U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

CERTIFICATE OF WAIVER AND AUTHORIZATION

ISSUED TO

Tulsa Fire Department

Waiver Number: 91.113-2026-01336

ADDRESS –

1760 Newblock Park Drive

Tulsa, OK 74127

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

Multiple small unmanned aircraft system (sUAS) operations beyond the visual line of sight of the remote pilot in command (PIC), are permitted in operations at or below 400 feet above ground level (AGL), or, at or below the UASFM altitudes in Class B, C, D or E (Surface Area) airspace whichever is lower, or as described and authorized in the Special Provisions.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

14 CFR §§ 91.113(b) — Right-of-way rules: Except water operations.,
91.119(b) and (c) — Minimum safe altitudes: General.
91.126(d) — Operating on or in the vicinity of an airport in Class G airspace
91.127(c) — Operating on or in the vicinity of an airport in Class E airspace
91.129(c) — Operations in Class D airspace
91.130(c) — Operations in Class C airspace
91.131(a)(1) and (c)(2) — Operations in Class B airspace
91.155 — Basic VFR weather minimums
91.209(a) – Aircraft Position Lighting

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

This Certificate of Waiver is effective from November 5, 2026, to May 31, 2030, and is subject to cancellation at any time upon notice by the Administrator or an authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

CHRISTOPHER M DOHERTY

Digitally signed by CHRISTOPHER M DOHERTY
Date: 2026.11.04 16:14:20 -06'00'

Emerging Technologies Division, AFS–700

SPECIAL PROVISIONS ISSUED TO:
Tulsa Fire Department

This Certificate of Waiver is an amendment which supersedes and replaces Waiver 91.113-2026-00189 issued to Tulsa Fire Department for operations under 14 CFR 91. Waiver 91.113-2026-00189 is no longer valid.

Purpose: To prescribe sUAS operating requirements in the National Airspace System (NAS) for the purpose of Public Aircraft Operations. The holder of this waiver will be referred herein as the "Operator."

Public Aircraft

1. A public aircraft operation is determined by statutes 49 U.S.C. § 40102(a)(41) and § 40125.
2. All public aircraft flights conducted under a waiver must comply with the terms of the statute.
3. All flights must be conducted per the declarations submitted in the application and as specified in the following Standard/Special Provisions.
4. All operations will be conducted in compliance with Title 14 CFR § 91 and the conditions of the authorization issued herein. If the operator cannot adhere to any of these requirements, a separate FAA Form 7711-2 waiver application may be required.

General.
The FAA's Flight Standards Service has reviewed your application to ensure compliance with the requirements of 14 CFR § 91.113. Pursuant to this authority, the Administrator finds that the proposed small unmanned aircraft systems (sUAS) operation can be conducted safely under the provisions of this Certificate of Waiver as listed below because you have established adequate mitigations for risks involved with operating your small unmanned aircraft (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.

This document also serves as an **Airspace Authorization** in accordance with listed **Special Provisions,** however, no part of this document will function as an airspace authorization for prohibited or restricted airspace.

Common Special Provisions. The operator 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) comply with all provisions of this waiver.

1. The operator 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 operator:
   a. Must ensure the remote PIC is trained by the Operator agency and certified by that agency as having the requisite knowledge to safely operate a sUA in the National Airspace System;
   b. 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; and
   c. Must ensure the remote PIC, manipulators of the controls, and VO(s) are informed and familiar with part 91 regulations;

   Note: Evidence of the above (a, b, and c) must be documented and must be presented for inspection upon request from the Administrator or an authorized representative;

2. This waiver may be combined with an Airspace Authorization issued through CAPS/CADZ, but may 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;

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 and shall be presented for inspection upon the request of any authorized representative of the Federal Aviation Administration, or of any federal, state or municipal official charged with the duty of enforcing federal, state or local laws or regulations. A digital copy is acceptable;

5. The operator listed on this waiver must maintain a current list of pilots by name used in operations under this waiver. This list must be presented for inspection upon request from the Administrator or an authorized representative;

6. The operator 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 issued takes precedence and must be followed;

9. If operations under this waiver are being conducted in conjunction with a COA or grant of exemption, then all provisions of those documents must be complied with in addition to the provisions of this waiver. If there is a conflict in provisions between the documents, the Operator is responsible to comply with the most restrictive provision;

Waiver Specific Special Provisions. The remote PIC and Visual Observer(s) (if used) may conduct multiple sUAS operations, over people and moving vehicles, in reduced visibility minimums, with and without the ability to see the unmanned aircraft throughout the entire flight, provided:

