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

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

July 27, 2015

Exemption No. 12170
Regulatory Docket No. FAA–2015–1701

Mr. Mark Wolf
Mr. Steve Tippmann
Tippmann Construction
9009 Coldwater Road
Fort Wayne, IN 46825

Dear Messrs. Wolf and Tippmann:

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 April 30, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Tippmann Construction (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 DJI Phantom 2 Vision + and DJI Phantom 3.

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, Tippmann Construction 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, Tippmann Construction is hereafter referred to as the operator.

Failure to comply with any of the conditions and limitations of this grant of exemption will be grounds for the immediate suspension or rescission of this exemption.

1. Operations authorized by this grant of exemption are limited to the DJI Phantom 2 Vision + and DJI Phantom 3 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 July 31, 2017, unless sooner superseded or rescinded.

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

Enclosures

April 30, 2015

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U.S. Department of Transportation, Docket Operations
West Building Ground Floor, Room W12-140
1200 New Jersey Ave, SE
Washington, DC 20590

RE: Exemption Request – Section 333 of the FAA Modernization and Reform Act of 2012

Attachments:

1) Phantom 2 Vision + User Manual V1.6

Dear Sir or Madam,

The purpose of this letter to you today is to petition the Federal Aviation Administration for an exemption from certain Federal Aviation Regulations in order for Mark Wolf and / or Steve Tippmann to operate an Unmanned Aerial System (UAS) to perform aerial photography and video for real estate development and construction progress and sites in the United States. As representatives of Tippmann Construction, we would like to be able to utilize a UAS to enhance our company's documentation and marketing of our projects. We have already logged more than 15 hours of flight time as hobbyists with the specific UAS that is the subject of this petition.

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, We, Mark Wolf, Steve Tippmann, and Tippmann Construction, are submitting the following information with our request:

Petitioner(s): Mark Wolf
Steve Tippmann
Tippmann Construction
9009 Coldwater Road
Fort Wayne, IN 46825
(260) 490-3000
mwolf@tippmanngroup.com

Description of Operations

A. The UAS that is the subject of this Petition
    a. DJI Phantom 2 Vision +
    b. DJI Phantom 3

Tippmann Construction currently owns a DJI Phantom 2 Vision + with a serial number of PH645385324, including the DJI factory mounted camera, along with the associated remote control unit, and DJI Vision app for iPhone which provides a first person view of what the camera is seeing in real time. This unit is a quad-copter with an advertised weight of 1,242 grams (including battery and propellers). Similar units have been the subject of prior exemptions by the FAA (examples include: Brian M. Walk / Unmanned Aerial Solutions, Exemption No. 11445, Regulatory Docket No. FAA-2015-0143; Daniel Achatz / Exemption No. 11434, Regulatory Docket No. FAA-2015-0201). The DJI Phantom 3 is not currently owned by Tippmann Construction, however, it will be purchased in the future to improve and enhance the aerial video and photography of our sites.

The associated remote control unit utilizes an operating frequency of 5.728 GHz – 5.85 GHz and a Range Extender that utilizes an operating frequency of 2412-2462 MHz. The communication distance between the remote control unit and the Phantom is 800m. The UAS also is equipped with a fail-safe return-to-home mode in the event that the link between the aircraft and the remote control ground station is lost. The UAS can operate for approximately 20-25 minutes on a fully charged battery.

B. The UAS Pilot(s) in Command

Mark Wolf and Steve Tippmann have made numerous flights as hobbyists with this aircraft, accumulating more than 15 hours of flight time with the Subject UAS.

C. UAS Operating Parameters and Intended Flight Profile

Mark Wolf is a Marketing professional and has been the primary photographer for Tippmann Construction for more than 12 years. He has traveled the country visiting job sites, active construction projects, and completed warehouses photographing these projects and facilities from all angles. Steve Tippmann is the Executive Vice President at Tippmann Construction and also has more than 10 years of experience as a hobbyist photographer, while also frequently photographing projects for Tippmann Construction. Safety is the top priority when visiting these sites, whether photographing from the ground or the air.

The following UAS Operating Procedures will be adopted and followed each time the UAS is flown:

1. All flights will be flown below 300 feet and within a radius distance of 800 feet from the remote control ground unit.

2. The Pilot In Command will have direct line of sight visual observation of the UAS at all times, and will operate the UAS only within direct line of sight.

3. There will be times when the UAS is flown in close proximity, within 20-25 feet of the structure under construction or a completed building. When this occurs, the UAS will be operated at less than 3 miles per hour.

4. Prior to the start of a flight, a pre-flight checklist will be thoroughly completed. This includes verifying a GPS lost-link procedure which will safely return the UAS in the event of a loss of communication between the aircraft and the remote control, as well as other standard safety checks and compass calibration as recommended by the manufacturer. Specific weather conditions are also addressed at this time, and the UAS will not be flown in adverse weather conditions, such as heavy wind, rain or snow.

