U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

# CERTIFICATE OF WAIVER AND AUTHORIZATION

ISSUED TO

**Northwestern Michigan College**
**Responsible Person: Tony Sauerbrey**
**Waiver Number: 107W-2026-02351**

ADDRESS –

**1701 East Front Street**
**Traverse City, MI 49686**

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

Small unmanned aircraft system (sUAS) operations beyond the visual line of sight of the remote pilot in command (PIC), Small unmanned aircraft system (sUAS) operations in which a participating Visual Observer (VO) is not able to see the unmanned aircraft, Small unmanned aircraft system (sUAS) operations over human beings, Small unmanned aircraft system (sUAS) operations over a moving vehicle and §107.41 Operations in Certain Airspace (May conduct operations under this Waiver at or below UAS Facility Maps (UASFM) for any airspace below published UASFM altitudes)

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

**14 CFR §§** **107.31 - Visual line of sight aircraft operation,**
**107.33(b) & (c)(2) - Visual observer,**
**107.39 - Operation over human beings, and**
**107.145 - Operations over moving vehicles**

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

This Certificate of Waiver is effective from November 18, 2026, to November 30, 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: 2026.11.19 06:01:58 -06'00'
**Emerging Technologies Division, AFS–700**

## SPECIAL PROVISIONS ISSUED TO

## Northwestern Michigan College

**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 § 107.31, Visual line of sight aircraft operation, is waived to allow operation of the small unmanned aircraft (sUA) beyond the direct visual line of sight of the remote pilot in command (PIC)
- 14 CFR § 107.33(b) & (c)(2), Visual observer, is waived to the extent necessary to allow operation of the small, unmanned aircraft (sUA) when any Visual Observer (VO) who is participating in the operation may not be able see the unmanned aircraft in the manner specified in § 107.31.
- 14 CFR § 107.39, Operations over human beings, is waived to allow sUA operations over human beings who are not direct participants, necessary for the safe operation of the small unmanned aircraft
- 14 CFR § 107.145, Operations over moving vehicles, is waived to allow sUA operations over a moving vehicle

**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 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;

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;

**Waiver Specific Special Provisions**

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. Remote ID: The sUA must be a standard remote identification unmanned aircraft listed on the FAA-accepted declaration of compliance list (found here: https://uasdoc.faa.gov/), unless otherwise authorized by the Administrator in writing;

11. The Flight Crew for operations under this Waiver must consist of the personnel specified in the Waiver application and supporting documentation, in the number and crew specialties as specified;

12. The remote PIC (RPIC) must be located within the Operational Area;

13. The RPIC is responsible for monitoring of local airport Common Traffic Advisory Frequencies (CTAF) during all operations conducted under this waiver that occur within 2 statute miles of an airport, heli-port or known manned aviation activity;

14. **Non-Shielded Operations: using Visual Observers**
    a. The sUA must not exceed 400 feet AGL;
    b. Flight duration must not exceed a 25% power reserve on Landing;
    c. Must use 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;
        i. Used to identify any non-participating aircraft prior to their entry into the planned operational area;
        ii. Physically located such that the remote PIC receives sufficient notice to ensure the UA remains well clear of all other aircraft;
        iii. Physically located to notify the remote PIC of any moving vehicle or human presence that may pose a hazard to the operation;

d. Communication between the remote PIC and VO must occur to facilitate, when necessary, for the remote PIC taking action to maneuver the sUA with sufficient time to;
   i. Give way to all other aircraft in accordance with § 107.37;
   ii. 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
   iii. Maintain compliance with this Waiver and un-waived provisions of part 107;
e. If communication between the VO and the remote PIC will occur by electronic device:
   i. The device must be continuous full-duplex;
   ii. The remote PIC must be able to use the device hands-free; and
   iii. There must be a reliable back-up communication method;
f. All VO(s) must receive documented training for their duties and responsibilities to include;
   i. Scanning of the Operational Volume for Air and Ground based intruders;
   ii. Communications procedures and phraseology; and
   iii. Overall operations conducted under this Waiver;

15. **Low Altitude Linear Survey, Mapping, Surveillance, Videography Flight Profile**
    a. 200 feet above ground level (AGL); or
    b. 200 feet above the height of any object, obstacle (natural or man-made) within a 200 foot radius of the sUA perpendicular to the sUA's direction of flight (lateral separation); and
    c. 200 feet above the height of any object, obstacle (natural or man-made) within a 500 foot radius of the sUA along the sUA's direction of flight (vertical separation);
    d. Minimum corridor length of 1000 feet before executing a turn greater than 30°;
    e. Flight duration must not exceed a 25% power reserve on Landing;

