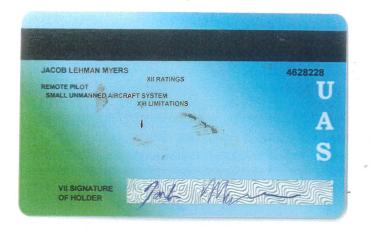


Country Partners Cooperative has been pioneering precision since 2021. Despite our department's relative newness to the cooperative scene, this hasn't hindered our progress in the technology and precision world. All of our precision employees obtain a Part 107 pilot's license and the proper 137 endorsements, along with comprehensive training. Additionally, we are proficient in software platforms such as QGIS, SMS, EFC FieldAlytics, and Pix4D.

For the past two years, Country Partners Cooperative has been providing drone services with the DJI AGRAS T30 spray drone, as well as offering imagery services with the DJI Mavic M3M Multispectral drone, and analyzing the data using Pix4D. We intend to utilize this grant opportunity to expand our drone diversity and services.

The expected lifespan for the requested drone technology is five years or more. Common repairs include annual inspections of the pump (T40) and propeller replacements to ensure safe flight and control during flight operations. With the PRO-AG grant fund, all equipment will be maintained in accordance with the manufacturer's maintenance requirements, along with FAA-required maintenance.











JACOB L MYERS 1710 LAKE AVE **GOTHENBURG, NE 69138** 

Applicator ID License Type Licensed Thru Commercial 04/15/2025

**License Categories** 

00 01 05 12

116623



# **CERTIFICATE OF INSURANCE**

**CERTIFICATE DATE:** 

4/14/2021

**CERTIFICATE HOLDER:** 

To Whom It May Concern

**POLICY HOLDER:** 

Rantizo, Inc.

105 Iowa Avenue, Suite 231 Iowa City, IA 52240

This is to certify that the following policy(s), subject to the terms and conditions, limitations and endorsements contained therein, and during their effective period, have been issued by the company(s) indicated below. In the event of material change or cancellation of said policy(s) the company will endeavor to notify the certificate holder, but failure to do so shall impose no liability or obligation of any kind upon the undersigned or the company(s) involved.

Policy Type: Commercial - UAV

Insurance Company: Old Republic Insurance Company

Policy Number: AG 00121603

**Policy Period:** 2/19/2021 to 2/19/2022

Aircraft Coverage - Ground and In Flight Coverage

Aircraft Liability - Non Chemical - Bodily Injury and Property Damage

Limits - \$1,000,000.00 Each Occurrence

Comprehensive Chemical Coverage - Bodily Injury and Property Damage

Limits - \$300,000.00 Each Occurrence / \$300,000.00 Aggregate

Crops Treated and Adjacent Fields

Farmers / Owners / Growers

Aviation General Liability / Premises Liability -

Limits - \$1,000,000.00 Each Occurrence

Approved Pilots are any pilot approved by the Named Insured, provided the pilot has obtained a remote pilot airmen certificate with a small UAS rating as required by FAR Part 107.

THE FOREGOING EVIDENCE OF COVERAGE IS NOT VERBATIM OF POLICY CONDITIONS, LIMITATIONS OR LANGUAGE; THE POLICY(S) REPRESENTED BY THIS CERTIFICATE ARE NOT AMENDED IN ANY WAY UNLESS SO STATED ON THIS CERTIFICATE.

### **ADDITIONAL AGREEMENTS:**

Operator / Additional Insured - (xxxxxxx) is included as an Additional Insured for Liability Coverages, but solely with respect to operations of the Named Insured, subject to all policy terms and conditions.

This Certificate is only valid provided that all terms and conditions of the policy have been met by the named insured.

NOTICE OF CANCELLATION: IN THE EVENT OF MATERIAL CHANGE OR CANCELLATION OF SAID POLICY(S), THE COMPANY(S) SHALL ENDEAVOR TO GIVE 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER WITH THE EXCEPTION OF A 10 DAY NOTICE FOR NONPAYMENT OF PREMIUM.

