



Federal Aviation Administration

September 1, 2015

Exemption No. 12689 Regulatory Docket No. FAA-2015-1346

Mr. Charles F. Jacques, Jr. Sky-View Aerial Services LLC 602 Centerton Road Pittsgrove, NJ 08318

Dear Mr. Jacques:

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 letters dated April 16 and July 7, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Sky-View Aerial Services LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial surveying, mapping, inspection, data collection, and public safety support operations.

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 3.

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 collection¹. 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, Sky-View Aerial Services LLC 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 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.

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.

Conditions and Limitations

In this grant of exemption, Sky-View Aerial Services LLC 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 3 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.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

Sky-View Aerial Service LLC Charles F. Jacques Jr., Member

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April 16, 2015

U.S. Department of Transportation (DOT)
Docket Operations, M-30
1200 New Jersey Avenue SE
Room W12-140, West Building, Ground Floor
Washington, DC 20590-0001

Subject: Request for Issuance of Exemption under Title 14 CFR, Seciton 333

To whom it May Concern,

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 and 14 CFR Part 11, Sky-View Aerial Services LLC, and Charles Jacques, it's sole member hereby appies for exemption from certain Federal Aviation Regulations to allow for the commercial operation of small Unmanned Aircraft Systems (sUAS) so long as the proposed operations are conducted within and under the conditions outlined herein or as may be established by the FAA as required in accordance with Section 333.

If granted, it is my intention to engage in the commercial operation of sUAS in order to offer services to multiple industries including but not limited to:

- -Aerial surveying and mapping
- -Cell tower inspections
- -Energy Systems inspections
- -Pipeline inspections
- -Aaerial data collection
- -Residential Real Estate sales presentations
- -Public safety support operations

The requested exemption would permit the operations of sUAS by the applicant under controlled conditions in airspace that is 1) limited, 2) predetermined, 3) controlled as to access, 4) would provide safety and environmental enhancements not possible with larger, manned aircraft, and 5) mitigate the inherent risk associated with the deployment of men and women in climbing and /or rappelling operations as may often times be required.

Additionally, the applicant holds a private pilot certificate and a current 3rd class medical certificate, and has more than 3000 hours of PIC time in both single and multi-engine aircraft, thereby demonstrating an intimate understanding of how manned aircraft safely navigate the National Airspace System.

Finally, the applicant will ensure that all flights will be operated in class G airspace within visual line of sight (VLOS) of the pilot and/or a visual observer (VO) under daytime VFR flight conditions as defined in FAR 91.155. For flights in other than class G airspace, the controlling agency will be notified at least 24 hours in advance, and, if required, any necessary permission will be obtained. The sUAS will be limited to a maximum altitude of 400 feet AGL or 100 feet above an elevated launch site. The applicant will keep the sUAS clear of and yield the right of way to all manned operations and activities at all times (including but not limited to ultra light crafts, skydiving activities, parasailing activities, hang gliders, and hot air balloons.

Name and address of the applicant:

Sky-View Aerial Services LLC Charles F. Jacques Jr., member 602 Centerton Road Pittsgrove, NJ 08318

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Regulations from which this exemption is requested:

- -14 CFR Part 21 Subpart H
- -14 CFR Section 45.23(b)
- -14 CFR Section 61.113(a) and (b)
- -14 CFR Section 91.7(a)
- -14 CFR Section 91.9(b)(2)
- -14 CFR Section 91.103
- -14 CFR Section 91.109
- -14 CFR Section 91.119
- -14 CFR Section 91.121
- -14 CFR Section 91.151(a)
- -14 CFR Section 91.405(a)
- -14 CFR Section 91.407(a)(1)
- -14 CFR Section 91.409(a)(1) and (2)
- -14 CFR Section 91.417(a) and (b)

