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

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

September 15, 2015

Exemption No. 12856
Regulatory Docket No. FAA−2015−2205

Mr. Kevin D. Pomfret
Williams Mullen
8300 Greensboro Drive
Suite 1100
Tysons Corner, VA 22102

Dear Mr. Pomfret:

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

By letter dated May 15, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of EagleView Technologies, Inc. (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial data collection.

See Appendix A for the petition submitted to the FAA describing the proposed operations and the regulations that the petitioner seeks an exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested exemption would not set a precedent, and any delay in acting on this petition would be detrimental to the petitioner.

Airworthiness Certification

The UAS proposed by the petitioner are the Microdrone md4-1000, Aerialtronics Altura Zenith ATX8, DJI Phantom, DJI Inspire, and PrecisionHawk Lancaster.

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

[1] Aerial data collection includes any remote sensing and measuring by an instrument(s) aboard the UA. Examples include imagery (photography, video, infrared, etc.), electronic measurement (precision surveying, RF analysis, etc.), chemical measurement (particulate measurement, etc.), or any other gathering of data by instruments aboard the UA.

Conditions and Limitations

In this grant of exemption, EagleView Technologies, Inc. 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 Microdrone md4-1000, Aerialtronics Altura Zenith ATX8, DJI Phantom, DJI Inspire, and PrecisionHawk Lancaster when weighing less than 55 pounds including payload. Proposed operations of any other aircraft will require a new petition or a petition to amend this exemption.

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

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

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

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

6. All operations must utilize a visual observer (VO). The UA must be operated within the visual line of sight (VLOS) of the PIC and VO at all times. The VO may be used to satisfy the VLOS requirement as long as the PIC always maintains VLOS capability. The VO and PIC must be able to communicate verbally at all times; electronic messaging or texting is not permitted during flight operations. The PIC must be designated before the flight and cannot transfer his or her designation for the duration of the flight. The PIC must ensure that the VO can perform the duties required of the VO.

7. This exemption and all documents needed to operate the UAS and conduct its operations in accordance with the conditions and limitations stated in this grant of exemption, are hereinafter referred to as the operating documents. The operating documents must be accessible during UAS operations and made available to the

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

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

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

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

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

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

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

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

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

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

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

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

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

20. The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough available power for the UA to conduct the intended operation and to operate after that for at least five minutes or with the reserve power recommended by the manufacturer if greater.

21. Air Traffic Organization (ATO) Certificate of Waiver or Authorization (COA). All operations shall be conducted in accordance with an ATO-issued COA. The exemption holder may apply for a new or amended COA if it intends to conduct operations that cannot be conducted under the terms of the attached COA.

22. All aircraft operated in accordance with this exemption must be identified by serial number, registered in accordance with 14 CFR part 47, and have identification (N−Number) markings in accordance with 14 CFR part 45, Subpart C. Markings must be as large as practicable.

23. Documents used by the operator to ensure the safe operation and flight of the UAS and any documents required under 14 CFR §§ 91.9 and 91.203 must be available to the PIC at the Ground Control Station of the UAS any time the aircraft is operating. These documents must be made available to the Administrator or any law enforcement official upon request.

24. The UA must remain clear and give way to all manned aviation operations and activities at all times.

25. The UAS may not be operated by the PIC from any moving device or vehicle.

26. All Flight operations must be conducted at least 500 feet from all nonparticipating persons, vessels, vehicles, and structures unless:
    a. Barriers or structures are present that sufficiently protect nonparticipating persons from the UA and/or debris in the event of an accident. The operator must ensure that nonparticipating persons remain under such protection. If a situation arises where nonparticipating persons leave such protection and are within 500 feet of the UA, flight operations must cease immediately in a manner ensuring the safety of nonparticipating persons; and
    b. The owner/controller of any vessels, vehicles or structures has granted permission for operating closer to those objects and the PIC has made a safety assessment of the risk of operating closer to those objects and determined that it does not present an undue hazard.

    The PIC, VO, operator trainees or essential persons are not considered nonparticipating persons under this exemption.

27. All operations shall be conducted over private or controlled-access property with permission from the property owner/controller or authorized representative. Permission from property owner/controller or authorized representative will be obtained for each flight to be conducted.

28. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the applicable COA must be reported to the FAA's UAS Integration Office (AFS−80) within 24 hours. Accidents must be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: www.ntsb.gov.

If this exemption permits operations for the purpose of closed-set motion picture and television filming and production, the following additional conditions and limitations apply.

29. The operator must have a motion picture and television operations manual (MPTOM) as documented in this grant of exemption.

30. At least 3 days before aerial filming, the operator of the UAS affected by this exemption must submit a written Plan of Activities to the local Flight Standards District Office (FSDO) with jurisdiction over the area of proposed filming. The 3-day notification may be waived with the concurrence of the FSDO. The plan of activities must include at least the following:
    a. Dates and times for all flights;
    b. Name and phone number of the operator for the UAS aerial filming conducted under this grant of exemption;
    c. Name and phone number of the person responsible for the on-scene operation of the UAS;
    d. Make, model, and serial or N−Number of UAS to be used;
    e. Name and certificate number of UAS PICs involved in the aerial filming;
    f. A statement that the operator has obtained permission from property owners and/or local officials to conduct the filming production event; the list of those who gave permission must be made available to the inspector upon request;
    g. Signature of exemption holder or representative; and
    h. A description of the flight activity, including maps or diagrams of any area, city, town, county, and/or state over which filming will be conducted and the altitudes essential to accomplish the operation.

31. Flight operations may be conducted closer than 500 feet from participating persons consenting to be involved and necessary for the filming production, as specified in the exemption holder's MPTOM.

Unless otherwise specified in this grant of exemption, the UAS, the UAS PIC, and the UAS operations must comply with all applicable parts of 14 CFR including, but not limited to, parts 45, 47, 61, and 91.

This exemption terminates on September 30, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures

Direct Dial: 703.760.5204
kpomfret@williamsmullen.com

May 15, 2015

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

Re: Section 333 Exemption Request

Dear Sir or Madam:

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (the "Reform Act"), EagleView Technologies, Inc. ("Petitioner") hereby applies for an exemption from the Federal Aviation Regulations ("FARs") described in Section VII below, a Certificate of Waiver and Authorization ("COA") and any other exemptions necessary to allow the Petitioner to operate the small Unmanned Aircraft Systems ("UAS") described in Section IV for commercial aerial data collection purposes, as more fully described in Section IX below.

I. Background on Petitioner

Petitioner is an industry leading provider of aerial imagery, data analytics and GIS solutions serving the commercial, government and public utility sectors. The company's patented image capture processes and 3D modeling algorithms coupled with property-centric analytic tools empower end-user workflow in support of property claims, risk management, emergency response, assessment, corridor mapping and more. In January, 2013, Petitioner merged with Pictometry International, creating a unique company with powerful technological solutions in the GIS, measurement and analytical space. The combined company has more than 50 patented technologies to provide scalable, efficient and highly accurate analytical solutions.

II. Contact Information

The contact information for Petitioner is set forth below:

Chris Barrow, CEO
EagleView Technologies, Inc.
3700 Monte Villa Parkway, Suite 200
Bothell, WA 98021
http://www.eagleview.com/

III. Request for Exemption to Use UAS for Commercial Inspections

Petitioner proposes to inspect commercial and residential buildings using the UAS under controlled conditions. The data collection will be conducted for commercial purposes, primarily to assist in insurance underwriting and determining insurance claims. The Petitioner also requests the right to utilize the UAS for other commercial purposes that require aerial data collection, such as monitoring building construction, pre/post disaster imaging and the status of fixed assets in the telecommunication and energy industries. In each case aerial data collection will be conducted under the conditions set forth herein and the Section 333 exemption grant. In that regard, the airspace will be (i) limited, (ii) predetermined, and (iii) controlled as to access. Petitioner will limit operations to property whose owners have been notified in advance and have provided consent. Operations will always occur within the line of sight of the UAS operator. Petitioner will take steps to protect the privacy of the property owners and nearby individuals.

