



U.S. Department
of Transportation
**Federal Aviation
Administration**

Aviation Safety

800 Independence Ave
Washington, DC 20591

May 25, 2023

Exemption No. 19628A
Regulatory Docket No. FAA-2022-1324

Jonathan Rupprecht, Esq.
Rupprecht Law P.A.
800 Village Square Crossing #331,
Palm Beach Gardens, FL 33410

RE: Pegasus Spray Midwest LLC
312 N 3rd Street
Hurdland, MO 63547

Dear Mr. Rupprecht:

This letter is to inform you that the Federal Aviation Administration (FAA) amends this exemption to align with changes to current FAA processes. For reasons explained below, the FAA has revised the Part 137 certificate application and certification process, as well as other changes to reflect updated FAA policy. This letter transmits the FAA's decision, explains the FAA's basis, and provides the conditions and limitations of the exemption, including the date the exemption ends, and lists the revised conditions and limitations.

The Basis for the FAA's Decision

By letter dated September 27, 2022, you petitioned the FAA on behalf of Pegasus Spray Midwest LLC (PSM) for an exemption from §§ 107.36, 137.19(c), 137.19(d), 137.19(e)(2)(ii), 137.19(e)(2)(iii), 137.19(e)(2)(v), 137.31(a), 137.31(b), 137.33(a), 137.33(b),

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137.41(c), and 137.42 of Title 14, Code of Federal Regulations (14 CFR) to the extent necessary to allow PSM to commercially operate a small unmanned aircraft system (UAS), weighing less than 55 pounds (lbs.), for agricultural aircraft operations. The FAA subsequently granted PSM Exemption No. 19628 on December 30, 2022.

The FAA has seen a significant increase in agricultural aircraft operator certificate applicants seeking to use UAS in agricultural aircraft operations under 14 CFR Part 137 and has approved hundreds of these requests with few incidents. Therefore, the FAA is shifting to a risk-based approach to streamline the certification process for certain lower-risk operators, and explains the relevant changes to conditions and limitations in this document in the analysis that follows. These include the following changes: (1) the Part 137 certification process; (2) revising the documentation requirements; and (3) updates to reflect FAA policy.

Part 137 certification process

Historically, an applicant requesting a Part 137 operator certificate would submit a Letter of Intent and Form 8710-3 to the jurisdictional Flight Standards District Office (FSDO) in order to be placed on the Certification Service Oversight Process (CSOP) list. In addition, the applicant would also have to petition for an exemption for relief to certain sections of the regulations pertaining to the proposed operation. This exemption streamlines the Part 137 UAS certification which removes the requirement for the applicant to submit documents to the jurisdictional FSDO, removes UAS applicants from the CSOP list and only requires the applicant to submit FAA Form 8710-3 and operator's exemption number to UAS137Certificates@faa.gov in accordance with Condition and Limitation No. 1 of this exemption.

Part 137 UAS agricultural aircraft operations present a lower risk than other certificated operations. The FAA first issued an agricultural aircraft operator certificate to a UAS operator on November 20, 2015. As of March 22, 2023, there are 122 certificated Part 137 UAS operators.

There have been no reported accidents or injuries among these operators during this time. Unmanned aircraft agricultural operations less than 55 lbs., operated under Part 107 are lower risk than manned aircraft in a similar operation because the unmanned aircraft (UA) weighs much less than a manned aircraft, carries a much smaller payload, carries no flammable fuel, and is slower and more maneuverable than a manned aircraft. Conversely, manned aircraft can weigh thousands of pounds and carry hundreds of gallons of fuel and payload, and fly much faster than a UA. Therefore, in an accident, a UA would impact the surface with less energy and cause less damage than a manned aircraft. Furthermore, battery powered multi-

rotor UAS present no risk of fire from fuel spillage. Additionally, the pilot of a manned aircraft is subject to much greater risk than the pilot of a UA, who is on the ground. Moreover, because of their size, speed, and maneuverability, UAS are better suited for operations in areas too confined for manned aircraft. Based on the lower risk of unmanned aircraft agricultural operations, combined with the operator's compliance with the conditions and limitations described in this exemption, the FAA has determined that updating the Part 137 certification process would not adversely affect safety. Grants of exemption that have been issued and the operator has not yet gone through the certification process with the FSDO, or where the operator is still on the CSOP list awaiting a grant of exemption and certification, wherein the petition for exemption is similar in all material respects to the nature of operations and the corresponding regulations that are granted relief in this exemption will be updated to correspond with the policy in this exemption. Accordingly, the FAA will reissue amended grants of exemptions for those operators.