Kimmel Aviation Insurance Agency, Inc. 442 Airport Road

Greenwood, MS 38930 (662) 455-3003 Fax: (662) 455-1611

Authorized Signature

Fral S. Kimel

#### UNITED STATES OF AMERICA **Department of Transportation** Federal Aviation Administration MEDICAL CERTIFICATE SECOND CLASS This certifies that (Full name and address): JACOB Lehman MYERS 1710 lake ave Gothenburg NE 69138 USA Date of Birth Height Weight Hair Eyes Sex 12/22/1998 76 296 BLOND BLUE M has met the medical standards prescribed in part 67, Federal Aviation Regulations, for this class of Medical Certificate. Fold Here Must use corrective lens(es) to meet vision standards at all required distances. Limitations Date of Examination Examiner's Designation No. 03/09/2023 681483005 Signature Typed Name Kassandra Davis, MD AIRMAN'S SIGNATURE

CONDITIONS OF ISSUE

The holder of this certificate must:

- Have it in his or her personal possession at all times while exercising privileges of an airman certificate. (14CFR § 61.3)
- Understand that the issuance of a medical certificate by an Aviation Medical Examiner may be reversed by the FAA within 60 days.
   (14CFR § 67.407)
- Comply with validity standards specified for first-, second-, and third-class medical certificates.
   (14CFR § 61.23)
- Comply with any statement of functional, operational, and/or time limitation issued as a condition of certification.

(14CFR § 67.401)

• Comply with the standards relating to prohibitions on operation during medical deficiency. (14CFR §§ 61.53, 63.19, and 65.49)

For International Operations Only: Some holders may be affected by certain international medical standards. Consult the U.S. Aeronautical Information Publication for U.S. differences with ICAO Annex 1 medical standards.

 FAA Form 8500-9
 (3-12) Supersedes Previous Edition
 NSN: 0052-00-670-7002

 (Cut on dashed line)



Applicant ID:

Aviation Safety
Office of Aerospace Medicine
Aerospace Medical Certification Division, AAM-300
P.O. Box 25082
Oklahoma City, OK 73125-9867

Control No.: 200010357387

JACOB Lehman MYERS 1710 lake ave Gothenburg NE 69138 USA

2002356898

Dear Airman:

Above is your new medical certificate. It supersedes any previous one you may have been issued.

To validate this certificate, it is necessary that you sign it in the space provided (Airman's Signature).

This certificate must be in your possession at all times while exercising your pilot privileges.



# **Emergency Contact Numbers**

National Pesticide Telecommunications Network (8am to 12pm Pacific Time) 800-858-7378
CHEMTREC Chemical Transportation Emergency (24/7) 800-262-8200
FAA Emergency Reporting Center (24/7) 202-267-3333 Please attempt to Contact Rantizo Chief Pilot before calling FAA
Rantizo Customer Support 319-201-3020 ext. 2
Rantizo Chief Pilot for Critical Incidents, Injury Report, or After-Hours Emergencies not related to technical support call Chief Pilot direct at 319-784-7976
Area Poison Control ()
State Pesticide Reporting Line ()

Other Emergency Numbers:



# **Operating Certificate**

# This certifies that

Rantizo, Inc. 4165 Alyssa Court Iowa City, Iowa 52240

has met the requirements of the Federal Aviation Act of 1958, as amended, and the rules, regulations, and standards prescribed therein, for the issuance of this certificate and is authorized to operate as an Air Operator and conduct

Commercial Agricultural Small Unmanned Aircraft Systems (UAS) Operations

in accordance with said Act and its rules, regulations, and standards; Dispensing of economic poisons allowed; Exemption No. 18187B, Regulatory Docket No. FAA-2018-1079. Exemption No. 18929A, Regulatory Docket No. FAA-2021-0246

This certificate is not transferable and, unless canceled, suspended, superseded, surrendered or revoked, shall continue in effect indefinitely

