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

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

August 27, 2015

Exemption No. 12636
Regulatory Docket No. FAA−2015−2425

Mr. Gary Bollinger
AirGo Media LLC
6738 Merwin Place
Columbus, OH 43235

Dear Mr. Bollinger:

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 June 5, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of AirGo Media LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography, cinematography, videography, mapping, crop surveying, and 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 are the DJI Inspire 1 and DJI S900.

In accordance with the statutory criteria provided in Section 333 of Public Law 112−95 in reference to 49 U.S.C. § 44704, and in consideration of the size, weight, speed, and limited operating area associated with the aircraft and its operation, the Secretary of Transportation has determined that this aircraft meets the conditions of Section 333. Therefore, the FAA

finds that relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates,* and any associated noise certification and testing requirements of part 36, is not necessary.

**The Basis for Our Decision**

You have requested to use a UAS for aerial data collection[1]. The FAA has issued grants of exemption in circumstances similar in all material respects to those presented in your petition. In Grants of Exemption Nos. 11062 to Astraeus Aerial (*see* Docket No. FAA−2014−0352), 11109 to Clayco, Inc. (*see* Docket No. FAA−2014−0507), 11112 to VDOS Global, LLC (*see* Docket No. FAA−2014−0382), and 11213 to Aeryon Labs, Inc. (*see* Docket No. FAA−2014−0642), the FAA found that the enhanced safety achieved using an unmanned aircraft (UA) with the specifications described by the petitioner and carrying no passengers or crew, rather than a manned aircraft of significantly greater proportions, carrying crew in addition to flammable fuel, gives the FAA good cause to find that the UAS operation enabled by this exemption is in the public interest.

Having reviewed your reasons for requesting an exemption, I find that—

- They are similar in all material respects to relief previously requested in Grant of Exemption Nos. 11062, 11109, 11112, and 11213;
- The reasons stated by the FAA for granting Exemption Nos. 11062, 11109, 11112, and 11213 also apply to the situation you present; and
- A grant of exemption is in the public interest.

**Our Decision**

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. 106(f), 40113, and 44701, delegated to me by the Administrator, AirGo Media LLC is granted an exemption from 14 CFR §§ 61.23(a) and (c), 61.101(e)(4) and (5), 61.113(a), 61.315(a), 91.7(a), 91.119(c), 91.121, 91.151(a)(1), 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), and 91.417(a) and (b), to the extent necessary to allow the petitioner to operate a UAS to perform aerial data collection. This exemption is subject to the conditions and limitations listed below.

**Conditions and Limitations**

In this grant of exemption, AirGo Media LLC is hereafter referred to as the operator.

[1] Aerial data collection includes any remote sensing and measuring by an instrument(s) aboard the UA. Examples include imagery (photography, video, infrared, etc.), electronic measurement (precision surveying, RF analysis, etc.), chemical measurement (particulate measurement, etc.), or any other gathering of data by instruments aboard the UA.

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

1. Operations authorized by this grant of exemption are limited to the DJI Inspire 1 and DJI S900 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 September 30, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures

AirGo Media LLC
6738 Merwin Place
Columbus Ohio 43235
PH: 614.425.3381

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

*Re: AirGo Media Petition for Exemption*

AirGo Media was created to bring professionalism and safety to the UAS industry while providing a much needed service to those in need of aerial imaging. We believe that there is an overwhelming desire for aerial imaging within the corporate world as well as within our government.

AirGo Media shares Congress's goal of getting small aerial vehicles (UAV's) flying commercially within the United States as soon as safety allows. In the FAA Modernization and Reform Act of 2012, Congress directed the FAA "to safely accelerate the integration of civil unmanned aircraft systems into the National Airspace System, (NAS) and under Section 333 of that law, gave the FAA power to grant innovators "expedited operational authorization" to do so. By this petition, AirGo Media is seeking its first such authorization, in order to conduct additional research and development for our clients.

Granting AirGo Media an exemption to allow for testing within the National Airspace System is in the public interest because it advances Congresses goal of getting commercial UAV's flying in the United States safely and soon. This exemption is a necessary step towards realizing the vast potential and services that UAV's will provide not only to the US commercial industry but to build upon the U.S. aviation safety record.

Furthermore, granting this request will do nothing more than allow AirGo Media to what thousands of hobbyists and manufactures of model aircraft do on a daily basis, though we will have to abide by more stringent safety measures then currently required by these groups. This exemption request essentially seeks FAA approval for AirGo Media to operate within the NAS in a safe, efficient and effective manner.