Documentation requirements

This exemption also affirms the type of operations that may be conducted prior to obtaining a Part 137 Operating Certificate which were previously addressed in Exemption No. 19037A. Operations such as training flights, proficiency flights, experience-building flights, and maintenance functional test flights have been expressly added as Condition and Limitation No. 2, which clarifies these flights can only be conducted for the purpose of obtaining a Part 137 certificate.

Although Part 137 does not require an operations manual or training program, this exemption requires both. This requirement mitigates safety concerns related to crew training and the streamlined UAS certification process now being implemented, as well as proper handling and stowage of hazardous materials and economic poisons. Previous Part 137 UAS exemptions¹ required the operator to submit these manuals to the FAA for review prior to a grant of exemption. However, the FAA has determined a sufficient level of safety can be maintained without submitting these manuals to the FAA for review, so long as the operator's operations manual and training program meet the criteria described in the exemption's Conditions and Limitations. Furthermore, the operator is required to be in possession of all operating documents referenced in Condition and Limitation No. 4 during operations.

As listed in Condition and Limitation No. 5, this exemption requires that the operations manual, at a minimum, must address the following topics: Safety Risk Management (SRM), adverse weather, flight planning, Notice to Air Missions (NOTAM), aircraft inspection,

¹ Exemption No. 17261, issued to Drone Seed, Co. March 17, 2017

preflight duties, post-flight duties, normal and emergency flight procedures, Crew Resource Management (CRM) and communications, crewmember responsibilities, accident reporting, hazardous material (HAZMAT) handling and stowage, and UAS maintenance. Additionally, as part of the FAA's continuous operational safety oversight, the operator must provide a copy of this manual to the FAA upon request.

The exemption also requires that the training program, at a minimum, must address the following topics: the knowledge requirements of 14 CFR § 137.19(e)(1), initial training, recurrent training, testing, completion standards, ground training, site surveying, flight training, emergency procedures, lost-link procedures, this exemption, the Air Traffic Organization (ATO) issued Certificate of Waiver or Authorization (COA), and HAZMAT handling and stowage. Additionally, as part of the FAA's continuous operational safety oversight, the operator must provide a copy of this manual to the FAA upon request. All crewmembers involved in operating under the exemption must satisfactorily complete training in accordance with the operator's training program. As stated in Condition and Limitation No. 7, satisfactory completion of training must be documented, and the documentation must be provided to the FAA upon request. Furthermore, the operator may conduct training operations only for the operator's employees as noted in Condition and Limitation No. 8.

Because the FAA has determined unmanned aircraft agricultural operations are lower risk than manned aircraft in a similar operation, the 14 CFR § 137.19(e) knowledge and skill tests required under this exemption may be self-administered and satisfactory completion of the test of knowledge specified in 14 CFR § 137.19(e)(1) and the test of skill specified in 14 CFR § 137.19(e)(2) must be documented and shown to the FAA upon request. Demonstration of the 14 CFR § 137.19(e) knowledge and skill tests by the applicant or their designated chief supervisor does not alleviate the pilot in command requirements of 14 CFR § 137.41(c), as stated in Condition and Limitation No. 7.

Federal Register Notice

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register. The FAA has determined that good cause exists because the amendment to the exemption would not set a precedent and any delay in acting on this petition would be detrimental to Pegasus Spray Midwest.

The FAA's analysis of the petitioner's operations and the FAA's determination that the operations would not adversely affect safety, given compliance with the Conditions and Limitations, have not changed. Additionally, certain Condition and Limitation editorial revisions were made for clarity.

The FAA's Decision

Under the authority contained in 49 U.S.C. §§ 106(f), 40113, and 44701, which the FAA Administrator has delegated to me, I hereby grant Pegasus Spray Midwest LLC an exemption from 14 CFR §§ 107.36, 137.19(c), 137.19(d), 137.19(e)(2)(ii), 137.19(e)(2)(iii), 137.19(e)(2)(v), 137.31(a), 137.31(b), 137.33(a), 137.33(b), 137.41(c), and 137.42 to the extent necessary to allow PSM to operate small UAS that weigh less than 55 lbs., on takeoff, to conduct agricultural aircraft operations. This exemption is subject to the conditions and limitations described below.

Conditions and Limitations

In the following Conditions and Limitations, Pegasus Spray Midwest LLC is hereinafter referred to as "the Operator."