10. Beyond Visual Line of Sight (BVLOS) Operations may occur without a VO, provided the sUA remains:
    a. For UAS ops not using a DAA system or outside the defined DAA coverage area proposed in the application, obstruction shielding is the primary collision avoidance mitigation, and the UA must remain:
        1) In **Class G Airspace**,
            a) at or below 200 feet AGL, or
            b) 100 feet above the height of any obstruction (natural or man-made) that is within a 100 foot radius of the sUA, not to exceed 400 feet AGL, or
        2) In **Class B, C, D or E (Surface Area) Airspace**,
            a) at or below 200 feet above the ground, or
            b) below the UASFM altitude, whichever is lower; **or**
    b. For UAS ops using the DAA system within the defined area proposed in the application as the primary collision avoidance mitigation, the UA must remain:
        1) In **Class G Airspace**,
            a) at or below 400 feet AGL, or
        2) In **Class B, C, D or E (Surface Area) Airspace**,
            a) at or below 400 feet AGL, or
            b) below the UASFM altitude, whichever is lower;

11. Multiple UAS Operations:
    a. The remote PIC may conduct operations of up to **"Four (4)"** sUA of the make/model defined in the Waiver application, controlled and monitored using the specified Flight Management System which must ensure adequate health and position monitoring and control of all sUA so they remain inside the area of operation, as described in the waiver application;
    b. All sUA must be operated at or below the applicable maximum altitude specified in Special Provision 10;
    c. The remote PIC must ensure that an individual system failure does not interfere with the operation of any other sUA or cause incidents, accidents, or loss of control involving any other sUA that are subject to this Waiver;
    d. Each sUA must be equipped with an independent Flight Termination System that will allow a safe maneuver for recovery inside the defined operational area if the command and control system fails;
    e. The flight termination and Geo-fencing systems must be verified operational prior to each flight;

12. The minimum flight visibility, as observed from the location where the sUA is positioned for flight must be no less than one (1) statute mile. For purposes of this section, flight visibility means the average slant distance from the control station at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night;

13. Operations into clouds is prohibited. The sUA must remain clear of clouds at all times;

14. An airspace authorization must be obtained through CAPS/CADZ, at https://caps.faa.gov/coaportal, for any flights:
    a. above 400 Feet AGL in Class G airspace,
    b. above the UASFM grid heights,
    c. in controlled airspace where UASFM's are not applicable, or
    d. VLOS or BVLOS, within controlled airspace of Sault Ste. Marie Airport (CYAM), Abbotsford Airport (CYXX), Chippewa County International Airport (KCIU), or Bellingham International Airport (KBLI);

15. The sUA must be equipped with anti-collision lighting to increase the conspicuity of the sUA to 3 statute miles for civil twilight and/or night operations. Anticollision light system must be operational at all times, day or night. The intensity of the anti-collision lighting may be reduced if, because of operating conditions, it would be in the interest of safety to do so.

16. Prior to conducting operations that are the subject of the COW, the remote PIC and VO (if used) must be trained to recognize and overcome visual illusions caused by darkness and understand physiological conditions which may degrade night vision. This training must be documented and must be presented for inspection upon request from the Administrator or an authorized representative;

17. The maximum speed of the sUA shall not exceed 87 knots (100 miles per hour);

18. No operations may be conducted from a moving vehicle or watercraft;

19. The maximum takeoff weight of the sUA and all attachments (such as prop guards, Parachute Recovery System (PRS), remote ID module, camera, anti-collision light, and/or payload) must be less than 55 pounds;

20. Operations over people and moving vehicles are only authorized if:
    a. The sUA is Part 107 subpart D Category 1, 2, 3, or 4 compliant and listed on the FAA accepted Declaration of Compliance page for operations over people, or:
    b. The sUA weighs up to and including 0.88 pounds at takeoff and is equipped and operated with a mechanism to shield or prevent rotating components (i.e., prop guards or prop brake mechanism) from causing lacerations to human skin, or;
    c. The sUA weighs more than 0.88 pounds at takeoff and is equipped with a Parachute Recovery System (PRS) that conforms to the ASTM F3322-18 (or newer) standard, operated in accordance with the manufacturer's operator manual and equipped and operated with a mechanism to shield or prevent rotating components (i.e., prop guards or prop brake mechanism) from causing lacerations to human skin. The PRS manufacturer's operator manual must be accessible to the remote PIC at all times during the operation. A digital copy of this manual is acceptable; or

    d. The operation over a human being or moving vehicle is necessary in order to safeguard human life. In these situations the remote PIC must not operate any lower or in closer proximity to human beings or moving vehicles than necessary to accomplish the operation and must not operate over people for any duration of time longer than necessary to safeguard that human life;

21. The remote PIC must have situational awareness of air traffic in the vicinity of the operation, and be in compliance with §91.111(a) Operating Near Other Aircraft;

