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

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

September 16, 2015

Exemption No. 12882
Regulatory Docket No. FAA−2015−2285

Mr. D. Logan Seale Jr.
220 Kenoza Avenue
Haverhill, MA 01830

Dear Mr. Seale:

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

By letter posted to the public docket on June 16, 2015, you petitioned the Federal Aviation Administration (FAA) for an exemption. You requested to operate an unmanned aircraft system (UAS) to conduct residential and commercial aerial photography and videography.

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

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

Airworthiness Certification

The UAS proposed by the petitioner is a 3D Robotics Iris+.

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, Mr. D. Logan Seale Jr. 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, Mr. D. Logan Seale Jr. 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 3D Robotics Iris+ 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

Logan Seale Interactive

moving photography...

Docket Operations, M-30
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Room W12-140, West Ground Floor
Washington, DC 20590-0001

Subject: Petition for Exception

I, D. Logan Seale Jr., of 220 Kenoza Ave. in Haverhill, MA 01830 hereby petition the FAA for an exemption from various sections of 49 USC of Federal Aviation Regulations. I am associated with Logan Seale Photography/Interactive of 220 Kenoza Ave, Haverhill, MA, and will be the Pilot in command of any aerial photography, following approval of this request.

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012, Public Law 112-95, I request certain exemptions in order to conduct residential and commercial aerial photography (henceforth meaning still and/or video) using a small Unmanned Aircraft System- the 3D Robotics Iris+

Sincerely,
D. Logan Seale Jr.
220 Kenoza Ave
Haverhill, MA 01830
Logan@LSPhoto.com

Overview:
I D. Logan Seale Jr. 220 Kenoza Ave. in Haverhill, MA hereby petition the FAA for an exemption from various sections of 49 USC of Federal Aviation Regulations. I am associated with Logan Seale Interactive/Photo, 220 Kenoza Ave. Haverhill, MA, and will be the Pilot in Command of any aerial photography, following approval of this request.

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012, Public Law 112-95, I request certain exemptions in order to conduct residential and commercial aerial photography (henceforth meaning still and/or video) using a small Unmanned Aircraft System, The 3D Robotics Iris+. The aircraft consists of four electric motors with rotors, powered by a Lithium battery and managed by an on board flight control system that is remotely accessed by the Pilot in Command using a portable control unit.
The remote control unit is a wireless communication device using the 915MHz frequency band. Real-time viewing of the on board camera is enabled through a video link within the 5.8GHz frequency band. Both frequencies are approved by the FCC for limited-range communication purposes.

The Iris+ (known as 'Iris+' for this request) has a maximum payload of less than 2 pounds including the camera (.9 pounds and has a maximum forward speed of 30 knots (-I would fly from 0-15 knots) and is managed by a sophisticated GPS control system that assures a Return To Land (RTL) procedure in the event of Loss of Signal (LOS). That same system can set maximum height and distance so the UA does not exceed preferred parameters. The manufacturer, 3D Robotics, regularly updates software and firmware. The Iris+ is equipped with a Geo fence that restricts its movements to an altitude of 100 meters and a distance from the operator of 1000 meters

I D. Logan Seale, will use the UAS in daytime only to enhance real estate marketing for Realtors in the greater New England area and coastal North Carolina area showing views of properties currently unattainable by still or aviation.
I will operate the quad-copter is a safe manner, using the following pre-flight check list and operating procedures to determine that the aircraft is physically and electronically ready for safe flight and that permission from the property owner/representative is received:

Pre-flight Checklist:
• If required, notify the appropriate FAA facility of our launch schedule and location.
• Survey the property for hazards- trees, utility poles and other elements that might compromise the flight, then make a judgment as to whether to proceed.
• Check the weather for wind speed, cloud cover and any forecast changes that might adversely affect flight safety and performance.
• Examine the aircraft- looking at connections and searching for cracks and loose parts.
• Determine that the electronic elements are performing correctly (receiving more than 8 GPS signals along with calibration of the magnetic compass)
• Determine that the barometric altimeter reflects approximately 0 feet AGL.
• Following takeoff, I will hover at an altitude of approximately 10 feet to assure that the Home Point is solid.
• I will then exercise all controls to confirm their functionality- if one of the controls is not functioning, the flight will be terminated immediately.
• I will fly only with a Visual Observer (VO) at my side who will double check for possible flight hazards. The VO will provide a second pair of eyes to assist the PIC in keeping the craft within Visual Line of Sight (VLOS). He will also assist in any emergency maneuvers due to unanticipated events that require a quick landing.
• I will not fly over dense traffic or crowds.
• I will give right-of-way to any manned aircraft.

