



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

800 Independence Ave., S.W.  
Washington, D.C. 20591

August 11, 2015

Exemption No. 12434  
Regulatory Docket No. FAA-2015-1547

Ms. Linda J. Baurer  
Owner  
Sarra Ventures  
13643 Antioch Road  
Tremont, IL 61568

Dear Ms. Baurer:

This letter is to inform you that we have granted your request for exemption. It transmits our decision, explains its basis, and gives you the conditions and limitations of the exemption, including the date it ends.

By letter dated April 30, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Sarra Ventures (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography and videography.

See Appendix A for the petition submitted to the FAA describing the proposed operations and the regulations that the petitioner seeks an exemption.

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

#### **Airworthiness Certification**

The UAS proposed by the petitioner is a DJI Phantom 2 Vision +.

The petitioner requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*. In accordance with the statutory criteria provided in Section 333 of Public Law 112–95 in reference to 49 U.S.C. § 44704, and in consideration of the size, weight, speed, and limited operating area associated with the aircraft and its operation, the Secretary of Transportation has determined that this aircraft meets the conditions of Section 333. Therefore, the FAA finds that the requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*, and any associated noise certification and testing requirements of part 36, is not necessary.

### **The Basis for Our Decision**

You have requested to use a UAS for aerial data collection<sup>1</sup>. The FAA has issued grants of exemption in circumstances similar in all material respects to those presented in your petition. In Grants of Exemption Nos. 11062 to Astraeus Aerial (*see* Docket No. FAA–2014–0352), 11109 to Clayco, Inc. (*see* Docket No. FAA–2014–0507), 11112 to VDOS Global, LLC (*see* Docket No. FAA–2014–0382), and 11213 to Aeryon Labs, Inc. (*see* Docket No. FAA–2014–0642), the FAA found that the enhanced safety achieved using an unmanned aircraft (UA) with the specifications described by the petitioner and carrying no passengers or crew, rather than a manned aircraft of significantly greater proportions, carrying crew in addition to flammable fuel, gives the FAA good cause to find that the UAS operation enabled by this exemption is in the public interest.

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

- They are similar in all material respects to relief previously requested in Grant of Exemption Nos. 11062, 11109, 11112, and 11213;
- The reasons stated by the FAA for granting Exemption Nos. 11062, 11109, 11112, and 11213 also apply to the situation you present; and
- A grant of exemption is in the public interest.

### **Our Decision**

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. 106(f), 40113, and 44701, delegated to me by the Administrator, Sarra Ventures is granted an exemption from 14 CFR §§ 61.23(a) and (c), 61.101(e)(4) and (5), 61.113(a), 61.315(a), 91.7(a), 91.119(c), 91.121, 91.151(a)(1), 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), and 91.417(a) and (b), to the

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<sup>1</sup> Aerial data collection includes any remote sensing and measuring by an instrument(s) aboard the UA. Examples include imagery (photography, video, infrared, etc.), electronic measurement (precision surveying, RF analysis, etc.), chemical measurement (particulate measurement, etc.), or any other gathering of data by instruments aboard the UA.

extent necessary to allow the petitioner to operate a UAS to perform aerial data collection. This exemption is subject to the conditions and limitations listed below.

### **Conditions and Limitations**

In this grant of exemption, Sarra Ventures is hereafter referred to as the operator.

Failure to comply with any of the conditions and limitations of this grant of exemption will be grounds for the immediate suspension or rescission of this exemption.

