



July 28, 2015

Exemption No. 12178 Regulatory Docket No. FAA–2015–1508

Mr. Michael Rouyre dba Point of View 5936 Travertine Lane #327 Fort Worth, TX 76137

Dear Mr. Rouyre:

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 14, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Mr. Michael Rouyre dba Point of View (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct roof inspections.

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

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

Airworthiness Certification

The UAS proposed by the petitioner is a DJI Inspire 1.

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 collection¹. 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, Mr. Michael Rouyre dba Point of View 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, Mr. Michael Rouyre dba Point of View 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 Inspire 1 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

Petition for Exemption

U.S. Department of Transportation, Docket Operations West Building Ground Floor, Room w12-140 1200 New Jersey Avenue, SE., Washington, DC 20590

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

April 14th, 2015

Dear Exemption Manager;

We wish to submit our Petition for Exemption for Unmanned Aircraft System operations. We currently have well over 900 flight hours in UAS flying.

Our request is to receive a waiver of the sections identified below. We are looking to operate a UAS in use of commercial applications for the roofing industry and insurance claims.

Approving this request will serve the public, its economic interest and will contribute to the safety of people. We have great knowledge of FAA ruling and have great awareness of restricted and operational airspace. Our number one goal is always safety when it comes to flight operations.

By allowing us this exemption for real world experience, we will be able to develop the best use of the UAS in the public. Operational utilization, training of the UAS, etc. has yet to be fully developed in the general public area, thus by allowing us to play a role in the development we will require more operational flight experience, and therefore need to get your approval for this petition.

Michael Rouyre dba Point of View 5936 Travertine Ln #327 Fort Worth, TX 76137 Phone: 817-903-1571

Email: povtours@gmail.com

-We are seeking to get exemption of:

Section of 14 CFR: parts 21 Subpart H14 C.F.R. §45.23(b); 14 C.F.R. § 45.27; 14 C.F.R. § 61.113(a) and (b); 14 C.F.R.§ 91.119(c); 14C.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).

If there was any omitted relevant sections for what we are looking to do, please feel free to suggest the section(s) that are missing.

-<u>The extent of relief you seek and the reason you seek the relief:</u>

Michael Rouyre dba Point of View is requesting relief and exemption from the listed Federal Aviation Regulations and any other applicable rules in order to allow the use of a Small Unmanned Aircraft System (UAS).

We are looking to help roof inspectors with their roof inspections on structures less than 75' in total height from the adjacent ground. The requested exemption would allow us to help a state licensed independent claim adjuster to perform roof inspections of roofs and roof materials in order to assess and photograph damages without placing the claim adjuster at risk of fall. The request for this exemption will also allow us to help insurance claim adjuster gather data in a much faster and efficient way as well as making it safer for them.

Per the U.S. Department of Labor News Release Number: 10-1753-NAT — "Fatalities from falls are the number one cause of workplace deaths in construction. We cannot tolerate workers getting killed in residential construction when effective means are readily available to prevent those deaths," said Assistant Secretary of Labor of Occupational Safety and Health Dr. David Michaels. "Almost every week, we see a worker killed from falling off a residential roof. We can stop these fatalities, and we must.""

Even though this article is referring to construction workers, the matching risks are involved in regards to independent adjusters who performs the roof inspections. By using an UAS, the risk of an adjuster falling off a roof or a structure during an insurance claim inspection causing serious injury and/or death would be eliminated.

-How your request would benefit the public as a whole:

- 1. More thorough inspection can be made in the roofing industry and insurance claims. A comprehensive and accurate report will be available to them.
- 2. By decreasing the risk of injury and death, the insurance premium should start changing due to less claims and better employee worker's compensation. This should then also affect the general public whether they are directly affected by a claim or not.
- 3. The use of dangerous equipment such as ladders, scaffolds, electronic and gas powered tools would not be needed anymore, therefore reducing the risk of injuries.
- 4. The general public would also benefit due to the amount of claims that can be completed during a natural disaster or catastrophic event. By providing such a fast turnaround, the public can recover much quicker.
- 5. Due to time cutting for inspections in roofs and insurance claims, the named property owner/insured will be able to settle much faster on the claims, therefore providing a much better customer service experience.

6. Safety of the adjusters whom are part of the public as a whole: adjusters are not physically climbing the roof, no possibility of a fall will be present.