5. If the need arises for a flight to be within 5 miles of an airport, the flight will only occur after permission has been granted by the appropriate control tower.

Sections of 14 CFR From Which Petitioner is Seeking an Exemption

14 CFR Part 21, Subpart H	Certification procedures for products and parts, Airworthiness Certificates
14 CFR Part 36	Noise Standards; Aircraft Type and Airworthiness Certification
14 CFR § 45.23	Display of marks; general
14 CFR Part 61	Certification: Pilots, Flight Instructors and Ground Instructors
14 CFR § 91.7	Civil Aircraft Airworthiness
14 CFR § 91.9	Civil Aircraft Flight Manual, Marking and Placard Requirements
14 CFR § 91.103	Preflight Action
14 CFR § 91.105	Flight Crewmembers at Stations
14 CFR § 91.109	Flight Instruction
14 CFR § 91.119	Minimum Safe Altitudes: General
14 CFR § 91.121	Altimeter Settings
14 CFR § 91.151	Fuel Requirements for Flight in VFR Conditions
14 CFR § 91.203	Civil Aircraft: Certifications Required
14 CFR § 91.207	Emergency Locator Transmitters
14 CFR Part 91, Subpart E	Maintenance, Preventive Maintenance and Alterations

Extent of Relief Sought and Reasons for Seeking the Exemption

14 CFR Part 21, Subpart H – FAR Part 21 establishes the procedures for issuance of certificates of airworthiness, as mandated by 49 U.S.C. § 44704. Under Section 333 and 49 U.S.C. § 44701 (b), the FAA may exempt aircraft from airworthiness certification. The petitioner requests an exemption from the requirements of this part because the size, weight, speed, operational capability and proximity to airports in which the UAS will be flown pose significantly less of a risk than those risks posed by conventional aircraft. Manned aircraft pose risks to the life and safety of the crew; that is not a consideration with the subject UAS. Risks to third parties are also minimized given the lightweight and slow speed at which the Subject UAS would operate. Nor are there risks of fuel spilling or fire in the event of an accident. Because of these factors, the petitioner requests that the FAA waive the requirement that the subject UAS require an airworthiness certificate.

14 CFR Part 36 – FAR Part 36, Subparts A, F and O establish certain noise standards for certification of various aircraft types. Because the subject UAS would not have an airworthiness certificate, and given its small size and minimal noise impact, the petitioner requests an exemption from FAR Part 36.

14 CFR § 45.23 – FAR 45.23 establishes marking requirements for aircraft; paragraph (b) mandates the registration number be displayed in letters not less than two inches in height. The subject UAS is too small to accommodate the type-size requirement. The petitioner request and exemption from this part.

14 CFR Part 61 – FAR Part 61 sets forth the certification requirements for pilots. Because the subject UAS would not have an airworthiness certificate, and given its small size and minimal risk factor, the petitioner requests an exemption from FAR Part 61, that would allow him to operate the subject UAS for aerial video and photography projects. Both petitioners on this request currently hold a valid TWIC (Transportation Worker Identification Credential) card, and have gone through the necessary background checks by the TSA in order to determine that neither Mr. Wolf nor Mr. Tippmann pose a threat to national security.

14 CFR § 91.7 – FAR 91.7 – (a) No person may operate an aircraft unless it is in an airworthy condition. To the extent that "airworthy" is defined as requiring an airworthiness certificate, the petitioner requests an exemption from this FAR for the same reasons ad identified in petitioner's request for an exemption of 14 CFR Part 21, Subpart H. Petitioner will not, however, operate the subject UAS if it is not in a condition for safe flight, as required under FAR 91.7 (b).

14 CFR § 91.9 – FAR 91.9 – requires that all aircraft have certain markings, placards and on-board flight manuals. Petitioner requests an exemption from this requirement for the same reasons as stated in in petitioner's request for exemption under 14 CFR Part 21, Subpart H.

14 CFR § 91.103 – FAR 91.103 – mandates certain pre-flight action. Petitioner will take all necessary pre-flight action, but requests an exemption from this requirement based on the interpretation of this requiring pre-flight actions that are appropriate to manned aircraft only.

14 CFR § 91.105 - FAR 91.105 – requires that crewmembers be at designated stations, with safety belts fastened, etc. Petitioner requests an exemption to this due to the fact that the subject UAS is unmanned.

14 CFR § 91.109 – FAR 91.109 – requires that persons operating an aircraft for flight instruction may not do so unless that aircraft has fully functioning dual controls. Petitioner requests an exemption due to the fact that the subject UAS does not have a second controller or dual control capability, which is consistent with other, similar UAS units.

