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

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

August 19, 2015

Exemption No. 12514
Regulatory Docket No. FAA−2015−1223

Mr. Michael Travisano
Michael Angelo Photographers
91 Salem Road
Brick, NJ 08724

Dear Mr. Tavisano:

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

By letter posted to the public docket April 27, 2015, and July 22, 2015 you petitioned the Federal Aviation Administration (FAA) on behalf of Michael Angelo Photographers (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial imaging and videography.

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 Blade 350 QX3.

The petitioner requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*. In accordance with the statutory criteria provided in Section 333 of Public Law 112−95 in reference to 49 U.S.C. § 44704, and in consideration of the size, weight, speed, and limited operating area associated with the

aircraft and its operation, the Secretary of Transportation has determined that this aircraft meets the conditions of Section 333. Therefore, the FAA finds that the requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*, and any associated noise certification and testing requirements of part 36, is not necessary.

The Basis for Our Decision

You have requested to use a UAS for aerial data collection[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, Michael Angelo Photographers 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, Michael Angelo Photographers 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 Blade 350 QX3 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

Michael Angelo Travisano
Michael Angelo Photographers
91 Salem Road
Brick, NJ 08724
Business 732-282-9800
Cell 908-814-5488

Subject: Exemption Request Section 333 of the FAA Reform Act and Part 11 of the Federal Aviation Regulations from 14 C.F.R. Part 21, 45.27(a), 45.29 (3) (c)(d)(e)(f)(g)(h), 61.113 (a) & (b), 91.103, 91.119, 91.121, 91.203, 91.151
Following the format of FAA Exemption No. 11138 -Regulatory Docket No. FAA –2014 –0481 I have included:

1) Supplemental Response for Petition

2) Blade 350 QX3 AP Combo RTF with SAFE® Technology+ User Manual

3) Personal protocols and controls -Safety/Flight concerns Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 and 14 C.F.R. Part 11,
I, Michael Travisano, a board certified professional Photographer for more than 28 years. Would like to apply for an exemption from the following Code of Federal Regulations (C.F.R) to be allowed commercial operation of lightweight Unmanned Aircraft Systems (UAS) for aerial imaging and video of homes listed for sale in Ocean and Monmouth Counties in the state of New Jersey requested by the home owner. For the exemption length of 2 years or the maximum allowed by the FAA. (maximum gross weight 64 ounces, equipped with four rotors that are driven by electric motors powered by batteries, the approximate flight time 10 -15 minutes.) A built in camera with intent for aerial video and photography to enhance sales and better represent the home for Real Estate marketing purposes. following an exemption and approval by the FAA. My exemption request would permit operation of ultra-light weight, unmanned (piloted by remote control) in predetermined areas inside the home owners property lines, away from general public, airports, heliports and vehicular traffic, under 300 ft. with a more likely operational envelope of less than 100 ft. After carefully reviewing, inspecting and examining the area of aerial observation. This would allow for photography within property boundaries of an individual homeowner's real estate listing.
I will abide all FAA requirements to ensure this exemption will provide a level of safety at least equal to existing rules and will only operate in a safe environment that is strictly controlled. Away from power lines, elevated lights, airports and actively populated areas; and I will conduct extensive preflight inspections and protocols, during which safety carries primary importance. 14 C.F.R. Part 21, Subpart H: Airworthiness Certificates 14 CFR § 91.203. Given the size, weight, speed, and limited operating area associated with the aircraft to be utilized, I am asking exemption from 14CFRpart21,Subpart H(Airworthiness Certificates)and§91.203 (a) and (b) (Certifications required),subject to certain conditions and limitations, is warranted and meets the requirements for an equivalent level of safety under14CFRpart 11 and