Description of proposed sUAS

The applicant proposed to utilize the Phantom 3 as manufactured by DJI. The rotorcraft weighs 2.9 pounds including the payload that consists of a Sony camera sensor. It is operated from the ground utilizing a remote controller operating at a frequency of 2.400Ghz-2.483Ghz. The maximum airspeed is 31 kts. It has a maximum ascent speed of 985 ft. per minute and a maximum descent speed of 590 ft. per minute. The Phantom has the ability to hover, and move in the vertical and horizontal plane simultaneously. It is equipped with integral GPS and

one touch auto-return home technology. It is also equipped with an intelligent battery which will provide approximately 23 minutes of flight time, and will cause the unit to return to the takeoff point upon detection of low battery power or the loss of connection with the remote control unit. Please see the manufacturer's specifications attached in Appendix "A".

Safety

The following operating procedures will apply during the sUAS and operations under this exemption request:

- 1. Any and all required permissions and permits will be obtained from appropriate state, county, or city jurisdictions, including local law enforcement, fire, or other appropriate governmental agency.
- 2. Approval will be obtained from relevant property owners prior to an operation.
- 3. The sUAS to be deployed by the applicant is the Phantom 3 by DJI, which has an operational weight of 2.9 pounds. See the complete specifications attached herewith.
- 4. The sUAS pilot in command (PIC) will be trained in advance for the safe operation of the sUAS to be operated. This will include operation of the sUAS in both normal and failsafe modes of operation, and will include familiarization with the operation manual as published by the manufacturer attached as Appendix "C"
- 5. All operations will be conducted:
 - i. within visual line of sight of the PIC
 - ii. utilizing a visual observer (VO) if the sUAS will be flown beyond the line of site of the PIC
 - iii. at less than 400 feet AGL or 100 feet above an elevated launch area
 - iv. within class G airspace unless permission is received at least 24 hrs. in advance of the planned flight.
 - v. under daytime VFR conditions as defined by FAR 91.155.
 - vi. at least 5 miles from any airport, heliport, or seaplane base.
- 6. If a VO is required, two-way communications between the PIC and the VO must be maintained for the duration of the flight.
- 7. The flight area of the sUAS will be observed for best takeoff and landing locations. Desired conditions include flat and level surfaces clear of debris, at least 15' from power lines and structures, and a minimum of 12' from PIC and VO.
- 8. The sUAS will be equipped with safety bumpers, sold by the manufacturer, installed around the propellers to protect the propellers, structures, and persons from damage and injury.

- 9. All batteries will be fully charged before each flight and each flight will be terminated when the battery has 20% power level remaining.
- 10. A visual safety inspection will be conducted before each flight to ensure the airworthiness of the sUAS in accordance with the manufacturer's operating instructions and the open pilot preflight checklist (see appendix "B"). This will include checking the propeller tightness, the security of the bumper guards, and remote controls.
- 11. A preflight briefing will be issued by the PIC to all personnel included in the operation prior to launch. All personnel who will be performing duties for the operation will be present for the briefing.
- 12. If appropriate, for the operation, the sUAS will utilize GPS navigation, failsafe, and return-to-home (RTH) and/or flight abort safety features.

Relief requested

Part 21, Certification Procedures for Products and Parts, prescribes, in pertinent part, the procedural requirements for issuing and changing design approvals, production approvals, airworthiness certificates, and airworthiness approvals.

The applicant requests an exemption from 14 CFR Part 21, Subpart H and the requirement for an airworthiness certificate in general

Section 45.23(b) prescribes, in pertinent part, that when marks include only the Roman capital letter "N" and the registration number is displayed on limited, restricted, or light-sport category aircraft or experimental or provisionally certificated aircraft, the operator must also display on that aircraft near each entrance to the cabin, cockpit, or pilot station, in letters not less than 2 inches nor more than 6 inches high, the words "limited," "restricted," "light-sport," "experimental," or "provisional," as applicable.

Due to the small size of the sUAS, the applicant requests an exception from 14 CFR 45.23(b) that would allow the sUAS to display the registration number in letters and numbers as large as practical on it's fuselage.

