

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

ISSUED TO

Thomas Swoyer
Responsible Person: Thomas Swoyer
Waiver Number: 107W-2022-02063

ADDRESS –

158 S Seguin Ave
New Braunfels, TX 78130

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; Operating Limitations for Small Unmanned Aircraft — Visibility; Operating Limitations for Small Unmanned Aircraft — Cloud Clearance.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

14 CFR §§ 107.51(b)—Operating limitations for small unmanned aircraft - Altitude,
107.51(c)—Operating limitations for small unmanned aircraft - Visibility, and
107.51(d)—Operating limitations for small unmanned aircraft - Cloud Clearance

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

This Certificate of Waiver is effective from **December 5, 2022, to December 4, 2024**, and is subject to cancellation at any time upon notice by the Administrator or an authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

Vonnie L. Giles
(Signature)

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

SPECIAL PROVISIONS ISSUED TO
Thomas Swoyer

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 3000 feet MSL;

14 CFR § 107.51(c), Operating limitations for small unmanned aircraft - Visibility, is waived to allow operations when the flight visibility as observed from the location of the control station is less than 3 statute miles;

14 CFR § 107.51(d), Operating limitations for small unmanned aircraft - Cloud Clearance, is waived to allow sUA operations not meeting the cloud clearance requirements of § 107.51(d).

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

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.

- 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-2022-02062. This Waiver 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;
- 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;

Special Provisions sUAS operations may be conducted above 400 feet AGL when visibility is below 3 statute miles, not to exceed 3000 feet MSL, provided:

OPERATIONAL PROVISIONS

- 8. All operations under this Waiver must use one or more VO;
- 9. Operations may not be conducted at night, as defined in 14 CFR § 1.1;
- 10. Not less than 12 hours prior to conducting operations that are the subject of this Waiver, a Notice to Air Missions (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;
- 11. Communication between the remote PIC and VO must occur to facilitate, when necessary, the remote PIC taking action to maneuver the sUA with sufficient time to:
 - a. Give way to all other aircraft in accordance with § 107.37,
 - b. 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
 - c. Maintain compliance with this Waiver and the requirements of part 107;
- 12. The sUA must be operated within 0.25 statute miles radius of the remote PIC;
- 13. Operations must comply with the letter of agreement between the 319th Operations Support Squadron and Grand Sky Tenant Sublease Letter of Agreement dated 1 JUL 2022;

TECHNICAL PROVISIONS

14. ADS-B out (1090/978 MHz) may not be transmitted from the sUAS when operating pursuant to this Waiver;
15. As described in the waiver request, the sUAS ground control station must display in real time the following information: sUA altitude, sUA position, sUA direction of flight, and sUAS flight mode. This information must be available at all times to the remote PIC;
16. The DAA system used in the application must be operational and maintain its security and performance status from the U.S. Air Force for all operations covered under this waiver;
17. 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;
18. 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;
19. 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;
20. The sUAS ground control station must display in real time the following information: sUA altitude, sUA position, sUA direction of flight, and sUAS flight mode, as described in the waiver application. This information must be available at all times to the remote PIC;
21. The sUA must be equipped with high visibility markings and lighting to increase the conspicuity of the sUA to 1 statute mile for daytime operations;
22. The responsible person must email a report within seven days to 9-afs-800-part107Waivers@faa.gov if any of the following occur:
 - a. Incident,
 - b. Accident,
 - c. Lost Link
 - d. Near Mid-Air Collision
 - e. Avoidance maneuvers due to manned aircraft in the vicinity;

ENVIROMENTAL PROVISIONS

23. Operations conducted under this Waiver are limited to location described in the application.

Operating Area

24. Operations conducted under this Waiver are limited to an area in the vicinity of Grand Forks Air Force Base within the green polygon as defined and depicted in Attachments 1 thru 3, under the jurisdiction of Grand Forks AFB (RDR) Air Traffic Control Tower (ATCT)

Air Traffic Control Coordination, Communication and Operational Requirements:

25. Proponent will execute and abide by the 319th Operations Support Squadron and Grand Sky Tenant Sublease Letter of Agreement.
26. RDR ATCT may disapprove, terminate, restrict or delay UAS flight operations under their airspace area of jurisdiction at any time.
- 27. Operations must only be conducted when Grand Forks AFB Air Traffic Control Tower is operational, providing Class D services and Class D airspace is active.**

Emergency/Contingency Procedures

28. Lost Link: In the event of a Lost Link, the UAS pilot shall immediately notify RDR ATCT at 701-747-3815.
29. Fly Away Procedures: In the event of a fly away, the UAS pilot shall immediately notify RDR ATCT at 701-747-3815 and state the following:
- a. UA Altitude
 - b. UA last known location
 - c. Direction of flight/heading
 - d. Fuel on board/battery time
 - e. Pilots intentions
 - f. Termination of flight/emergency condition
30. If the UAS loses communications or loses its GPS signal, the PIC must immediately notify RDR ATCT at 701-747-3815. Upon ATC authorization, the UAS will return to Lost Link home point and land.
31. The PIC must abort the flight in the event of unpredicted obstacles or emergencies.

