



U.S. Department
of Transportation

**Federal Aviation
Administration**

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

July 8, 2015

Exemption No. 11992
Regulatory Docket No. FAA-2015-1490

Mr. Anthony S Thurman
Ms. Stephanie J Thurman
Aerial Check UAVs
P.O. Box 1813
Waller, TX 77484

Dear Mr. Thurman and Ms. Thurman:

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

By letter dated April 14, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Aerial Check UAVs (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial digital imagery, survey, and inspection.

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 2 Vision + and DJI Spreading Wings 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 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, Aerial Check UAVs 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, Aerial Check UAVs is hereafter referred to as the operator.

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

1. Operations authorized by this grant of exemption are limited to the DJI Phantom 2 Vision + and DJI Spreading Wings 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.

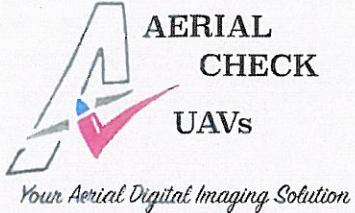
This exemption terminates on July 31, 2017, unless sooner superseded or rescinded.

Sincerely,

/s/

John S. Duncan
Director, Flight Standards Service

Enclosures



April 14, 2015

Docket Management Facility
U.S. Department of Transportation
Docket Management System
1200 New Jersey Ave S.E.
Washington D.C. 20590

RE: Exemption Request, Section 333 of the FAA Reform Act of the Federal Aviation Regulations from 14 C.F.R.

Dear Sir or Madam:

Pursuant to the FAA Modernization and Reform Act of 2012 and the procedures contained within 14 C.F.R. Part II, Thurman & Thurman, LLC (dba Aerial Check UAVs) is writing to request that we, Anthony S. Thurman and Stephanie J. Thurman, as owners and operators of small unmanned aircrafts (UAS) equipped to conduct aerial digital imagery, respectfully request to be granted exemption as listed below.

This exemption will permit Aerial Check UAVs to operate an Unmanned Aircraft System (UAS) for the commercial purpose of conducting aerial inspections and surveys as well as post-disaster aerial support. Inspections would include property, land survey and other high structures that currently require fall protection gear (i.e. Cellular/RF towers and roofs). Additionally, we shall operate in areas of agriculture and search and rescues and will provide digital imaging services for the purpose of developing marketing materials. The details of the operation as well as all pertinent information are contained within this document or provided within the attachments.

14 C.F.R 11.81 (a) – Name and address of the Petitioner:

The name and address of the applicants are:

Anthony S Thurman
Stephanie J Thurman
PO Box 1813
Waller, TX 77484
Phone: (832) 928-9594
Email: stephanie.thurman@outlook.com

14 C.F.R (b) – Exemptions Requested:

Regulations from which the exemption is requested include:

Private Pilot Privileges	14 C.F.R § 61.113 (a)
Aircraft Airworthiness	14 C.F.R § 91.7 (a)
Preflight Action	14. C.F.R. §91.103 (b)
Minimum Safe Altitudes	14. C.F.R § 91.119 (c)
Altimeter Settings	14. C.F.R § 91.121
Fuel Requirements	14 C.F.R.§ 91.151 (a)
Maintenance Required	14 C.F.R § 91.405 (a)
Operation after Maintenance	14 C.F.R § 91.407 (a) (1)
Inspections	14 C.F.R § 91.409 (a) (1) & (2)
Maintenance Records	14 C.F.R. § 91.417 (a) & (b)

Private Pilot Privileges – 14 C.F.R. § 61.113 (a) – Because a UAS does not carry a pilot or passengers, the proposed operations can achieve the equivalent level of safety of current operations by requiring the PIC operating the aircraft to have a private pilot's license rather than a commercial pilot's license to operate small UAS. Unlike a conventional manned aircraft, a UAS is remotely controlled by a ground-based operator. The operational area is controlled and restricted and all flights are planned and coordinated in advance. The level of safety exceeds that provided by a piloted helicopter or aircraft. The risks associated with the operations contemplated by Part 61 allowing UAS use by a private pilot as the PIC exceed the present level of safety sought by 14 C.F.R. §61.113 (a) and (b)

Aircraft Airworthiness 14 C.F.R § 91.7 (a) – states that no person may operate a civil aircraft unless it is in airworthy condition. Currently, no Administration regulatory standard exists for determining the airworthiness of a UAS. Therefore, if the exemption is granted, Aerial Check UAVs will follow and maintain the UASs as indicated by the manufacturer and conduct all safety checks recommended prior to each flight.