	By Direction of the Administrator		
	KYLE H THURSTON	Digitally signed by KYLE H THURSTON Date: 2022.05.25 11:57:26 -05'00'	
Certificate number: 8RZG200Q	Kyle T	hurston	
	(Sigr	nature)	
Effective Date: May 20, 2019	Man	ager	
Amended May 25, 2022	(T	ïtle)	
Issued at: DSM FSDO Ankeny, IA			

FAA Form 8430-21 (6-87)

Electronic Forms (PDF)



# 14 CFR Part 137 Agricultural Aircraft Operations

### **Applicability**

1.	The certificate holder, RANTIZO INC, whose 14 CFR Part 137 Certificate Number
is	8RZG200Q maintains a principal base of operations located at:

Primary Business Address: 4165 Alyssa Court Iowa City, Iowa 52240

Mailing Address: 4165 Alyssa Court Iowa City, Iowa 52240

- 2. The certificate holder is authorized to conduct agricultural aircraft operations in accordance with the specific authorizations, limitations, and procedures in 14 CFR Part 137 and all appropriate Parts of the CFR.
- 3. Notwithstanding the provisions of 14 CFR Part 133, the certificate holder may, if he/she complies with 14 CFR Part 137, conduct agricultural aircraft operations with a rotorcraft with external dispensing equipment in place without a rotorcraft external-load operator certificate.
- 4. The certificate holder is authorized to use only the business name which appears in subparagraph 1., above, to conduct the agricultural aircraft operations described in these operations specifications.

04/21/2005 HQ Revision: 000

This Waiver or Authorization is Issued by the Federal Aviation Administration and approved by direction of the Administrator.			
Digitally signed by Charles Grabill, Principal Operations Inspector (CE01) [1] EFFECTIVE DATE: 5/12/2021, [2] AMENDMENT #: 2 DATE: 2021.05.12 08:10:03 -05:00			
I hereby accept and receive this Authorization.			
Michael Ott, CEO	Date		

Certificate No.: 8RZG200Q



Federal Aviation Administration

# 14 CFR Part 137 Agricultural Aircraft Operations

This Waiver or Authorization is Issued by the Federal Aviation Administration and approved by direction of the Administrator.



Digitally signed by Jeremiah W. Abel, Principal Avionics Inspector (CE01) [1] EFFECTIVE DATE: 2/11/2020, [2] AMENDMENT #: 1 DATE: 2020.02.11 14:01:04 -06:00

I hereby accept and receive this Authorization.		
Caleb Howard, Chief Supervisor, Part 137	Date	