1. Operations authorized by this grant of exemption are limited to the DJI Phantom 2 Vision + when weighing less than 55 pounds including payload. Proposed operations of any other aircraft will require a new petition or a petition to amend this exemption.
2. Operations for the purpose of closed-set motion picture and television filming are not permitted.
3. The UA may not be operated at a speed exceeding 87 knots (100 miles per hour). The exemption holder may use either groundspeed or calibrated airspeed to determine compliance with the 87 knot speed restriction. In no case will the UA be operated at airspeeds greater than the maximum UA operating airspeed recommended by the aircraft manufacturer.
4. The UA must be operated at an altitude of no more than 400 feet above ground level (AGL). Altitude must be reported in feet AGL.
5. The UA must be operated within visual line of sight (VLOS) of the PIC at all times. This requires the PIC to 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 or U.S. driver's license.
6. All operations must utilize a visual observer (VO). The UA must be operated within the visual line of sight (VLOS) of the PIC and VO at all times. 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 PIC must be designated before the flight and cannot transfer his or her designation for the duration of the flight. The PIC must ensure that the VO can perform the duties required of the VO.
7. This exemption and all documents needed to operate the 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 be accessible during UAS operations and made available to the

Administrator 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. The operator may update or revise its operating documents. It is the operator's responsibility to track 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 if it petitions for extension 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. The FAA's UAS Integration Office (AFS-80) may be contacted if questions arise regarding updates or revisions to the operating documents.

8. Any UAS that has undergone maintenance or alterations that affect the UAS operation or flight characteristics, e.g., replacement of a flight critical component, must undergo a functional test flight prior to conducting further operations under this exemption. Functional test flights may only be conducted by a PIC with a VO and must remain at least 500 feet from other people. The functional test flight must be conducted in such a manner so as to not pose an undue hazard to persons and property.
9. The operator is responsible for maintaining and inspecting the UAS to ensure that it is in a condition for safe operation.
10. Prior to each flight, the PIC must conduct a pre-flight inspection and determine the UAS is in a condition for safe flight. The pre-flight inspection must account for all potential discrepancies, e.g., 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 and the UAS is found to be in a condition for safe flight.
11. The operator must follow the UAS manufacturer's maintenance, overhaul, replacement, inspection, and life limit requirements for the aircraft and aircraft components.
12. Each UAS operated under this exemption must comply with all manufacturer safety bulletins.
13. Under this grant of exemption, a PIC must hold either an airline transport, commercial, private, recreational, or sport pilot certificate. The PIC must also hold a current FAA airman medical certificate or a valid U.S. driver's license issued by a state, the District of Columbia, Puerto Rico, a territory, a possession, or the Federal government. The PIC must also meet the flight review requirements specified in 14 CFR § 61.56 in an aircraft in which the PIC is rated on his or her pilot certificate.

14. The operator may not permit any PIC to operate unless the PIC demonstrates the ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption, including evasive and emergency maneuvers and maintaining appropriate distances from persons, vessels, vehicles and structures. PIC qualification flight hours and currency must be logged in a manner consistent with 14 CFR § 61.51(b). Flights for the purposes of training the operator's PICs and VOs (training, proficiency, and experience-building) and determining the PIC's ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption are permitted under the terms of this exemption. However, training operations may only be conducted during dedicated training sessions. During training, proficiency, and experience-building flights, all persons not essential for flight operations are considered nonparticipants, and the PIC must operate the UA with appropriate distance from nonparticipants in accordance with 14 CFR § 91.119.
15. UAS operations may not be conducted during night, as defined in 14 CFR § 1.1. All operations must be conducted under visual meteorological conditions (VMC). Flights under special visual flight rules (SVFR) are not authorized.
16. The UA may not operate within 5 nautical miles of an airport reference point (ARP) as denoted in the current FAA Airport/Facility Directory (AFD) or for airports not denoted with an ARP, the center of the airport symbol as denoted on the current FAA-published aeronautical chart, unless a letter of agreement with that airport's management is obtained or otherwise permitted by a COA issued to the exemption holder. The letter of agreement with the airport management must be made available to the Administrator or any law enforcement official upon request.
17. The UA may not be operated less than 500 feet below or less than 2,000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.
18. If the UAS loses communications or loses its GPS signal, the UA must return to a pre-determined location within the private or controlled-access property.
19. The PIC must abort the flight in the event of unpredicted obstacles or emergencies.
20. The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough available power for the UA to conduct the intended operation and to operate after that for at least five minutes or with the reserve power recommended by the manufacturer if greater.
21. Air Traffic Organization (ATO) Certificate of Waiver or Authorization (COA). All operations shall be conducted in accordance with an ATO-issued COA. The exemption holder may apply for a new or amended COA if it intends to conduct operations that cannot be conducted under the terms of the attached COA.

