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

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

August 24, 2015

Exemption No. 12565
Regulatory Docket No. FAA−2015−2394

Mr. Jason Spradley
High Above SBC
6024 Summerville Lane
Bossier City, LA 71111

Dear Mr. Spradley:

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 29, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of High Above SBC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography, videography, marketing, and surveys.

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

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

Airworthiness Certification

The UAS proposed by the petitioner are the DJI Phantom 3 and Yuneec Q500.

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, High Above SBC 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, High Above SBC 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 and Yuneec Q500 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

5/29/2015

Jason Spradley
High Above SBC
6024 Summerville Ln
Bossier City, LA 71111
(512) 221-7360
Jason.spradley@ricoh-usa.com

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

To Whom It May Concern:

I, Jason Spradley, am writing to request exemption from the following sections of Title 14, Code of Federal Regulations §§ in accordance with the FAA's **Guidelines for Submitting a Petition for Exemption under section 333 of the FAA Modernization and Reform Act of 2012.**

91.119(c), .91.121, 91.151(a), 91.405(a), 91.407(a)(1), 91.409(a)(1), 91.409(a)(2), 91.417(a)&(b).

I am requesting this exemption in order to operate small unmanned aircraft systems (sUAS) commercially in airspace regulated by the Federal Aviation Administration (FAA) for the purposes of aerial photography/video, real estate marketing and surveys, and other flight requests that could be performed safely and more cost effectively with the use of sUAS at low altitude (below 200 feet) within the U.S. national airspace system as compared to a manned aircraft. Such requests will only be performed with the authorization and permission of clients or authorized agents of such clients. No persons will be included in any photo/video without their

expressed written permission, which will be kept on file for audit at any time by the FAA.

The following reasons for exemption of the above mentioned Federal Aviation Regulations (FAR) are being requested by myself, Jason Spradley.

- **91.119(c)** As determined in the Exemption 11138 (Douglas Trudeau) - operations conducted closer than 500 feet to the ground may require that the UAS be operated closer than 500 feet to essential persons or objects that would not be possible without additional relief. The petitioner requests modification or exemption and clarification concerning the terms *congested areas* and *densely populated*. I am requesting a waiver for this condition to allow responsible operation with extreme safety in areas with housing and possible other structures.
- **91.121** As determined in exemption 11138 (Douglas Trudeau) - is nonapplicable since the the sUAS does not use an altimeter but does utilize electronic GPS with a barometric sensor for altitude hold and information.
- **91.151(a)** As discussed in exemption 11136 (Advanced Aviation Solutions LLC) – prior relief has been granted for manned aircraft to operate at less than the prescribed minimums, including exemption numbers 2689, 10650, and 5745. Additionally, similar UAS specific relief has been granted in exemption numbers 10673, 8811, and 10808 for daytime visual field of reference conditions (VFR). The UAS provides battery power measurement to the radio controller held by the person in control (PIC). The UA batteries allow for apporoximately 20 minutes of flight. I have attached information on UASs that describe in more detail the specifics around battery management. They contain process and procedures for the PIC when battery reaches a certain level. Understanding the limitations on proposed operations and location of said operations, the FAA found that reduced minimum power reserve for flight in daytime VFR conditions was reasonable.
- **91.405(a), 91.407(a)(1), 91.409(a)(1) & (2), 91.417(a) & (b)** As discussed in exemption 11138 (Douglas Trudeau) – I, Jason

Spradley, will personally inspect and ensure that each UAS is in top condition for safe flight in accordance with all documents pertaining to safe operation. The FAA found that adherence to the petitioners operating documents and the conditions and limitations specified, describing the requirements for maintenance and record keeping and inspection were sufficient to ensure that safety would not be adversely affected.

Description of UAS to be Operated under this Exemption

The DJI Phantom 3 professional and the Yuneec Q500 are both manufactured by highly successful and safety oriented companies. Both UASs fly under 25 pounds and carry high definition cameras. The advertised maximum speed is less than 15 miles per hour and is powered by four electric motors with a distance of less than 18 inches. They both utililize gps and compass orientation for stable flight and the ability to knowtheir position at all times. The gps on both UASs also do not allow for motors to be initialized within a designated No Fly Zone. Real time video that includes telemetry is visible by the PIC at all times. The PIC can measure battery level, GPS strength, altitude, distance from PIC, along with image from camera at all times. Both units have fail safe modes of operation for low battery, loss of gps or loss of signal. In these situations, the UAS will return to the point of takeoff and motors will automatically disengage. Each UAS can be programmed to limit their altitude and distance from PIC before flight. Both units are also limited to approximately 20 minutes per battery. Both units also have visible LED indicators that let the PIC know of any situation that the PIC might determine requires the UAS to return home. Most flights last less than 10 minutes and more information is available in the attachments that I have included with this application for exemption.