Federal Aviation Administration

# 14 CFR Part 137 Agricultural Aircraft Operations

Aircraft Approved for Agricultural Operations  Registration Number Aircraft Make/Model/Series			
FA3HXME3KN	suas-noncert-multirotor		
FA3K4HHLE4	sUAS-NONCERT-MULTIROTOR		
FA3KACELML	sUAS-NONCERT-MULTIROTOR		
FA3KACHFPC	sUAS-NONCERT-MULTIROTOR		
FA3KACLATY	sUAS-NONCERT-MULTIROTOR		
FA3KACN4XP	sUAS-NONCERT-MULTIROTOR		
FA3KFYL7NF	sUAS-NONCERT-MULTIROTOR		
FA3LMYE7YP	AGRAS MG-1P		
FA3LXR9RTC	sUAS-NONCERT-MULTIROTOR		
FA3MAYNTTF	sUAS-NONCERT-MULTIROTOR		
FA3NEC33KM	sUAS-NONCERT-MULTIROTOR		
FA3NHFX493	sUAS-NONCERT-MULTIROTOR		
FA3NKAAYTC	sUAS-NONCERT-MULTIROTOR		
FA3NKMWPTW	sUAS-NONCERT-MULTIROTOR		
FA3NKMYLXM	sUAS-NONCERT-MULTIROTOR		
FA3NKN4H3E	sUAS-NONCERT-MULTIROTOR		
FA3NKN9C74	sUAS-NONCERT-MULTIROTOR		
FA3P3WRTHF	sUAS-NONCERT-MULTIROTOR		
FA3PAEPXRT	AGRAS MG-1P		
FA3R3EMXF9	sUAS-NONCERT-MULTIROTOR		
FA3R3EPRKX	sUAS-NONCERT-MULTIROTOR		
FA3R3ETMMM	sUAS-NONCERT-MULTIROTOR		
FA3R3NRKWY	sUAS-NONCERT-MULTIROTOR		
FA3RLMPPA7	sUAS-NONCERT-MULTIROTOR		
FA3TCNMWNR	sUAS-NONCERT-MULTIROTOR		
FA3WMRTK39	sUAS-NONCERT-MULTIROTOR		
FA3WMRXE7X	sUAS-NONCERT-MULTIROTOR		
FA3WMT39AN	sUAS-NONCERT-MULTIROTOR		
FA3WTNHYEL	sUAS-NONCERT-MULTIROTOR		
FA3WTNLTHA	sUAS-NONCERT-MULTIROTOR		
FA3WTNNNLX	sUAS-NONCERT-MULTIROTOR		
FA3WTNRKNN	sUAS-NONCERT-MULTIROTOR		
FA3X9CLEFH	sUAS-NONCERT-MULTIROTOR		
FA3XNW74RA	sUAS-NONCERT-MULTIROTOR		
FA3YPNA97C	sUAS-NONCERT-MULTIROTOR		
N301RZ	AGRAS T30		

2. All aircraft shall be equipped with a suitable and properly installed shoulder harness for use by each pilot. No person may operate an aircraft in operations conducted under 14 CFR Part 137 without a safety belt and shoulder harness properly secured about that person except that the



# 14 CFR Part 137 Agricultural Aircraft Operations

# **Summary of Authorizations and Limitations**

The certificate holder is authorized to conduct agricultural aircraft operations in 7

accordance with the specific authorizations, limitations, and proce and all other appropriate Parts of the CFR. Any additional special prohibitions the certificate holder has been granted are listed belo	authorization	
a. The certificate holder, in accordance with the reference docum authorized to:	ents, is additi	onally
	Refere Paragi	
Conduct agricultural aircraft operations under certain exemptions and/or deviations.	A005	
b. The certificate holder is <u>not</u> authorized to:		
	Refere Paragi	
Conduct agricultural aircraft operations over congested areas for a special period of time.	fied A503	
Operate aircraft using MMEL as an MEL.	D095	
Operate specific aircraft under multiple airworthiness standards.	D137	
HQ Control: 04/21/2005  This Waiver or Authorization is Issued by the Federal Aviation Adapproved by direction of the Administrator.  Digitally signed by Jeremiah W. Abel, Principal Avionics Inspection of the Administrator.  [1] EFFECTIVE DATE: 2/11/2020, [2] AMENDMENT #: 1 DATE: 2020.02.11 14:01:11 -06:00		000 <b>and</b>
I hereby accept and receive this Authorization.		
Caleb Howard, Chief Supervisor, Part 137 Date		

Certificate No.: 8RZG200Q



of Transportation
Federal Aviation
Administration

# 14 CFR Part 137 Agricultural Aircraft Operations

This Waiver or Authorization is Issued by the Federal Aviation Administration and approved by direction of the Administrator.



Digitally signed by Jason T. Glass, Principal Operations Inspector (CE01) [1] EFFECTIVE DATE: 12/21/2021, [2] AMENDMENT #: 4 DATE: 2021.12.21 09:23:47 -06:00

# I hereby accept and receive this Authorization.

Digitally signed by Kyle B Brown on behalf of Beau Brown, Assistant Chief Instructor

DATE: 2021.12.21 09:22:16 -06:00

RANTIZO INC A005-2 Certificate No.: 8RZG200Q



Administration

# 14 CFR Part 137 Agricultural Aircraft Operations

This Waiver or Authorization is Issued by the Federal Aviation Administration and approved by direction of the Administrator.



