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

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

September 25, 2015

Exemption No. 13002
Regulatory Docket No. FAA−2015−2814

Mr. Skip Miller
President
UASUSA
229 Airport Road
Longmont, CO 80503

Dear Mr. Miller:

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 June 8, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of UASUSA (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct data gathering for agricultural applications, aerial inspections, mapping, surveying, R&D search and rescue, and product demonstrations.

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 UASs proposed by the petitioner are the DJI Phantom 2, DJI Phantom 3, and the DJI Inspire 1.

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[1]. 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, UASUSA 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

[1] 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, UASUSA 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, DJI Phantom 3, and the DJI Inspire 1 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 5 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 enclosed 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.ntsb.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 September 30, 2017, unless sooner superseded or rescinded.

Sincerely,
/s/
John S. Duncan
Director, Flight Standards Service

Enclosures

UASUSA

229 Airport Rd
Longmont, CO 80503
Phone: (720) 608-1827
E-mail: miller@uasusa.com
URL: http://www.uasusa.com

June 8, 2015

U.S. Department of Transportation
Docket Management System
1200 New Jersey Ave., SE
Washington, DC, 20590

RE: Exemption Request Under Section 333 of the FAA Modernization and Reform Act of 2012 and 14 C.F.R. Part 11

Dear Madam, Sir,

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 and 14 C.F.R. Part 11, UASUSA seeks an exemption from the Federal Aviation Regulations detailed below for the DJI Phantom 2, Phantom 3, and Inspire 1 UAS. The largest of these three systems, the Inspire 1 UAS, has a maximum gross takeoff weight of 6.5 lbs. All of the proposed UAS are multi-rotor aircraft with electric propulsion. These UAS are all commercial platforms from DJI with a proven track record and have been approved for flights in the National Airspace under several different FAA Certificates of Authorization (COA).

The requested exemption would allow UASUSA to pursue commercial interests in aerial data collection using small unmanned aircraft systems. The systems proposed will be used to conduct data gathering for agricultural applications, aerial inspections, mapping, surveying, R&D search and resuce, and product demonstrations. The team at UASUSA will operate in accordance with FAA N 8900.227 and utilize both a Pilot in Command and a ground-based visual observer. UASUSA will also utilize emergency, lost link, and lost communication procedures that are available upon request. All flights under these exemptions will be conducted with the following restrictions:

1. Flights will be in Class G airspace at no more than 400' AGL.
2. The UAS will be operated over private property only with the permission of the owner.
3. The UAS will not be operated over populated areas.
4. The UAS will not be operated within 5 NM of an airport.
5. Operations will be limited to daytime operations under visual meteorological conditions.
6. The aircraft will remain within visual line of sight of the observer at no more than 1/2 NM range.
7. A NOTAM will be issued prior to flight operations.
8. The UAS will have a maximum GTOW of less than 55 lbs.
9. The aircraft will be U.S. registered and display the N-number.
10. The PIC and Observer will possess the certifications required under N 8900.227.

11. No operator or observer will engage in, nor may an operator or observer permit, any activity during a critical phase of flight which could distract any operator or observer from the performance of his/her duties or interfere in any way with the proper conduct of his/her duties.
12. The PIC will conduct a pre-flight inspection prior to each flight so as to ensure that the UAS and associated systems are in a condition for safe operation.
13. The PIC and observers will maintain two-way communications with each other during all operations; if unable to maintain two-way communications, or if any condition occurs that may otherwise cause the operation to be unsafe, the operator will immediately conclude the operation.
14. The aircraft will automatically return to a specific location if the communications link is lost.
15. All flights will be conducted below 70mph.

The regulations from which the exemption is requested are as follows. The Appendix contains details of the UASUSA operations related to showing an equivalent level of safety for these exempt regulations.

- 14 C.F.R. Part 21, Subpart H
- 14 C.F.R. §91.203(a) and (b)
- 14 C.F.R. §45.23(b)
- 14 C.F.R. §61.23(a)
- 14 C.F.R. §61.113(a) and (b)
- 14 C.F.R. §61.133(a)
- 14 C.F.R. §91.7(a)
- 14 C.F.R. §91.9
- 14 C.F.R. §91.109(a)
- 14 C.F.R. §91.119
- 14 C.F.R. §91.121
- 14 C.F.R. §91.151(a)
- 14 C.F.R. Subpart E (§91.401 - §91.417)

UAS Overview

UASUSA is submitting this request for exemption for three different multi-rotor platforms from DJI; the Phantom 2, Phantom 3, and Inspire 1. These commercially available systems from DJI have been shown to be reliable and are popular products utilized by hobbyists and professionals. UASUSA has expertise and knowledge in the operations of these systems. We will utilize training and operational procedures that follow the guidelines presented in N 8900.227.