My experience as a retired 28 year Air Traffic Controller and 18 year pilot will not only lend to the operational safety concerns many will have concerning UAS operation but will greatly enhance the safety record that the FAA has established for the National Airspace System.

Information Supporting this Petition as Specified in 14 CFR § 11.81

1. **Your name and mailing address and, if you wish, other contact information such as a fax number, telephone number, or e-mail address**

AirGo Media LLC
6738 Merwin Place
Columbus, Ohio 43235
PH: 614-425-3381
FX: 888-329-6870
EM: gary@airgomedia.com

2. **The specific section or sections of 14 CFR from which you seek an exemption**

- 14 CFR § 21.191(a) Experimental Certificates
- 14 CFR § 45.23(b) Display of Marks, General
- 14 CFR § 91.9(b) Civil aircraft flight manual, marking, and placard requirements
- 14 CFR § 91.203(a) and (b) Civil Aircraft: Certifications Required

AirGo Media believes that the exemptions noted above will be sufficient to conduct the necessary R&D it requires. To the extent that the FAA may deem necessary, however, we also request an exemption from any regulations ancillary to the foregoing that may be need to facilitate the desired operations AirGo Media requires.

3. **The extent of relief you seek, and the reason you seek the relief**

We seek an exemption from several interrelated provisions of 14 CFR Parts 21,45 and 91 to the extent necessary to engage in private, non-commercial R&D operations of UAV's on our own property that would otherwise be permitted if conducted by a hobbyist or manufacturer producing UAV's. We have detailed below a significant set of safeguards that will apply to our R&D operations. Operations under these safeguards will provide for a level of safety exceeding the level of safety required of similar UAV operations that the FAA authorizes currently without requiring compliance with the regulations from which we seek an exemption. Moreover our operations will not create a hazard to users of the National Airspace System or to the public or pose a threat to National Security and are thus consistent with the Congressional mandate in Section 333 of the FAA Modernization and Reform Act of 2012, which give the FAA a mechanism to allow certain UAS to operate safely within the National Airspace System.

4. **The reasons why granting your request would be in the public interest; that is, how it would benefit the public as a whole**

By leading the next generation of UAS operators into the future. By setting the example of safe, efficient and orderly operations within the National Airspace System and showing the public that flights with unmanned systems can indeed be safe while providing a valuable service to our nation's economy.

5. **The reasons why granting the exemption would not adversely affect safety, or how the exemption would provide a level of safety at least equal to that provided by the rule from which you seek the exemption**

AirGo Media operations would provide a level of safety that far exceeds that which is required of hobbyists and manufactures of model aircraft. Our protocols are as follows and would apply during all phases of R&D conducted under this exemption request:

*Regarding the Unmanned Aircraft System*

1. **UAS Description:**

    a. Maximum weight of less than 55lbs
    b. Maximum speed , less than 50mph
    c. Battery operated
    d. Break away Props used for safety (when required)
    e. Will be registered and display markings in accordance with 14 CFR Part 45 Subpart C

2. **UAS Pilot Training:**

    a. All UAS Operators will be required to log a minimum of 10 Hours with UAS Simulator prior to flying live within the NAS (National Airspace System)
    b. In addition all UAS Operators will be required to pass basic knowledge tests in reference to the following items:
        i. National Airspace System layout and usage - 14 CFR Part 91.126 – Part 91.138, 91.145
        ii. Basic Weather Knowledge as it pertains to UAS flight
        iii. Aeronautical Charts and Related Publications as outlined in the FAA's Aeronautical Information Manual
        iv. Safety of Flight

*Regarding the Unmanned Aircraft System (cont.)*

**3. UAS Flight Procedures**

a. Preflight and Post Flight Inspections prior to each UAS conducting flight
b. Planned preventive maintenance and repair schedules of each UAS
c. Standard Operating Procedure Checklists for Pre-Flight, In-Flight and Post Flight Operations

**4. Radio Spectrum Frequency**

**a.** Current UAS's employed by AirGo Media utilize the following radio spectrum:
   i. 5.725~5.825 GHz
   ii. 2.400~2.483 GHz

*Regarding the Unmanned Aircraft PIC (Pilot in Command)*

**1. Qualifications:**

**a.** Our sUAS testing under this exemption will be conducted under the direct supervision of a designated pilot in command (PIC) who has final responsibility for the operation in accordance with 14 CFR § 91.3 and either (A) holds a current FAA private pilot certificate issued under 14 CFR § Part 61, Subpart E, a higher FAA pilot certificate, or a FAA recognized equivalent or (B) has completed FAA private pilot ground instruction and passed the FAA private pilot written examination or FAA- recognized equivalent; and (C) using on those operators that have completed extensive training on the normal, abnormal emergency procedures in specific detail and have demonstrated proficiency with the UAS being operated.