Given the potential for this exemption to lead to developments that will save lives and property after a storm or disaster, the Petitioner requests that this request for exemption be considered on an expedited basis. In that regard, Petitioner notes that the FAA has previously granted exemptions for similar activities for the md4-1000, the Altura Zenith ATX8, the DJI Phantom and the DJI Inspire.[1]

IV. Unmanned Aircraft Systems

A. Microdrone md4-1000

The md4-1000 is a battery powered quadcopter weighing less than 6 kg, including payload. It has a maximum speed of 26 mph and a maximum flight operating endurance of 88

[1] *See, e.g.*, Asymmetric Technologies (Microdrone md4-1000 – Exemption No. 11171), State Farm Mutual Automobile Insurance Company (Altura Zenith ATX8 – Exemption No. 11175 and Exemption 11188), Montico Inc. (DJI Phantom 2 – Exemption 11230), Erie Insurance (DJI Phantom – Exemption 11293), NextEra Energy, Inc. (DJI Phantom – Exemption 11224), Travelers Companies, Inc. (DJI Phantom – Exemption 11494) Build Imagery, LLC (DJI Inspire - Exemption 11204),), CineDrones, LLC (DJI Inspire – Exemption 11279) and USAA (PrecisionHawk – Exemption 11309).

minutes. Its flight and navigation controller centers on an inertial measurement unit, consisting of an accelerometer and a gyroscope for each axis, supplemented by a 3-axis magnetometer, a barometric altitude sensor and a GNSS receiver. With all these sensor readings put together, the md4-1000 is able to fly self-stabilized with GNSS Position Hold. As soon as there is no input from the operator, the md4-1000 will stay on the spot, waiting for the next command. It is possible to let the md4-1000 hover in the same spot for several minutes.

The aircraft is operated using a remote control ground station and is capable of setting pre-programmed distance and height limits. In the event of a loss link, GPS failure or law battery condition, the aircraft can be programmed to descend and land or return to home.

B. Aerialtronics Altura Zenith ATX8

The Altura Zenith ATX8 is a multi-rotor aircraft built with a monocoque carbon airframe. The Zenith has a 5.6 kg take-off weight and a maximum payload of 2.9 kg. The Zenith carries a 16.600 mAh battery, which facilitates up to 45 minutes of flight-time. It can be flown with either a radio or tablet and carries a variety of payloads. The Zenith has a maximum cruise speed of 20 m/s. It features auto-takeoff and landing, auto go home and landing, GPS waypoint navigation, direction lock, and GIS mapping. Specifications include:

- Length x Width: 23.6" x 23.6"
- Height: 13.7" – 21.6" tall
- Weight: 7.7 lbs., without payload (less than 15 lbs. with payload)

C. DJI Phantom

The DJI Phantom is a multi-rotor copter that that will weigh less than 55 lbs. when fully loaded. It will be operated at a maximum speed of less than 50 mph and a flight time of no more than 20 minutes. If its communications with the PIC is lost, the safety system will allow it to either hover in place and slowly descend or to return to a predetermined point.

D. DJI Inspire

The DJI Inspire is a multi-rotor copter that will weigh less than 55 lbs. when fully loaded. It will be operated at a maximum speed of less than 50 mph and a flight time of no more than 20 minutes. Its safety system will allow it to either hover in place and slowly descend if communication with the PIC is lost or to return to a predetermined point.

E. Precision Hawk Lancaster

The PrecisionHawk Lancaster is a fixed-wing vehicle that will weigh less than 55 lbs. when fully loaded. It will be operated at no more than 100 mph. It contains onboard flight diagnostics that allow it to adjust flight patterns when needed.

Each of the UAS set forth above have operating manuals, maintenance schedules and training procedures (collectively, the "Operational Documents"). Petitioner will comply with each of the Operational Documents. Copies of each can be made available upon request.

V. Statutory Authority for Requested Exemptions

This petition for exemption is submitted in accordance with Section 333 of the Reform Act. Pursuant to Section 333 of the Reform Act, the Federal Aviation Administration (FAA) Administrator (the "Administrator") is to permit operation of an unmanned aircraft system where it does not create a hazard to users of the national airspace system (NAS) or the public or pose a threat to national security. Moreover, the Federal Aviation Act grants the Administrator general authority to grant exemptions from the agency's safety regulations and minimum standards when the Administrator decides such a requested exemption is in the public interest. *See* 49 U.S.C. §§ 106(f), 44701-44716, *et seq*. A party requesting an exemption must explain the reasons why the exemption: (i) would benefit the public as a whole, and (ii) would not adversely affect safety or how it would provide a level of safety at least equal to the existing rules. 14 C.F.R. § 11.81.

