

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

ISSUED TO

Firefly Drone Shows
Responsible Person: Kyle Dorosz
Waiver Number: 107W-2024-02031

ADDRESS –

2677 Aubrey Dr
Lake Orion, MI 48360

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

sUAS operations higher than 400 feet above ground level, 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 - 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 Nos. 1 to 18, inclusive, are set forth on the attached pages.

This Certificate of Waiver is effective from **August 10, 2024, to August 31, 2024**, and is subject to cancellation at any time upon notice by the Administrator or an authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

FAA, Central Service Area
(Region)

Marty Skinner
(Signature)

Tactical Operations Team Manager (A) (AJV-C23)
(Title)

SPECIAL PROVISIONS ISSUED TO Firefly Drone Shows

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 § 107.51(b), Operating limitations for small unmanned aircraft - Altitude, is waived to allow sUAS operations higher than 400 feet above ground level (AGL), not to exceed 600 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 requests for such 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 (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 be combined with Waiver 107W-2024-00242. This Waiver may not be combined with any other waiver(s), authorization(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;

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.

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;

Operations higher than 400 feet AGL Special Provisions sUAS operations may be conducted above 400 feet AGL, not to exceed 600 feet AGL, provided:

9. All operations under this Waiver must use one or more VO as described in the Waiver application;
10. The sUAS ground control station must display in real-time the sUA altitude, position, direction of flight, and sUA flight mode, and be configured to audibly or visually alert the remote PIC of degraded system performance and loss of Control link with the sUA. This information must be available at all times to the remote PIC;
11. All operations must use the lighting system and procedures as described in the waiver application in a manner sufficient to alert approaching aircraft as described in Waiver **107W-2024-00242**;
12. The Responsible Person must file a Notice to Air Mission (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). The Responsible Person must verify the NOTAM has been issued prior to conducting waived operations;
13. The responsible person must ensure the local Flight Standards District Office manager is notified at least 72 hours in advance. The notification must include:
 - a. The location of the planned sUAS operation;
 - b. The time(s) of the planned sUAS operations;
 - c. A copy of this Waiver; and
 - d. A copy of the airspace authorization, per § 107.41, if required for the location and altitude of the sUAS operation;

The locations of local Flight Standard District Offices and contact information can be located at https://www.faa.gov/about/office_org/field_offices/fsdo/;

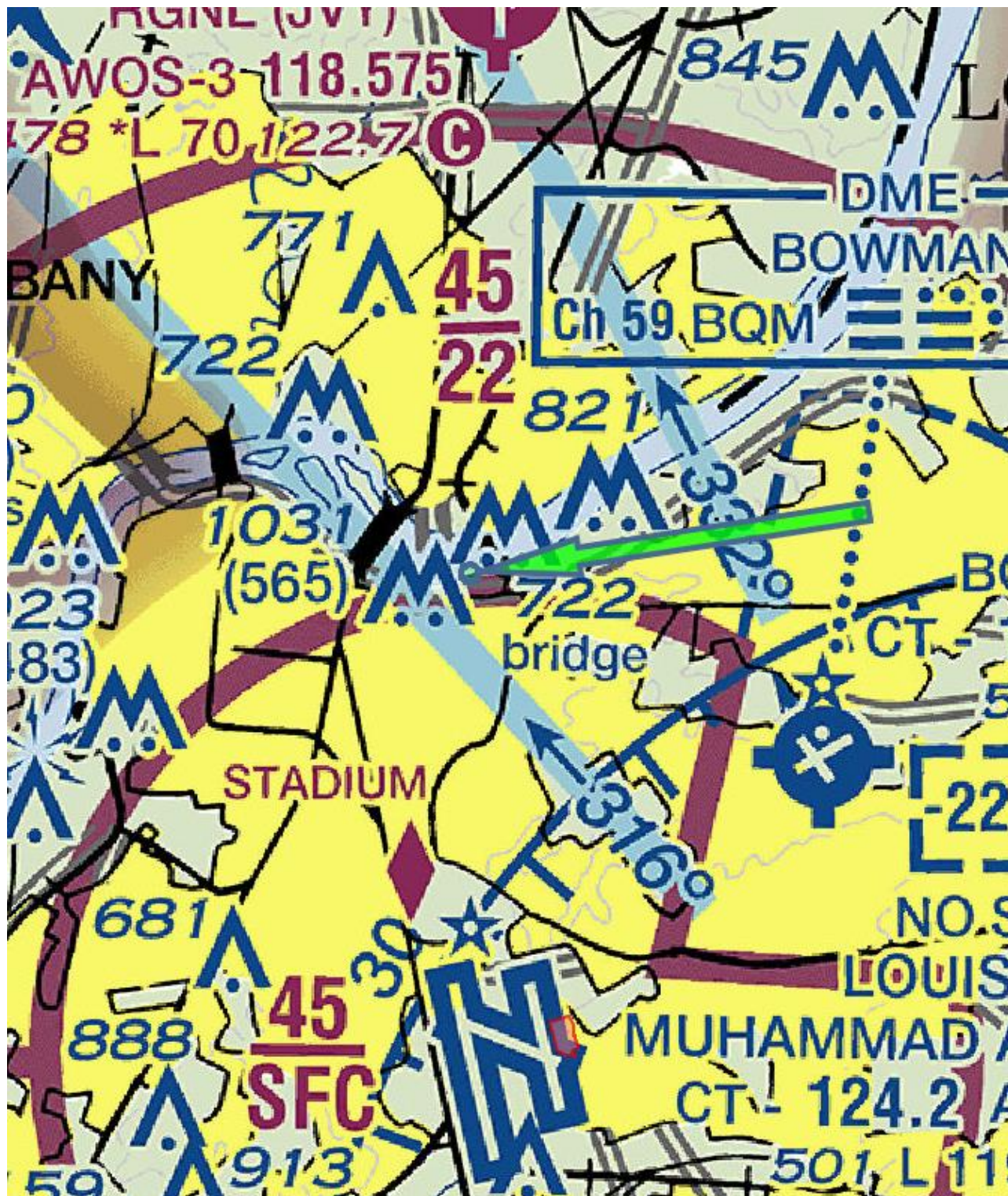
14. Prior to conducting operations under this Waiver, the remote PIC must ensure that the geo-fence system, telemetry system, associated flight control systems, and sensors, as described in the Waiver application, operate properly;
15. ADS-B out (1090/978 MHz) may not be transmitted from the sUAS when operating pursuant to this Waiver;

