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

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

September 25, 2015

Exemption No. 13006
Regulatory Docket No. FAA−2015−2765

Mr. Anton Vomfell
Aerotek Imaging LLC
48597 Hayes Road
Shelby Township, MI 48315

Dear Mr. Vomfell:

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 posted to the public docket on July 7, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Aerotek Imaging LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography and/or video for real estate, architecture, land surveying, engineering, assist with search and rescue, including television, public events, cinematography and news gathering, aerial inspection/photography of residential/commercial utility infrastructure, and training[1].

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.

[1] The petitioner also requested authority to conduct UAS training. At this time, the FAA is unable to authorize UAS operations for training until a further assessment is completed. When the FAA completes its review, we will proceed accordingly and no further action will be required by the petitioner. However, the petitioner is permitted to train its own pilot in commands and visual observers in accordance with condition no. 14 and the other conditions and limitations in this exemption.

Airworthiness Certification

The UAS proposed by the petitioner are the DJI Phantom 2 and DJI Inspire 1.

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

The Basis for Our Decision

You have requested to use a UAS for aerial data collection[2]. 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.

[2] 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.

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, Aerotek Imaging 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.

Conditions and Limitations

In this grant of exemption, Aerotek Imaging 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 2 and DJI Inspire 1 when weighing less than 55 pounds including payload. Proposed operations of any other aircraft will require a new petition or a petition to amend this exemption.

2. Operations for the purpose of closed-set motion picture and television filming are not permitted.

3. The UA may not be operated at a speed exceeding 87 knots (100 miles per hour). The exemption holder may use either groundspeed or calibrated airspeed to determine compliance with the 87 knot speed restriction. In no case will the UA be operated at airspeeds greater than the maximum UA operating airspeed recommended by the aircraft manufacturer.

4. The UA must be operated at an altitude of no more than 400 feet above ground level (AGL). Altitude must be reported in feet AGL.

5. The UA must be operated within visual line of sight (VLOS) of the PIC at all times. This requires the PIC to be able to use human vision unaided by any device other than corrective lenses, as specified on the PIC's FAA-issued airman medical certificate or U.S. driver's license.

6. All operations must utilize a visual observer (VO). The UA must be operated within the visual line of sight (VLOS) of the PIC and VO at all times. The VO may be used to satisfy the VLOS requirement as long as the PIC always maintains VLOS capability. The VO and PIC must be able to communicate verbally at all times; electronic messaging or texting is not permitted during flight operations. The PIC

must be designated before the flight and cannot transfer his or her designation for the duration of the flight. The PIC must ensure that the VO can perform the duties required of the VO.

7. This exemption and all documents needed to operate the UAS and conduct its operations in accordance with the conditions and limitations stated in this grant of exemption, are hereinafter referred to as the operating documents. The operating documents must be accessible during UAS operations and made available to the Administrator upon request. If a discrepancy exists between the conditions and limitations in this exemption and the procedures outlined in the operating documents, the conditions and limitations herein take precedence and must be followed. Otherwise, the operator must follow the procedures as outlined in its operating documents. The operator may update or revise its operating documents. It is the operator's responsibility to track such revisions and present updated and revised documents to the Administrator or any law enforcement official upon request. The operator must also present updated and revised documents if it petitions for extension or amendment to this grant of exemption. If the operator determines that any update or revision would affect the basis upon which the FAA granted this exemption, then the operator must petition for an amendment to its grant of exemption. The FAA's UAS Integration Office (AFS−80) may be contacted if questions arise regarding updates or revisions to the operating documents.

8. Any UAS that has undergone maintenance or alterations that affect the UAS operation or flight characteristics, e.g., replacement of a flight critical component, must undergo a functional test flight prior to conducting further operations under this exemption. Functional test flights may only be conducted by a PIC with a VO and must remain at least 500 feet from other people. The functional test flight must be conducted in such a manner so as to not pose an undue hazard to persons and property.

9. The operator is responsible for maintaining and inspecting the UAS to ensure that it is in a condition for safe operation.

10. Prior to each flight, the PIC must conduct a pre-flight inspection and determine the UAS is in a condition for safe flight. The pre-flight inspection must account for all potential discrepancies, e.g., inoperable components, items, or equipment. If the inspection reveals a condition that affects the safe operation of the UAS, the aircraft is prohibited from operating until the necessary maintenance has been performed and the UAS is found to be in a condition for safe flight.

