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

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

September 17, 2015

Exemption No. 12885
Regulatory Docket No. FAA−2015−2710

Mr. William Wheeless
1738 East Perkinsville Road
Chino Valley, AZ 86323

Dear Mr. Wheeless:

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 4, 2015, you petitioned the Federal Aviation Administration (FAA) for an exemption. You requested to operate an unmanned aircraft system (UAS) to conduct aerial photography and videography for real estate, surveying, mapping, and infrastructure inspections.

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 are the DJI Phantom 3, DJI S900, and DJI S1000.

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 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, Mr. William Wheeless 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.

Conditions and Limitations

In this grant of exemption, Mr. William Wheeless is hereafter referred to as the operator.

[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.

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, DJI S900, and DJI S1000 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

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

June 4, 2015

Petitioner:
William Jared Wheeless
1738 E. Perkinsville Rd.
Chino Valley, AZ 86323

SUMMARY

I, William Jared Wheeless, (the petitioner) am seeking exemption under Section 333 of the FAA Modernization and Reform Act of 2012 from the requirements of 14 CFR §§ 61.113(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) in order to commercially operate the DJI Phantom 3, DJI S900 and DJI S1000 small Unmanned Aircraft Systems (sUAS) for the purpose of aerial photography and videography in support of real estate services, surveying and mapping operations, as well as inspections of towers and structures.

OPERATOR, EQUIPMENT AND PROCEDURES

The petitioner holds a private pilot rotorcraft-helicopter certificate with instrument helicopter rating and is expecting to have a commercial pilot rotorcraft-helicopter certificate in the next four months. The petitioner also holds an airframe and powerplant mechanic certificate. For commercial sUAS operations, the petitioner will utilize three different sUAS from the manufacturer DJI, including the Phantom 3, S900 and S1000. All three sUAS are under 25 pounds including payload and share similar flight and safety characteristics. All three have safety parameters built in for a communication failure with the Pilot In Command (PIC) or a low battery condition. Both situations result in a return to the designated takeoff location to prevent any fly-aways or accidents resulting from depleted batteries. All three sUAS are equipped with systems that send telemetry data including height Above Ground Level (AGL), airspeed and distance from takeoff location to the PIC. The PIC can also monitor battery level and GPS signal strength which further increases situational awareness. For commercial operations, a Visual Observer will be utilized to increase safety. Also, all operations will be conducted during daytime Visual Flight Rules (VFR) conditions and within visual line of sight (VLOS) of the PIC. The petitioner is also developing pre-flight, in-flight and post-flight procedures for each different sUAS to further enhance safety and standards. Flight time on each sUAS will be logged appropriately and maintenance procedures will be followed using all available resources including the user manuals provided by DJI. These manuals will be attached to this request for exemption.

SPECIFIC EXEMPTIONS AND EXTENT OF RELIEF SOUGHT:

§ 61.113(a) PRIVATE PILOT PRIVILEGES AND LIMITATIONS: PILOT IN COMMAND

(a) Except as provided in paragraphs (b) through (h) of this section, no person who holds a private pilot certificate may act as pilot in command of an aircraft that is carrying passengers or property for compensation or hire; nor may that person, for compensation or hire, act as pilot in command of an aircraft.

EXTENT OF RELIEF SOUGHT: To the extent necessary to permit the holder of a private pilot certificate with at least a current third-class medical certificate to conduct the proposed flight operations for compensation or hire.

§ 91.7(a) CIVIL AIRCRAFT AIRWORTHINESS

(a) No person may operate a civil aircraft unless it is in an airworthy condition.

EXTENT OF RELIEF SOUGHT: To the extent that the petitioner's sUAS are not eligible for an airworthiness certificate under 14 C.F.R. 21 and therefore cannot be airworthy in the context of the regulation.

§ 91.119 MINIMUM SAFE ALTITUDES: GENERAL

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 (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.