-Reason why the exemption would not adversely affect safety, or how the exemption would provide a level of safety at least equal to the existing rule.

The exemption will not adversely affect safety due to the safety protocols put in place by Michael Rouyre dba Point of View. The general public would be much safer than the current state it is in by eliminating the risks previously stated.

- 1. A visual observer in addition to the Pilot-in-Command (PIC) will be mandatory at all times.
- 2. Communication will be established between the visual observer and PIC at all times.
- 3. The UAS will never be flown near manned aircrafts.
- 4. A consent form will be required to be signed by the property owner during roof inspections and insurance claims. All non-participating persons will be asked to move 50' beyond the perimeter set.
- 5. During roof inspections a flight ceiling limit of 100' altitude from adjacent ground level shall be strictly adhered to by the geo-fence and PIC for all inspections. Insurance claims will have a flight ceiling limit of 150' from adjacent ground level.
- 6. A signage barrier will be set up at every flight location to alert the public of an UAS inspection in progress. A geo-fence will also be enabled on the UAS so the aircraft will be limited to the airspace above the property or area to be inspected.
- 7. The UAS will always be in the line of sight of the PIC and visual observer at all times.
- 8. Never will the UAS carry any dangerous materials or flammable liquids.
- 9. The UAS flight will end at 15 minute of flight time during roof inspections or 30 minutes of flight time during search and rescue or when the battery level has 25% power remaining.
- 10. A flight termination option will be on the UAS, which will prevent a "fly away" which will let the PIC safely terminate the flight.
- 11. The UAS operates electrically, has integrated GPS pilot system, provides location information as well as height AGL, speed, battery life, and can be programmed for no-fly zones. The craft can also provide direction of travel and distance from the pilot.
- 12. The PIC will have access the manufacturer operation manual and be available upon request. The PIC and UAS flight will abide all pre-flight checks and suggested flight protocols.
- 13. A log will be kept of all flights and locations.
- 14. A take-off and landing zones will be designated before the beginning of the flight. An emergency landing zone will be chosen as well.
- 15. All radio frequency used for the operation and controls of the UAS will comply with the FCC and any other agencies.
- 16. Operations will not occur under IFR conditions.
- 17. Michael Rouyre dba Point of View will maintain a \$1,000,000 insurance liability policy at all times during the operation of the UAS.
- 18. The UAS will have all the proper contact information and the federal exemption number attached to it permanently.
- 19. In the event that that UAS fails any pre-flight inspections, the UAS will be grounded permanently until the manufacturer issues a compliance certificate stating that the UAS has been fixed and has been inspected and deemed safe to fly again.

-A summary we can publish in the Federal Register stating –

- a) The rule from which you seek the exemption; and
- b) A brief description of the exemption you seek

(a) Point of View is seeking exemption from:

Exemption Request Pursuant to Section 333 of the FMRA and Part 11 of the Federal Aviation Regulations, Seeking Exemption from 14 C.F.R. Part 21 Subpart H; 14 C.F.R. § 45.23(b); 14 C.F.R. § 45.27; 14 C.F.R. §§ 61.113(a) and (b); 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).

(b) A brief description of what Michael Rouyre dba Point of View is seeking is as follows:

By obeying to much more stringent safety measures than is described by the Model Aircraft Operations Limits according to the FAA Modernization and Reform Act of 2012, Point of View is seeking exemption of the above listed rules. The sole purpose for the use of the UAS is to gather photo documentation of a roof or property in order to document an insurance claim made by the property owner. The photos can be obtained safely and quickly by the use of a UAS, thus decreasing the chance of a roof fall or any other threats during a claim inspection, by the adjuster, and subsequent collateral damage. The UAS roof inspection will also eliminate any damage caused by a physical roof inspection to a previously undamaged roof (breakage of clay tiles, or bending of metal roofing material by foot traffic, etc.). Safe and responsible use of a hobby sized UAS to gather photos of a roof below a height of 100' poses no threat of harm to the public if conducted with the above mentioned protocols in place. Based on the size of the craft, experience of the pilot, and the operational goals, this request appears to be well suited for approval.

-If you want to exercise the privileges of my exemption outside the U.S.

I do not wish to use the rights of my exemption outside of the United States.

Sincerely,

Michael Rouyre dba Point of View 5936 Travertine Ln #327 Fort Worth, TX 76137 Phone: 817-903-1571

Email: povtours@gmail.com