Section 61.113(a) and (b) prescribes that—

- (a) No person who holds a private pilot certificate may act as a pilot in command (PIC) of an aircraft that is carrying passengers or property for compensation or hire; nor may that person, for compensation or hire, act as PIC of an aircraft.
- (b) A private pilot may, for compensation or hire, act as PIC of an aircraft in connection with any business or employment if—

- (1) The flight is only incidental to that business or employment; and
- (2) The aircraft does not carry passengers or property for compensation or hire.

Because the sUAS is incapable of carrying a pilot or passengers, and due to the controlled area of operation, the applicant seeks an exemption from this regulation. The applicant is the holder of a private pilot certificate. We believe that the private pilot certification coupled with appropriate training as outlined in the flight training manual for this sUAS (attached in Appendix "C") exceeds the level of safety provided by a single pilot holding a commercial pilot's certificate operating in a conventional aircraft.

Section 91.7(a) prescribes that no person may operate a civil aircraft unless it is in an airworthy condition.

Given that if this exemption is granted, there will be no airworthiness certificate, and no standard exists for an aircraft of this type. We propose to utilize the manufacturer's operating and maintenance manual in conjunction with the open pilot preflight checklist attached herewith as exhibit "B" to assess the airworthiness of the sUAS.

Section 91.9(b)(2) prescribes, in pertinent part, that no person may operate a U.S.-registered civil aircraft unless there is available in the aircraft a current approved Airplane or Rotorcraft Flight Manual, approved manual material, markings, and placards, or any combination thereof.

Due to the size and configuration of the sUAS, there is no room or capacity to carry such an item on the aircraft. We propose maintaining and equivalent level of safety by keeping the manual at the ground control point where the pilot flying the sUAS will have immediate access to it.

Section 91.103 prescribes that each PIC shall, before beginning a flight, become familiar with all available information concerning that flight, to include—

- (a) For a flight under instrument flight rules (IFR) or a flight not in the vicinity of an airport, weather reports and forecasts, fuel requirements, alternatives available if the planned flight cannot be completed, and any known traffic delays of which the PIC has been advised by air traffic control (ATC);
- (b) For any flight, runway lengths at airports of intended use, and the following takeoff and landing distance information:
 - (1) For civil aircraft for which an approved Airplane or Rotorcraft Flight Manual containing takeoff and landing distance data is required, the takeoff and landing distance data contained therein; and

(2) For civil aircraft other than those specified in paragraph (b)(1) of this section, other reliable information appropriate to the aircraft, relating to aircraft performance under expected values of airport elevation and runway slope, aircraft gross weight, and wind and temperature.

We request an exemption from 14 CFR 91.103 as FAA approved flight manuals will not be used. In the absence of the flight manuals, the PIC will take all pre-flight actions including but not limited to reviewing weather, flight battery requirements, launch and landing area assessments, and aircraft performance data before commencing a flight.

Section 91.109 prescribes, in pertinent part, that no person may operate a civil aircraft (except a manned free balloon) that is being used for flight instruction unless that aircraft has fully functioning dual controls.

We request an exemption from 14 CFR 91.109 as evidence is inconclusive that a person with a private pilot certificate can successfully maneuver or trains someone in the safe operation and maneuvering of a sUAS without first hand flight experience with the particular sUAS. Therefore the training we will offer will provide an equivalent level of safety.

Section 91.119 prescribes that, except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

- (a) Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
- (b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open-air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
- (c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.
- (d) Helicopters, powered parachutes, and weight-shift-control aircraft. If the operation is conducted without hazard to persons or property on the surface—
 - (1) A helicopter may be operated at less than the minimums prescribed in paragraph (b) or paragraph (c) of this section, provided each person operating the helicopter complies with any routes or altitudes specifically prescribed for helicopters by the FAA; and
 - (2) A powered parachute or weight-shift-control aircraft may be operated at less than the minimums prescribed in paragraph (c) of this section.