VI. Safety Measures and Public Interest Benefits

As described in more detail in Section IX, the Petitioner will take measures to ensure such operations will not create a hazard to aviation or the public. Flights will be conducted under 400 feet AGL thereby avoiding interference with users of the NAS. Flights will be suspended immediately to yield right-of-way to any other aircraft. Geo-fencing will be utilized when available to ensure that a UAS does not fly outside of the intended area. The site will be secured and only authorized personnel will be permitted on the grounds. Given the size and speed of the UAS, the controlled nature of the locations being used and the lack of explosive materials or flammable jet fuels, the operations will not pose a threat to national security.

There are a number of reasons why granting the Petitioner's request to operate the UAS for commercial aerial data collection is in the public interest. For example, use of UAS in this manner will make conditions for insurance claim representatives safer. Today claim representatives must climb onto a roof for data collection. Such activities are inherently dangerous as each year claim handlers are injured due to falls from roofs. Claim handlers will be able to reduce their exposure to such hazards by using a UAS. In addition, they will be able to obtain the data necessary to make accurate assessments of a roof more quickly. Similarly,

utilization of UAS to inspect construction, telecommunication and energy physical assets will result in enhanced safety for individuals, cost savings and greater efficiencies in large and critical industries.

VII. Specific Sections from Which Petitioners Seek an Exemption

Based upon the information provided and the exemptions that the FAA has already granted pursuant to Section 333, the Petitioner requests the following exemptions:

14 C.F.R. § 61.113(a)
14 C.F.R. § 61.23(a)
14 C.F.R. § 61.23(c)
14 C.F.R. § 61.101(e)(4)
14 C.F.R. § 61.101(e)(5)
14 C.F.R. § 61.113(a)
14 C.F.R. § 61.315(a)
14 C.F.R. § 91.7(a)
14 C.F.R. § 91.119(c)
14 C.F.R. § 91.121
14 C.F.R. § 91.151(a)
14 C.F.R. § 91.405(a)
14 C.F.R. § 91.407(a)(1)
14 C.F.R. § 91.409(a)(1)
14 C.F.R. § 91.409(a)(2)
14 C.F.R. § 91.417(a)
14 C.F.R. § 91.417(b)

VIII. Justifications for Each Exemption Request

1. 14 C.F.R. § 61.23(a), 14 C.F.R. § 61.23(c), 14 C.F.R. § 61.101(e)(4), 14 C.F.R. § 61.101(e)(5), 14 C.F.R. §61.113(a) and 14 C.F.R. § 61.315(a).

Petitioner notes that FAA is now requiring the Pilot in Command to hold either an airline transport, commercial, private, recreational or sport certificate pilot license and either 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. Petitioner will ensure that its PICs will satisfy each of these requirements. Since Petitioners' PICs will be operating UAS under the same conditions as those previously granted, an equivalent level of safety will be met by granting these exemptions.

2. 14 C.F.R. § 91.7(a) Civil aircraft worthiness.

Section 91.7(a) requires that an operator determine an aircraft is in airworthy condition before a flight. Petitioner requests relief from this section provided that the operator of the UAS determines prior to each flight that the aircraft is in compliance with the applicable Operational Documents. Such pre-flight inspection will provide the equivalent level of safety as that provided by this section. Petitioner notes that the Administrator has granted relief from this section in previous exemptions.

3. 14 C.F.R. § 91.119(c) Minimum safe altitudes over congested and other areas.

Section 91.119(c) establishes safe altitudes for operation of civil aircraft over areas other than congested areas. The Petitioner requests relief from this section with respect to those participating persons, vehicles, and structures directly involved with data collection. The UAS will never operate at higher than 400 AGL. It will be operated in a restricted area, where buildings and people will not be exposed to operations without prior consent. Relief from this section is warranted as operations will be conducted with adequate safety provisions as outlined herein and in the applicable Operational Documents. As a result, an equivalent level of safety will be met by granting this exemption. Petitioner notes that the Administrator has granted relief from this section in previous exemptions.