11. The operator must follow the UAS manufacturer's maintenance, overhaul, replacement, inspection, and life limit requirements for the aircraft and aircraft components.

12. Each UAS operated under this exemption must comply with all manufacturer safety bulletins.

13. Under this grant of exemption, a PIC must hold either an airline transport, commercial, private, recreational, or sport pilot certificate. The PIC must also hold a current FAA airman medical certificate or a valid U.S. driver's license issued by a state, the District of Columbia, Puerto Rico, a territory, a possession, or the Federal government. The PIC must also meet the flight review requirements specified in 14 CFR § 61.56 in an aircraft in which the PIC is rated on his or her pilot certificate.

14. The operator may not permit any PIC to operate unless the PIC demonstrates the ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption, including evasive and emergency maneuvers and maintaining appropriate distances from persons, vessels, vehicles and structures. PIC qualification flight hours and currency must be logged in a manner consistent with 14 CFR § 61.51(b). Flights for the purposes of training the operator's PICs and VOs (training, proficiency, and experience-building) and determining the PIC's ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption are permitted under the terms of this exemption. However, training operations may only be conducted during dedicated training sessions. During training, proficiency, and experience-building flights, all persons not essential for flight operations are considered nonparticipants, and the PIC must operate the UA with appropriate distance from nonparticipants in accordance with 14 CFR § 91.119.

15. UAS operations may not be conducted during night, as defined in 14 CFR § 1.1. All operations must be conducted under visual meteorological conditions (VMC). Flights under special visual flight rules (SVFR) are not authorized.

16. The UA may not operate within 5 nautical miles of an airport reference point (ARP) as denoted in the current FAA Airport/Facility Directory (AFD) or for airports not denoted with an ARP, the center of the airport symbol as denoted on the current FAA-published aeronautical chart, unless a letter of agreement with that airport's management is obtained or otherwise permitted by a COA issued to the exemption holder. The letter of agreement with the airport management must be made available to the Administrator or any law enforcement official upon request.

17. The UA may not be operated less than 500 feet below or less than 2,000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.

18. If the UAS loses communications or loses its GPS signal, the UA must return to a pre-determined location within the private or controlled-access property.

19. The PIC must abort the flight in the event of unpredicted obstacles or emergencies.

20. The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough available power for the UA to conduct the intended operation and to operate after that for at least 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 October 31, 2017, unless sooner superseded or rescinded.

Sincerely,

John S. Duncan
Director, Flight Standards Service

Enclosures

Anton Vomfell
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Shelby Twp., Mi 48315

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

RE: Exemption Request Section 333 of the FAA Reform Act of 2012 and Part 11 of the Federal Aviation Regulations from 14 C.F.R. Part 21; 14 C.F.R. 45.23(b); 14 CFR 61.113 (a) & (b); 14 C.F.R. 91.7 (a); 14 CFR 91.9 (b) (2); 14 C.F.R. 91.103(b); 14 C.F.R. 91.109; 14 C.F. R. 91.119; 14 C.F.R. 91.121; 14 CFR 91.151 (a); 14 CFR 91.203 (a) & (b); 14 CFR 91.405 (a); 14 CFR 407 (a) (1); 14 CFR 409 (a)(2) ; 14 CFR 417 (a) & (b)

Dear Sir or Madam,

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 and 14 C.F.R. Part 11, Aerotek Imaging, LLC, operator of Small Unmanned Aircraft Systems (sUAS) , hereby applies for an exemption from the listed Federal Aviation Regulations (FARs) to allow commercial operation of its sUASs, so long as such operations are conducted within and under the conditions outlined herein or as may be established by the Federal Aviation Administration (FAA) as required by Section 333.