We request an exeption from 14 CFR 91.119 as we believe an equivalent level of safety will be achieved given the size, weight, and speed of the sUAS. No flights will be taken without proper notices given, and permission being received from the property owners, therefore adequate notice will be provided for any individuals that may be affected by the operation. Additionally, since there is no flammable fuel load, any potential risk associated with these operations is far less than those presently presented utilizing conventional aircraft operating below 500 ft. AGL. Finally, the low-altitude restriction of the sUAS operations will ensure separation between the sUAS and conventional aircraft that must comply with this section.

Section 91.121 prescribes, in pertinent part, that each person operating an aircraft shall maintain the cruising altitude by reference to an altimeter that is set when operating below 18,000 feet mean sea level (MSL) to the elevation of the departure airport or an appropriate altimeter setting available before departure.

We request an exemption from 14 CFR 91.121 as the sUAS is not equipped with a barometric altimeter, but instead outputs GPS altitude data. An equivalent level of safety will be achieved by the PIC verifying the altitude at the launch site prior to and during the flight.

Section 91.151(a) prescribes that no person may begin a flight in an airplane under visual flight rules (VFR) conditions unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed—

- (1) During the day, to fly after that for at least 30 minutes; or
- (2) At night, to fly after that for at least 45 minutes.

We seek an exemption from 14 CFR 151 as we believe we can achieve an equivalent level of safety by requiring an operation to be terminated when the indicated battery power reaches 20%. This would provide more than sufficient time for the sUAS to return to it's planned landing zone from anywhere in the limited VSOL operating area.

Section 91.203(a) prescribes, in pertinent part, that no person may operate a civil aircraft unless it has within it—

- (1) An appropriate and current airworthiness certificate; and
- (3) An effective U.S. registration certificate issued to its owner or, for operation within the United States, the second copy of the Aircraft Registration Application as provided for in § 47.31(c).

Section 91.203(b) prescribes, in pertinent part, that no person may operate a civil aircraft unless the airworthiness certificate or a special flight authorization issued under § 91.715 is displayed at the cabin or cockpit entrance so that it is legible to passengers or crew.

We request an exemption from 14 CFR 203(a) and (b). Since the UAS weighs less than 3 pounds carries no pilot or crew, and has no cockpit or cabin. We propose to keep these documents at the ground control point where the PIC will have immediate access to them, to the extent the are applicable to the sUAS.

Section 91.405(a) prescribes, in pertinent part, that each owner of an aircraft shall have that aircraft inspected as prescribed in subpart E of this part and shall, between required

inspections, except as provided in paragraph (c) of this section, have discrepancies repaired as prescribed in part 43, Maintenance, Preventive Maintenance, Rebuilding, and Alteration.

Section 91.407(a)(1) prescribes that no person may operate any aircraft that has undergone maintenance, preventive maintenance, rebuilding, or alteration unless it has been approved for return to service by a person authorized under § 43.7 of this chapter.

Section 91.409(a)(2) prescribes, in pertinent part, that no person may operate an aircraft unless, within the preceding 12 calendar months, it has had an inspection for the issuance of an airworthiness certificate in accordance with part 21.

Section 91.417(a) and (b) prescribe, in pertinent part, that—

- (a) Each registered owner or operator shall keep the following records for the periods specified in paragraph (b) of this section:
 - (1) Records of the maintenance, preventive maintenance, and alteration and records of the 100-hour, annual, progressive, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine, propeller, rotor, and appliance of an aircraft.

The records must include—

- (i) A description (or reference to data acceptable to the Administrator) of the work performed; and
- (ii) The date of completion of the work performed; and
- (iii) The signature and certificate number of the person approving the aircraft for return to service.
- (2) Records containing the following information:

- (i) The total time in service of the airframe, each engine, each propeller, and each rotor.
- (ii) The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance.
- (iii) The time since last overhaul of all items installed on the aircraft that are required to be overhauled on a specified time basis.
- (iv) The current inspection status of the aircraft, including the time since last inspection required by the inspection program under which the aircraft and its appliances are maintained.
- (v) The current status of applicable airworthiness directives (AD) and safety directives including, for each, the method of compliance, the AD or safety directive number and revision date. If the AD or safety directive involves recurring action, the time and date when the next action is required.
- (vi) Copies of the forms prescribed by §43.9(d) for each major alteration to the airframe and currently installed engines, rotors, propellers, and appliances.
- (b) The owner or operator shall retain the following records for the periods prescribed:
 - (1) The records specified in paragraph (a)(1) of this section shall be retained until the work is repeated or superseded by other work or for 1 year after the work is performed.
 - (2) The records specified in paragraph (a)(2) of this section shall be retained and transferred at the time the aircraft is sold.
 - (3) A list of defects furnished to a registered owner or operator under § 43.11 of this chapter shall be retained until the defects are repaired and the aircraft is approved for return to service.

We request an exemption from 14 CFR 91.405(a), 91.407(a)(1), 91.409(A)(2), and 91.417(a) and (b) as we believe these sections apply only to aircraft with an airworthiness certificate. The applicant will meet all maintenance requirements as prescribed by the manufacturer in accordance with the operating manual. This will provide an equivalent level of safety given the small size of the sUAS, the proximity to the PIC during flight, the short duration of flights and the low altitude.

In the event of a mechanical issue, the sUAS can land immediately. The PIC will ensure the sUAS is in proper working order prior to initiating flight, perform all required maintenance, and keep a log of any maintenance performed.

Attachments:

- -Appendix "A" DJI Phantom 3 Series Specifications
- -Appendix "B" Open Pilot Preflight Checklist
- -Appendix "C" DJI Phantom Pilot Training Guide

Sky-View Aerial Services LLC Charles F. Jacques Jr., Member

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July 7, 2015

Ms. Brenda Robeson Program Analyst, Aircraft and Airport Rules Division Federal Aviation Administration 800 Independence Ave, SW Washington, D. C. 20591

Subject: Sky-View Aerial Services, LLC Public Docket No. FAA-2015-1346 Supplemental Information

Dear Ms. Robeson,

In response to your letter dated July 1, 2015, I respectfully submit the additional information you've requested in order to comply with the requirements of 14 CFR §11.81. In your letter, you requested that I specifically address the following:

- -The reasons why granting the request would be in the public interest; that is, how it would benefit the public as a whole.
- -Any additional information, views, or arguments available to support your request.

I trust you will find these attachments sufficient to reconsider my petition.

Respectfully submitted;

Charles Jacques Jr.

Sky-View Aerial Services LLC

Public Interest:

Given the small size of the UA involved and the limited environment within which it will operate, its proposed operation "falls squarely within that zone of safety (an equivalent level of safety) in which Congress envisioned that the FAA must, by exemption, allow commercial operations of UAS to commence immediately." Also because of the size of the UA and the restricted areas in which the sUAS will operate, the petitioner asserts approval of the application presents no national security issue. Additionally, the ability to conduct the types of missions outlined in the Sky-View petition by a craft significantly smaller that a manned aircraft and carrying no passengers, crew or flammable fuel significantly enhances safety to the general public as well as those involved with the mission.

Granting the requested exemptions is in the public interest because of (1) the clear direction in section 333 of Public Law 112–95, (2) the strong equivalent level of safety surrounding the proposed operations, and (3) the significant public benefit, including enhanced safety and reduction in environmental impacts (such as reduced emissions associated with allowing sUAS for photography and inspection operations).

Additional consideration:

The FAA has set precedence in granting petitions to other entities that propose to engage in the same or similar types of activities under essentially the same operating parameters. Below is a list of exemptions granted which we believe engage in operations similar to those we propose.

- -11062 Astraeus Aerial
- -11109 Clayco Inc.
- -11112 VDOS Global
- -11213 Aeryon Labs, Inc.
- -11969 HighGround Images, LLC
- -11941 soaring Sky, LLC
- -11940 Aerial Associates Photography, Inc.
- -11947 Daniel C. Augspurger