4. 14 C.F.R. § 91.121 Altimeter Settings.

This regulation 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." An exemption from section may be needed if the UAS does not have a barometric altimeter but instead has a GPS altitude read out. An equivalent level of safety will be achieved by the operator, pursuant to the applicable Operational Documents, confirming the altitude of the launch site shown on the GPS altitude indicator before flight. As a result, an equivalent level of safety will be met by granting this exemption. Petitioner notes that the Administrator has granted relief from this section in previous exemptions.

5. 14 C.F.R. § 91.151(a) Fuel requirements for flight in VFR conditions.

Section 91.151 (a) prohibits an individual from beginning "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."

Complying with the 30 minute reserve would severely limit the length of the Petitioner's UAS flights and hamper the ability to conduct data collection. Given the limitations on the UAS's proposed flight area, a longer time frame for flight in daylight conditions is reasonable.

Operating the UAS in a tightly controlled area, where only people or official representatives who have signed waivers will be allowed, does not raise the type of risks that this section was intended to address, particularly given the size and speed of the UAS. Petitioner believes that an equivalent level of safety can be achieved by limiting flights to 50 minutes or 20% of battery power, whichever happens first.

6. 14 C.F.R. § 91.405(a) Maintenance required; 14 C.F.R. § 91.407(a)(1) Operation after maintenance, preventive maintenance, rebuilding or alteration; 14 C.F.R. §§ 91.409(a)(1) and (2) Inspections; 14 C.F.R. §§ 91.417(a) and (b) Maintenance records.

Maintenance will be accomplished by the operator pursuant to the applicable Operational Documents. An equivalent level of safety will be achieved because the UAS are very limited in size and will carry a small payload and operate only in restricted areas for limited periods of time. If mechanical issues arise, the UAS will be operating from no higher than 400 feet AGL and can immediately land. As provided in the applicable Operational Documents, the operator will ensure that the UAS is in working order prior to initiating flight, perform required maintenance, and keep a log of any maintenance performed. Moreover, the operator is the person most familiar with the aircraft and best suited to maintain the aircraft in an airworthy condition to provide the equivalent level of safety. As a result, an equivalent level of safety will be met by granting this exemption. Petitioner notes that the Administrator has granted relief from this section in previous exemptions.

7. Additional Relief.

In addition to the exemptions listed above, the Petitioner requests exemption from such other rules and regulations as the FAA deems appropriate to enable the operations described herein. Since previous exemptions granted under Section 333 of the Reform Act have been effective for two years, the Petitioner also requests that if the FAA issues interim or final rules applicable to the operation of any UAS included herein after the Petitioner receives a Grant of Exemption that any conditions and limitations required in such Grant that are more burdensome than the new regulation be appropriately modified or removed.

IX. Operating Parameters for UAS Use

Petitioner proposes that if the requested exemptions are granted, it will operate the UAS under the following conditions:

1. UAS operations will be conducted by a Pilot in Command (PIC). The PIC shall hold an airline transport, commercial, private, recreational, or sport pilot certificate. The PIC will also hold a current FAA airman medical certificate or a valid U.S. driver's

license issued by a state, the District of Colombia, Puerto Rico, a territory, a possession, or the Federal government. The UAS will be in visual line of site (VLOS) of the PIC at all times.

2. All UAS operations will utilize a visual observer ("VO"). The VO will not perform any other duties beyond assisting the PIC with seeing and avoiding air traffic and other ground-based obstacles/obstructions.

3. The PIC and VO will be able to communicate verbally at all times.

4. Petitioner will rely on the UAS vendor(s) to provide a pilot qualification program, including a training program incorporating proper aircraft operations and safety standards. The PIC and the VO will have obtained the necessary qualifications/training. A record of completion of this qualification process will be documented and made available to the Administrator upon request.

