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

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

May 1, 2015

Exemption No. 11478
Regulatory Docket No. FAA-2015-0125

Richard Bowden Dobbins
The Dobbins Company
3827 Cliff Crest Drive
Smyrna, Georgia 30080

Dear Mr. Dobbins:

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.

The Basis for Our Decision

By letter dated January 12, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of The Dobbins Company (hereinafter petitioner or operator) for an exemption. The exemption would allow the petitioner to operate an unmanned aircraft system (UAS) to conduct commercial operations for real estate inspections including; residential, commercial and rural properties.

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 2.

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 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. 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, The Dobbins Company 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, The Dobbins Company 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 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.

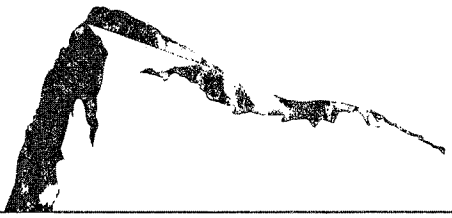
30. At least 3 days before aerial filming, the operator of the UAS affected by this exemption must submit a written Plan of Activities to the local Flight Standards District Office (FSDO) with jurisdiction over the area of proposed filming. The 3-day notification may be waived with the concurrence of 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 May, 31, 2017, unless sooner superseded or rescinded.

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



THE DOBBINS COMPANY

INDUSTRIAL LIQUIDATIONS & APPRAISALS SINCE 1975

January 12, 2015

United States Department of Transportation
Federal Aviation Administration
800 Independence Ave, SW
Washington, DC 20591

RE: Petition for Exemption from certain Title 14 CFRs in regards to Section 333 of the FAA Modernization & Reform Act of 2012 concerning Unmanned Aerial Systems (UAS)

To whom it may concern:

Good day. Per this letter of request, I seek exemption from several Title 14 CFRs that relate to the commercial use of unmanned aerial systems (UAS). The following will be included in this request: Name & information of Petitioner; Executive Summary of Petitioner summarizing the rules Petitioner seeks exemption from and reasons the exemptions would serve the public good; Specific Title 14 CFRs to which an exemption is sought; the extent & reasons for the requested exemptions; reasons why safety would not be compromised.

PERSONAL INFORMATION

Name	Richard Bowden Dobbins (**hereafter referred to as "Petitioner"**)
Company	The Dobbins Company
Address	3827 Cliff Crest Dr. Smyrna, Georgia 30080 404-451-1595 rick@dobbinscompany.com

EXECUTIVE SUMMARY

The Petitioner was born on December 7, 1959 in Atlanta, Ga. and is a US citizen. He is the CEO of The Dobbins Company which has been in business since 1975. The Dobbins Company is a consulting firm whose primary clients are banks and commercial finance companies located mainly in the southeast USA. The petitioner is a licensed private pilot with an instrument rating. He has previously owned a 1975 Cessna Cardinal RG. Petitioner has never been cited for any FAA violations. Since 2013, Petitioner has owned a DJI Phantom 2 and a Phantom 2 Vision UAS. As a hobbyist, Petitioner has become very proficient with the Phantom models with over 100 hours flown in type. Petitioner is requesting an exemption from the current rules in Section 333 which govern the uses of UASs for commercial purposes. The Petitioner seeks authorization to perform commercial UAS operations for real estate inspections. This would include residential, commercial and rural properties. Prospective customers and clients would include real

estate agents & brokers, management companies, insurance companies & vendors, banks and private property owners.

The Title 14 CFRs exemptions that this request entails are 61.113(a) & (b); 91.7(a); 91.119; 91.121; 91.151(a); 91.405; 91.407(a); 91.409(a)(1) & (2); 91.417(a) & (b). Reasons for request are cited below.