16. **Long Range Linear Infrastructure Shielding Flight Profile**: (e.g. objects or obstacles that are connected along a relatively narrow linear direction such as electrical lines, above ground pipelines, connected buildings, rail lines etc. May also be applied to tall vegetation and forested areas)
    a. 100 feet above ground level (AGL); or
    b. 100 feet above the height of any object, obstacle (natural or man-made) within a 200 foot radius of the sUA perpendicular to the sUA's direction of flight (lateral separation); and
    c. 100 feet above the height of any object, obstacle (natural or man-made) within a 500 foot radius of the sUA along the sUA's direction of flight (vertical separation);
    d. Not to exceed 400 feet AGL; except
    e. Stated UAS Facility Map Grid Heights take precedent over provisos a., b. and c. unless otherwise authorized; and
    f. Must remain within the confines of the defined operational area detailed in the Site Selection Performance procedures as stated in the CONOPs;
    g. Flight duration must not exceed a 25% power reserve on Landing;

17. **Electrical Distribution and Transmission Line Shielded Flight Profile**: The sUA must not exceed:
    a. 200 feet above ground level (AGL); or
    b. 200 feet above the height of any object, obstacle (natural or man-made) within a 200 foot radius of the sUA perpendicular to the sUA's direction of flight (lateral separation). Clearing turns may be executed as long as the sUA does not exceed 300 feet off the target asset centerline; and
    c. 200 feet above the height of any object, obstacle (natural or man-made) within a 500 foot radius of the sUA along the sUA's direction of flight (vertical separation);
    d. Stated UAS Facility Map Grid Heights take precedent over provisos a., b. and c. unless otherwise authorized; and
    e. Not to exceed 400 feet AGL;
    f. Flight duration must not exceed a 25% power reserve on Landing;

18. **Operations in UAS Facility Map Grids**: The Operator is Authorized under §107.41 Operations in Certain Airspace to conduct UAS operations under this Waiver at or below UAS Facility Maps (UASFM) for any airspace below published UASFM altitudes. If these type operations are conducted a Notice to Airmen (NOTAM) must be filed as follows:
    a. 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). The Responsible Person must verify the NOTAM has been issued prior to conducting waivered operations

19. **Operations Over Non-Participants:**
    a. **Sentaero 6 UAS**: Overflight of people or moving vehicles may only be done over sites that meet the criteria of CONOPs Performance-Based Operations Site Selection Process and classified as *Sparsely Populated areas*.
    b. **Sentaero 5 UAS**: Overflight of people or moving vehicles may only be done over sites that meet the criteria of CONOPs Performance-Based Operations Site Selection Process and classified as *Other Than Congested areas*.
    c. Must adhere to the exposure limits detailed in the NMC-COW-001 CONOPs document (as revised)
    d. Operations over open air assemblies of persons is prohibited;
    e. Operations over non-participants or moving vehicles must be transitory in nature. Sustained operations over non-participants or moving vehicles is prohibited. For the purposes of this waiver, sustain is defined as loitering, hovering, and continuous or sequential overflight of non-participating persons or moving vehicles; and
    f. The flight paths and routes must be designed to avoid overflight of human beings and traffic areas;

20. 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 made by a requested Waiver Amendment;
    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 into areas where the effectivity or coverage of the DAA system is compromised the maximum altitude must not exceed 200 feet AGL;

21. The remote PIC (RPIC) must ensure:
    a. Prior to conducting operations under this Waiver, the RPIC must perform a documented site survey to:
        i. Identify flight operational area obstacles and boundaries so as to avoid collision with, or damage to property;
        ii. Validate C2 signal strength is sufficient for control through the entire route;
        iii. Validate suitable launch/recovery site(s); and
        iv. Complete and document a Flight Risk Assessment;
    b. Routes are preplanned (using waypoints) prior to flight and aircraft are programmed to automatically follow the route. Manual flights are allowed as necessary;
    c. Geofencing is used to confine the Operational Volume. (defined as the property lines of the assets or perimeter boundaries of the controlled access area or right of way specified in the Waiver application + maximum allowed altitude);

d. Return to Home/Return to Land feature must not allow the sUA to deviate from the defined operational volume;
e. Launch or recovery areas are pre-designated and monitored to keep any human being who is not directly participating in the operation out of the areas prior to, during, and immediately following flight operations;
f. Non-participant persons inside the operational area are notified of sUA operations; and
g. Individuals directly participating in the operation of the sUAS must be easily identifiable visually (e.g., apparel, safety vests);