22. All aircraft operated in accordance with this exemption must be identified by serial number, registered in accordance with 14 CFR part 47, and have identification (N-Number) markings in accordance with 14 CFR part 45, Subpart C. Markings must be as large as practicable.
23. Documents used by the operator to ensure the safe operation and flight of the UAS and any documents required under 14 CFR §§ 91.9 and 91.203 must be available to the PIC at the Ground Control Station of the UAS any time the aircraft is operating. These documents must be made available to the Administrator or any law enforcement official upon request.
24. The UA must remain clear and give way to all manned aviation operations and activities at all times.
25. The UAS may not be operated by the PIC from any moving device or vehicle.
26. All Flight operations must be conducted at least 500 feet from all nonparticipating persons, vessels, vehicles, and structures unless:
  - a. Barriers or structures are present that sufficiently protect nonparticipating persons from the UA and/or debris in the event of an accident. The operator must ensure that nonparticipating persons remain under such protection. If a situation arises where nonparticipating persons leave such protection and are within 500 feet of the UA, flight operations must cease immediately in a manner ensuring the safety of nonparticipating persons; and
  - b. The owner/controller of any vessels, vehicles or structures has granted permission for operating closer to those objects and the PIC has made a safety assessment of the risk of operating closer to those objects and determined that it does not present an undue hazard.

The PIC, VO, operator trainees or essential persons are not considered nonparticipating persons under this exemption.

27. All operations shall be conducted over private or controlled-access property with permission from the property owner/controller or authorized representative. Permission from property owner/controller or authorized representative will be obtained for each flight to be conducted.
28. 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 to the FAA's UAS Integration Office (AFS-80) within 24 hours. Accidents must be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: [www.nts.gov](http://www.nts.gov).

If this exemption permits operations for the purpose of closed-set motion picture and television filming and production, the following additional conditions and limitations apply.

29. The operator must have a motion picture and television operations manual (MPTOM) as documented in this grant of exemption.
30. At least 3 days before aerial filming, the operator of the UAS affected by this exemption must submit a written Plan of Activities to the local Flight Standards District Office (FSDO) with jurisdiction over the area of proposed filming. The 3-day notification may be waived with the concurrence of the FSDO. The plan of activities must include at least the following:
  - a. Dates and times for all flights;
  - b. Name and phone number of the operator for the UAS aerial filming conducted under this grant of exemption;
  - c. Name and phone number of the person responsible for the on-scene operation of the UAS;
  - d. Make, model, and serial or N-Number of UAS to be used;
  - e. Name and certificate number of UAS PICs involved in the aerial filming;
  - f. A statement that the operator has obtained permission from property owners and/or local officials to conduct the filming production event; the list of those who gave permission must be made available to the inspector upon request;
  - g. Signature of exemption holder or representative; and
  - h. A description of the flight activity, including maps or diagrams of any area, city, town, county, and/or state over which filming will be conducted and the altitudes essential to accomplish the operation.
31. Flight operations may be conducted closer than 500 feet from participating persons consenting to be involved and necessary for the filming production, as specified in the exemption holder's MPTOM.

Unless otherwise specified in this grant of exemption, the UAS, the UAS PIC, and the UAS operations must comply with all applicable parts of 14 CFR including, but not limited to, parts 45, 47, 61, and 91.

This exemption terminates on August 31, 2017, unless sooner superseded or rescinded.

