

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
CERTIFICATE OF WAIVER

ISSUED TO

**PrecisionHawk, Inc., Responsible Person: Thomas Haun
Waiver Number: 107W-2016-00002**

ADDRESS

**8601 Six Forks Ave. Forum I, Suite 600
Raleigh, North Carolina, 27615**

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 standard and special provisions contained in this certificate, and such other requirements of the Federal Aviation Regulations not specifically waived by this certificate.

OPERATIONS AUTHORIZED

Flights using small unmanned aircraft system (sUAS) operations in accordance with 7711-2 application for Certificate of Waiver.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

**14 CFR § 107.31 Visual line of sight aircraft operation
14 CFR § 107.33(b) & (c)(2) Visual observer**

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 21, inclusive, are set forth on the attached pages.

This Certificate of Waiver 107W-2016-00002 is effective from August 29, 2016 to August 31, 2020 and is subject to cancellation at any time upon notice by the Administrator or an authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

General Aviation and Commercial Division, AFS-800

**SPECIAL PROVISIONS ISSUED TO
PrecisionHawk, Inc.**

General.

The FAA's Flight Standards Service has reviewed your application to ensure compliance with the requirements of Title 14 Code of Federal Regulations (14 CFR) § 107.200. The Administrator finds that the proposed sUAS operation can be conducted safely under the provisions of this Certificate of Waiver (Waiver) as listed below, because adequate mitigations for risks involved with operating your sUAS in the manner you describe has been established. PrecisionHawk's unique Concept of Operations (CONOP) and Operational Risk Assessment details the specifics of the company's risk mitigations based on their prior flight testing, operational history, and flight experience with these unique and specific operations. This data ensures that PrecisionHawk's remote pilots and visual observers will always be able to see and scan the airspace encompassing the small Unmanned Aircraft's operational area. Adherence to the provisions of this Waiver establishes a level of safety that ensures safety within the national airspace system.

This Waiver may be canceled at any time by the Administrator, the person authorized to grant the Waiver, or the representative designated to monitor a specific operation. 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 may serve as justification for cancellation.

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

14 CFR § 107.31, Visual line of sight aircraft operation, is waived to allow small Unmanned Aircraft Systems operations beyond the Remote Pilot's and / or Visual Observer's direct visual observation of the small unmanned aircraft.

14 CFR § 107.33(b) and (c)(2), Visual observer, are waived to allow sUAS operations beyond the direct visual observation of the visual observer.

Common Provisions. The Responsible Person, Thomas Haun, for PrecisionHawk, Inc., is directly responsible for safety of operations conducted under this Waiver and will ensure the remote pilot in command (PIC), manipulator of the controls, and Visual Observer (VO) comply with all provisions of this Waiver.

1. This Waiver must not be combined with any other waiver(s), authorization(s), or exemption(s) without specific authorization from the FAA;
2. 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;
3. 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;

4. A copy of this Waiver must be available during Waivered sUAS operations;
5. The Responsible Person listed on this Waiver must maintain a current list of pilots by name and remote pilot certificate number used in the Waiver holder's operations. 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 small unmanned aircraft (sUA) by registration number(s) used in the Waiver holder's operations. This list must be presented for inspection upon request from the Administrator or an authorized representative;

Visual Line of Sight Operations and Visual Observer Special Provisions. sUAS operations may be conducted outside the visual line of sight of the remote PIC and/or VO, except for launch and recovery, provided:

7. Flights under this Waiver are only authorized in uncontrolled airspace (Class G) at or below 400 feet above ground level (AGL) during daylight hours and in accordance with the submitted CONOP;
8. The sUA must be contained in the preplanned designated operational area. Designated operational areas must be free of obstacles, obstructions, structures, and non-participating human beings;
9. The remote pilot must be proficient in visual line of sight (VLOS) operations and trained in accordance with the company's specific training program, to include semi-autonomous operations, prior to conducting operations under this Waiver. Any changes to the training relating to flight operations must be reviewed by the FAA prior to further operation under this Waiver. This proficiency and training must be documented and must be presented for inspection upon request from the Administrator or an authorized representative;
10. The remote pilot must be able to determine the position, attitude, altitude, and direction of flight of the sUA during operations in accordance with this Waiver;
11. A VO must be used whenever the sUA will fly beyond the range that the remote pilot can see intruding traffic;
12. The VOs necessary for the safe conduct of the operation must be in place during flight operations. Standard body positioning and orientation points must be established prior to the flight and understood by all participating personnel throughout the entire flight;
13. Communication between the VO and remote PIC must allow for the remote PIC to maneuver the sUA in sufficient time to yield right-of-way in accordance with § 107.37;
14. The sUA must be capable of semi-autonomous operations. A preplanned flight plan and track for the sUA to follow must be verified by the remote PIC prior to conducting the operation;

15. The remote PIC must have the capability to control the sUA at all times;
16. All planned launches and recoveries of the sUA must be within VLOS of the remote PIC or VO;
17. The remote PIC must be able to determine that the Command and Control system and communications equipment have performance capabilities that meet the planned ranges for the proposed operation;
18. The sUA must have pre-programmed and actively available contingency and emergency profiles. The sUAS displays must be capable of alerting the pilot of degraded systems;
19. All participants involved in the sUA flight operation must be trained on contingency profiles and emergency procedures. This training must be documented and must be presented for inspection upon request from the Administrator or an authorized representative;
20. The sUA must have high-visibility exterior features to increase its conspicuity; and
21. The sUA must use lighted anti-collision lighting unless a system is in place that ensures the sUA is able to avoid all non-participating aircraft.