22. The remote PIC must ensure there is always a safe operating distance between other aviation activities and their sUA. Additionally, the sUAS shall not be operated in a manner that interferes with operations or traffic patterns at any airport, heliport, or seaplane base;

23. The operator must coordinate and deconflict their activities with other known first responder and emergency response entities flying manned aircraft and must give way to all other manned aircraft;

24. The operator is responsible for reviewing the current (UASFM) prior to each flight, noting any changes to the area of operations (e.g., airspace modifications or temporary flight restrictions [TFR]). Access the UASFM website at, https://udds-faa.opendata.arcgis.com, then scroll down and open the "Visualize It" section;

25. No person may operate an sUA in a prohibited area or restricted area unless that person has permission from the using or controlling agency, as appropriate. The AP1A/B (DoD Flight Information Publication), found via the following link, lists agencies scheduling special use airspace (SUA): https://www.daip.jcs.mil/pdf/ap1b.pdf;

26. If operating in controlled airspace below the UASFM altitudes, ATC authorizes sUAS operations without requiring two-way radio communication between that aircraft and ATC;

27. The FAA waives the requirement in 91.131(a)(1) and (c)(2), for the sUAS operator to receive an ATC clearance from the ATC facility having jurisdiction for that area before operating an aircraft below the UASFM altitudes in that Class B airspace area;

28. Prior to takeoff, the sUAS must be programmed to execute a pre-programmed return-to-home (RTH) command if the signal is lost. The RTH altitude must avoid any obstructions along the RTH route and;
    a. the sUA must remain at or below 200 feet above the ground, or
    b. within 50 feet of an obstruction in Class G Airspace, and
    c. at or below the UASFM altitudes in Class B, C, D or E (Surface Area) airspace;

29. Prior to commencing any flight under this waiver, a checklist should be completed by the remote PIC to identify potential ground and air hazards that are within 1 statute mile of the intended operating area or route of flight. The checklist must:

a. Be briefed to VO(s) and person(s) manipulating the controls, and
b. Identify the following items, at a minimum:
    1) 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,
    2) Location(s) of expected pedestrian and/or vehicular traffic,
    3) Highest obstacle or obstruction that may be encountered,
    4) Validate Command and Control (C2) signal strength is sufficient for control through the entire route, and
    5) Validate suitable launch/recovery site;

Note: During critical/urgent emergency management operations, the completion of this checklist should be considered, but is not required.

30. Detect and Avoid Technology:
    a. No changes may be made to the Detect and Avoid system described in the waiver application. Any change to the technology or manner in which Detect and Avoid is accomplished that differs from that specified in the waiver application or supporting documentation must be initiated by submitting a waiver amendment request;
    b. The Detect and Avoid Systems specified in the waiver application must be active and under observation by the remote PIC or Electronic Observer, as applicable during all operations as described in the waiver application. If the sUA is operated in areas where the effectivity or coverage of the DAA system is compromised the maximum altitude must not exceed 200 feet AGL

31. Emergency/Fly-Away Procedures:
    a. In the event of an emergency/fly-away toward an area or airport where the PIC has determined the sUA may create a hazard to aviation, the PIC will immediately contact the ATC facility having jurisdiction for the airspace;
    b. The PIC must provide the following information:
        1) Nature of emergency,
        2) Last known sUA position, altitude, and direction of flight, and
        3) Maximum remaining flight time;

32. During emergency and/or life-threatening operations, when the operation needs to exceed the limitations of this COW and/or when operating outside the pre-approved operating areas or altitudes specified in these Special Provisions, unless otherwise authorized, the operator must request a Special Government Interest (SGI) approval by contacting the System Operations Support Center (SOSC) at 202-267-8276, or by submitting an SGI application at https://waivers.faa.gov/aap/te_pages.p_login;

33. All emitters used in 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;

34. The operator must maintain, and make available to the Administrator upon request, a record of all flight times for the duration of the waiver to include monthly total flight time;

35. When operating BVLOS, RPIC must use a detection system to identify aircraft that are transmitting ADS-B out (978 MHz and 1090 MHz);

36. ADS-B out transmissions must be received or obtained through a sensor/receiver owned, operated, or controlled by the Operator, onboard the sUA itself, or an FAA approved UTM third party data service provider;

37. The operator, by the most expeditious means available, must report all aircraft accidents, incidents, or occurrences to the National Transportation Safety Board (NTSB) in accordance with 49 CFR 830; and

38. The operator must report to the Federal Aviation Administration (FAA) via email, at 9-AVS-AFS-750-91.113Waivers@faa.gov, the following:
    a. Each event where an sUA was operated less than 500 feet vertically and/or horizontally from an aircraft with at least one person onboard. Include the closest point of approach between the two aircraft in straight line distance, horizontal distance, and vertical distances, and
    b. The date and description of any event in which the sUA experiences a loss of control.