Sincerely,

/s/

John S. Duncan

Director, Flight Standards Service

Enclosures



April 30, 2015  
United States Department of Transportation  
Docket Management System  
1200 New Jersey Ave., SE  
West Building Ground Floor Room W12-140  
Washington, DC 20590

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DEPARTMENT OF TRANSPORTATION  
Docket Management System  
2015 MAY 11 A 9 50

**Re: Exemption Request Pursuant To Section 333 of the FAA Reform Act of 2012**

Dear Sir or Madam:

I am writing concerning the FAA Modernization and Reform Act of 2012 ( the "Reform Act") and the procedures contained in 14 C.F.R. 11. I am requesting that Sarra Ventures, owned and operated by Linda J Baurer be exempted from the Federal Aviation Regulations ("FARs") listed below so that Sarra Ventures may operate its small unmanned aircraft/lightweight unmanned aircraft systems "UAS" in commercial airspace regulated by the Federal Aviation Administration ("FAA").

Primary uses will be low altitude aerial photography and video footage for educational, agricultural, research, promotional, entertainment, and marketing purposes.

Sarra Ventures and Linda J Baurer have operated a UAS on many occasions non-commercially without incident. Sarra Ventures and Linda J Baurer also use an FAA certified Agricultural pilot for consultation if questions or concerns arise.

The UAS utilizes battery power, not combustible fuels. Flight time ranges between five and twenty minutes. The UAS has GPS functionality to hover in place as well as a return to home function in case of loss of contact with the radio. It has an audible and visual warning system and will start to descend slowly if battery power reaches 25%.

Sarra Ventures's exemption request would permit its operation of lightweight, unmanned (piloted by remote control) and comparatively inexpensive UASs in tightly controlled and limited airspace. As stated earlier, Linda J Baurer has UAS flight experience and is willing to abide and comply with the FAA's current and forthcoming regulations.

For the reasons stated below, Sarra Ventures respectfully request the grant of an exemption allowing it to operate lightweight, remote controlled UASs.

**1. Contact Information:**

Linda J Baurer  
Sarrra Ventures  
13643 Antioch Rd  
Tremont, IL 61568  
(309)925-5980  
e-mail: plajjd@gmail.com

**2. The Specific Sections of Title 14 of the Code of Federal Regulations from Which We Request Exemption is:**

14CFR 21:  
14 C.F.R. 45.23 (b):  
14 CFR 61m113 (a) & (b):  
14 C.F.R. 91, et seq.:  
14 CFR 407 (a) (1):  
14 CFR 409 (a) (2):  
14 CFR 417 (a) & (b).  
U.S Dep't of Trans.

**3. The Extent of Relief Sarrra Ventures Seeks and the Reason It Seeks Such Relief:**

Sarrra Ventures submits this application in accordance with the Reform Act, 112 P.L. 95§§ 331-334, seeking relief from any currently applicable FARs operating in cinematic, educational, promotional, agricultural, research, entertainment, and marketing flight operations within the national airspace system. The Reform Act in Section 332 provides for such integration of civil unmanned aircraft systems into our National airspace system as it is in the public's interest to do so. Our lightweight UAS meets the definition of "small unmanned aircraft" as defined in Section 331 and therefore the integration of our lightweight UAS is expressly contemplated by the Reform Act. We would like to operate our lightweight UAS prior to the time period by which the Reform Act requires the FAA to promulgate rules governing such craft.

The Reform Act guides the Secretary in determining the types of UASs that may operate Safely in our national airspace system. Considerations include:

- The weight, size, speed and overall capabilities of the UAS:
- Whether the UAS will be operated near airports or populated areas: and,
- Whether the UAS will be operated by line of sight.

112 P.L. 95 § 333 (a). Each of these items militates in favor of an exemption for Sarrra Ventures. Our UAS utilizes four counter-rotating propellers for extreme balance, control and stability. It weighs less than 5 pounds, including battery and all equipment. This small unmanned aircraft is designed to primarily hover in place and operate at less than a 50 knot maximum speed. It is capable of vertical and horizontal operation but operate only within the line of sight of the remote control pilot. In addition to the remote control pilot, we use a spotter, such that, at minimum, two Sarrra Ventures personnel govern the safe flight of the aircraft at all times.