22. The Responsible Person must ensure:
    a. A copy of the Waiver application and Waiver is available to the remote PIC and all other direct participants prior to and during sUAS operations that are the subject of this Waiver;
    b. A copy of the current operations manual required by this Waiver is available to the remote PIC and all other direct participants prior to and during sUAS operations that are the subject of this Waiver;
    c. All operations conducted under this Waiver follow the procedures outlined in the current operations manual. If a discrepancy exists between the provisions in this Waiver and the procedures outlined in the operations manual, the provisions of this Waiver take precedence and must be followed;
    d. A documented notification from the operator(s) of the sUA to any airport, heliport, known agricultural aerial application operation or aerial military installation within a 3 mile radius of the operating area; and
    e. Each remote PIC who will conduct operations under this Waiver is trained in a manner that addresses the items listed in § 107.49(a) and in a manner that is consistent with how the sUAS will be operated under this Waiver. All training and demonstration for all remote PICs and VO(s) must be documented and made available upon request by the Administrator or an authorized representative;
        i. RPIC's with documented experience operating UAS may receive initial Waiver Operations training under the provisions of this Waiver and/or via simulator;
        ii. RPIC's who do not have documented experience operating UAS must receive initial Waiver Operations training under the standard un-waivered requirements of Part 107 followed by training under the provisions of this waiver and/or via simulator;
        iii. The training must include:
            1. sUA limitations;
            2. sUA programming;
            3. sUA operational procedures;
            4. Waiver specific operations and procedures. The training program must address each Waivered regulation;
            5. Abnormal procedures;
            6. Air traffic avoidance procedures;
            7. Crew Resource Management;
            8. sUA flight training; and
            9. Demonstration of sUA ground and flight skills;

23. Operations Manual: The Responsible Person must update or revise the operations manual (aka CONOPs) submitted with the Waiver application for changes in the operation. The Responsible Person must track such revisions and present revised documents to the Administrator or an authorized representative upon request. The Responsible Person must also present revised documents when applying for extension of or amendment to this Waiver. If any revision to the manual would be contrary to the information provided in the waiver application or obviate a condition or limitation of this waiver, then the Responsible Person must apply for an amendment to this Waiver;

24. Operations subject to this waiver must cease as soon as possible in a manner that does not jeopardize the safety of human beings, property or other aircraft, if, at any time:
    a. Safety of human beings or property on the ground or in the air is in jeopardy;
    b. Any failure to comply with the provisions of this Waiver exists;
    c. Full-duplex communications cannot be maintained between the remote PIC and any VO participating in the operation;

25. Lost Link Procedures: If the remote PIC loses command or control link with the sUA, the sUA must follow a predetermined route to immediately reestablish command and control link. If command and control link is not immediately reestablished and the remote PIC no longer has the ability to direct the sUAS to ensure compliance with applicable provisions of part 107, the sUA must follow the loss of command and control procedure as described in the waiver application;

26. Safety Briefing: Prior to operations under this Waiver, all Direct Participants must attend a safety briefing that addresses, at minimum, the following items as applicable:
    a. Designated positions, physical locations, responsibilities, and Crew Resource Management;
    b. Planned flight operating area;
    c. Designated launch and recovery areas;
    d. Verification of geo-fence boundaries;
    e. Verification of return home and land flight profile, and course;
    f. Procedures for avoidance of other aircraft and obstacles;
    g. Procedures for operating under this waiver;
    h. Land vehicle speed;
    i. Intended flight path;
    j. Abnormal procedures; and
    k. Emergency procedures;

27. Unmanned Aircraft System: 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;
    a. Censys Technologies Sentaero 6

28. 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;

29. Anti-Collision Lighting: The sUA must be equipped with anti-collision lighting compliant with §107.29 to appropriately increase the conspicuity of the sUA. The anti-collision lighting system must be operational at all times;

30. Ground Control Station, Control and Communications (C2) System:
    a. Telemetry: The sUAS ground control station must display in real-time the sUA altitude, position, direction of flight, ground speed, C2 signal strength, GPS or navigation system signal condition, battery condition, and sUA distance from the control station as described in the Waiver application;
    b. Alerting: The remote PIC must ensure the GCS is configured to audibly and/or visually alert the remote PIC of degraded system performance, geofence loss of containment, loss of Control link with the sUA, and intrusion alerts as described in the Waiver application;
    c. Emergency Profiles: The remote PIC must ensure the GCS is configured for automated emergency actions (e.g. RTL/RTH, altitude descend, position hold etc.) as described in the Waiver application; and

d. Sensors: the remote PIC must ensure any installed collision/obstacle avoidance sensors are operational;

31. 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 remote 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:
        i. A description (or reference data acceptable to the Administrator) of work performed;
        ii. The date of completion of the work performed;
        iii. The name of the person who performed the work; and
        iv. The signature of the person who performed the work;
    c. Any sUA that has undergone maintenance (including firmware or software changes) that may appreciably affect the flight characteristics of the sUA must undergo a functional check flight prior to conducting commercial operations under this Waiver. The functional check flight may be conducted under the provisions of this Waiver in a controlled access area and under the standard provisions of 107.51. A log entry must be made for each functional check flight. The log entry must contain at minimum the
        i. Calendar date;
        ii. sUA registration number;
        iii. Remote PIC who performed the functional test flight;
        iv. Duration of the flight; and
        v. The result of the functional flight test;

32. All emitters used in sUAS must be compliant with all applicable FCC regulations provisions of the FCC authorization granted for the emitter. A FCC Experimental authorization may not be used for sUAS operations under this Waiver;

33. Operations conducted under this Waiver are limited to the locations meeting the site selection performance procedures as stated in the Waiver application.