DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION CERTIFICATE OF WAIVER OR AUTHORIZATION

ISSUED TO

Any Operator with a valid 49 USC 44807 Grant of Exemption

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

Operation of Unmanned Aircraft System(s) (UAS) in accordance with the operators' 49 USC 44807 Grant of Exemption in Class G airspace at or below 400 feet Above Ground Level (AGL) in the National Airspace System (NAS).

list of waived regulations by section and title $N\!/\!A$

STANDARD PROVISIONS

1. A copy of the application, made for this certificate shall be attached and become a parthereof.

2. This certificate shall be presented for inspection upon the request of any authorized representative 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. A to G, inclusive, are set forth on the attached pages.

This Certificate of Waiver or Authorization (COA) is valid for two years from the issuance of a 49 USC 44807 Grant of Exemption and is subject to cancellation at any time upon notice by the Administrator or his/her authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

/S/

FAA Headquarters (Region) Joseph Maibach (Signature)

Acting Manager, UAS Policy Team, AJV-P22 (Title)

FAA Form 7711-1 (7-74)

SPECIAL PROVISIONS

A. General.

- 1. Unmanned aircraft have no on-board pilot to perform see-and-avoid responsibilities; therefore, when operating outside of active restricted and warning areas approved for aviation activities, provisions must be made to ensure an equivalent level of safety exists for unmanned operations consistent with 14 CFR Part 91 §91.111, §91.113 and §91.115.
- 2. The approval of this COA is effective only with an approved 49 USC 44807 Grant of Exemption.
- 3. This authorization may be canceled at any time by the Administrator, the person authorized to grant the authorization, or the representative designated to monitor a specific operation. As a general rule, this authorization 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 the authorization is cause for cancellation. The operator will receive written notice of cancellation.

B. Safety of Flight.

- 1. The operator or pilot in command (PIC) is responsible for halting or canceling activity in the COA area if, at any time, the safety of persons or property on the surface or in the air is in jeopardy, or if there is a failure to comply with the terms or conditions of this authorization.
- 2. The PIC is responsible:
 - a. To remain clear and give way to all manned aviation operations and activities at all times,
 - b. For the safety of persons or property on the surface with respect to the UAS, and
 - c. For compliance with CFR Parts 91.111, 91.113 and 91.115.
- 3. UAS pilots must ensure there is a safe operating distance between aviation activities and Unmanned Aircraft (UA) at all times.
- 4. Visual observer (s) must be used at all times and maintain instantaneous communication with the PIC.
- 5. The PIC is responsible to ensure visual observer(s) are:
 - a. Able to see the UA and the surrounding airspace throughout the entire flight, and
 - b. Able to sufficiently provide the PIC with the UA's flight path, and proximity to all aviation activities and other hazards (e.g., terrain, weather, structures) to enable the PIC to exercise effective control of the UA to prevent the UA from creating a collision hazard.
- 6. Visual observer(s) must be able to communicate clearly to the PIC any instructions required to remain clear of conflicting traffic.

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7. The operator or delegated representative must not operate in Prohibited Areas, Special Flight Rule Areas or, the Washington National Capital Region Flight Restricted Zone. Operations in the Washington DC Special Flight Rule Area may be conducted in accordance with FDC NOTAM 6/1117. Such depicted charts available areas are on at http://www.faa.gov/air_traffic/flight_info/aeronav/. Additionally, aircraft operators should abide by Notices to Airmen (NOTAMS) that restrict operations in proximity to power plants, electric substations, dams, wind farms, oil refineries, industrial complexes, national parks, the Disney resorts, stadiums, emergency services, the Washington DC Metro Flight Restricted Zone (FRZ), military or other federal facilities.