14 CFR § 91.119 – FAR 91.119 – indicates the minimum safe altitudes over various areas. Petitioner requests an exemption to this, due to the fact that the subject UAS is intended to be a low-flying device in order to capture aerial video and photography.

14 CFR § 91.121 – FAR 91.121 – requires various altimeter settings in order to maintain a level flight. Petitioner requests an exemption from this FAR as the subject UAS will not have an altimeter that matches the requirements of this FAR. Altitude will be monitored through the DJI Vision app, and the unit will be kept below 300 feet as designated by the indications within that app.

14 CFR § 91.151 – FAR 91.151 – sets forth requirements for amount of fuel on any given flight. Petitioner requests an exemption from this FAR because the subject UAS operates on battery power. The subject UAS will only be operated when there is a minimum of 5 minutes of battery power remaining.

14 CFR § 91.203 – FAR 91.203 – requires that a civil aircraft have an airworthiness certificate and a registration certificate. Petitioner requests an exemption from this FAR because of the reasons stated in petitioner's request for an exemption under 14 CFR Part 21, Subpart H.

14 CFR § 91.207 – FAR 91.207 – prohibits operation of a US – registered aircraft unless it is equipped with an emergency locator transmitter. Given the limited distance of flights with the subject UAS, and the fact that it will be flown with direct line of sight visibility, petitioner requests an exemption from this FAR.

14 CFR § Part 91, Subpart E – requires that owners or operators of aircraft have the aircraft inspected at certain intervals, and by certain mechanics. Petitioner requests an exemption from this Subpart because the subject UAS has a maintenance and trouble-shooting program that is best executed by the owner/operator and is different from that of manned aircraft.

How this request would benefit the public

Aerial photography and video normally require the use of a manned aircraft, either a small airplane or helicopter, adding to already congested airspace. Use of a low-flying and slow moving UAS does not significantly impact the airspace as it is flown at a lower altitude and is more maneuverable and precise than larger, manned aircraft. This also enhances safety around the area being photographed, while also reducing environmental impacts caused by emissions from manned aircraft.

Operations with this UAS will serve property owners a better perspective for progress, details and benefits of the subject being photographed which cannot be achieved by taking photographs from the ground or at higher altitudes in a manned aircraft. Low level aerial photography, as provided by a UAS is also a valuable marketing tool that can lead to increased business. This type of photography can also improve work site efficiency in the construction industry by providing a perspective that cannot be seen through other efforts.

Why this exemption will not adversely affect safety

A pre-flight checklist will be performed prior to each flight to ensure the subject UAS is working properly before taking flight. Because the subject UAS is battery powered and does not carry any flammable fuels, there is little to no risk of fire in the event of an accident. The unit will also always be within a direct visual line of sight of the operator of the aircraft, in order to prevent the subject UAS from flying too close to any structure or people near the site being flown.

The subject UAS is a very small aircraft, weighing less than 5 pounds, and the likelihood of damage to property or injury to an individual in the event of a mishap is extremely low. Aerial photography in general is still utilized very often, and the risk associated with using the subject UAS is significantly lower than the risk of traditional aerial photography using an airplane or helicopter.

The subject UAS also has a lost-link fail safe function that is a part of the system, allowing the unit to return to its home base if the link between the remote controller and the unit is lost.

Summary for publishing in the Federal Register

Petition for Exemption under Section 333 of the FAA Modernization and Reform Act of 2012:

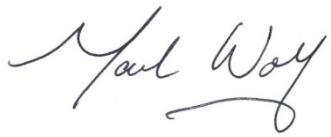
Petitioner is seeking an exemption from the following Federal Aviation Regulations:
14 CFR Part 21, Subpart H ; 14 CFR Part 36 ; 14 CFR § 45.23 ; 14 CFR Part 61 ; 14 CFR § 91.7 ; 14 CFR § 91.9 ; 14 CFR § 91.103 ; 14 CFR § 91.105 ; 14 CFR § 91.109 ; 14 CFR § 91.119 ; 14 CFR § 91.121 ; 14 CFR § 91.151 ; 14 CFR § 91.203 ; 14 CFR § 91.207 ;
14 CFR Part 91, Subpart E

Description of the exemption being sought:
The petitioner seeks an exemption from the above-referenced Federal Aviation Regulations to conduct aerial photography using a small, light unmanned aircraft for the purpose of acquiring photo and video documentation of real estate development and construction progress and sites in order to provide these images and videos to the owners or representatives of these properties.

Conclusion

Mr. Wolf and Mr. Tippmann would like to thank the FAA for considering our request. Please do not hesitate to contact us if there is a need for additional information.

Respectfully Submitted,



Mark Wolf
Tippmann Construction
Petitioner

Steve Tippmann
Tippmann Construction
Petitioner