PUBLIC GOOD

Aerial videography for geographical awareness and for real estate marketing and inspections has been around for a long time through manned fixed wing aircraft and helicopters. But for small business owners, its expense has been cost-prohibitive. Granting this exemption to the Petitioner would allow him to provide this service at a much lower cost. Further, the small UAS being utilized in this application will pose no threat to the public given its small size and lack of combustible fuel when compared to larger manned aircraft. The operation of this U A S will minimize ecological damage and promote economic growth by providing information to businesses & individuals in the metro Atlanta and north Georgia area.

DESCRIPTION OF UAV TO BE DEPLOYED UNDER REQUESTED EXEMPTIONS

Petitioner currently owns a DJI Phantom 2 quad copter and a DJI Phantom 2 Vision quad copter. These are virtually the same model of UAV. The difference is in camera capabilities and slightly different control links. The petitioner intends to use the Phantom 2 as the primary UAV in commercial applications described herein. The Phantom 2 is a quad copter that can take off and land vertically. It weighs approximately 3 lbs. and has a maximum airspeed of approximately 25 knots. This UAS uses lithium polymer batteries which have approximately 20-25 minutes of total charge time. This gives this UAS approximately 12-15 minutes of flight time with sufficient remaining battery charge to land safely. The particular model of Phantom 2 being utilized under this request for exemption has First Person View (FPV) which allows the PIC to visually monitor certain telemetry data on a ground station monitor including altitude (AGL), GPS signal strength, battery charge information, etc. This FPV also gives the PIC video feed from the attached GoPro camera showing what images are being captured. This is a significant safety feature as it shows the attitude of the UAS and its forward direction. However, this FPV feature will never be used as a tool to deviate from VLOS operation by the PIC.

PREFLIGHT

The petitioner will always follow procedures outlined in the UAS operator's manual as to proper preflight inspection of all hardware, software, environment and any other factors needed to ensure a safe flight.

FCC INFORMATION

The UAS be deployed here is a DJI Phantom 2. The control link operates on the 2.4 GHz ISM radio frequency. Its published range is 1000 meters (3280 feet). The receiver sensitivity is -97dBm.

PIC QUALIFICATIONS

The petitioner holds a FAA Private Pilot's License with an instrument rating. Petitioner has over 600 hours PIC time in a variety of Cessna and Piper aircraft with the majority being in the 1975 Cessna 177RG he previously owned. Petitioner has owned the UAS described above since 2013 and has over 100 hours in this type of UAS as a hobbyist. The petitioner envisions being the PIC in all operations that will be performed under the requested rule exemptions and the subsequent COA request. However, if another PIC is used for these operations, petitioner agrees that any PIC of the UAS in the envisioned operations will hold at least a FAA Private pilots certificate, hold at least a 3rd class medical certificate, have no less than 25 hours of PIC time in the UAS being deployed before beginning any type of commercial for hire operations and conform to all safety protocols.

DESCRIPTION OF INTENDED COMMERCIAL OPERATIONS

Petitioner intends to solicit work for aerial real estate inspections from real estate agents & brokers, insurance companies & related vendors, banks and private property owners to provide photography and videography of residential, commercial and rural real estate. This work will always be conducted with the permission of the property owner or their respective agent. Flight operations will be restricted to flights directly over the property that has granted permission. Given the type of work being targeted here, the Petitioner does not foresee any instance where the UAS would be flown over any crowds or assemblages of people in an open air environment. If in fact any job does entail flights over crowds, petitioner will elect not to make said flight. Safety will always be the primary concern regarding any flight at any time.

Petitioner agrees to place a sign during any flight operation that says: CAUTION-UNMANNED AERIAL VEHICLE IN OPERATION. STAY BACK 100 FEET FROM AIRCRAFT.

UAS OPERATING PARAMETERS

The UAS being deployed in these exemption request can fly at a speed of approximately 25 knots. However, given the intended use describe here, this speed will never be necessary. Much slower speeds are preferred to collect the photographic material needed.