Digitally signed by Jason T. Glass, Principal Operations Inspector (CE01) [1] EFFECTIVE DATE: 12/17/2021, [2] AMENDMENT #: 2 DATE: 2021.12.20 06:07:30 -06:00

## I hereby accept and receive this Authorization.

Digitally signed by Kyle B Brown on behalf of Beau Brown, Assistant Chief Instructor

DATE: 2021.12.17 11:54:00 -06:00

RANTIZO INC A007-2 Certificate No.: 8RZG200Q



**Aviation Safety** 

800 Independence Ave Washington, DC 20591

April 28, 2021

Exemption No. 18187B Regulatory Docket No. FAA-2018-1079

Mr. Beau Brown Technology Manager Rantizo, Inc. 4165 Alyssa Ct. Iowa City, Iowa 52240

Dear Mr. Brown:

This letter is to inform you that the Federal Aviation Administration (FAA) has granted your petition to extend Exemption No. 18187A. This letter transmits FAA's decision, explains FAA's basis, and provides the revised conditions and limitations of the exemption, including the date the exemption ends.

#### The Basis for the FAA's Decision

By letter dated November 23, 2020, Ms. Kelley Neubecker, UASolutions Group, LLC, petitioned the FAA on behalf of Rantizo, Inc. (Rantizo) for an extension of Exemption No. 18187A. That exemption from Title 14, Code of Federal Regulations (14 CFR) 107.36; 137.19(c), (d), (e)(2)(ii), (e)(2)(iii), and (e)(2)(v); 137.31(a) and (b); 137.33(a) and (b); 137.41(c); and 137.42 allows Rantizo to operate small unmanned aircraft systems (UAS) that weigh less than 55 pounds (lbs.) on takeoff, to conduct agricultural aircraft operations.

In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the original exemption.

#### The FAA's Decision

The FAA has determined that good cause exists for not publishing a summary of the petition in the <u>Federal Register</u> because the requested extension of the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to Rantizo.

may update or revise its operating documents. It is the operator's responsibility to track all such revisions and present updated and revised documents to the Administrator or any law enforcement official upon request. The operator must also present updated and revised documents upon requesting extension of, or amendment to, this grant of exemption. If the operator determines that any update or revision would affect the basis upon which the FAA granted this exemption, then the operator must petition for an amendment to its grant of exemption. If questions arise regarding updates or revisions to the operating documents, the operator may contact the Flight Standards Service General Aviation and Commercial Division (AFS-800), 55 M Street, SE, 8th Floor, Zone 1, Washington, DC 20003. Telephone: 202-267-1100, Email: 9-AFS-800-Correspondence@faa.gov.

- 4. 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 remote pilot in command (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 at § 107.33.
- 5. 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.
- 6. The remote PIC must demonstrate to the FAA the ability to safely operate the small unmanned aircraft system in a manner consistent with how it will be operated under this exemption, and under any waiver issued under part 107 to the operator. This demonstration must include the applicable knowledge and skills requirements for agricultural aircraft operations outlined in part 137, evasive and emergency maneuvers, and maintaining appropriate distances from persons, vessels, vehicles and structures before operating non-training, proficiency, or experience-building flights under this exemption.
- 7. For small UAS aerial application operations, conducted under part 137 where Global Positioning System (GPS) signal is necessary to safely operate the small unmanned

If you request an extension or amendment to this exemption, please submit your request by using the Regulatory Docket No. FAA-2018-1079 (http://www.regulations.gov). In addition, you should submit your request no later than 120 days prior to the exemption's expiration date listed below, or 120 days before you need the amendment.

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

### The Effect of the FAA's Decision

The FAA's decision amends Exemption No. 18187A to 18187B and extends the termination date to April 30, 2023, unless sooner superseded or rescinded.

