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

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

August 24, 2015

Exemption No. 12573
Regulatory Docket No. FAA−2015-2358

Mr.Troy Moore
Mr. Julio Velasco
3637 US Highway 259 N.
Apartment 206
Longview, TX 75605

Dear Messrs. Moore and Velasco:

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 June 18, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of FT Aerial Services, LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography, videography, surveying, 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 is a DJI Phantom 3 Professional.

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, FT Aerial Services, LLC is granted an exemption from 14 CFR §§ 61.23(a) and (c), 61.101(e)(4) and (5), 61.113(a), 61.315(a), 91.7(a), 91.119(c), 91.121, 91.151(a)(1), 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), and 91.417(a) and (b), to the extent necessary to allow the petitioner to operate a UAS to perform aerial data collection. This exemption is subject to the conditions and limitations listed below.

Conditions and Limitations

In this grant of exemption, FT Aerial Services, LLC 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 Professional 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 August 31, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures

Petition of FT Aerial Services, LLC
for Exemption Pursuant to Section 333
of the FAA Modernization and Reform Act of 2012

Dear Sir or Madam,

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 and 14 CFR Part 11, FT Aerial Services, LLC is hereby requesting an exemption from the listed Federal Aviation Regulations to operate a small Unmanned Aircraft System for the purpose of recording photography and videography for compensation or hire.

This exemption would permit commercial operation by FT Aerial Services, LLC, using a DJI Phantom 3 Professional UAS in order to provide the following services:

- real estate advertising
- land surveying
- agricultural surveying
- commercial advertisement
- personal event photography and videography
- commercial event photography and videography
- industrial inspections

FT Aerial Services, LLC's operation under the exemption will be subject to strict operating requirements and conditions to ensure an equivalent level of safety to currently authorized operations using manned aircraft and under conditions as may be modified by the FAA as required by Section 333.

FT Aerial Services, LLC respectfully submits this request for an exemption due to its use of sUASs/UASs. Approval of this exemption would enhance safety and fulfill the Secretary of Transportation's responsibilities under Section 333(c) of the Reform Act to "establish requirements for the safe operation of such aircraft systems in the national airspace system."

FT Aerial Services, LLC has organized this exemption request as follows:

I. Petitioner's Description

FT Aerial Services, LLC, headquartered in Longview, TX, is a company that provides aerial drone footage for consumers and businesses alike. The services we provide include but are not limited to:

- real estate advertising
- land surveying
- commercial advertisement
- personal event photography and videography
- commercial event photography and videography
- industrial inspections

FT Aerial Services, LLC's goal is to operate in an accident-free environment while serving our community.

FT Aerial Services, LLC is owned/operated by two managing members with over 10 years of combined UAS/UAV/Drone experience:

Troy Moore
3637 US Highway 259 N
Apt 206
Longview, TX 75605
(903) 746-1559
troy@ftaerialservices.com

Julio Velasco
605 Old Highway 26
Kilgore, TX 75662
(806) 220-6793
julio@ftaerialservices.com

II. Relevant Statutory Authority

This petition for exemption is submitted to fulfill Congress' goal in passing Section 333(a) through (c) of the Reform Act. Congress has directed the FAA "to safely accelerate the integration of civil unmanned aircraft systems into the national airspace system." Pursuant to Section 333 of the Reform Act, the FAA Administrator is to consider whether certain unmanned aircraft systems may operate safely in the National Airspace ("NAS") before completion of formal UAS legislation, based on the following considerations:

- The UAS's size, weight, speed, and operational capability;
- Operation of the UAS in close proximity to airports and populated areas; and
- Operation of the UAS within the visual line of sight of the operator.

If the Secretary determines that such vehicles "may operate safely in the National Airspace System, the Secretary shall establish requirements for the safe operation of such aircraft in the National Airspace System."

Additionally, the FAA Administrator has general authority to grant exemptions from its safety regulations and minimum standards, and has done so on numerous occasions, when the

Administrator decides a requested exemption is in the public interest. A party requesting an exemption must explain the reasons why the exemption: (1) would benefit the public as a whole, and (2) would not adversely affect safety (or how it would provide a level of safety at least equal to the existing rules).

The Federal Aviation Act expressly grants the FAA the authority to issue exemptions. This statutory authority, by its terms, includes exempting civil aircraft, as the term is defined under 40101 of the Act, from the requirement that all civil aircraft must have a current airworthiness certificate and those regulations requiring commercial pilots to operate aircraft in commercial service:

The Administrator may grant an exemption from a requirement of a regulation prescribed under subsection (a) or (b) of this section or any of sections.

III. Qualifications for Approval Under Section 333 of the Reform Act

The proposed operations in this petition for exemption qualify for expedited approval under Section 333 of the Reform Act. Each of the statutory criteria and other relevant factors are satisfied.

The proposed operations would permit FT Aerial Services, LLC the use of small unmanned aircraft systems under controlled conditions in airspace that is: (1) predetermined; (2) access controlled; (3) enhanced with an increased level of safety beyond that existing when fixed or rotor wing aircraft are used to accomplish the same purpose.