16. 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; and

OPERATING AREA AND ATC REQUIREMENTS

17. Operations conducted under this Waiver are limited to Class G airspace at or below 600 feet AGL in the vicinity of Louisville, Kentucky under the jurisdiction of Louisville Muhammad Ali International (SDF) Airport Traffic Control Tower/Terminal Radar Approach Control within an area defined and depicted in the Attachments.
18. Coordination with Air Traffic Control is not required.

Operating Altitude: At or Below 600 feet AGL



Attachment 2

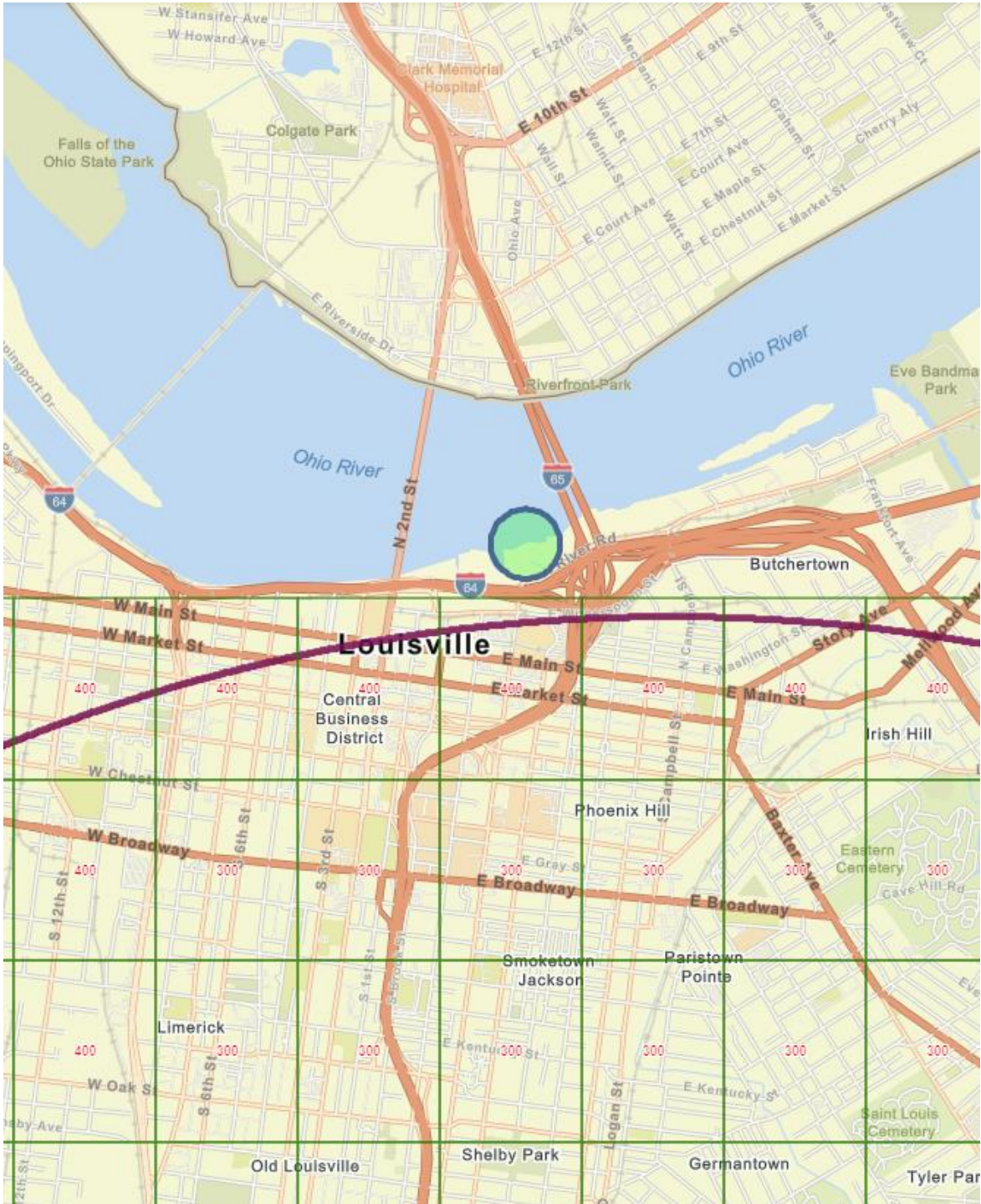
Operating Area: Class G airspace in the vicinity of Louisville, Kentucky as defined and depicted:

38°15'39"N 85°44'42"W 0.10 NM Radius

Operating Altitude: At or Below 600 feet AGL



Operating Altitude: At or Below 600 feet AGL



Attachment 4

Operating Area: Class G airspace in the vicinity of Louisville, Kentucky as defined and depicted:

38°15'39"N 85°44'42"W 0.10 NM Radius

Operating Altitude: At or Below 600 feet AGL