Sincerely,

/s/

Robert C. Carty Deputy Executive Director, Flight Standards Service

Enclosure Exemption No. 17261

is unable to comply with the requirements of subpart E, including 14 CFR § 91.403(b), the relief is necessary. The relief from 14 CFR § 91.403(b), addressed in the exemption, is limited only to how to perform maintenance, preventive maintenance, or alterations on an aircraft other than as prescribed in that subpart and other applicable regulations, including Part 43 of Title 14.

The DJI Agras T16, DJI Agras T20, and DJI Agras T30 UAS do not currently have an airworthiness certificate. Title 49 U.S.C. § 44807 provides the Secretary of Transportation (hereinafter Secretary) with authority to determine whether a certificate of waiver, certificate of authorization, or a certificate under 49 U.S.C. § 44703 or § 44704, is required for the operation of certain UAS. Section 44807(b) instructs the Secretary to base this determination on which types of UAS do not create a hazard to users of the National Airspec System (NAS) or the public. In making this determination, the Secretary must consider the size, weight, speed, operational capability of the UAS, and other aspects of the proposed operation. In accordance with the statutory criteria provided in 49 U.S.C. § 44807, and in consideration of the size, weight, speed, and operational capability, proximity to airports and populated areas, and specific operations, the Secretary has determined this aircraft does not create a hazard to users of the NAS or the public.

The FAA has issued a grant of exemption in circumstances similar in all material respects to those presented in your petition. In Grants of Exemption Nos. 18009 and 18413A (copies enclosed), the FAA found that a grant of exemption was in the public interest, and that the proposed operations' UAS safety features and the limitations under which the petitioner would operate were sufficient mitigations that ensured the proposed agricultural operations would not adversely affect safety.

Having reviewed your reasons for requesting an exemption, I find that—

- They are similar in all material respects to relief previously requested in the enclosed Grant of Exemption No. 18009 and Exemption No. 18413A;
- The reasons stated by the FAA for granting the enclosed Grant of Exemption No. 18009 and Exemption No. 18413A also apply to the situation you present;
- Exemption No. 18009 contains the FAA analysis for the relief granted from 14 CFR §§ 61.3(a)(1)(i), 91.7(a), 91.121, 91.151(b), 91.405(a), 91.407(a)(1),91.409(a)(1), 91.409(a)(2), 91.417(a), 91.417(b), 137.19(c), 137.19(d), 137.19(e)(2)(ii), 137.19(e)(2)(iii), 137.19(e)(2)(v), 137.31, 137.33, 137.41(c), and 137.42;
- Exemption No. 18413A contains the FAA analysis for the relief granted from 14 CFR § 91.119(c) and § 91.403(b); and
- A grant of exemption is in the public interest.

- hour or at any speed greater than the maximum operating speed recommended by the aircraft manufacturer, whichever is lower.
- 5. All operations must be conducted in accordance with an Air Traffic Organization (ATO) issued Certificate of Waiver or Authorization (COA). A copy of the blanket 49 U.S.C. § 44807 COA is enclosed with this exemption. Rantizo must apply for a new or amended COA if it intends to conduct operations that cannot be conducted under the terms of the enclosed COA. If a conflict exists between the COA and this condition, the more restrictive provision will apply. The COA will also require the Operator to request a Notice to Airmen (NOTAM) not more than 72 hours in advance, but not less than 48 hours prior to each operation. Unless the COA or other subsequently issued FAA authorization specifies an altitude restriction lower than 200 feet above ground level (AGL), operations under this exemption may not exceed 200 feet AGL. Altitude must be reported in feet AGL.
- 6. The pilot in command (PIC) must be designated before the flight and cannot transfer his or her designation for the duration of the flight. In all situations, the PIC is responsible for the safety of the operation. The PIC is also responsible for meeting all applicable conditions and limitations as prescribed in this exemption and ATO-issued COA, and operating in accordance with the operating documents. The aircraft must be operated within visual line of sight (VLOS) of the PIC at all times. The PIC must be able to use human vision unaided by any device other than corrective lenses, as specified on the PIC's FAA-issued airman medical certificate.
- 7. The PIC may manipulate flight controls in the operation of no more than one unmanned aircraft at the same time. Proposed operation of more than one unmanned aircraft at the same time (by one PIC) requires a new petition or a petition to amend this exemption.
- 8. All operations must utilize the services of at least one or more visual observers (VO). The VO must be trained in accordance with Rantizo's training program. For purposesof this condition, a VO is someone: (1) who maintains effective communication with the PIC at all times; (2) who the PIC ensures is able to see the unmanned aircraft with human vision as described in Condition and Limitation No. 5; and (3) coordinates with the PIC to scan the airspace where the unmanned aircraft (UA) is operating for any potential collision hazard and maintain awareness of the position of the UA through direct visual observation. The aircraft must be operated within VLOS of both the PIC and VO at all times. The operation must be conducted with a dedicated VO who has no collateral duties and is not the PIC during the flight. The VO may be used to satisfy the VLOS requirement as long as the PIC always maintains VLOS capability. The VO and PIC must be able to communicate verbally at all times; electronic messaging or texting is not permitted during flight operations. The VO must maintain visual sight of the aircraft at all times

