (or reference data acceptable to the Administrator) of work performed;
 - 2) The date of completion of the work performed;
 - 3) The name of the person who performed the work; and
 - 4) The signature of the person who performed the work;
 - c. Any sUAS that has undergone maintenance must undergo a functional test flight prior to conducting operations under this Waiver. The functional test flight may only be conducted under the standard requirements of part 107 (without waiver). A log entry must be made for each functional test flight.

The log entry must contain at minimum the:

- 1) Calendar date;
- 2) sUA registration number;
- 3) Remote PIC who performed the functional test flight;
- 4) Duration of the flight; and
- 5) The result of the functional flight test; and
- 24. All emitters used in sUAS must be compliant with all applicable FCC regulations provisions of the FCC authorization granted for the emitter. A FCC Experimental authorization may not be used for sUAS operations under this Waiver.
- 25. Operations conducted under this waiver are limited to location(s) that meet the performance-based criteria contained in the waiver application;