EXTENT OF RELIEF SOUGHT: To the extent necessary for the petitioner to conduct commercial operations at or below 400 feet AGL over other than congested areas. Due to the sUAS unique capabilities and small size, emergency landings conducted at or below 400 feet AGL will pose minimal hazards to persons or property on the surface.

§ 91.121(a) ALTIMETER SETTINGS

(a) Each person operating an aircraft shall maintain the cruising altitude or flight level of that aircraft, as the case may be, by reference to an altimeter that is set, when operating—

(1) Below 18,000 feet MSL, to—

(i) The current reported altimeter setting of a station along the route and within 100 nautical miles of the aircraft;

(ii) If there is no station within the area prescribed in paragraph (a)(1)(i) of this section, the current reported altimeter setting of an appropriate available station; or

(iii) In the case of an aircraft not equipped with a radio, the elevation of the departure airport or an appropriate altimeter setting available before departure; or

(2) At or above 18,000 feet MSL, to 29.92″ Hg.

EXTENT OF RELIEF SOUGHT: To the extent that the petitioner's sUAS do not utilize a conventional pressure altimeter and instead use a barometric sensor and GPS to compute altitude.

§ 91.151 FUEL REQUIREMENTS FOR FLIGHT IN VFR CONDITIONS

(a) No person may begin a flight in an airplane under 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.

(b) No person may begin a flight in a rotorcraft under 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, to fly after that for at least 20 minutes.

EXTENT OF RELIEF SOUGHT: To the extent that the petitioner's sUAS are unable to comply with the VFR fuel requirements for airplanes or helicopters. Wind and weather conditions will be considered before each flight and no flight will begin unless there is enough power available 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.

§ 91.405(a) MAINTENANCE REQUIRED

Each owner or operator of an aircraft—

(a) 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 of this chapter;

EXTENT OF RELIEF SOUGHT: To the extent that the petitioner's sUAS have not been issued Airworthiness Certificates. The petitioner will use trained technicians to perform maintenance, alterations and preventive maintenance on the sUAS using the methods, techniques, and practices prescribed in the UAS operating documents including the DJI Phantom 3, S900 and S1000 Instruction Manuals and the A2 Flight Controller Quick Start Guide. Furthermore, the petitioner will document and maintain all maintenance records for the sUAS.

§ 91.407(a)(1) OPERATION AFTER MAINTENANCE, PREVENTATIVE MAINTANCE, REBUILDING, OR ALTERATION

(a) No person may operate any aircraft that has undergone maintenance, preventive maintenance, rebuilding, or alteration unless—

(1) It has been approved for return to service by a person authorized under §43.7 of this chapter; and

EXTENT OF RELIEF SOUGHT: To the extent that the petitioner's sUAS have not been issued Airworthiness Certificates. The petitioner will use trained technicians to perform

maintenance, alterations and preventive maintenance on the sUAS using the methods, techniques, and practices prescribed in the UAS operating documents including the DJI Phantom 3, S900 and S1000 Instruction Manuals and the A2 Flight Controller Quick Start Guide. Furthermore, the petitioner will document and maintain all maintenance records for the sUAS.

§ 91.409(a)(1) and (2) INSPECTIONS

(a) Except as provided in paragraph (c) of this section, no person may operate an aircraft unless, within the preceding 12 calendar months, it has had—

(1) An annual inspection in accordance with part 43 of this chapter and has been approved for return to service by a person authorized by §43.7 of this chapter; or

(2) An inspection for the issuance of an airworthiness certificate in accordance with part 21 of this chapter.

EXTENT OF RELIEF SOUGHT: To the extent that the petitioner's sUAS have not been issued Airworthiness Certificates. The petitioner will use trained technicians to perform maintenance, alterations and preventive maintenance on the sUAS using the methods, techniques, and practices prescribed in the UAS operating documents including the DJI Phantom 3, S900 and S1000 Instruction Manuals and the A2 Flight Controller Quick Start Guide. Furthermore, the petitioner will document and maintain all maintenance records for the sUAS.