- 12. Prior to each flight, the PIC must conduct a pre-flight inspection and determine the aircraft is in a condition for safe flight. The pre-flight inspection must account for all potential discrepancies, such as inoperable components, items, or equipment. If the inspection reveals a condition that affects the safe operation of the UAS, the aircraft is prohibited from operating until the necessary maintenance has been performed, andthe aircraft is found to be in a condition for safe flight.
- 13. Rantizo must follow the UAS manufacturer's operating limitations, maintenance instructions, service bulletins, overhaul, replacement, inspection, and life limit requirements for the DJI Agras T16, DJI Agras T20, and DJI Agras T30 and its components. Each UAS operated under this exemption must comply with all manufacturers' safety bulletins. Maintenance must be performed by individuals who have been trained by Rantizo in proper techniques and procedures for these UAS. All maintenance must be recorded the aircraft records including a brief description of the work performed, date of completion and the name of the person performing the work.
- 14. PIC certification: Under this exemption, a PIC must hold a current remote pilot certificate.
- 15. The PIC must also hold at least a current FAA second-class airman medical certificate. The PIC may not conduct the operation if he or she knows or has reason toknow of any medical condition that would make him or her unable to meet the requirements for at least a second-class medical certificate, or is taking medication or receiving treatment for a medical condition that results in the PIC being unable to meet the requirements for at least a second-class medical certificate. The VO or any other direct participant may not participate in the operation if he or she knows or has reason to know of any physical or mental condition that would interfere with the safe operation of the aircraft.
- 16. The PIC must demonstrate the ability to safely operate the UAS in a manner consistent with how it will be operated under this exemption. The PIC must demonstrate the applicable knowledge and skills requirements for agricultural aircraftoperations outlined in Part 137, evasive and emergency maneuvers, and maintaining appropriate distances from persons, vessels, vehicles and structures before operating non-training, proficiency, or experience-building flights under this exemption. Additionally, all PICs must satisfactorily complete Rantizo's training program requirements, the completion of which must be documented. Furthermore, the PIC must satisfactorily demonstrate his or her ability to respond appropriately to a lost-link occurrence as part of the knowledge and skill assessment that will occur in accordance with 14 CFR § 137.19(e). PIC qualification flight hours and currency maybe logged in a manner consistent with 14 CFR § 61.51(b). However, time logged for UAS operations may not be recorded in the same columns or categories as time