Although the UAS being deployed has an approximate control link distance of 3/4 mile, this is much more than VLOS will allow. Petitioner agrees never to fly UAS outside of VLOS.

Petitioner will only fly UAS during the day in VMC conditions. Given the petitioner agrees to never fly higher than 300 feet AGL, distance from clouds should not be a factor if flown in VMC conditions.

Petitioner agrees to use a Visual Observer (VO) during all operations. The VO will be used to help assure VLOS at all times.

The UAS will not operate within 5 nautical miles of an airport reference point as denoted on a current FAA published aeronautical chart.

The UAS being deployed with these exemption requests has the capability of using GPS signals to return to its initial point of take off if connection with the radio control link is lost.

The petitioner agrees to yield right of way to all manned aviation activities at all times.

EXEMPTION REQUESTS

The following are a list of Title 14 CFAs which the petitioner seeks exemption. **Please note** that the Petitioner has used Exemption No. 11138 to Douglas Trudeau (Regulatory Docket No. FAA-2014-0481) as a reference. Given that the petitioner and Mr. Trudeau intend to use the exemptions in similar manners and both use similar equipment, it seemed prudent not to burden the reviewer in this matter with exemption requests that have been previously deemed that relieve was not necessary. These rules are Part 21, 45.23(b), 91.9(b)(2), 91.103(b), 91.109 and 91.203(a) & (b). If the reviewer believes that these rules need to be addressed in this request, the petitioner will make a supplemental request including these additional rule exemptions.

RULE 61.113 PRIVATE PILOT PREVELEGES AND LIMITATIONS

The Petitioner currently holds an FAA Private Pilot Certificate with an Instrument Rating (a copy of this certificate is included in supplemental material as part of this request). In addition to the certificate, Petitioner agrees to maintain a 3rd Class Medical Certificate. However, petitioner has an eye sight problem that may cause rejection of the medical unless addressed by rule exemption. Petitioner has what is called a ***unilateral papilledema*** of the right eye. This is an inflammation of the right optic nerve to which there is no cure or corrective lens solution. This causes blurriness in the right eye. The left eye has 20/20 vision and when using both eyes, Petitioner has 20/20 long distance sight. Corrective lens are need for reading. This sight condition has caused Petitioner to cease operating manned aircraft. However, this condition does not affect Petitioner's ability to operate a UAS in any way. The petitioner seeks an exemption from some eyesight requirements for the 3rd Class medical certificate.

As to private pilot limitations concerning operations for hire or compensation, it seems that Exemption No. 11062 to Astraeus has allowed this exemption previously and was noted in the Trudeau Exemption No. 11138.

As to airmanship skills, the Petitioner has been operating his UAS since 2013 and has over 100 hours of flight time. Petitioner currently fly's this UAS several hours a month as a hobby and is very proficient and has the skills to maintain altitude, maintain VLOS, navigate, avoid obstacles, avoid air traffic and respond to loss of control link. Petitioner understands that he must make at least 3 takeoffs and landings within a 90 day period for currency purposes.

RULE 91.7(a) CIVIL AIRCRAFT AIRWORTHINESS

There is no current FAA regulatory standard for determining airworthiness of UAS and there is no certificate currently available for UAS airworthiness. Petitioner seeks an exemption from this rule by ensuring that the UAS is in an airworthy condition based on compliance with the operating documents prior to every flight. Flight manuals and other important documents will be kept in a location readily accessible to the PIC at all times.

RULE 91.119(c) MINIMUM SAFE ALTITUDES

91.119 prescribes safe altitudes for the operation of civil aircraft, but it allows helicopters to be operated at lower altitudes in certain conditions. Petitioner seeks an exemption from this rule as Petitioner will only operate the UAS in a range from ground level up to but not exceeding 300 feet (AGL) and will only operate in safe areas away from the public thus providing a level of safety not available to manned aircraft. The petitioner asserts that given the size, weight, maneuverability and speed of the UAS, an equivalent or higher level of safety will be achieved that from conventional manned helicopters.

