

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

ISSUED TO

Engineering Systems Inc.
Responsible Person: Michael Bauer
Waiver Number: 107W-2025-00691

ADDRESS

2355 Polaris Ln N Ste 120
Plymouth, MN 55447

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

Small Unmanned Aircraft System (sUAS) operations higher than 400 feet above ground level (AGL), when not within a 400 foot radius of a structure.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

14 CFR § 107.51(b)—Operating limitations for small unmanned aircraft (sUA) - Altitude

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 1 to 18, inclusive, are set forth on the attached pages.

This Certificate of Waiver is effective from May 01, 2025, to June 30, 2025, and is subject to cancellation at any time upon notice by the Administrator or an authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

Adam Vetter
Tactical Operations Manager
FAA Western Service Center

SPECIAL PROVISIONS ISSUED TO
Engineering Systems Inc.

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 sUAS 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 sUAS 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 § 107.51(b), Operating limitations for small unmanned aircraft - Altitude, is waived to allow sUAS operations higher than 400 feet AGL, not to exceed 1,100 feet AGL.

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 such requests for authorizations.

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 (PIC), manipulator of the controls, and Visual Observers (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 PIC, manipulators of the controls, and VO are informed of the terms and provisions of this Waiver and the strict observance of the terms and provisions herein;
 - b. Must ensure the PIC, manipulators of the controls, and VO are informed of, 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 must not be combined with any other waiver(s), authorizations(s), or exemption(s) without specific authorization from the FAA;
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;

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.

4. A copy of this Waiver must be accessible and available to the PIC at the ground control station during sUAS 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 PICs, persons manipulating the controls, VOs, and any persons whose involvement is necessary for safety of the sUAS 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;

Operations higher than 400 feet AGL Special Provisions: sUAS operations may be conducted above 400 feet AGL, not to exceed 1,100 feet AGL, provided:

9. Operations may not be conducted at night or during civil twilight, as defined in 14 CFR § 1.1 and § 107.29(c), respectively;
10. NOTAM: The Responsible Person must file a Notice to Airmen (NOTAM) no more than 72 hours and no less than 24 hours prior to operating under this Waiver. A NOTAM can be filed by calling 1-877-487-6867 (1-877-4-US-NTMS); and must include the location and/or operating area, altitude, time, nature of the activity, Waiver and/or COA number, PIC name and contact information. The Responsible Person must verify the NOTAM has been issued prior to conducting waived operations;
11. Visual Observers: All operations conducted under this Waiver must use one or more VO as described in the waiver application:
 - a. All VOs must receive documented training for their duties and responsibilities to include;
 - 1) Scanning of the Operational Volume for Air and Ground based intruders;
 - 2) Communications procedures and phraseology; and
 - 3) Overall operations conducted under this Waiver;
 - b. Sufficient VO(s), defined as the minimum number of VO(s) required to continuously observe at least a 2 statute mile radius of airspace surrounding the sUA in flight, are;
 - 1) Used to identify any non-participating aircraft prior to their entry into the planned operational area;
 - 2) Physically located such that the PIC receives sufficient notice to ensure the sUA remains well clear of all other aircraft;
 - 3) Physically located to notify the PIC of any moving vehicle or human presence that may pose a hazard to the operation;
 - c. Communication between the PIC and VO must occur to facilitate, when necessary, for the PIC taking action to maneuver the sUA with sufficient time to:

- 1) Give way to all other aircraft in accordance with 14 CFR § 107.37;
 - 2) React to any unforeseen operational or mechanical failure without creating a hazard to other people, other aircraft, or property in the event of a loss of control of the sUA; and
 - 3) Maintain compliance with this Waiver and un-waived provisions of Part 107;
- d. If communication between the VO and the PIC will occur by electronic device:
- 1) The device must be continuous full-duplex;
 - 2) The PIC must be able to use the device hands-free; and
 - 3) There must be a reliable back-up communication method;
12. Operations Manual: Prior to operations, the Responsible Person must develop an operations manual that contains at least the following items:
- a. Operator name, address, and telephone number;
 - b. Method of manual distribution and revision;
 - c. Certificate of Waiver. The operations manual must include a copy of the current Waiver(s);
 - d. Aircraft description and limitations list by aircraft type and model;
 - e. Method to ensure safety of non-participating persons and aircraft;
 - f. Safety briefing of Direct Participants;
 - g. Direct Participant minimum requirements;
 - h. Method of communications;
 - i. Normal operating procedures;
 - j. Abnormal operating procedures;
 - k. Emergency procedures;
 - l. Crew Resource Management;
 - m. Risk management; and
 - n. Accident Notification. The operations manual must contain procedures for notification and reporting of accidents in accordance with 14 CFR Part § 107.9 and NTSB 830;
13. Operations conducted under this Waiver may only occur with the make and model sUAS described in the waiver application. Proposed operations of any other manufacturer, make or model of sUAS will require a new waiver application or a request to amend this Waiver;
14. Anti-Collision Lighting: The sUA must be equipped and operated with high visibility markings and/or anti-collision lighting to increase conspicuity of the sUA in order to be seen by crewmembers in other aircraft from a distance of no less than 1 statute mile for daytime operations;
15. ADS-B out (1090/978 MHz) may not be transmitted from the sUAS when operating pursuant to this Waiver. An ADS-B in Receiver (other than a cell phone, or third-party internet services) must be operational and monitored during all operations pursuant to this Waiver;

16. 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 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) PIC who performed the functional test flight;
 - 4) Duration of the flight; and
 - 5) The result of the functional flight test;
17. All emitters used in the sUAS must be in compliance with all applicable FCC regulations and all provisions of the FCC authorization granted for the emitter. A FCC experimental authorization may not be used for sUAS operations under this Waiver; and
18. Operations Area: Operations conducted under this Waiver are limited to the Operations Area described in the waiver application (see description and images below).

Eden, Utah:
41° 21' 00.6" N, 111° 48' 26.3" W (in Blue)
Radius: 3.00 Nautical Miles
At or Below: 1,100 feet AGL