Acknowledgment of FAA Safety Regulations and Guidelines

I, Jason Spradley, have reviewed and retained a copy of all FAA regulations including those regulations and guidelines based on the premise of safety. I find all regulations to be reasonable and I will not only meet, but do my

best to exceed all safety regulations as set forth by the FAA. My main focus is safety and protection of all persons and property that myself or my UAS comes in contact with. I have enclosed documents that include a preflight and postflight checklist, but I also have an additional checklist that I use before, during and after each flight. All moving parts of the UAS are inspected to ensure safety.

Request for Close Proximity Flight

I, Jason Spradley, am also requesting to be allowed to operate within 5 miles of an airport similar to reference number 1, providing that

"The UA may not operate in Class B, C, or D airspace without written approval from the FAA. The UA may not operate within 5 nautical miles of the geographic center of a non towered airport as denoted on a current FAA published aeronautical chart unless a letter of agreement with that airport's management is obtained, and the operation is conducted in accordance with a NOTAM as required by the operator's COA. The letter of agreement with the airport management must be made available to the Administrator upon request."

I have permission of the airport administrator or designated official. I will have written permission and a documented flight plan for each flight used in this manner. The before mentioned written permission and flight plan will be kept on file for audit at any time for the FAA. Flight within 5 miles of an airport is rare, but in the area I plan to operate, there are several small airports that allow UAS flight within 5 miles with permission as noted above.

Other Interests

I feel that this exemption will allow me not only the ability to gain financially for use at the request of different companies, but it will also allow me to help educate the public on the safe use of a UAS under proper legal guidelines and safety. I feel that this exemption will also allow me to perform tasks that not only could not be performed from the ground, but would also allow me to perform tasks that would normally put persons at

risk to obtain the same information. Many of the structures I would be filming would be hazardous for an individual to access. The use of a UAS allows for safe visual inspection of not only property, but buildings and other structures as well.
I can also use the UAS to participate in air shows and displays for no charge to show the many uses of this type of aircraft when performed under the proper legal guidelines. My services will also be offered to local organizations such as schools, fire departments, and police departments as long as such requests fall under the rules of the exemption that I am requesting along with all other FAA guidelines.
Operations for this petition will also enhance the economic growth of the area in which my company resides.

Summary

I, Jason Spradley, am requesting this exemption for the purposes of aerial photography and video of, not only real estate, but possibly land observation, inspection of construction equipment, towers, and other flight operations as requested by clients. I am requesting this exemption for the reasons noted above and specifically intended these items to be broad based on my business plan to extend operations to different areas based on requests by clients. Each request will be analyzed by myself, Jason Spradley, to validate that these requests can be done in a safe manner and in compliance with all FAA regulations. I also plan to use my business and myself as a mentor for other small business owners to educate and to assist them in starting their own business in accordance with all FAA regulations and laws. I have seen several advertisements of people offering these services, as specified above, but I have refrained from pursuing opportunities for commercial use of my UAS until I can properly be authorized by the FAA.

Personal Information

I am a member of the AMA, Member # 1071321. I have been flying RC aircraft for over 2 years with no incidence and I am an avid builder of RC models to include cars, helicopters, and UASs. I have a passion for the

hobby and I have been waiting for the opportunity to possibly turn that hobby into a venture that would help support my family.

Documents Attached

1. DJI Phantom 3 Professional Safety Guidelines
2. Yuneec Q500 Owner's Manual
3. Yuneec Q500 LED Indicators

References

1. FAA Exemption Number 11080, Regulatory Document Number FAA-2014-0355 in the matter of the petition of Flying Cam INC
2. FAA Exemption Number 11136, Regulatory Document Number FAA-2014-0508 in the matter of the petition of Advanced Aviation Solutions LLC
3. FAA Exemption Number 11138, Regulatory Document Number FAA-2014-0481 in the matter of the petition of Douglas Trudeau

Thank you for your consideration of my petition for this exemption. I look forward to hearing from you soon. Please do not hesitate to reach out to me with any questions or if any additional information is needed.

Respectfully,

Jason Spradley
Owner
High Above SBC