• I will stay clear of FAA controlled airspace at airports (generally a five nautical mile radius) as well as restricted and prohibited zones.
• I will fly no higher than 300' and no further than 1000' from the Home Point, recognizing that the primary responsibility is to safely keep the aircraft safely within VLOS.
• I will stay clear of clouds and fog (500' vertically and 2,000' horizontally).
• I will perform a post-flight check of the Iris+ to determine its physical and electronic condition.

Operating Procedures:
• After receiving permission from the property owner or representative, I will notify abutting property owners of our intensions and anticipated time on site.
• I will not fly over neighboring properties unless permission is granted.
• I will keep individuals not involved in the flight at a safe distance (500 feet if practical).
• I will post a sign stating: Take Notice" Aerial Photography Under Way- Stay Clear

Altitude, distance from the PIC, airspeed and battery state-of-charge are data constantly viewable in the control monitor which is the Iris+ equivalent of an aircraft's control panel. I maintain that the above checklist and procedures will minimize risks to property and persons on the ground as well as other aircraft in the National Air Space.

At this writing, I have practiced extensively in the Iris + accumulating 10:50 hrs of flight time with the craft. I continue to add flying hours to my Iris+ log. I have exercised all functions in the aircraft and fly only when weather conditions allow.
I have private pilot license #229946924 issued in April 29, 2004. I will reacquire my 3rct class medical certificate. I am fully aware of VFR flight rules. The serial number of my Iris + is 22172214 and I will mark the aircraft with whatever 'N' number the FAA requires.

Exemption Requests:
I respectfully request exemption from the following regulations with which I cannot fully comply.
14CFR
Part 21 Airworthiness Certification
Subpart H "prescribes the procedural requirements for issuing and changing design approval, production approval, airworthiness certificates and airworthiness approval." (Summation from Exemption No. 11138, page 11)
Response: "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." (Summation from Exemption No. 11138, page 11
Part 61 (a)(b) Parts, General Operating and Flight Rules
(a) Prescribes the requirements for issuing pilot licenses and the privileges and limitations associated with various ratings.
(b) Aeronautical experience means pilot time, flight simulator or flight training device for meeting the appropriate training and flight time requirements for an airman certificate.
Response: Organized or commercially available FAA-approved flight training has yet to be achieved by the UA industry. While I have regularly used a flight simulator on my computer, those skills are generally not transferable to quad-copter operation. My sources of training are: the Flight Instruction Manual from 3DR, online videos from the manufacturer as well as videos from users; and most importantly, personal training in a secure location- an open area not subject to traffic and/or uninvolved individuals. Those training flights, which have averaged 10-15 minutes each, deal with setup, physical and electronic safety checks; lift off followed by hovering at

approximately 10 feet to confirm that the GPS system is functioning properly and has registered its Home Point; a prescribed flight plan to familiarize and then master the fight controls and camera; returning to the launch point and landing, either on a plastic pad or having my VO secure the Iris+ by hand. I then conduct a post-flight inspection for any problems, log the location and flight time and then view the video. There are no FAA certified instructors or FAA certified study guides available at this time as the technology continues to develop. I respectfully request an exemption from this rule.

§91.103 (b)(2)

(b)(2) This section deals the pilot's preparations for flight, in particular runway lengths, takeoff and landing distance information.

Response: Since a quad-copter, like a helicopter, takes off and lands vertically, an Iris+ pilot would not need to know this information since there are no runways involved and the return from flight is the takeoff point. The FAA has determined that "relief is not necessary." (Summation from Exemption No. 11138, page 20)

§ **91.105**

Summary: This section deals with flight crewmembers at stations.

Response: Since there are no passengers, pilots or crewmembers, I respectfully request relief from this regulation.

§ **91.109**

Summary: This sections deals with flight instruction, simulated instrument flight and certain flight tests.

Response: None of these functions are applicable to a quad-copter flight and, as stated earlier, there are no FAA certified instructors or FAA certified study guides available at this time for quad-copter operation. I respectfully request an exemption from this rule.

§ **91.119** (a) **(b)** (c)

Summary: This section deals with minimum safe altitude stating that if the power fails anywhere, an aircraft should have an altitude sufficient so that an emergency landing can occur without hazard to persons or property (91.119 a). It also sets minimum altitudes over congested areas and uncongested areas as well as has a paragraph on helicopters (91.119 b). It also sets minimum distance (500 feet) from any person, vessel, vehicle, or structure (91.119 c). Iris+ returns to its Home Point around the 20% battery level. I respectfully request an exemption from this rule.