Commercial operation of an UAS, as described herein, which are equipped with camera(s) and sensors, would operate in the following manner:

1. Aerial photography and/or video for public and/or private use including real estate, architecture, land surveying, engineering and other related professional activities.
2. Aerial video/photography or providing live video feed to assist with search and rescue operations in cases of an emergency or natural disaster only when the local authorities or government has requested it by contract or donation.
3. Aerial video and/or photography for public and/or private use including television, public events, cinematography and news gathering.
4. Aerial inspection/photography of residential/commercial utility infrastructure including but not limited to electrical power lines, wind turbines and cell tower's
   (sUAS can reduce the need for a person to perform inspections from an elevated position Thus reducing the potential risk of injury or death.)
5. The ability to offer training to persons individually or belonging to both private and/or public organizations that have interests in the safe use and operation of a UAS.

BACKGROUND

Unmanned Aircraft Systems: DJI Phantom 2, DJI Inspire 1 UASs

Aerotek Imaging seeks an exemption to operate DJI systems for compensation or hire within the NAS. The DJI Phantom 2 and DJI Inspire 1 are vertical takeoff and landing (VTOL) Unmanned Aircraft (UA) with a Ground Control Station (GCS) utilizing electronic tablet or smart phone systems. The DJI Phantom 2 has a maximum gross weight of approximately 2 pounds 11 ounces, while having a length of 16 inches width of 16 inches, height of 8 inches, and a maximum speed of approximately 29 knots. The DJI Inspire 1 has a maximum gross weight of 6 pounds 7.5 ounces, a length of 17.3 inches, width of 17.7 inches, height of 11.8 inches, and a maximum speed of approximately 42 knots. The DJI Phantom 2 and DJI Inspire 1UAs are equipped with four main rotors; driven by Lithium Polymer battery powered electric motors.

The DJI UASs that will be operated by Aerotek Imaging will be registered in accordance with 49 U.S.C. 44103, Registration of Aircraft, as well as 14 C.F.R Part 47, Aircraft Registration, and marked in accordance with 14 C.F.R. Part 45, Identification and Registration Marking.

Specifically, each UAS is: A lightweight (< 55.0 lb gross weight with all on-board equipment), battery operated 4- motor rotorcraft in the form of a quad copter that takes off and lands vertically, manufactured by DJI, with the following equipment:

− An on-board flight computer with GPS navigation and location ability that receives signals for flight controls from a ground-based transmitter/controller;

− An on-board camera capable of capturing imagery in the form of full color, high definition still photos and video;

− An on-board telemetry system that delivers flight data from the on-board flight computer to the onboard radio transmitter including altitude AGL, horizontal and vertical speed, compass direction of flight and direction back to its launch site;

− A 600mW, 5.8GHz on-board radio transmitter that transmits live video from the on-board camera plus all the flight data from the telemetry system described above; The Ground Station Includes:

− A Pilot in Command (PIC) in operational control of a flight operation from beginning to end and who controls the UAS while in the air;

− A radio receiver receiving live video and flight data from the on-board camera and computer projects it all together onto a screen for the PIC to view during flight;

− A Visual Observer (VO)

BASIS FOR PETITION

Petitioner, Aerotek Imaging pursuant to the provisions of the Federal Aviation Regulations (14 C.F.R. § 11.61) and the FAA Modernization and Reform Act of 2012 (FMRA), Section 333, *Special Rules for Certain Unmanned Aircraft Systems*, hereby petition the Administrator to commercially operate the DJI UAS in the National Airspace System (NAS), and for an exemption from the requirements of 14 C.F.R §§ 21 subpart H, 61.113(a)&(b), 91.7(a), 91.9(b)2,91.103, 91.121, 91.151(a),

In consideration of the speed, weight, size, and limited operating area associated with the unmanned aircraft and its operation, Aerotek Imaging's operation of the DJI Inspire 1 and DJI Phantom 2 UAS meets the conditions of FMRA Section 333 and therefore, will not require an airworthiness certificate in accordance with 14 C.F.R. Part 21, Subpart H. Accordingly, Aerotek Imaging requests relief from Sections 91.405(a), 91.407(a)(1), 91.409(a)(1) & (a)(2), and 91.417(a) & (b), as these sections set forth requirements for maintenance that only apply to aircraft with an airworthiness certificate.

Aerotek Imaging submits that the requested relief is proper since an equivalent level of safety will be ensured. Aerotek Imaging will use experienced personnel or technicians to perform maintenance, alterations, or preventive maintenance on the UAS using the methods, techniques, and practices prescribed in the operating documents (i.e., Maintenance Log, and DJI Instruction Manuals. Furthermore, Aerotek Imaging will document and maintain all maintenance records for the DJI UAS.