UASUSA is planning on using the proposed three UAS to pursue further commercial applications. The three UAS are multi-rotor aircraft with electric propulsion. Figure 1 below contains an image of the three UAS and Table 1 contains more detailed information on these systems. UASUSA proposes that the small size and weight of the UAS included in this request for exemption, flown under the guidelines of N 8900.227, will have an equivalent level of safety to manned aircraft performing similar missions.

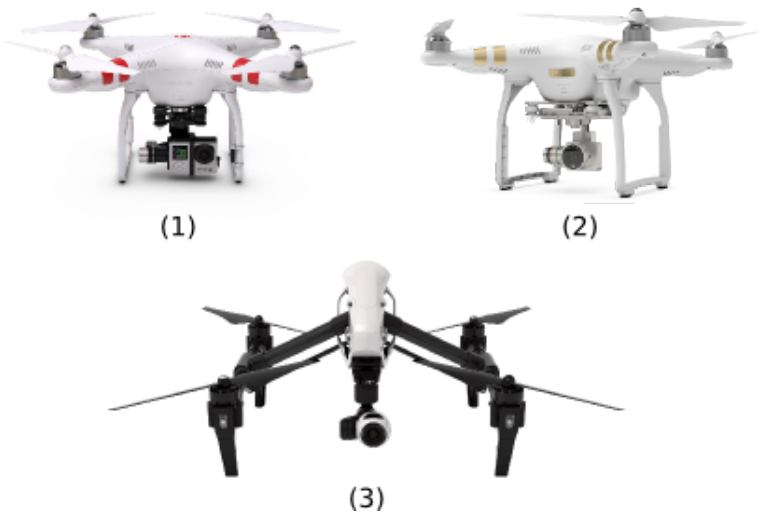

Figure 1: The UAS: (1) The DJI Phantom 2, (2) the DJI Phantom 3, and (3) the DJI Inspire 1

Aircraft	Dimensions	Weight
DJI Phantom 2	14"x14"x7"	2.6 lbs
DJI Phantom 3	14"x14"x7"	2.8 lbs
DJI Inspire 1	17"x18"x12"	6.5 lbs

Table 1: Name, size, and weight of the aircraft.

The name and contact information of the applicant are:

UASUSA
Attn: Skip Miller
Phone: (720) 608-1827
E-mail: miller@uasusa.com

UASUSA requests exemption under Section 333 to enable safe commercial UAS operations for the activities stated. By approving these exemptions the FAA will create benefits to the areas mentioned that is ultimately in the public interest. Please contact us if you require additional information or clarification.

Sincerely,

Skip Miller
President

APPENDIX
Specific Exemption Requests and Equivalent Level of Safety Showings

14 C.F.R. Part 21, Subpart H: Airworthiness Certificates
14 C.F.R. §91.203(a) and (b) - Civil aircraft: Certifications required.
Section 91.203 requires all civil aircraft to have a certificate of airworthiness. Part 21, Subpart H, entitled Airworthiness Certificates, establishes the procedural requirements for the issuance of airworthiness certificates as required by FAR §91.203(a). UASUSA requests an exemption from these rules and will utilize an internal airworthiness process based on MIL-HDBK 516B for an equivalent level of safety.

Such an exemption meets the requirements of an equivalent level of safety under Part 11 and Section 333 of the Reform Act. The Federal Aviation Act and Section 333 of the Reform Act both authorize the FAA to exempt aircraft from the requirement for an airworthiness certificate, upon consideration of the size, weight, speed, operational capability, and proximity to airports and populated areas of the UAS involved.

14 C.F.R. §45.23(b) - Display of marks; general.
These regulations provide that each aircraft must display "N" and the aircraft's registration number in letters at least 3 inches high. Additionally, the aircraft must display the word "EXPERIMENTAL" in letters at least 2 inches high near the entrance to the cabin, cockpit, or pilot station. Given the size of the UAS (fuselage length of 6'), this requirement is impossible to match. The equivalent level of safety will be achieved by having the registered N-number in 1 inch lettering on the side of the fuselage.

14 C.F.R. §61.23(a) - Medical certificates: Requirement and duration.
Regulations provide that a person must hold at least a second class medical certificate when exercising:

- Second-in-command privileges of an airline transport pilot certificate in part 121 of this chapter (other than operations specified in paragraph (a)(1)(ii) of this section); or
- Privileges of a commercial pilot certificate

Given the size of the UAS in this petition and the limited flight area and the safety features integrated in the autopilot UASUSA believes that an Equivalent Level of Safety can be reached if the operator has a valid drivers license.

14 C.F.R. §61.113(a) and (b), §61.133 - Private Pilot Privileges and Limitations: Pilot in Command; Commercial Pilot Privileges and Limitations
Subsections (a) and (b) of §61.113 prohibit private pilots from operating aircraft in commercial operations, and §61.133(a) requires an individual operating an aircraft for compensation or hire to hold a commercial pilot certificate.