Petitioner will avoid actively populated areas. These areas will be interpreted to include areas on a FVR chart depicted in yellow and will be supplemented with information from a Flights Standard District Office (FSDO). Petitioner intends to operate the UAS over real estate for inspection purposes. Petitioner will not operate over any assemblage of people in an open air environment

Per the exemption granted in No. 11138 concerning 91.119(c), Petitioner agrees to act in strict accordance to that exemption. However, Petitioner seeks an exemption from the rule stipulating that a UAS cannot be operated *within 500 feet* of a structure *without permission of the owner*. Given the intended use Petitioner will use these exemptions for, which is for photography and videography of real estate for marketing & inspection purposes, agreement from the ***engaging*** property owner or their agent is an absolute necessity. The UAS will only be flown over properties with this permission. However, given the housing density in the Atlanta, GA area, maintaining a 500 foot distance from other structures even while strictly flying over a permission granting owner's property is impossible in many instances. The Petitioner seeks an exemption to this rule which would allow a 50' stand-off from other structures as long as the UAS is operated completely over and within the property boundary lines of a permission granting property owner. Petitioner agrees to always keep privacy rights of other property owners in mind and will never engage a UAS in any type of surveillance or spying.

RULE 91.121 ALTIMETER SETTINGS

Petitioners' UAS has GPS derived altitude capabilities with a barometric sensor. The petitioner believes this rule in not applicable to the UAS operations intended.

RULE 91.151(a) FUEL REQUIREMENTS FOR FLIGHT IN VFR CONDITIONS

Petitioner seeks relief from this rule due to the UAS being deployed is battery operated and the requirements under this rule are not applicable. The UAV in question has First Person Vision capabilities which transmits certain telemetry to a monitor where the PIC can monitor certain aspects of the flight including battery level. A typical battery for a

Phantom 2 UAS will last approximately 20-25 minutes before total exhaustion. Certain battery level warnings are set where the PIC will know when the battery state is at 30% and 15% remaining charge levels. This will normally allow a flight of 12 – 15 minutes with sufficient battery charge to make a safe landing. Petitioner will never begin a flight unless a fully charged battery is used.

RULE 91.405(a) MAINTENANCE REQIOERD, 91.407(a) OPERATION AFTER MAINTENANCE, PREBVENTITIVE MAINTENANCE, REBUILDING OR ALTERATION; 91.409(a)(2) INSPECTIONS; 91.417(a)(b) MAINTENANCE RECORDS

Petitioner seeks relief from these rules due to it being an alternate inspection requirement of 91.409(a)(2). The Petitioner will inspect and ensure UAS is in a condition for safe flight and adhere to all operating documents.

SUPPLEMENTAL INFORMATION

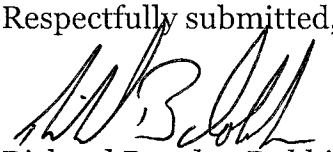
The Petitioner has provided the following information to support these requests for rule exemptions:
1) Copy of petitioners FAA Private Pilot's License, 2) Phantom 2 User Manual v.1.04, 3) NAZA M-V2 Main Controller Quick Start Guide v.1.26 (This is the micro controller that operates the UAS), 3) iOSD Mini User Manual (This provides telemetry data during flight).

CLOSING

The Petitioner believes that exemption from the above listed Title 14 CFRs is warranted given Petitioner's background as a Private Pilot, the nature of the type of UAS flights that will be undertaken, the size & weight of the UAS being deployed, the safety precautions to the general public and the NAS the Petitioner intends to adhere to, the positive environmental impact the flight operations would have compared to manned fuel consuming missions and the economic benefit the Petitioner's business would have in this new area of aviation.

Thank you for your review of this matter. Please feel free to contact me at any time with any questions regarding this matter.

Respectfully submitted,



Richard Bowden Dobbins