FT Aerial Services, LLC uses a UAS (DJI Phantom 3 Professional) that is multi-rotor, weighing less than 55 pounds, including payload. Under normal conditions, it operates at speeds less than 50 mph and has the capability to fly, hover, and move in the vertical and horizontal plane. FT Aerial Services, LLC's UASs will operate in line of sight, during daylight hours, and will only operate within a sterile area. FT Aerial Services, LLC will operate at or below 400 feet above ground and will file a NOTAM for each flight operated in controlled airspace. All required permissions and permits would be obtained from territorial, state, county, or city jurisdictions, including local law enforcement, fire, or other appropriate governmental agencies prior to operating a UAS.

Given the small size of the UAS's involved and the restricted sterile environment within which they will operate, FT Aerial Services, LLC's exemption falls within the zone of safety and demonstrates an equivalent level of safety, in which Congress desired the FAA to permit commercial UAS operations by exemption pending the completion of formal legislation. Also, due to the size of the UASs and the confined area in which they will operate, approval of the exemption presents no hazard in the National Airspace System.

Considering the clear direction in Section 333 of the Reform Act, the authority contained in the Federal Aviation Act, as amended, the equivalent level of safety surrounding the proposed operations, and the significant public benefit, the grant of the requested exemptions is also in the public interest.

IV. Description of Proposed Operations

To assist the FAA in its safety assessment of FT Aerial Services, LLC's proposed UAS operations, below is a summary of operational limitations and conditions that will ensure an equivalent or higher level of safety to operations conducted under current regulatory guidelines:

1. The UAS will weigh less than 55 pounds,
2. Flights will be operated within line of sight of the PIC and observer.
3. Maximum total flight time for each operational flight will be limited to the amount of time the UAS can be flown and still maintain a reserve battery power of no less than 25%.
4. Flights will be operated at an altitude of no more than 400 feet above ground.
5. Minimum crew for each operation will consist of the UAS Pilot in Command and a Visual Observer.
6. Prior to the operations at a particular location, a site inspection will have been conducted.
7. All UAS's will be maintained in accordance with inspection programs specified in the manufacturer's guidelines.
8. The PIC and VO will at all times be able to communicate by voice.
9. The PIC, VO, and any other operational personnel will have been fully trained prior to having any operational responsibilities.
10. All required permissions and permits would be obtained from territorial, state, county or city jurisdictions, including local law enforcement, fire or other appropriate governmental agencies.
11. If the UAS loses communication signal, the UAS will have the capability to return to a pre-determined location with the sterile area and land.
12. The UAS PIC has the capability to abort a flight in case of unpredicted obstacles or emergencies.
13. FT Aerial Services, LLC, by following FAA, NTSB, and AFS-80 best practices, will assure no individuals' privacy is violated.
14. Procedures have been established by FT Aerial Services, LLC to contact ATC prior to operating in airspace other than G.

V. Regulations from which Exemption is Requested

To use a UAS for data collection, FT Aerial Services, LLC requests relief from the following sections of Title 14 of the Code of Federal Regulations:

- **§61.101(e)(4) and (5) and §61.113(a) Private Pilot Limitations: Pilot in Command**

Sections 61.101(e)(4) and (5) and 61.113(a) limits private pilots to non-commercial operations. However, because the aircraft will not carry pilots or passengers and is limited in the type of operation and the area of operation, a private pilot can achieve the equivalent level of safety for the proposed operations as a commercial pilot. First, unlike conventional manned aircraft, UASs are remotely controlled by a ground based pilot operator in a controlled and restricted area. Second, the aircraft is much smaller than a manned aircraft that the level of risk associated with its' operation is diminished from the level of risk associated with commercial operations contemplated by part 61. Therefore, allowing aircraft use by a private pilot as the PIC meets or exceeds the present level of safety sought by 14 CFR 61.101(e)(4)&(5) and 61.113(a).

- **§61.315(a) Sport Pilot Limitations**

Section 61.315(a) limits sport pilots to non-commercial operations. However, because the aircraft will not carry pilots or passengers and is limited in the type of operation and the area of operation, a private pilot can achieve the equivalent level of safety for the proposed operations as a commercial pilot. First, unlike conventional manned aircraft, UASs are remotely controlled by a ground based pilot operator in a controlled and restricted area. Second, the aircraft is much smaller than a manned aircraft that the level of risk associated with its' operation is diminished from the level of risk associated with commercial operations contemplated by part 61. Therefore, allowing aircraft use by a private pilot as the PIC meets or exceeds the present level of safety sought by 14 CFR 61.315(a).

- **§91.7(a) Civil Aircraft Worthiness**

Section 91.7(a) requires a civil aircraft to be in an airworthy condition for operation, which accordingly includes an airworthiness certificate in accordance with 14 CFR part 21, Subpart H. To maintain an equivalent level of safety, the PIC will ensure that the aircraft is in compliance with the Operating Manual and the FOPM prior to each flight. Additionally, the Pilot will still comply with 91.7(b) and ensure that the aircraft is in condition for a safe flight.