Aerotek Imaging submits that they will ensure that the DJI UAS are in an airworthy condition, prior to every flight.

Aerotek Imaging seeks relief from Section 45.23(b) Which states 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.

The size of the UAS is too small to fit the required markings on the fuselage. A smaller type or different designation could be used.

Aerotek Imaging seeks Relief from certain requirements of Section 61.113(a) and (b), entitled *Private pilot privileges and limitations: Pilot in command*, to the extent necessary to allow a Pilot in Command (PIC) holding an airman medical certificate, and who has demonstrated, by meeting minimum flight- hour and currency requirements, that the PIC is able to safely operate the DJI UAS in a manner consistent with this exemption, including evasive and emergency maneuvers and maintaining appropriate distances from people, vessels, vehicles and structures.

Aerotek Imaging also seeks an exemption from the requirements of Section 91.121, entitled *Altimeter Settings*, as the DJI UA will not have a typical barometric altimeter onboard. However, altitude information of the UA will be provided to the PIC via Global Positioning System (GPS) equipment and radio communications telemetry data link, which downlinks from the UA to the GCS for active monitoring of the flight path. This altitude information, combined with Aerotek Imaging's operation of the DJI UA within visual line of sight, at or below 400 feet AGL, will ensure a level of safety equivalent to Section 91.121.

Additionally, Aerotek Imaging seeks an exemption from the requirements of Section 91.151(a), entitled *Fuel requirements for flight in VFR conditions*.
Aerotek Imaging, submits that safety will not be affected by operation of the DJI UA during daylight hours in visual meteorological conditions (VMC) under visual flight rules (VFR), with enough battery power to fly for a total duration of approximately 13.5 minutes to the first point of intended landing and, assuming normal cruising speed, to fly after that for at least 4.5 minutes. In accordance with 14 C.F.R. § 11.81.

Aerotek Imaging provides the following information in support of their petition for exemption:

Maintenance:

To ensure safe operational control a maintenance program will be followed, Scheduled and preventive maintenance shall be documented and only quality replacement parts will be used.

Equivalent level of Safety:

Inspection:

Preflight checks shall be completed before liftoff and continuous monitoring of in-flight systems shall be performed from the ground station from the moment of powering up for preflight until shutting down at the end of the operation.
Before every flight, the UASs operational condition will be inspected for damage and deterioration, paying close attention to the props for damage, cracks or ware and the UASs fuselage for damage . If damage, cracks or unusual ware is detected, the damage and or ware will be logged and the flight will be suspended until proper repairs have been made.

Hazards Spotter: To ensure safety, either the listing agent, seller, contractor, owner or another party, will be on site to review and observe hazards before and during the flight.

Population of Intended Areas: To ensure safety, all non-essential personnel will be removed from the area. There will be no flight over heavily populated areas like stadiums, schools, malls, casinos, and the like during operating hours.

Airports: According FAA rules and to ensure pilot(s) safety, there will no flight in or around airports unless explicit permission is granted according to current FAA regulations.

Weather: To ensure safety of spotter, agents, property owners, pet and wildlife flights will be conducted in optimal weather conditions. Flights will not be conducted in winds above 20 mph.

Return-to-Home Feature: In the event the DJI UA loses signal or runs critically low on battery the UAS has a GPS controlled return to home feature. The "home" is set upon flight startup. - Auto Return-to-Home & Landing.

Flying in Confined Areas: There is a high probability of flying in confined spaces, around residential properties. Pilot and spotter will be in constant communication by two way radio, or cell phone, or other approved FAA communications device when geographically separated during flight to ensure awareness of obstacles, hazards and UAS location.

Line of Site: The UAS will always be within the line of site of the pilot and spotter. If the UAS cannot be seen the return home failsafe will be used to regain visual control.

Height: Fights will not exceed 400 ft AGL above subject properties at any time.

Pilot Qualifications

The Pilot in command will be familiar with current FAA regulations regarding UAS commercial usage.

The Pilot in command will have sufficient eye sight (with or without corrective lenses and without the aid of binoculars) to see and operate the UAS at the distances necessary for the purpose of the flight.

Pilot will be in good health.