Section 333of P.L. 112-95 (Section 333).14 C.F.R. 45.27(a): Location of marks; non fixed-wing aircraft. 14 C.F.R. 45.29 (3) (c)(d)(e)(f)(h): Size of Marks
Furthermore I request an exemption from §45.23 Marking of the aircraft because my UAS will not have a cabin, cockpit on which to mark certain words or phrases. Additionally two -inch lettering will not fit on such a small aircraft with dimensions smaller than the minimal lettering requirement. I understand the need for markings and will mark my UAS in the largest possible lettering by placing the word "Experimental" or assigned number or name (based on a request or ruling by the FAA) on its fuselage as required by §45.29(f) so that anyone assisting me as a spotter will see the markings. I also ask for an exemption from §§91.405(a),91.407(a)(1), 91.409(a)(2) and 91.417(a) and(b) Maintenance inspections may be required and should be granted since they only apply to aircraft with an airworthiness certificate. But, as a safety precaution I will perform a preflight inspection of my UAS before each flight as outlined in his operating documents.14 CFR 61.113 (a) & (b): Private pilot privileges and limitations: Pilot in command. Under §61.113 (a) and(b) private pilots are limited to non-commercial operations, however I can achieve an equivalent level of safety as achieved by current regulations because my UAS does not carry any pilots or passengers. While helpful, a pilots' license will not ensure remote control piloting skills. The risks of operating a UAS are far less than the risk levels inherent in the commercial activities outlined in 14 CFR part61,et seq., I requests an exemption from §61.113 Private Pilot Privileges and Limitations .Regarding UAS operational training, I have experience flying practice flights in a remote control park located in Farmingdale NJ an area designated for hobbyist for remote control flight. The purpose is to gain familiarization with the characteristics of my UAS' performance under different temperature and weather conditions. I am aware of a three-day drone training course in Las Vegas Nevada and would attend if required by the FAA.14 C.F.R. 91.103 (b)(1), (b)(2): Preflight Action If granted an exemption I agree to additional safety procedures including, but not limited to:

1)Keeping my UAS within a radius distance of 1000 feet from the controller to both aid in direct line of sight visual observation.
2)Operate the UAS for 3-7 minutes per flight; land my UAS according to the manufacturer's recommended minimum level of battery power.
3)Operate my UAS only within visual line of sight (VLOS).
4)Use the UAS' global positioning system(GPS) flight safety feature; it hovers and then slowly lands if communication with the remote control.

7-10-15
Michael Angelo Travisano
Michael Angelo Photographers LLC
91 Salem Road
Brick, NJ 08724
Business 732-282-9800
Cell 908-814-5488

Docket (No. FAA-2015-1223-0001)

Re: Additional Information requested by Program Analyst Brenda Robeson On 7-1-15

Public Benefit and Safety

Granting the present petition will further the public interest by allowing Michael Angelo Photographers to safely, efficiently, and economically perform aerial video and photography of, real estate locations, and landscapes.
It will decrease congestion of the National air space by using unmanned aircraft that do not require an airport to takeoff or land. therefore it will reduce the amount of manned aircraft conducting aerial video and photography missions. It would then result in fewer aircraft that must be handled by air traffic control during the ground, takeoff, departure, arrival, and landing phases of flight operations, reduce pollution, and provide significant benefits to the economy.

My Blade 350 QX3 AP Combo RTF with SAFE® Technology can be considered superior to full size manned aircraft for this company's purposed limited use, due to the smaller device size ,cheaper equipment and personnel cost, reduced noise that will greatly benefit the public by drastically reducing the levels of air and noise pollution that are generated during traditional full sized fixed wing aerial flight operations. By using battery power and electric motors, my UAs (Unmanned Aircraft System) will not produce air pollution, and is the most viable environmentally conscious alternative to the traditional full sized MANNED fixed wing aircraft.

I am petitioning for an exemption to operate a UAs with a built-in stabilized HD camera and GPS safety features which restrict its ability to a specified height above ground. It also has a feature that limits the distance it can fly from the controller thus adding an additional level to public safety.

my UAs also has a failsafe function that is triggered in the event communication is lost between the UAs and the main controller transmitter. At that time, the UAs will autonomously return to its point of takeoff and land safely.

Additional information of support for Exemption request

Operating the battery powered UAs is one such technology that not only allows companies greater operational flexibility compared to manned aircraft, but provides such flexibility without the high operational cost of a traditional manned aircraft. By operating a UAs, companies such as Michael Angelo Photographers , can remain competitive and profitable, and therefore, provide greater job stability to employees and contractors, which will ultimately contribute to growth of the U.S. economy.

I will only operate my UAs in mine or my observer's line-of-sight and will operate at locations that are `sufficient distance' from populated areas within the flight area. Such operations will ensure that the UAs will "not create a hazard to users of the national airspace, or the public."

I will not fly the UAs within five (5) miles of an airport . Maximum flight time for each operation will be between 4-12 minutes.

Flights will be terminated when battery levels reach 25%, allowing sufficient reserve flight time to safely land the UAs.

The UAs will be programmed so it will not be operated at an altitude that exceeds 200 feet AGL, and not more than 200 feet above an elevated platform from which video and photography is planned.

Minimum crew for each operation shall consist of: UAs operator, and a visual UAs observer,

The UAs operated by Michael Angelo weighs less than 8 pounds, including all payload (i.e. camera, lens, and stabilized gimbal).

The UAs will operate at speeds of no more than 18 knots per hour.