Preflight Action 14. C.F.R. §91.103 (b) – states that a pilot in command (PIC) become familiar with specific information before each flight, including information contained in the Administration approved Flight Manual on board the aircraft. As no such manual currently exists, Aerial Check UAVs requests an exemption from this requirement. If the exemption is granted, the PIC will take all actions including review of the flight requirements, landing and takeoff distances, weather prior to the commencement of the flight.

Minimum Safe Altitudes 14. C.F.R § 91.119 (c) establishes safe altitudes for operation of civil aircraft. As set forth herein, the UAS would never operate above 400AGL, except under very limited and restricted circumstances as referenced by the User Manual. Further, the low-altitude operations of an UAS will ensure separation between these small UAS operation and the operations of conventional aircraft that must company with Section 91.119.

Altimeter Settings 14. C.F.R § 91.121 - This regulation requires each person operating an aircraft to maintain a cruising altitude by reference to an altimeter that is “set to the elevation of the departure airport or an appropriate altimeter setting available before departure”. As the UAS may have a barometric altimeter, this device is calibrated via onboard electronic calibration and cannot be set or reset by the PIC, an exemption is requested. An equivalent of safety will be achieved by the operation, pursuant to the Manual and Safety Check list, confirming the altitude of the launch site as shown on the onscreen display altitude indicator before flight.

Fuel Requirements 14 C.F.R. § 91.151 (a) - outlines fuel requirements for beginning a flight in VFR conditions. The battery powering the UAS provides approximately 30 minutes of powered flight. To meet the 30 minute reserve requirement, UAS flights would be limited to approximately 5 minutes. Given the limitations on the UASs proposed flight area and the location of its proposed operations within a predetermined area, a longer time frame for flight in daylight or night VHR conditions is reasonable.

Operating the small UAS, in a controlled area, where only people and property owners or official representatives who have signed waivers will be allowed, with less than 30 minutes of reserve fuel, does not engender the type of risks that Section 91.151(a) was intended to alleviate give the size and speed of the small UAS. Additionally, limiting UASs flights to 10 minutes would greatly reduce the utility for which the exemption will be granted. Aerial Check UAVs submits that safety will not be affected by terminating flights of the battery powered S1000 and Phantom 2 UASs after 15 to 20 minutes of continuous flight, which allows for five minutes of battery power remaining. Standard flights operated by Aerial Check UAVs would last between 10 and 20 minutes.

Maintenance Required 14 C.F.R § 91.405 (a)**Operation after Maintenance 14 C.F.R § 91.407 (a) (1)****Inspections 14 C.F.R § 91.409 (a) (1) & (2)****Maintenance Records 14 C.F.R. § 91.417 (a) & (b)**

Since Sections 91.405(a), 91.407(a)(1), 91.40(a) (1) & (2) and 1.417 (a) & (b) only apply to aircraft with an airworthiness certificate, we respectfully request exemption from these Sections because the S1000 and Phantom 2 do not require airworthiness certificates.

Should the exemption be granted, Aerial Check UAVs will use approved operators to perform maintenance, alterations, or preventive maintenance on the UAS using the methods, techniques, and practices as prescribed in the DJI users/maintenance manual. A maintenance manual for each UAS will record all maintenance performed on each UAS and a pre-flight check list will be following prior to the inception of each flight.

14 C.F.R (c) – The extent of relief petitioner seeks, and the reasons petitioner seeks the relief:

Aerial Check UAVs seeks relief pursuant to this exemption from the identified sections of the Federal Aviation Regulations to the extent necessary to perform commercial flight operations within the national airspace. Aerial Check UAVs seeks authorization to conduct small UAS flight operations within the perimeters of this exemption request.

14 C.F.R. Part 11.81(d) – The reasons why granting petitioners request would be in the public interest; that is, how it would benefit the public as a whole:

Should Aerial Check UAV be granted an exemption, it would allow the company to safely and efficiently conduct UAS flight operations, commercially, to collect valuable information for our clients in the form of High-Definition Aerial Imaging while realizing the scales of economy. Using UASs as a means to capture aerial data will decrease congestion of the NAS, reduce pollution (no dependence on fossil fuels), thereby reducing the carbon footprint and reduce inherent risks associated with the operation of an aircraft carrying pilots and fuel. During and immediately following emergency situations (i.e., Natural disasters, fires, search and rescue) data can be fed to the client in real-time, thereby allowing them to provide information to the public in a timely manner.