- Part 45, Subpart C. Markings must be as large as practicable.
- 25. Documents used by Rantizo to ensure the safe operation and flight of the UAS and any documents required under 14 CFR §§ 91.9, 91.203, and 137.33 must be available to the PIC at the ground control station of the UAS any time any aircraft operates in accordance with this exemption. These documents must be made available to the Administrator or any law enforcement official upon request.
- 26. The UA must remain clear and give way to all manned aviation operations and activities at all times.
- 27. The UAS may not be operated by the PIC from any moving device or vehicle.
- 28. All flight operations must be conducted at least 500 feet from all persons who are not <u>directly</u> participating in the operation, and from vessels, vehicles, and structures, unless when operating:
  - a. Over or near people directly participating in the operation of the UAS. No personmay operate the UAS directly over a human being unless that human being is directly participating in the operation of the UAS, to include the PIC, VO, and other personnel who are directly participating in the safe operation of the UA.
  - b. Near nonparticipating persons. Except as provided in subsection (a) of this section, a UA may only be operated closer than 500 feet to a person when barriersor structures are present that sufficiently protect that person from the UA and/or debris or hazardous materials such as fuel or chemicals in the event of an accident. Under these conditions, Rantizo must ensure that the person remains under such protection for the duration of the operation. If a situation arises in which the person leaves such protection and is within 500 feet of the UA, flight operations must cease immediately in a manner that does not cause undue hazard to persons.
  - c. Closer than 500 feet from vessels, vehicles and structures. The UA may be operated closer than 500 feet, but not less than 100 feet, from vessels, vehicles, and structures under the following conditions:
    - (1) The UAS is equipped with an active geo-fence boundary, set no closer than 100 feet from applicable waterways, roadways, or structures;
    - (2) The PIC must have a minimum of 7 hours' experience operating thespecific make and model UAS authorized under this exemption, at least 3 hours of which must be acquired within the preceding 12 calendar months;
    - (3) The PIC must have a minimum of 25 hours' experience as a PIC indispensing agricultural materials or chemicals from a UA;

31. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the applicable COA must be reported within 24 hours as required by the applicable COA issued by the FAA ATO. Additionally, any incident or accident that occurs, or any flight operation that transgresses the lateral or vertical boundaries of the operational work area, must be reported to the Flight Standards District Office (FSDO) that holds Rantizo's Part 137 certificate.

Unless otherwise specified in this grant of exemption, the UAS, PIC, and Rantizo must comply with all applicable parts of 14 CFR including, but not limited to, Parts 45, 47, 91, and 137. In addition, Rantizo must comply with all limitations and provisions of Rantizo's agricultural aircraft operator certificate, which Rantizo must obtain prior to conducting agricultural operations in accordance with 14 CFR § 137.11.

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

#### The Effect of the FAA's Decision

The FAA's decision amends Exemption No. 18929 to 18929A. This exemption terminates on November 30, 2023, 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-2021-0246 (<a href="http://www.regulations.gov">http://www.regulations.gov</a>). 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/

Robert C. Carty Deputy Executive Director, Flight Standards Service

Enclosures: Exemption No. 18009, Exemption No. 18413A, and 49 U.S.C. § 44807 Blanket COA

### **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.

- 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: 9-AJV-115-UASOrganization@faa.gov 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

# SPECIAL PROVISIONS ISSUED TO Rantizo, Inc.

#### General

This Certificate of Waiver is an amendment which supersedes and replaces Waiver 107W-2020-02000 issued to Rantizo LLC for operations under 14 CFR 107. Waiver 107W-2020-02000 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 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 systems, is waived to allow 3 sUA aircraft to operate simultaneously in a Part 137 operation.

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 such requests.

**Common Special 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 Visual Observer(s) (VO)<sup>1</sup> 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 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 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 be combined with Exemption No. 18187 as amended. This waiver may not be combined with any other waiver(s), authorizations(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;

<sup>&</sup>lt;sup>1</sup> 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.

- 16. Prior to conducting combined operations of this Waiver, the remote RPIC and VO's must demonstrate to the FAA the ability to safely operate the small unmanned aircraft system in a manner consistent with how it will be operated under this Waiver. This demonstration must include the applicable knowledge and skills requirements for agricultural aircraft operations outlined in 14 CFR part 137, evasive and emergency maneuvers, and maintaining appropriate distances from persons, vessels, vehicles and structures before operating non-training, proficiency, or experience-building flights under this waiver;
- 17. 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; and
- 18. Operations conducted under this Waiver are limited to the areas as described in the waiver application.