1. The Operator must obtain an agricultural aircraft operator certificate under 14 CFR Part 137 by submitting FAA Form 8710-3 and the Operator's exemption number to UAS137Certificates@faa.gov.
2. Prior to the Operator obtaining an agricultural aircraft operator certificate under Part 137, the Operator may conduct training flights, proficiency flights, experience-building flights, and maintenance functional test flights under this exemption with the understanding that the Operator is conducting these flights for the purpose of and in conjunction with obtaining a Part 137 agricultural aircraft operator certificate.
3. Operations authorized by this grant of exemption are limited to any small unmanned aircraft system (UAS) model with a maximum takeoff weight of less than 55 pounds, including everything that is on board or otherwise attached to the aircraft.
4. This exemption, and all documents needed to operate the small UAS and conduct its operations in accordance with the conditions and limitations stated in this grant of exemption, are hereinafter referred to as the operating documents. The operating documents must include at a minimum:
 - a. The Operator's operations manual;
 - b. The Operator's training program;
 - c. The manufacturers provided flight manual;
 - d. All other manufacturer UAS provided documents;
 - e. This exemption; and

- f. Air Traffic Organization (ATO) issued Certificate of Waiver or Authorization (COA) that applies to operations under this exemption.

These operating documents must be accessible during all UAS operations that occur under this exemption and made available to the Administrator or any law enforcement official upon request. If a discrepancy exists between the conditions and limitations in this exemption and the procedures outlined in the operating documents, the conditions and limitations herein take precedence and must be followed. Otherwise, the Operator must follow the procedures as outlined in its operating documents.

5. The Operator must have and keep current a comprehensive Operations Manual that is tailored for their proposed operation and contain, at a minimum:
 - a. Operations policies, methods, and procedures that address Safety Risk Management (SRM);
 - b. Adverse weather;
 - c. Flight planning;
 - d. Notice to Air Missions (NOTAM);
 - e. Aircraft inspection;
 - f. Preflight duties, post-flight duties;
 - g. Normal and emergency flight procedures;
 - h. Crew Resource Management (CRM) and communications;
 - i. Crewmember responsibilities;
 - j. Accident reporting;
 - k. Hazardous material (HAZMAT) handling and stowage; and
 - l. UAS maintenance.
6. The Operator must have and keep current a comprehensive Training program that is tailored for their proposed operation and contain, at a minimum:
 - a. Knowledge requirements of Section 137.19(e)(1);
 - b. Initial training, recurrent training;
 - c. Testing;
 - d. Completion standards;
 - e. Ground training;
 - f. Site surveying;
 - g. Flight training;
 - h. Normal and emergency procedures;
 - i. UAS operating limitations;
 - j. Lost-link procedures;
 - k. This exemption;

- l. Any ATO COA that applies to operations under this exemption; and
 - m. Hazardous material (HAZMAT) handling and stowage.
7. The remote pilot in command (PIC) must satisfactorily complete the Operator's training program requirements, as described in the training manual; and satisfactorily complete the applicable knowledge and skills requirements for agricultural aircraft operations outlined in Part 137; (Sections 137.19(e)(2)(ii), 137.19(e)(2)(iii), and 137.19(e)(2)(v), are not required). The Operator or chief supervisor's knowledge and skill tests of Section 137.19(e) may be self-administered. Documentation of satisfactory completion of both the training program and the knowledge and skill tests of Section 137.19(e) must include the date of the test, as well as the PIC's name, FAA pilot certificate number, and legal signature. This documentation must be shown to the FAA upon request.
 8. All training operations must be conducted during dedicated training sessions in accordance with the Operator's training program. The Operator may conduct training operations only for the Operator's employees. Furthermore, the PIC must operate the UA not closer than 500 feet to any nonparticipating person while conducting training operations.
 9. Any small UAS used by the Operator that has undergone maintenance or alterations that affect the small UAS operation or flight characteristics of the aircraft (including replacement of a flight-critical component, updates to software or firmware of or associated with the system, and any other change that could affect the operation), must undergo a functional test flight prior to conducting further operations under this exemption. Such functional test flights must be conducted in a manner consistent with how the small UAS will be operated under this exemption. Functional test flights may only be conducted by a PIC with the assistance of a Visual Observer (VO) and other personnel necessary to conduct the test flight (such as a mechanic or technician). The test flight must be conducted in such a manner so as to not pose an undue hazard to persons and property. For purposes of this condition and limitation, "assistance of a Visual Observer" means the assistance described in Section 107.33.
 10. The Operator must follow the small UAS manufacturer's maintenance, overhaul, replacement, inspection, and life-limit requirements for the aircraft and aircraft components. Each small UAS operated under this exemption must comply with all updates to these documents that the manufacturer makes for the purposes of ensuring safety of operations in the small UAS.