14 C.F.R Part 11.81 (e) – The reasons why granting the exemption would not adversely affect safety, or how the exemption would provide a level of safety at least equal to that provided by the rule from which petitioner seeks the exemption:

Using UAS technology to collect photographic/videography data is beneficial to the public as a whole as it significantly risks to workers who must scale heights to collect information (risk of fall), it reduces risks to the public as a whole due to the reduction of helicopters and small aircraft as the UASs carry no combustible

materials on board. Battery Powered UASs serve as a safe, efficient and economical alternative to manned aircraft traditionally used for capturing aerial images. They provide high levels of safety to person and property since no pilot or crew need to be airborne. UASs provide greater operational flexibility and reduced costs. Better aerial imagery can be obtained by using UASs due to their small size, maneuverability and flight performance characteristics. Less time is needed in the air to obtain the footage, thereby reducing the number of aircraft in the NAS. Reduction of noise will benefit the public as well. Finally, the UAS industry is expected to grow to \$11.5B by 2024 (military and civilian), which ultimately will contribute to the US economy by creating jobs and increasing consumer spending.

The use of UASs can significantly reduce the risk to workers of falls while inspecting, surveying, or monitoring sites. UASs can inspect, photograph, and collect data on hard to access areas that otherwise would require worker inspection. Falls are a leading source of workplace fatality and injury on construction sites and reducing falls through UASs use for site imaging could save workers lives. Additionally, UASs could replace the use of helicopters and small aircraft to monitor sites. The UASs we propose to fly in this application are less than 25 pounds, and carry no combustible material on board, as opposed to the much larger conventionally powered small aircraft. Shifting to UASs from helicopters presents a marked safety increase for our workers and the public. Lastly, UASs reduce the environmental impact by dramatically decreasing the energy used for aerial imaging and data collection over a construction site. Our UASs use rechargeable lithium ion batteries, as opposed to fossil fuels burned in operation of small aircraft that are many hundreds of times heavier.

The operating limitations proposed by Aerial Check UAVs provide for at least an equivalent or higher level of safety because the operations further enhance the safety of aerial digital imaging over using conventional aircraft. In addition to following all instructions as provided by the manufacturer, Aerial Check UAVs shall include the following conditions and limitations in all operations:

- 1) Flights will be operated within line of sight of a pilot and/or observer.
- 2) Flights will be terminated at 20% battery power reserve.
- 3) Flights will be operated at an altitude of no more than 400ft AGL, and not more than 200 feet above an elevated platform.
- 4) Flights will only be operated in reasonably safe environments that are strictly controlled, are away from airports, power lines, elevated lights, and/or actively populated areas.
- 5) Minimum crews will consist of the UAS Pilot, the Visual Observer and the Camera Operator.
- 6) Consent will be obtained from all persons involved in the operation and only authorized personnel will be allowed within 500 feet of the flight operation.
- 7) Written permission will be obtained from the relevant property owners
- 8) If the UAS loses communications or loses its GPS signal, the UAS will be placed in "Return to Home" mode and will return to its point of takeoff.
- 9) The UAS flight will be aborted should circumstances arise that created a potential hazard to person or place.

Aircraft Description

Aerial Check UAVs proposes the use of two UASs, the DJI S1000 and the DJI Phantom II. Aerial Check UAVs will choose which unit to use based on a review of the proposal of work, taking into consideration many factors including weather, wind, altitude necessary to complete the job and the complexity of the site location.

Important safety features of the DJI S1000 and the DJI Phantom II include Airport vicinity no-fly features, restricted altitude features, return home capability and GPS Navigation. With an on-board OSD (Onscreen Display Transmitting Device), the PIC has the ability to monitor altitude, distance, and battery level, as well as real time camera imagery. Although the units can be programmed to fly at a maximum of 400 feet, typical applications require altitudes between 50 and 250 feet.

Both the SJI S100 and the DJI Phantom II will operate with the DJI Ground Station Software. One of the unique functions of the DJI Ground Station software is that users will not be able to build waypoints or home points in designated restricted areas and any waypoint routines that attempt to go through these special areas will be rendered invalid.

The DJI Ground Station enables 3-D Map Waypoints Editing, Flight Path Planning, Real-time Flight State Feedback and Auto Takeoff and Landing. This product is specially designed for the purpose of aircraft operation, flying in applications such as land surveillance, aerial photography, etc. Working with DJI flight control system, DJI Ground Station not only ensures stable performance and safety of the aircraft, easy operation for the pilot, but also allows the aircraft to fly along the flight path set before or modified during the flight mission in the Ground Station software autonomously.