- **§91.119(c) Minimum Safe Altitudes**

Section 91.119(c) establishes safe altitudes for operation of civil aircraft over other than congested areas. FT Aerial Services, LLC requests authority to operate up to 400 AGL over uncontested areas. The aircraft will operate in a limited area within pre-defined boundaries with the consent of the landowner/controller and require that all non-essential persons remain clear of the flight area during operations. The PIC will make a safety assessment of the risk of operating the aircraft and ensure no undue hazard is present for persons or property. Considering the size, weight and speed of the aircraft, these protections will ensure the equivalent level of safety of minimum safe altitudes. Compared to flight operations for manned aircraft and the lack of flammable fuel, any risk associated with the proposed aircraft operations is far less than conventional aircraft operating at or below 500 ft AGL. In addition, the low-altitude operations of the aircraft will ensure separation with conventional aircraft.

- **§91.121 Altimeter Settings**

Section 91.121 requires 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 DJI Phantom 3 Professional does not have a barometric altimeter, but instead uses GPS altitude data. FT Aerial Services, LLC establishes an equivalent level of safety by requiring the pilot to confirm that the GPS altitude is set to zero before every flight.

- **§91.151(a)(1) Fuel Requirements for Flight in VFR Conditions**

Section 91.151(a)(1) requires all day VFR flights to operate with enough fuel to fly to first point of intended landing and then for at least an additional thirty minutes.

The batteries that power FT Aerial Services, LLC unmanned aircraft systems provide approximately 23 minutes of powered flight time and therefore is unable to meet this requirement. However, the DJI Phantom 3 Professional has a low battery alarm along with a critical battery limit that automatically sends the aircraft back to its departure point. Also, because the aircraft will be flying in a confined area without the presence of non-essential persons and with landowner/controller permissions, an equivalent level of safety can be achieved by flight planning all flights to return to intended landing site with a minimum of 25% reserve power in accordance with the FOPM.

- **§91.405(a), §91.407(a)(1), §91.409(a)(1) and (2), §91.417(a) and (b) Maintenance Inspections**

Sections §91.405(a), §91.407(a)(1), §91.409(a)(1) and (2), §91.417(a) and (b) require that an aircraft operator or owner 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…," and others shall inspect or maintain the aircraft in compliance with Part 43.

Given that these sections and Part 43 apply only to aircraft with an airworthiness certificate, these sections will not apply to FT Aerial Services, LLC operations. Maintenance will be accomplished by FT Aerial Services, LLC in accordance with the operations manual and FOPM. The Pilot in Command will ensure that the aircraft is in working order prior to flight and will perform some maintenance and inspection of the aircraft and "be authorized to approve the aircraft for return to service." Additionally, the Pilot in Command will conduct detailed inspections of the aircraft every 10 hours of flight. Maintenance performed by the PIC is limited to repairing small cracks replacing propellors, and updating software and firmware. All other maintenance will be performed by the manufacturer.

FT Aerial Services, LLC will keep a log of maintenance performed. Moreover, FT Aerial Services, LLC and the PIC are most familiar with the aircraft and best suited to maintain it in an airworthy condition.

An equivalent level of safety will be achieved because the DJI Phantom 3 Professional is limited in size, will carry a small payload and operate only in restricted areas for limited periods of time. If mechanical issues arise, the aircraft can land immediately and will be operating no higher than 400 feet AGL.

VI. Privacy

There is little concern that the proposed flights will cause invasions of privacy because flights will occur over private or controlled access property with the land owner's prior consent and knowledge.

VII. Public Interest

Use of the DJI Phantom 3 Professional drone is in the public interest because it is safer for people and structures than conventional manned aircraft. First, risk to the flight crew is virtually eliminated by using an unmanned aircraft. Second, by flying a small aircraft weighing less than 55 pounds and carrying no fuel, risk to persons and structures on the ground is

greatly reduced. Finally, use of the DJI Phantom 3 Professional benefits the public because it is better for the environment through reduction in noise and environmental pollution.

VIII. Federal Registry Summary

FT Aerial Services, LLC seeks an exemption from the following sections of Title 14 of the Code of Federal Regulation: 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 commercially operate an unmanned aircraft system for commercial purposes including but not limited to: aerial photography, aerial videography, land surveying, and industrial inspections.

As established by the UAS exemptions already granted by the FAA, allowing commercial operations of UASs for aerial photography and videography will enhance safety by reducing risk. Conventional aerial photography, aerial videography, aerial surveying, and aerial inspections using manned aircraft present avoidable risks to flight crew and persons and structures on the ground because the aircraft is flying at low altitudes with large amounts of fuel. In contrast, a UAS weighing less than 55 pounds and powered by batteries eliminates virtually all of that risk given the small size and lack of combustible fuel. Environmental risks are also eliminated by using an aircraft that does not have emissions. Therefore, by using an UAS for the purposes outlined by FT Aerial Services, LLC, the risk to persons and structures will be significantly reduced.

IX. Conclusion

FT Aerial Services, LLC requests an exemption from the aforementioned sections of 14 CFR. The exemption is in the public interest because it will increase safety for persons and structures and FT Aerial Services, LLC will provide an equivalent or greater level of safety as provided for in the applicable 14 CFR sections.