Utilizing battery power and not combustibile fuels, flights generally last between five and twenty minutes. We do not operate the UAS with less than twenty five percent battery capacity. Safety

systems in place include a GPS mode that allows the UAS to hover in place or return to takeoff location if communication with the radio control pilot is lost and then slowly descend the UAS at twenty five percent battery capacity. Sarra Ventures does not operate the UAS near airports or near populated areas. To date, we have only operated the UAS in a non-commercial manner.

Our operation of this small unmanned aircraft will not “create a hazard to users of the national airspace system or the public.” 112 P.L. 95 § 333 (b). Given the small size and weight of the UAS, combined with its operation in cordoned off and well-controlled areas, this falls within Congress’s contemplated safety zone when it promulgated the Reform Act and the corresponding directive to integrate UASs into the national airspace system. Indeed, our UAS will not pose any threat to the general public or national security.

The FAA has the authority to issue the exemption sought by Sarra Ventures pursuant to the Federal Aviation Act, 85 P.L. 726 (1958), as amended (the “Act”).

#### **4. How this Request Will Benefit the Public As A Whole:**

Granting this exemption request will benefit the public by promoting education, research, and promotional ideas within the agricultural communities. Sarra Ventures would like to use UAS to fly agricultural fields for scouting, educating, researching and promoting increased yields in crops and animal production. The information gathered by these flights will be used to educate and promote better agricultural and resource management. Promotional and educational videos, photos, and images will be used to educate and train farmers to increase crop production and detect early problems within the farming operation. An example would be a UAS flying (and filming) a 100 acre field of newly emerging crops. By analyzing the imagery taken by the UAS an Agricultural specialist would be able to detect if the crop needs more nutrients or if the field is being invaded by pests. Recommendations would be made and the farmer who could then adjust accordingly so maximum crop production is achieved. Educational and promotional films would be made to show additional farmers the benefit of using an UAS to help increase their own yields. This crop increase would benefit the public as a whole. Not only would the farmer get higher income from increased production, but the public would get more food on the grocery shelves at lower costs.

Sarra Ventures would also like to use UASs for cinematic and entertainment purposes. The videos and imagery captured would be put together in films that offer entertainment to the general public audience. Progression of the arts and sciences has been fundamental to our society since its inclusion in the United States Constitution. Congress mandated the integration of UASs into our national airspace system, in part, to achieve progression in this noteworthy and inevitable field. Permitting Sarra Ventures to immediately fly within the United States furthers these goals.

#### **5. Reasons Why Sarra Ventures Exemption Will Not Adversely Affect Safety Or How The Exemption Will Provide a Level of Safety At Least Equal To Existing Rule:**

This exemption will not adversely affect safety. Since Sarra Ventures has experience with flying UASs, we are quite aware (and follow) FAA safety protocols and airspace guidelines. Sarra Ventures also works closely with an FAA Commercial pilot, so it has valuable safety resources on hand if needed.

In addition we submit the following to represent the safety techniques we uphold when flying our UAS:

- Our UAS weighs less than 5 pounds complete with all mounted equipment and battery:
- We only operate our UAS below 400 feet:
- Our UAS only operates for 5-20 minutes per flight:
- We land our UAS when it reaches 25% battery power:
- Our remote control pilot operates the UAS by line of sight:
- Our remote control pilot has video backup and GPS locator should he somehow lose sight of the UAS:
- We staff each flight with a remote control pilot and spotter with communication systems

Enabling real time communication between them:

- Our UAS has GPS flight modes whereby it hovers, returns to takeoff position and then slowly lands if communication with the remote control pilot is lost or battery power

Is below 25%:

- We actively analyze electronic flight data and other sources of information to constantly update and enhance safety protocols:

- We conduct briefings prior to flight during which safety carries primary importance:
- We have procedures in place to abort flights in the event of safety breaches or potential danger.