UASUSA requests an exemption from 14 C.F.R. §61.113(a) and (b) and 14 C.F.R. §61.133(a) so that above mentioned UAS may be operated by individuals who have a private pilot certificate. Based upon the design features of the UAS, its autopilot system, and safety factors, the FAA should permit operation of UAS by operators with a private pilot certificate when the conditions described above have been satisfied. The above-described conditions are in-line with those set forth in Volume 16, Chapter 4, Section 1 of FAA Order 8900.1.

UASUSA proposes to conduct operations in accordance with these restrictions. Given these conditions and restrictions, an equivalent level of safety to manned operations will be achieved through operation with a private pilot certificate. The risks associated with the operation of the DJI multi-rotor aircraft (given the size, speed, operational capabilities, and lack of combustible fuel) are so much less than the level of risk associated with fixed wing and rotorcraft operations, both private and commercial, as contemplated by Part 61, that allowing operations of these UAS, as set forth above, meets or exceeds the present level of safety provided under 14 C.F.R. §61.113(a) and (b) and §61.133(a).

14 C.F.R. §91.7(a) - Civil aircraft flight manual, marking, and placard requirements
This regulation requires that no person may operate a civil aircraft unless it is in airworthy condition. UASUSA requests that an exemption be granted allowing commercial operation without an airworthiness certificate. Given the size of the aircraft self certification utilizing MIL-HDBK 516B will provide an equivalent level of safety.

14 C.F.R. §91.9(b)- Civil aircraft flight manual, marking, and placard requirements.
This regulation provides that no person may operate an aircraft unless a current, approved flight manual is in the aircraft. UASUSA assumes that the intent of this requirement is to ensure that flight manual information is available to the aircrew while operating the aircraft. UASUSA requests an exemption to this requirement since the aircraft is not only too small to carry documentation, but the documentation would not be available to the crew. The equivalent level of safety will be achieved by keeping a hard copy of the DJI user manual with the ground crew.

14 C.F.R. §91.109(a) - Flight instruction; Simulated instrument flight and certain flight tests
Sections 91.109(a) provides that no person may operate a civil aircraft that is being used for flight instruction unless that aircraft has fully functioning dual controls. The UAS in this exemption are remotely piloted aircraft, and, by design, not equipped with fully functional dual controls. Flight control is accomplished through the use of a control box that communicates with the aircraft via radio communications. Utilizing a pilot skilled in remote piloting will provide an equivalent level of safety.

14 C.F.R. §91.119 - Minimum safe altitudes: General.
The regulation provides that over sparsely populated areas the aircraft cannot be operated closer than 500 feet to any person, vessel, vehicle, or structure. Since the UAS in this exemption will be operating at a maximum of 400 feet AGL, this requirement cannot be followed. To provide an equivalent level of safety UASUSA will only fly over private property with the permission of the land owner. The land owner will be briefed of the expected route of flight and the associated risks to persons and property on the ground. We maintain that due to the small size of the UAS, the hazard to persons, vessels, vehicles, and structures is not comparable to manned aircraft and should be considered in granting the exemption. Furthermore, UASUSA will not operate over congested areas nor over any open air assembly of persons.

14 C.F.R. §91.121 - Altimeter settings.
The regulation states that aircraft shall maintain cruising altitudes by reference to an altimeter setting available within 100 nautical miles of the aircraft. The UAS will fly below 400 feet AGL and will not need to maintain hemispherical cruising altitudes in order to de-conflict with other aircraft. To provide an equivalent level of safety, the autopilot calculates the reference altitude (ground level) with the on-board GPS during the pre-flight tests. The GPS and barometer data are then used to calculate the altitude in-flight.

14 C.F.R. §91.151(a) - Fuel requirements for flight in VFR conditions.
The regulation states that no person may begin a flight in an airplane under day-VFR conditions unless there is enough fuel to fly to the first point of intended landing and to fly after that for at least 30 minutes. As the aircraft in this request are electric-powered, this requirement is inapplicable. An equivalent level of safety is achieved through a low battery power warning. The DJI UAS are designed to automatically return to base and land safely when the power is too low.

14 C.F.R. Subpart E (§91.401 - §91.417) - Maintenance, Preventive Maintenance, and Alterations
The regulation provides that the operator is primarily responsible for maintaining the aircraft in an airworthy condition, including compliance with part 39 and 43. Paragraphs 91.407 and 91.409 require that the aircraft be "approved for return to service by a person authorized under 43.7" after maintenance and inspection. UASUSA plans to have the PIC perform maintenance and inspection of the aircraft and "be authorized to approve the aircraft for return to service." The PIC will ensure that the aircraft is in an airworthy condition prior to flight and conduct detailed inspections after every 10 flight hours. Additionally, checklists will be

utilized with all of the necessary pre-flight procedures prior to every flight operation. The PIC will document work performed in accordance with 91.417. We feel that due to the size, construction, and simplicity of the aircraft, the PIC can ensure an equivalent level of safety.