**b.** PIC's and Observers will also be required under this exemption to undergo training requirements set forth by AirGo Media's Standard Operating Procedures Manual. (SOP) These requirements will include but are not limited to the following:
   *i.* PIC / Observer must pass basic UAS knowledge test in reference to UAS being operated.
   *ii.* PIC / Observer are required to log a minimum of 5 hours simulator flight time as well as 5 hours actual flight time under direct supervision prior to UAS certification by AirGo Media.
   *iii.* All PIC's will require a Class III medical certification as set forth by CFR § 67.301 – 67.315

*Regarding the Operation of the Unmanned Aircraft*

Safety is at the core of not only AirGo Media's request for exemption but will define our company as we progress into the future of UAS operations. AirGo Media wishes to work closely with the FAA in order to help define the rules and regulations that will ensure the safety and integrity of our National Airspace System. AirGo Media will take every precaution to ensure not only the safety of non-participating persons and property but we will take every effort to put in place procedures that will ensure the public safety of those within the operational boundaries of our UAS's.

AirGo Media's Operations Manual will included but not be limited to the following:

1. **Preflight**:

    **a.** Clearly defined safety zone operational areas will be put in place for all phases of UAS operations.
    **b.** Aviation facilities that may directly / indirectly be impacted by the operation of the UAS will be notified as to our intended area of operation and use per AC 91-57
    **c.** Operators will maintain the UAS for safe operation and conduct pre-flight inspections prior to each flight so as to ensure that the UAS control station, data link equipment, payload and support equipment are in a condition for safe operation and in a configuration appropriate for the purpose of the intended flight in accordance with 14 CFR § 91.7(b).

2. **In-Flight:**

    **a.** No operator or observer will engage in nor may an operator or observer permit any activity during a critical phase of flight which could distract any operator or observer from the performance of his/her duties or interfere in any way with the proper conduct of his/her duties.
    **b.** Operators and observers will maintain two-way radio communications with each other during all operations, if unable to do so, or if any condition occurs that may otherwise cause the operation to be unsafe, the operator will conclude the operation.
    **c.** If the communications link with the operator is lost, safety features built into the UAS will allow for the UAS to return safely to its departure point, land and power down. In addition each UAS operator and observer will have the ability to press a physical button that is within his/her reach at all times that will reduce the power of the UAS and force it to return to its departure point, land and power down.
    **d.** All UAS operations will maintain a Visual Line-of-Sight with the vehicle in operation in accordance with the statutory mandate under Section 333(b) (1).
    **e.** Maximum and Minimum speeds of UAS in an operational role will be in accordance with manufactures guidelines but will not exceed FAA FAR Sec. 91.117. Proposed average operational speeds will normally be made between 0 (hovering) & 35 Knots
    **f.** Altitude limitations will be that listed by the manufacture for the particular UAS in operation, though Minimum Safe Altitude as outlined in 14 CFR § 91.119 will

be adhered to.

**g.** Weather requirements for operational use will follow FAR Sec. 91.155

*Regarding the Operation of the Unmanned Aircraft* (cont.)

**h.** Operational Proximity:

**i.** Operational areas of intended use will vary and each will require a preflight safety risk assessment in order to determine that the UAS would be in a condition safe for flight and that the planned operation can be conducted and completed safely.

**ii.** Operational areas of intended use within the proximity of aviation related activities such as airports, heliports or active non-controlled flight areas will have a preflight safety risk assessment outlined in order to determine any impact on the services provided within these areas as well as those known to contain active flight operations.

**iii.** Notification of FSS's (Flight Service Stations), FSDO's (Flight Standards District Offices), ATCT's (Air Traffic Control Tower's) or any other entity that may be impacted by UAS operations will properly be notified.

AirGo Media will effectively operate our UAS's with additional safe guards that far exceed those that the FAA has provided for the public and our National Airspace System. AirGo Media will ensure that all operational UAS's it operates will adhere to the strictest safety precautions to ensure protection of public persons and property.

Respectfully Submitted,

Gary Bollinger (CEO)
AirGo Media LLC