Although the UAS can be operated by one person, flight operations carried on by Aerial Check UAVs involve at least two people: a pilot-in-command ("PIC") and an observer. The PIC is responsible for flying the UAS, monitoring its status and flight dynamics while maintaining visual line of sight and keeping the flight within the manufacturer's specified limits in terms of wind, flight range, battery life, etc., for safe operation of the UAS. Observers will be responsible for monitoring the airspace for other aircraft and hazards, advising the operator before and during flight of all such observed risks, and monitoring the controlled operating area.

Summary for Publication in the Federal Register

Pursuant to 14 C.F.R. Part 11, the following summary is provided for publication in the Federal Register, should it be determined that publication is necessary.

Aerial Check UAVs, operators of a DJI s1000 and DJI Phantom 2, both weighing less than 25 pounds, seeks an exemption for the following rules:

14 C.F.R § 61.113 (a); 14 C.F.R § 91.7 (a); 14. C.F.R. §91.103 (b); 14. C.F.R § 91.119 (c); 14. C.F.R § 91.121;
14 C.F.R. § 91.151 (a); 14 C.F.R § 91.405 (a); 14 C.F.R § 91.407 (a) (1); 14 C.F.R § 91.409 (a) (1) & (2);
14 C.F.R. § 91.417 (a) & (b);

Granting this exemption will allow for the commercial operation of small UASs for the purpose of conducting aerial inspections and surveys as well as post-disaster aerial support. Inspections would include property, land survey and other high structures that currently require fall protection gear (i.e. Cellular/RF towers and roofs). Additionally, operations shall be conducted in areas of agriculture and search and rescues and will provide digital imaging services for the purpose of developing marketing materials, so long as such operations will provide an equivalent level of safety and will be conducted within and under the conditions outlined in the exemption request, the supporting documents, or as may be established by the FAA as required by Section 333.

The factors as directed by Congress to consider, in accordance with Section 333(b) of P.L. 112-95 states, in part: "In making the determination under subsection (a), the Secretary shall determine, at a minimum-- (1) which types of unmanned aircraft systems, if any, as a result of their size, weight, speed, operational capability, proximity to airports and populated areas, and operation within visual line of sight do not create a hazard to users of the national airspace system or the public or pose a threat to national security are each supported in this request. UASs are small, and will operate at slow speeds in order to more safely and efficiently conduct inspections of all types that would otherwise involve a risk to inspectors. This increase in safety and decrease in human injuries weighs heavily in favor of granting the requested exemption.

The requested exemption would permit the operation of small, unmanned UASs under controlled conditions that will not create a hazard to other users of the NAS or the public or pose a threat to national security. The controlled operations of small, low altitude UASs will provide safety enhancements to the existing methods of inspection and videography.

Conclusion

As for the reasons set forth herein, Aerial Check UAVs seeks an exemption pursuant to 14 C.F.R. §11.61 and Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA), which will permit the safe operation of the DJI S1000 and DJI Phantom 2 UASs commercially, without an airworthiness certification, for the purpose of conducting aerial digital imaging and photography over certain areas of the United States. By granting this Petition, the FAA Administrator will be fulfilling the Congressional mandate of the FAA Modernization and Reform Act of 2012, while also advancing the interests of the public, by allowing the UASs to be flown safely, efficiently, and economically within the NAS.

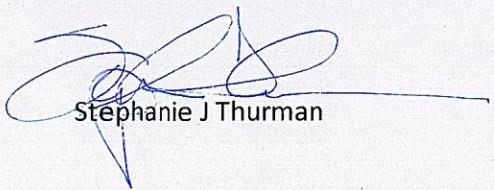
Wherefore, in accordance with the Federal Aviation Regulations and the FAA Modernization and Reform Act of 2012, Section 333, Aerial Check UAVs respectfully requests that the Administrator grant this Petition for an Exemption from the requirements of 14 C.F.R Sections 61.113(a) & (b), 91.(a), 91.121, 91.151(b), 91.405(a), 91.407 (a) (1), 91409(a) (1) & (a)(2) and 91417 (a) & (b), and permit Aerial Check UAVs to operate the DJI S1000 and DJI Phantom 2 commercially for the purpose of conducting aerial digital imaging and photography over certain areas of the United States.

Dated: April 14, 2015

Respectfully submitted



Anthony S Thurman



Stephanie J Thurman