§ 91.405

Summary: This section deals with aircraft maintenance including regular inspection, the keeping of appropriate maintenance records and replacement of inoperable instruments

Response: Maintenance on the Iris+ is quite straight forward. If, in landing, a rotor blade is damaged, it is quickly replaced. The traditional instrument cluster in an aircraft is replaced by a data stream from the Iris+, visible in the remote control monitor. Replacement of minor parts are performed by the PIC and a major 'overhaul' that can't be easily resolved will go back to the manufacturer for repair. Currently, there are no required inspections by 'authorized' maintenance personnel and there would be no space/room on board to install a placard of inoperability. I respectfully request an exemption from this rule.

§ 91.407

Summary/Response: This section addresses requirements after maintenance has been performed. Again, approval of the maintenance before flight is essentially in the hands of the PIC. Whatever maintenance is performed will be entered in the aircraft log, unless a separate maintenance log is required. Paragraph (b) refers to the prohibition of a pilot carrying passengers or crewmembers, if the flight characteristics have been substantially affected, before a rated pilot performs an operational check of the maintenance. Again,

this is a PIC's responsibility to preflight the Iris+ and determine its flyability. And, as mentioned earlier, there is no pilot, crewmembers or passengers on board the Iris+. I respectfully request an exemption from this rule.

§ 91.409

Inspections: This section deals with the necessity of annual and 100-hour inspections or "progressive inspections" and approval by authorized persons which will lead to the "issuance of an airworthiness certificate."

Response: As stated earlier, there is no FAA approved inspection protocols nor authorized inspection personnel. The PIC handles those issues each time the Iris+ is prepared for flight. The pre-flight check list enumerated earlier will be followed to determine its mechanical and electronic integrity. I respectfully request an exemption from this rule.

§ 91.417

Maintenance Records: This section requires a maintenance record be kept on repair, replacement and condition of vital parts (rotors, engines & airframe). Certain records must be retained for one year while other record must be kept with the aircraft even when sold to another part.

Response: The details of this section would be impractical with an Iris+, but repair issues can be entered into the aircraft log. I respectfully request an exemption from this rule.

The above requests for exemptions follow the guidance published by the FAA.

The Iris+is a UAS with multiple safety features to assure a safe and efficient flight, minimizing personal injury and property damage and integrating with minimal risk into the NAS. They include:

• A GPS flight system that allows for stable remote control of the aircraft.
• The ability to hover in place by simply taking hands off the controls.
• A Return to Land function if electronic contact between the Remote Control and the aircraft is lost. If the aircraft begins to show unstable flight, I will land it immediately.
• The ability to limit height (<300') and distance (<1000') from the PIC through the control software.
• Readout of the battery's state of charge so that there is sufficient power to bring the UA home.
• The weight, size, speed and limited flight which focuses on inanimate objects (homes) reduces the likelihood of significant personal or property damage. Flight of the UA risks no on board lives, as in helicopter or plane photography. The safety features associated with the Iris+ as well as my pre-flight checklist and procedures will assure that public safety is not adversely affected .

Public Service:

In my business I have several non-profit organizations and I intend to help them with fund raising by providing aerial video to augment their videos and to provide aerial photos as a fund raising effort for our local school. If approved, these activities would be donated for the benefit of the community.

Airports and Prohibited Area:

Since I intend to conduct flights primarily in the greater Boston area, there are several airports that require additional precautions. They are

• Boston (BOS)- FAA control tower Class B airspace with well known upside down wedding cake airspace.
• Lawrence Municipal (LWM) Class D Airspace
• Norwood Municipal Also Class D

• Hanscom Field Class D
In North Carolina there is:
• Cape Hatteras National Seashore and MOA

I respectfully request exemptions from the above listed regulations in order to conduct aerial photography of residential and commercial properties in order to assist realtors and developers in their marketing efforts. In addition, my commitment to public education and safety will focus on local charities and schools
Signed,
D. Logan Seale Jr.

Pertinent Links
Iris Plus User Manual on Line
http://3drobotics.com/wp-content/uploads/2014/10/IRIS-Plus-Operation-Manual-vC-web.pdf

Manufacturer Video Explanation of GPS Systems
https://youtu.be/sj96PqV1mN0

Manufacturer Video Explanation of Iris + GPS based Flight Modes
https://youtu.be/n2JtSQ7vDGA