§ 91.417(a) and (b) MAINTENANCE RECORDS

(a) Except for work performed in accordance with §§91.411 and 91.413, 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 which are required to be overhauled on a specified time basis.

(iv) The current inspection status of the aircraft, including the time since the 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) of this chapter 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 with the aircraft 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.

EXTENT OF RELIEF SOUGHT: To the extent that the petitioner's sUAS have not been issued Airworthiness Certificates. The petitioner will use trained technicians to perform maintenance, alterations and preventive maintenance on the sUAS using the methods, techniques, and practices prescribed in the UAS operating documents including the DJI Phantom 3, S900 and S1000 Instruction Manuals and the A2 Flight Controller Quick Start Guide. Furthermore, the petitioner will document and maintain all maintenance records for the sUAS.

GRANTING THIS EXEMPTION IS IN THE PUBLIC'S INTEREST

There are numerous reasons why granting this exemption will benefit the public as a whole. First and foremost, UAS operations will benefit the economy by creating jobs and reducing costs for customers that, up until now, have had to rely on manned aircraft for the same operations. UAS operational costs are much lower than manned aircraft and those savings will benefit our nation's economy on many different levels. Jobs will be created in manufacturing, Research and Development, logistics, education, operations and maintenance, just to name a few. Using UAS in lieu of manned aircraft will enhance safety and reduce environmental impact as well. Without a crew onboard like a traditional aircraft, UAS can take over some of the dangerous operations that manned aircraft once held, such as powerline inspections or work in confined areas. Also, UAS are much less dangerous to persons on the ground if a catastrophe does happen. They are much smaller and lighter and most do not carry flammable fuel onboard. Aerial surveying and inspections can increase work site efficiency, improve volumetric estimations and reduce risks. A visual observer will be utilized for all operations to ensure the petitioner's sUAS do not interfere with any manned aircraft operations or pose a hazard to non-participating persons. Liability insurance will be obtained commensurate with the granting of this request for exemption.

GRANTING THIS EXEMPTION WILL NOT ADVERSELY AFFECT PUBLIC SAFETY

The petitioner firmly believes not only will this exemption not adversely affect public safety, but integrating UAS into the National Airspace System will actually enhance public safety. Operations that utilize traditional manned aircraft put the public at risk of a much larger vehicle

travelling at a much higher rate of speed. Also, traditional aircraft have the ability to carry many gallons of flammable fuel that makes an accident that much more dangerous. Furthermore, many of those manned operations contribute to congestion in the NAS resulting in an increased risk of collision with other aircraft. Because the petitioner's sUAS will be operated away from the airport environment, where the highest risk of collision occurs, using this aircraft in place of a manned aircraft enhances safety.

FEDERAL REGISTRY SUMMARY

William Jared Wheeless seeks exemption from the requirements of 14 CFR §§ 61.113(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).

This exemption will permit William Jared Wheeless to commercially operate small Unmanned Aircraft Systems (sUAS) for the purpose of aerial photography and videography in support of real estate services, surveying and mapping operations, as well as inspections of towers and structures.

ADDITIONAL INFORMATION

The A2 Flight Controller user manual is attached to this exemption request for reference purposes. Because of the file size limitations, the user manuals could not be attached to this exemption request. They can be found at the web addresses below.

The user manual for the DJI Phantom 3 can be found at http://download.dji-innovations.com/downloads/phantom_3/en/Phantom_3_Professional_User_Manual_v1.2_en.pdf

The user manual for the DJI S900 can be found at http://download.dji-innovations.com/downloads/s900/en/S900_User_Manual_v1.2_en.pdf

The user manual for the DJI S1000 can be found at http://download.dji-innovations.com/downloads/s1000/en/S1000_User_Manual_v1.10_en.pdf

Respectfully,

William Jared Wheeless