New Pilots in training will shadow and act as the Pilot in Command Spotter until They can demonstrate a workable knowledge of the UAS and proficiency in operational control at all times.

Summary

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

(a) no person who holds a private pilot certificate may act as a 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.

(b) a private pilot may, for compensation or hire, act as pilot in command 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.

The UAS is not capable of carrying passengers or is able to carry cargo aside from the mentioned gimbal mounted camera.

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

There are no specifications on what makes a UAS airworthy, during the preflight checks all propellers and mountings are checked for damage and operation.

Section 91.7(a) prescribes that the pilot in command of a civil aircraft is responsible for determining whether that aircraft is in condition for safe flight and that the PIC shall discontinue the flight when un-airworthy mechanical, electrical, or structural conditions occur.

Section 91.9(b)(2) prohibits operation of 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.
Supplemental materials will include equipment and flight manuals issued with the UAS.
Section 91.103(b) prescribes that a pilot shall for any flight, become familiar with runway lengths at airports of intended use, and takeoff and landing distance information.
All landing zones will be thoroughly checked and flight areas reviewed before any flights are made.
Section 91.109(a) 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.
The system is not available with dual controls, though with the UAS size and training in safe areas the instruction could be contained to a safe altitude and area where safety can be optimized for all involved.
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
(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.
Due to altitude limitations and the desire to avoid passenger carrying aircraft it is requested to maintain a maximum ceiling of 400' with typical heights being below that dependent on angles and shots for photographic use.
Section 91.405(a) requires, in pertinent part, that an aircraft operator or owner shall have that aircraft inspected as prescribed in subpart E of the same part and shall, between required inspections, except as provided in paragraph (c) of the same section, have discrepancies repaired as prescribed in part 43 of the chapter.
As there are no current maintenance requirements for UAS of this type it is not possible to meet this requirement at this time.
Section 91.121 requires, in pertinent part, each person operating an aircraft to maintain 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."
The UAS is single operator only with no dual controls so there will be only one pilot during flight, the GPS system will reference the altitude at the launch point for every flight. This will also be the point that the UAS will return to upon completion.
Section 91.151(a) prescribes that 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.
Petitioner will operate UAS until the earlier of a maximum of thirty (30) minutes or when 25% of battery remains. All UAS are additionally equipped with a low battery failsafe that allow the UAS to safely land when little battery remains. The UAS are not propelled by fuel and will operate only within the safety constraints of the UAS battery life

Section 91.203(a) prohibits, in pertinent part, any person from operating a civil aircraft unless it has within it (1) an appropriate and current airworthiness certificate; and (2) 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.
Section 91.407(a)(1) prohibits, in pertinent part, any person from operating an 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 the same 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 of this chapter.
There are currently no airworthiness certificates for the UAS to be used and also as there is no cabin cockpit or passenger compartment on the UAS it is not possible to store certificates on board the craft.
Section 91.417(a) and (b) prescribes, 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 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.
Records of maintenance and engine replacement can be kept as well as prop changes and any repairs or fixes to the gimbal, electronics, and camera system. Maintenance records may not apply due to the relatively inexpensive cost of completely replacing parts instead of repair them.

Conclusion

Aerotek Imaging is a veteran owned company, our UAS pilots have a combined experience level of over 15 years of flying both fixed wing and rotary wing remotely controlled aircraft.
Aerotek Imaging's Petition for exemption demonstrates the appropriate safeguards and criteria, including weight, speed, operating capabilities, proximity to airports and populated areas, operation within VLOS and national security concerns, that Congress expressed in Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA), which will permit safe operation of the DJI Phantom 2 and DJI Inspire 1 UASs commercially, without an airworthiness certificate, for the limited purpose of conducting aerial video 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 Aerotek Imaging to safely, efficiently, and economically operate the DJI Phantom 2 and DJI Inspire 1 UASs commercially within the NAS. Furthermore, structural inspections, by their nature, can be difficult and dangerous. These risks can be avoided by using a small UAS under controlled conditions preventing possible human injury or death thus it is in the public interest to grant these exemptions.

Thank you for your consideration of our requested exemptions, if you have any questions, or if you require additional information, please do not hesitate to contact me.

Manufactures instruction manuals are available upon request.

Respectfully

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