It is important to note that absent the integration of commercial UASs into our national airspace system, helicopters and manned airplanes are the primary means of aerial motion picture and agricultural imagery. While the safety record of such aircraft is remarkably astounding, it is far safer to operate a battery powered lightweight UAS. The potential loss of life is diminished because UASs carry no people on board and Sarra Ventures only operates them in specific areas away from mass populations. There is no fuel on board a UAS and thus the potential for fire or explosions is greatly diminished. The small size and extreme maneuverability of our UAS allows our remote control pilot to avoid hazards. Given their small size and weight, even when close enough to capture amazing images, our UAS needs not be so close to the objects it is focused on. Accordingly, our UAS has operated and will continue to operate at and above current safety levels.

## **6. Summary:**

A. 14 C.F.R. 21 and 14 C.F.R. 91: Airworthiness certificates and Manuals.

14 C.F.R. 21, Subpart H, entitled Airworthiness Certificates, sets forth requirements for procurement of necessary airworthiness certificates in relation to FAR § 91.203(a)(1). The size, weight and enclosed operational area of Sarra Ventures UAS permits exemption from Part 21 because Sarra Venture's UAS meets an equivalent level of safety pursuant to Section 333 of the Reform Act. The FAA is authorized to exempt aircraft from the airworthiness certificate requirement under both the Act (49 U.S.C. § 44701 (f) and Section 333 of the Reform Act. Both pieces of legislation permit the FAA to exempt UASs from the airworthiness certificate requirement in consideration of the weight, size speed, maneuverability and proximity to areas such as airports and dense populations. Sarra Ventures UAS meets or exceeds each of the elements.

14 C.F.R. 91.7(a) prohibits the operation of an aircraft without an airworthiness certificate. As no such certificate will be applicable in the form contemplated by the FARs, this Regulation is inapplicable.

14 C.F.R. § 91.9(b) (2) requires an aircraft flight manual in the aircraft. As there are no pilots or passengers, and given the size of the UASs, this Regulation is inapplicable. An equivalent level of safety will be achieved by maintaining a manual at the flight operations center. The FAA has previously issued exemptions to their regulation in Exemption Nos 8607, 8737, 8738, 9299, 9299A, 9565, 9565B, 10167, 10167A, 10602, 10700 and 32827.

14 C.F.R. § 91.121 regarding altimeter settings is inapplicable insofar as Sarra Ventures utilizes electronic global positioning systems and internal gyroscopes to provide spatial coordination.

14 C.F.R. § 91.203 (a) and (b) provides for the carrying of civil aircraft certifications and registrations. They are inapplicable for the same reasons described above. The equivalent level of safety will be achieved by maintaining such certifications and registrations at Sarra Ventures.

B. 14 C.F.R. § 45.23: Marking of the Aircraft.

Applicable Codes of Federal Regulation require aircraft to be marked according to certain specifications. Sarra Venture's UAS is, by definition, unmanned. It therefore does not have a cabin, cockpit or pilot station on which to mark certain words or phrases. Further, two-inch lettering is difficult to place on such small aircraft. Regardless, Sarra Ventures will mark its UAS in the largest possible lettering by placing the word "EXPERIMENTAL" on its fuselage as required by 14 C.F.R. § 45.29(f) so that the pilot, technician, spotter and others working with the UAS will see the markings. The FAA has previously issued exemptions to this regulation through Exemptions Nos. 8738, 10167, 10167A and 10700.