Attachment 1

Operating Area: Class D airspace within the depicted polygon and defined by coordinates:

47°56'32.21"N, 97°25'6.27"W
47°56'32.26"N, 97°24'40.53"W
47°56'1.91"N, 97°24'41.01"W
47°56'1.69"N, 97°25'6.09"W

Operating Altitude: At or Below 3000 feet MSL



Attachment 2

Operating Area: Class D airspace within the depicted polygon and defined by coordinates:

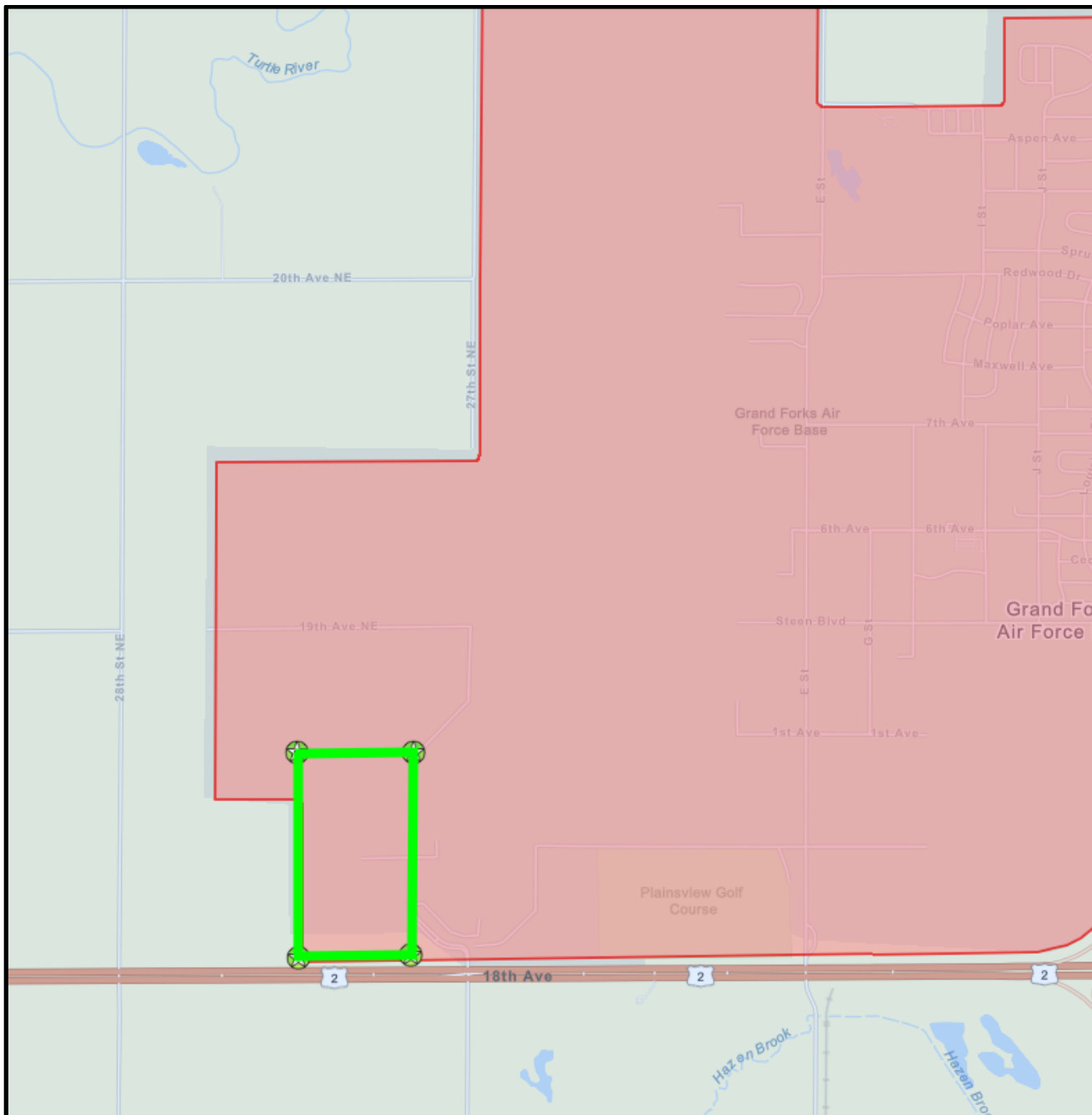
47°56'32.21"N, 97°25'6.27"W

47°56'32.26"N, 97°24'40.53"W

47°56'1.91"N, 97°24'41.01"W

47°56'1.69"N, 97°25'6.09"W

Operating Altitude: At or Below 3000 feet MSL



Attachment 3

Operating Area: Class D airspace within the depicted polygon and defined by coordinates:

47°56'32.21"N, 97°25'6.27"W
 47°56'32.26"N, 97°24'40.53"W
 47°56'1.91"N, 97°24'41.01"W
 47°56'1.69"N, 97°25'6.09"W

Operating Altitude: At or Below 3000 feet MSL