C. Reporting Requirements.

- 1. Documentation of all operations associated with UAS activities is required, regardless of the airspace within which the UAS operates. **NOTE:** Negative (zero flights) reports are required.
- 2. The proponent must submit the following information to <u>9-AJV-115-</u> <u>UASOrganization@faa.gov</u> on a monthly basis:
 - a. Name of operator, Exemption number, and aircraft registration number
 - b. UAS type and model
 - c. All operating locations to include location city/name and latitude/longitude
 - d. Number of flights (per location, per aircraft)
 - e. Total aircraft operational hours
 - f. Takeoff or Landing damage
 - g. Equipment malfunctions. Reportable malfunctions include, but are not limited to the following:
 - (1) On-board flight control system
 - (2) Navigation system
 - (3) Power plant failure in flight
 - (4) Fuel system failure
 - (5) Electrical system failure
 - (6) Control station failure
 - h. The number and duration of lost link events (control, performance and health monitoring, or communications) per aircraft per flight.

D. Notice to Airmen (NOTAM).

A distant (D) NOTAM must be issued when unmanned aircraft operations are being conducted.

This requirement may be accomplished:

1. Through the operator's local base operations or NOTAM issuing authority, or UAS Operations 400 feet and below for

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- 2. By contacting the NOTAM Flight Service Station at 1-877-4-US-NTMS (1-877-487- 6867) not more than 72 hours in advance, but not less than 24 hours prior to the operation, unless otherwise authorized as a special provision. The issuing agency will require the:
 - a. Name and address of the pilot filing the NOTAM request.
 - b. Location, altitude, and/or operating area.
 - c. Time and nature of the activity.
 - d. Number of UAS flying in the operating area.
- 3. The area of operation defined in the NOTAM must only be for the actual area to be flown for each day and defined by a point and the minimum radius required to conduct the operation.
- 4. The operator must cancel applicable NOTAMs when UAS operations are complete or will not be conducted.

E. Coordination Requirements.

- 1. Operators and UAS equipment must meet the requirements (communication, equipment, and clearance) of the class of airspace within which the UAs will operate.
- 2. Operator filing and the issuance of required distance (D) NOTAM will serve as advance ATC facility notification for UAS operations in an area.
- 3. Coordination and de-confliction between Military Training Routes (MTRs) is the operator's responsibility. When identifying an operational area the operator must evaluate whether an MTR will be affected. In the event the UAS operational area overlaps an MTR, the operator will contact the scheduling agency 24 hours in advance to coordinate and de-conflict. If unable to determine the MTR point of contact, contact the FAA at email address mail to: <u>9-AJV-115-UASOrganization@faa.gov</u> with the IR/VR routes affected and the FAA will provide the scheduling agency information. If prior coordination and de-confliction does not take place 24 hours in advance, the operator must remain clear of all MTRs. Scheduling agencies for SUAs are listed in the FAA JO 7400.8.

F. Flight Planning Requirements.

- 1. Operations must be under Visual Meteorological Conditions (VMC) and meet the following conditions and limitations:
 - a. At or below 400 feet AGL, and
 - b. Beyond the following distances from the airport reference point (ARP) of a public use airport, heliport, gliderport, or seaport listed in the Digital Chart Supplement (d-CS), Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications:
 - (1) 5 nautical miles (NM) from an airport having an operational control tower; or
 - (2) 3 NM from an airport having a published instrument flight procedure, but not having an operational control tower; or

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- (3) 2 NM from an airport not having a published instrument flight procedure or an operational control tower; or
- (4) 2 NM from a heliport.
- 2. For all UAS requests not covered by the conditions listed above, the exemption holder may apply for a new Air Traffic Organization (ATO) COA at <u>https://caps.faa.gov/coaportal</u>.

G. Emergency/Contingency Procedures.

- 1. Lost Link/Lost Communications Procedures: If the UAS loses communications or loses its GPS signal, the UA must return to a pre-determined location within the private or controlled-access property and land.
- 2. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries defined in this COA must be reported to the FAA via email at: 9-AJV-115-UASOrganization@faa.gov within 24 hours. Accidents must be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: www.ntsb.gov.

AUTHORIZATION

This COA does not, in itself, waive any Title 14 Code of Federal Regulations, nor any state law or local ordinance. Should the proposed operation conflict with any state law or local ordinance, or require permission of local authorities or property owners, it is the responsibility of the operator to resolve the matter. This COA does not authorize flight within Special Use airspace without coordinating and de-conflicting with the scheduling agency. The operator is hereby authorized to operate the Unmanned Aircraft System in the National Airspace System.