

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

# CERTIFICATE OF WAIVER OR AUTHORIZATION

ISSUED TO

**Georgia Tech Research Institute, Responsible Person: Cliff Eckert  
Waiver Number: 107W-2016-01776A**

ADDRESS

**7220 Richardson Road  
Smyrna, GA 30080**

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

Acting as a remote pilot in command (PIC) or visual observer (VO) in the operation of more than one small unmanned aircraft (sUA) at the same time.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

**14 CFR § 107.35 Operation of multiple small unmanned aircraft**

### 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 14, inclusive, are set forth on the attached pages.

This Certificate of Waiver is effective from July 9, 2017 to July 31, 2021, inclusive, 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  
Georgia Tech Research Institute**

**General.**

This Certificate of Waiver is an amendment which supersedes and replaces Waiver 107W-2016-01776 issued to Georgia Tech Research Institute for operations under 14 CFR 107. Waiver 107W-2016-01776 is no longer valid.

The FAA's Flight Standards Service has reviewed your application to ensure compliance with the requirements of 14 CFR § 107.200. The Administrator finds that the proposed small unmanned aircraft system (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.

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 §107.35 Operation of multiple small unmanned aircraft is waived to the extent necessary to allow a person to act as a remote Pilot in Command (PIC) or visual observer (VO) in the operation of more than one unmanned aircraft at the same time.

**Common Provisions.** The Responsible Person is directly responsible for safety of operations conducted under this Waiver and will ensure the remote PIC, manipulator of the controls, and VO complies 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 are informed on the terms and provisions of this waiver and the strict observance of the terms and provisions herein;
  - b. Must ensure the remote PIC, manipulators of the controls, and VO are informed and familiar with part 107 regulations not waived; and
  - c. The above 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 a waiver for § 107.51(b) only. 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. Operations under this Waiver may only be conducted in Class G airspace unless a separate airspace Certificate of Waiver or Authorization specifically stating operations may be conducted in controlled airspace is received from the FAA, in accordance with § 107.41;
5. A copy of this Waiver must be available during sUAS operations that are the subject of this Waiver;
6. 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;
7. 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;
8. All operations under this Waiver must use one or more VO, and as described in the waiver application:
  - a. One backup remote PIC for every four sUA operated; and
  - b. One VO for every four sUA operated;

**Operation of Multiple sUAS Special Provisions.** sUAS operations with multiple sUA may be conducted, provided:

9. As described in the waiver application, operations conducted under this Waiver are limited to geographic areas that meet the following criteria:
  - a. sparsely populated areas;
  - b. for fixed wing sUA the location must be an area of at least ten acres and provide for a minimum horizontal flight distance of 1,200 feet;
  - c. for rotary wing sUA the location must be an area of at least two acres;
  - d. clear of all personnel, property, buildings, roads, and utilities;
  - e. predefined aero-terminate areas must be identified prior to flight adjacent to the intended flight area; and
  - f. the size of the aero-terminate areas must account for the sUAS weight, ground speed, turn radius, and planned operational altitudes so as to avoid collision with, or damage to property; and
  - g. monitoring must be conducted in a manner to restrict access by non-participating persons.

10. An individual system failure must not interfere with the operation of other sUA or cause incidents, accidents, or loss of control involving other sUA that are the subject of this Waiver;
11. Prior to conducting operations, simulation based testing will be conducted as described in the waiver application;
12. The remote PIC may conduct operations of up to 20 sUA, equipped with redundant flight control and transmission systems, and must ensure adequate simultaneous control of the sUA so they remain inside the area of operation, as described in the waiver application.
13. The remote PIC must ensure that the flight controllers, geo-fence systems and the associated flight control system, as described in the Waiver application, operate properly and are programmed for visual and audio alerts if they fail to operate properly. The remote PIC or VO must have the ability to verify this at any time during operation;
14. Not less than 24 hours prior to conducting operations that are the subject of this Waiver, a Notice to Airmen (NOTAM) must be filed. The NOTAM must include location, altitude, and/or operating area, time and nature of the activity, and number of sUA flying in the operating area.