5. UAS will not be flown at ground speeds exceeding 50 mph.

6. Flights will be operated at an altitude of no more than 400 feet above ground level.

7. Each UAS operation will be completed within 50 minutes flight time or with 20% battery power remaining, whichever occurs first. At 30% battery the UAS will enter a return and land sequence; at 20% it will land immediately.

8. UAS will not be operated over any person (other than participating personnel) at an altitude that is hazardous to persons or property on the surface in the event of a UAS failure or emergency. UAS will be operated at a distance from participating buildings of at least 10 feet. Operations will be conducted at least 500 feet from non-participating persons or buildings, unless barriers are in place to provide adequate protection.

9. The UAS will abort the flight in the event of unpredicted obstacles or emergencies in accordance with the applicable Operational Document.

10. The UAS will remain clear and yield the right of way to all other manned operations and activities at all times.

11. UAS operations will not be conducted during night.

12. The UAS will not be operated by the PIC from any moving device or vehicle.

13. The UAS will 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.

14. The applicable Operational Documents and all documents required under 14 C.F.R. § 91.9 and 91.203 will be available to the PIC at the Ground Control Station of the UAS any time the aircraft is operating. These documents will be made available to the Administrator upon request.

15. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the applicable COA will be reported to the FAA's UAS Integration Office (AFS-80) within 24 hours. Accidents will be reported to the National Transportation Safety Board (NTSB).

16. The operator will follow the procedures as outlined in its applicable Operational Documents.

17. Prior to each flight, pilot will inspect the UAS to ensure it is in condition for safe flight. If the inspection reveals a discrepancy, the aircraft will be prohibited from operating until the necessary maintenance has been performed and the UAS is found to be in a condition for safe flight.

18. Operations will not be conducted over congested or densely populated areas.

19. All operations will be conducted over private or controlled-access property with permission from the land-owner/controller or authorized representative. Permission from the land-owner/controller will be obtained for each flight to be conducted.

20. All maintenance and alterations will be properly documented in the aircraft records.

21. Any UAS that undergoes maintenance or alterations that affect the UAS operation or flight characteristics will undergo a functional flight test in accordance with the applicable Operational Documents.

22. Petitioner will institute a rigorous maintenance program to ensure airworthiness of the UAS. Operator will follow the manufacturer's UAS aircraft/component, maintenance, overhaul, replacement, inspection, and life limit requirements.

23. Each UAS will comply with all manufacturer Safety Bulletins.

X. Summary to be Published in Federal Register

Petitioner: EagleView Technologies, Inc.

Sections of 14 C.F.R. Affected: § 61.23(a); § 61.23(c); § 61.101(e)(4);§ 61.101(e)(5); §61.113(a);, 61.315(a); § 91.7(a); § 91.119(c); § 91.121; § 91.151(a); § 91.405(a); § 91.407(a)(1); §§ 91.409(a)(1) and (2); §§ 91.417(a) and (b).

Description of Relief Sought: Petitioner seeks relief from the requirements of 14 C.F.R. § 61.23(a); 14 C.F.R. § 61.23(c); 14 C.F.R. § 61.101(e)(4); 14 C.F.R. § 61.101(e)(5); 14 C.F.R. §61.113(a);_14 C.F.R. § 61.315(a); § 91.7(a);14 C.F.R. § 91.119(c); 14 C.F.R. § 91.121; 14 C.F.R. § 91.151(a); 14 C.F.R. § 91.405(a); 14 C.F.R. § 91.407(a)(1); 14 C.F.R. §§ 91.409(a)(1) and (2); 14 C.F.R. §§ 91.417(a) and (b) to conduct inspections for commercial purposes using small unmanned aircraft systems (UAS) subject to operating procedures that meet or exceed those that FAA requires for similar operations.

XI. Conclusion

Satisfaction of the criteria provided in Section 333 of the Reform Act regarding size, weight, speed, operating capabilities, proximity to airports and populated areas, operation within visual line of sight, and national security, provide more than adequate justification for the grant of the requested exemption allowing operation of Petitioner's UAS for the purposes set forth herein. Please contact Petitioner's outside counsel, Kevin D. Pomfret at 703-760-5204 or kpomfret@williamsmullen.com with any questions about this filing.

Sincerely,

Kevin D. Pomfret

KDP/kmb