C. 14 C.F.R. § 61.113: Private Pilot Privileges and Limitations: PIC. Pursuant to 14 C.F.R. §§ 61.113 (a) & (b) private pilots are limited to non-commercial operations. Sarra Ventures can achieve an equivalent level of safety as achieved by current regulations because Sarra Ventures UAS does not carry any pilots or passengers. Furthermore, Sarra Ventures uses the wisdom and advice of a certified FAA Commercial pilot when there are any safety issues in question. The risks attendant to the operation of Sarra Venture UAS is far less than the risk levels inherent in the commercial activities outlined in 14 C.F.R. § 61, et seq. Thus, allowing Sarra Ventures to operate its UAS

with a private pilot as the pilot in control will exceed current safety levels in relation to 14 C.F.R. § 61.113 (a) & (b).

D. 14 C.F.R. 91.119: Minimum Safe Altitudes.

14 C.F.R. § 91.119 prescribes safe altitudes for the operation of civil aircraft. It allows helicopters to be operated at lower altitudes in certain conditions. Sarra Ventures will never operate at an altitude greater than 400 AGL. Given the size, weight, maneuverability and speed of Sarra Ventures UAS, an equivalent level of safety will be achieved.

E. 14 C.F.R. 91.405 (a) (2); 417 (a) & (b): Maintenance Inspections.

The above cited Regulations require, amongst other things, aircraft owners and operators to “have aircraft inspected as prescribed in subpart E of this part and shall between required inspection, except as provided in paragraph © of this section, have discrepancies repaired as prescribed in part 43 of this chapter....”

These Regulations only apply to aircraft with an airworthiness certificate. Therefore, they will not apply to Sarra Ventures should its requested exemption be granted. Sarra Ventures conducts a maintenance program that involves regular software updates and curative measures for any damaged hardware. Therefore, an equivalent level of safety will be achieved.

F. Summary

Sarra Ventures and Linda J Baurer seek an exemption from the following Regulations: 14 C.F.R. 21, subpart H; 14 C.F.R. 45.23(b); 14 C.F.R. §§ 61.113 (a) & (b); 14 C.F.R. § 91.7 (a); 14 C.F.R § 91.9 (b)(2); 14 C.F.R.§ 91.103(b); 14 C.F.R.§ 91.109; 14 C.F.R. § 91.119; 14 C.F.R. § 91.121; C.F.R. § 91.151 (a); 14 C.F.R. §§ 91.203(a) and (b); 14 C.F.R. § 91.405 (a); 14 C.F.R. § 91.407 (a) (1); 14 C.F.R. § 91.409 (a)(2);14 C.F.R. § 91.409 (a)(2);and 14 C.F.R.§§ 91.417 (a) & (b) to commercially operate its lightweight unmanned aircraft in agricultural, educational, promotional, research, and motion picture or photography operations.

Granting Sarra Ventures request for exemption will reduce current risk levels and thereby enhance safety. Currently aerial agricultural and motion picture image filming rely primarily on the use of larger aircraft running combustible fuel. Sarra Venture aircraft does not contain potentially explosive fuel, is smaller, lighter and more maneuverable than conventional aircraft. Sarra Ventures UAS operates at lower altitudes and in controlled airspace. There are no people on board Sarra Venture’s UAS and therefore the likelihood of death or serious bodily injury is significantly limited. Sarra Ventures operation of its UAS, weighing less than 5 pounds and travelling at speeds lower than 50 knots will provide at least an equivalent level of safety as that achieved under current FARs.

Accordingly, Sarra Ventures respectfully requests that the FAA grant its exemption request without delay. The FAA has the authority to issue the exemption sought by Sarra Ventures pursuant to the Federal Aviation Act, 85 P.L. 726(1958), as amended (the “Act”).

In closing, Sarra Ventures would like to state that by granting Sarra Ventures the exemption the FAA would be helping a small business accomplish two important things that would benefit the general public. 1) the potential increase of crop production for farmers... which in turn produces more food for the consumer at lower prices. 2) Entertainment and educational value for all public audiences.

Respectfully submitted,

Linda J Baurer

Owner/Operator

Sarra Ventures

13643 Antioch Rd

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