11. For small UAS aerial application operations, conducted under Part 137 where Global Positioning System (GPS) signal is necessary to safely operate the small unmanned aircraft (UA), the PIC must immediately recover or land the small UA upon loss of GPS signal.
12. If the PIC loses command or control link with the small UA, the small UA must follow a pre-determined route to either reestablish link or immediately recover or land, which must be documented as part of the knowledge and skill assessment that will occur in accordance with Section 137.19(e).
13. The PIC must abort the flight operation if unexpected circumstances or emergencies arise that could potentially degrade the safety of persons or property. The PIC must terminate flight operations without causing undue hazard to persons or property in the air or on the ground.
14. The relief granted from Section 107.36 is limited to the use of any economic poison as defined in Section 137.3.
15. The PIC may operate the small UAS from a moving device or vehicle as described in Section 107.25, which permits such operation in sparsely populated areas, provided the small UAS do not transport property for compensation or hire. If conducting agricultural aircraft operations in accordance with Section 107.25, which must be documented as part of the knowledge and skill assessment of Section 137.19 in the type of device or vehicle to be used in agricultural aircraft operations.
16. This exemption is not valid for operations outside the United States.

Failure to comply with any of the above conditions and limitations may result in the immediate suspension or rescission of this exemption.

This exemption does not obviate the applicability of, or in any manner alter, the provisions of Parts 107 and 137 that are not the subject of this exemption. In this regard, the Operator must adhere to the terms of any waiver the FAA has issued to the Operator under Part 107, Subpart D that is associated with the agricultural operations that are the subject of this exemption. In addition, the Operator must comply with all limitations and provisions of the Operator's agricultural aircraft operator certificate, which the Operator must obtain prior to conducting agricultural operations in accordance with Section 137.11.

The Effect of the FAA's Decision

The FAA's decision amends Exemption No. 19628 to 19628A and terminates on January 31, 2025, unless sooner superseded or rescinded.

To request an extension or amendment to this exemption, please submit your request by using the Regulatory Docket No. FAA-2022-1324 (<http://www.regulations.gov>). In addition, you should submit your request for extension or amendment no later than 120 days prior to the expiration listed above, or the date you need the amendment, respectively.

Any extension or amendment request must meet the requirements of 14 CFR § 11.81.

Sincerely,

/s/

Caitlin E. Locke
Acting Deputy Executive Director
Flight Standards Service

Enclosure



US Department
of Transportation

Federal Aviation
Administration

AGRICULTURAL AIRCRAFT OPERATOR CERTIFICATE APPLICATION

Paperwork Reduction Act Statement: The information collected on this form is required. This form is submitted to determine eligibility for the issuance of the Agriculture Aircraft Operator Certificate. Confidentiality is neither requested nor provided. We estimate that it will take 1 hour to complete the form. Please note that an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number associated with this collection is 2120-0049. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591 Attn: Information Collection Clearance Officer, ASP-110.

SUPPLEMENTAL
INFORMATION

Form 8710-3 (12/16)

AGRICULTURAL AIRCRAFT OPERATOR CERTIFICATE APPLICATION

INSTRUCTIONS
Complete form in its entirety
Submit to the local Flight Standards
District Office

INSPECTION REPORT - For FAA Use Only*(To be completed by the General Aviation for Flight Standards District Office)***COMPLIANCE WITH APPLICABLE REGULATIONS**

1. PILOTS	NOT REQUIRED	SATISFACTORY	UNSATISFACTORY
A. CERTIFICATES			
B. RATING(S)			
C. KNOWLEDGE TEST			
D. SKILL TEST			
2. AIRCRAFT			
A. CERTIFICATED			
B. AIRWORTHY			
C. EQUIPPED FOR AGRICULTURAL OPERATIONS			

10. REMARKS *(Include an explanation of denial if application is disapproved).***4. DISTRICT OFFICE ACTION**

		W. DISTRICT OFFICE/SECTION	
<input type="checkbox"/>	CERTIFICATE ISSUED	INSPECTORS SIGNATURES	
<input type="checkbox"/>	APPLICATION DISAPPROVED		
DATE INSPECTION COMPLETED			