



April 2, 2015

Exemption No. 11270 Regulatory Docket No. FAA-2014-0930

Mr. Thomas Webb Treasurer Elevated Perspective Media 36 Post Road Warwick, RI 02888

Dear Mr. Webb:

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.

The Basis for Our Decision

By letter dated September 25, 2014¹, you petitioned the Federal Aviation Administration (FAA) on behalf of Elevated Perspective Media (hereinafter petitioner or operator) for an exemption. The exemption would allow the petitioner to operate an unmanned aircraft system (UAS) to conduct aerial cinematography and filming on closed sets.

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

Discussion of Public Comments

A summary of the petition was published in the Federal Register on September 2, 2014, (80 FR 9847). One comment was received in support of the petition.

¹By letter dated February 10, 2015, and posted to the public docket on February 22, 2015, the petitioner responded to the FAA's Request for Information.

Airworthiness Certification

The UAS proposed by the petitioner are the Aervonics Sky Jib frame with a DJI A2 flight system and a Vulcan frame controlled by a DJI A2 flight controller.

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, 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 and closed set motion picture and filming. 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–2014–0382), 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, Elevated Perspective Media 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 and closed set motion picture and filming. This exemption is subject to the conditions and limitations listed below.

Conditions and Limitations

In this grant of exemption, Elevated Perspective Media 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 Aervonics Sky Jib frame with a DJI A2 flight system and a Vulcan frame controlled by a DJI A2 flight controller 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 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 Colombia, 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 predetermined 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 April 30, 2017, unless sooner superseded or rescinded.

Sincerely,

/s/ John S. Duncan Director, Flight Standards Service September 25, 2014

Thomas Webb Chris Walsh ELEVATED PERSPECTIVE MEDIA 36 POST ROAD WARWICK RHODE ISLAND 02888 401-261-5117



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United States Department of Transportation Docket Management System 1200 New Jersey Ave SE West Building Ground Floor Room W12-140 Washington, DC 20590

Re: Exemption Request Pursuant To Section 333 of the FAA Reform Act of 2012

Dear FAA,

We are writing regarding the FAA Modernization and Reform Act of 2012 (the "Reform Act") and the procedures contained in:

14 C.F.R. 11

Elevated Perspective Media, an operator of small-unmanned aircraft, is requesting to be exempted from the Federal Aviation Regulations listed below. So that ELEVATED PERSPECTIVE MEDIA may operate it's lightweight unmanned aircraft systems ("UAS") commercially in airspace regulated by the Federal Aviation Administration ("FAA"). As long as Elevated Perspective Media's operations are conducted within the established by the FAA as required by Section 333.

The conditions identified and proposed by the applicant are drawn from:

Order 8900.1 CHG 0, Volume 3, Chapter 8-Issue a Certificate of Waiver for Motion Picture and Television Filming.

Thomas Webb, Chris Walsh and Judson Bell and Their company: ELEVATED PERSPECTIVE MEDIA is an experienced company and the combined years of knowledge in the film industry exceeds 40 years. ELEVATED PERSPECTIVE MEDIA and its members have been working with special effects on set for great movies like Fast and the Furious, the Green Lantern and Shutter Island. More importantly we have over 100 hours of flight training in the physical world and over 200 hours on a simulator.

ELEVATED PERSPECTIVE MEDIA has been involved in the technical development of UAS"s to provide high quality aerial cinematography with small, unmanned aircraft. ELEVATED PERSPECTIVE MEDIA has been working with multirotors for over 5 years, developing technical and practical expertise. ELEVATED PERSPECTIVE MEDIA is also currently developing a curricula for future (with the blessing of the FAA) a certification process for uas pilots.

Elevated Perspective Media's request to film and produce high quality video exclusively for film and production companies would allow it to be the vanguard of safety and correct flight procedures. Elevated Perspective Media already has a detailed safety plan in place with numerous fail-safes to insure safety to all involved. Above all else is our concern for safety.

Allowing Elevated Perspective Media to operate is productive to not only our benefit but also to numerous other industries, as we are adding to a burgeoning industry and creating jobs in an otherwise down economy.

Elevated Perspective Media respectfully requests the grant of an exemption allowing it to operate lightweight, remote controlled UAS'Ss.

The Specific Sections of Title 14 of the Code of Federal Regulations, Elevated Perspective Media Requests Exemption are:

14 CFR 21

14 CFR 45.23(b)

14 CFR 61.113 (a) & (b)

91.7 (a) 91.9 (b) (2) 91.103(b) 91.105 91.109 91.119 91.121 91.151(a) 91.203(a) & (b) 91.405 (a)

91.407(a) (1) 91.409 (a) (2) 91.417 (a) & (b).

Elevated Perspective Media's reasons for relief are simple: Without the exemption our business is not viable, we will not operate our business of cinematic filming on closed sets without the FAA's blessing. ELEVATED PERSPECTIVE MEDIA

realizes that reasons for relief are more complex than stated directly above, below are reasons why we would like to fly and why it makes America a better place. We seek relief to be the leading voice of safety and responsible practices

112 P.L. 95 §§ 331-334

when it comes to filming with UAS's.

Elevated Perspective Media is seeking relief from any currently applicable FARs to prevent us from working on a closed set cinematic production. The Reform Act in Section 332 provides for such integration of civil unmanned aircraft systems into our national airspace system as it is in the public's interest to do so. Elevated Perspective Media lightweight UASs meet the definition of "small unmanned aircraft" as defined in Section 331 and therefore the integration of Elevated Perspective Media lightweight UAS'S are expressly contemplated by the Reform Act. Elevated Perspective Media would like to operate its lightweight UAS'S prior to the time period by which the Reform Act requires the FAA to promulgate rules governing such craft.

The Reform Act guides the Secretary in determining the types of UAS'S that may operate safely in our national airspace system. Considerations include: The weight, size, speed and overall capabilities of the UAS; Whether the UAS will be operated near airports or populated areas; and, Whether the UAS will be operated by line of sight.

Each of these items urges in favor of an exemption for Elevated Perspective Media:

- a) Elevated Perspective Media UAS'S has:
- -an Aervonics Sky Jib frame with a DJI A2 flight system
- -Tiger Motors, considered the best in the industry
- -A Futaba transmitter, also considered an industry leader
- -Eight counter-rotating propellers for extreme balance, control and stability.
- -Weigh less than 55 pounds, including cinematic or other equipment.
- -Hover in place and operate at less than a 50-knot maximum speed.
- -Line of sight of the remote control pilot.
- -At all times there is a spotter, pilot and a cameraman.
- b) Elevated Perspective Media uses battery power:
- -Uses battery power and not carbon fuel.
- -Never does the battery go below 25% capacity with safeguards not only on the battery itself but also on the safety system.
- -GPS system is in place to control the UAS if any loss of connection occurs

- c) Elevated Perspective Media follows AMA guidelines
- -does not operate its UASs near airports and generally does not operate them near populated areas.
- -The UAS operating software and GPS navigation systems do not allow any of the Elevated Perspective Media UAS vehicles to operate near airports or restricted fly zones.
- -The failsafe software will disable the UAS vehicles from taking off and also limit the UAS systems from operating within specific GPS preset no-fly zones. To date, Elevated Perspective Media has only operated its fleet as prescribed by the AMA. Elevated Perspective Media only operates its UASs in predetermined areas and only in compliance with well regarded safety protocols such as those contained within the well established and commonly known Motion Picture and Television Operations Manual.

Elevated Perspective Media operation of its fleet of small-unmanned aircraft will not "create a hazard to users of the national airspace system or the public." 112 P.L. 95 § 333 (b). Given the small size and weight of Elevated Perspective Media UASs, combined with their operation in cordoned off and well-controlled areas, Elevated Perspective Media fleet falls within Congress's contemplated safety zone when it authored the Reform Act and the corresponding directive to integrate UASs into the national airspace system. Indeed, Elevated Perspective Media UASs have a demonstrable safety record and do not pose any threat to the general public or national security.

The FAA has the authority to issue the exemption to Elevated Perspective Media pursuant to:

The Federal Aviation Act, 85 P.L. 726 (1958)

As a public benefit Elevated Perspective Media will advance:

- -research into future safety guidelines for the use of UAS
- -Reducing dangers by limiting the use of larger helicopters,
- -Reducing carbon emissions.
- -Advancement of art.
- -Advancement of science through advanced data collection.

Elevated Perspective Media Exemption will not alter or change safety to the public and if fact, advance it, here are the reasons why:

- -Longer flight times equal more practice.
- -Elevated Perspective Media UASs weigh less than 55 pounds
- -Elevated Perspective Media only operates its UASs below 400 feet
- -Elevated Perspective Media UASs only operate for 5-16 minutes per flight
- -Elevated Perspective Media lands its UASs when they reach 25% battery power
- -Elevated Perspective Media remote control pilots operate by line of sight.
- -Elevated Perspective Media staffs each flight with a pilot, cameraman and a spotter.
- -Elevated Perspective Media UAS'S have gps modes to control UAS when communication is lost.
- -Elevated Perspective Media only operates in secured areas that are strictly controlled.
- -Elevated Perspective Media uses safety meetings before and after each flight to ensure protocols are used.
- -Elevated Perspective Media always obtains all necessary permissions and permits prior to operation.

The bottom line is safety is our number one priority and adhering to a strict protocol is of the utmost importance. Granting this exemption would allow us to be the vanguard for safety and correct protocol for uas.

Elevated Perspective Media respectfully requests that the FAA grant its exemption request. The FAA has the authority to issue the exemption to Elevated Perspective Media pursuant to the Federal Aviation Act, 85 P.L. 726 (1958), as amended (the "Act").

Sincerely

Thomas Webb ELEVATED PERSPECTIVE MEDIA

Treasurer