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

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

September 8, 2015

Exemption No. 12779
Regulatory Docket No. FAA−2015−2550

Ms. Laura Heller
Founder
Stratis Imaging, Inc.
3213 West Wheeler Street, Suite 27
Seattle, WA 98199

Dear Ms. Heller:

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 11, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Stratis Imaging, Inc. (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct mapping, surveying, inspection, analysis, and general 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 are the DJI Flamewheel F450 and Tarot Iron Man 680 Pro.

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, Stratis Imaging, Inc. 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, Stratis Imaging, Inc. 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 Flamewheel F450 and Tarot Iron Man 680 Pro 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

June 11, 2015

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

RE: Exemption Request Section 333 of the FAA Reform Act of 2012 (P.L. 112-95)

Attachments:
1) Stratis UAV Flight and Maintenance Manual
2) Stratis UAV Pilot Training Manual

To Whom It May Concern:

On behalf of Stratis Imaging, Inc., (herein referred to as "Stratis") co-founders Laura Heller and Geoffrey Heller, we request an exemption from the below stated sections of Title 14, Code of Federal Regulations. This is in accordance with the FAA's *Guidelines for Submitting a Petition for Exemption under section 333 of the FAA Modernization and Reform Act of 2012.* This request is submitted based on the precedence set by and is similar to Exemptions No. 11062, 11109, 11112, and 11213.

- 14 CFR 61.101(e)(4) and (5) Recreational pilot privileges and limitations. For compensation or hire; In furtherance of business.
  It is Stratis intent to operate the UAS for commercial use for compensation or hire and for the pursuance of our business.

- 14 C.F.R. 61.113(a) Private pilot privileges and limitations: Pilot in command.
  As previously stated, it is Stratis intent to operate the UAS for commercial use for compensation or hire and for the pursuance of our business using a private pilot to command the UAS.

- 14 C.F.R. 61.23(a) and (c) Medical certificates: Requirement and duration.
  As Stratis intends to utilize a private pilot or sport pilot license holder who has a current US drivers license, an exemption from the need a medical certificate is requested. Further, the pilots UAS operations will be conducted on ground on a relatively light weight UAS vs. in-air on a manned aircraft.

 14 C.F.R. 91.7 (a) Civil aircraft airworthiness.
Stratis Imaging requests an exemption since there is currently no certificate applicable to our operation other than the Section 333 Exemption which states that the PIC shall have the responsibility to determine airworthiness. This requirement is stated in the Flight and Maintenance Manual as well as in the Pilot Training Manual.

 14 C.F.R. 91.119(c) Minimum safe altitudes: General.
Stratis UAS will operate below 400 ft. This requirement is stated in the Flight and Maintenance Manual as well as the Pilot Training Manual.

 14 C.F.R. 91.121 Altimeter Settings.
The UAS will be equipped with a barometric pressure altimeter. Altitude shall be monitored using the UAS telemetry.

 14 C.F.R. 91.151(a) (1) Fuel requirements.
The UAS will be powered by battery and will operate for the intended operational time with at least five minutes remaining battery or with the reserve power recommended by the manufacturer if greater.

 14 C.F.R. 91.405(a) Maintenance required.
The Pilot will perform a preflight inspection of the UAS before each flight as outlined in the attached Flight and Maintenance Manual document. Additionally, if there is any alteration that affects the flight characteristics or safety, a functional test will be conducted prior to being deemed airworthy.

 14 C.F.R. 91.407(a)(1) Operation after maintenance, preventive maintenance, rebuilding, or alteration.
Procedures in the Flight Manual require the pilot to monitor the UAS during a preflight inspection for airworthiness. Any alteration shall be minor, not affect the safety of flight, and shall not affect the basic control and stability of the UAS. Additionally, if there is any alteration that affects the flight characteristics or safety, a functional test will be conducted prior to being deemed airworthy

 14 C.F.R. 91.409(a)(1) and (2) Inspections.
Procedures in the Flight Manual require the pilot to inspect the UAS during a preflight inspection for airworthiness prior to flight. Additionally, a flight test is required prior to the operational flight to ensure UAS readiness.

 14 C.F.R. 91.417(a) and (b) Maintenance Records.
Pilot and Operator procedures are required to monitor, inspect, and document any issues related to the UAS operation effectiveness. This requirement is stated in the Flight and Maintenance manual.

I. About Stratis Imaging

Stratis Imaging Inc. was founded to innovate around UAS data collection and analysis. Additionally, Stratis Imaging will provide data collection services for multiple purposes, including mapping, surveying, inspection, analysis, and general videography. Our mission is to enhance commercial UAS data collection and analysis capabilities to provide new insights for industry use. Additionally, digital imaging data gathering service will be conducted to explore the UAS market as well as provide clients with high quality images and digital data. Stratis will be performing research and development around UAS digital imaging as well as operational digital imaging.

One of our primary missions as a company is to ensure full compliance with all regulations that govern UASs. As such, our operations will be conducted within the acceptable FAA regulations with the exception of the herein requested exemptions. Additionally, the referenced flight and maintenance manual as well as the pilot training manual state these requirements in their respective context. Further, the UAS Pilot and observers engaged in operations are expected to be responsible for operating within these regulatory parameters.

Safety of flight is a primary objective at all times for our company operations with a high standard of safety awareness. Stratis has taken several steps to ensure safety of flight in UAS operations: First, is to be fully compliant to the relevant UAS regulations as stated above, as these regulations are in place to enhance public safety. Second, is to train all pilots and observers as outlined in the referenced pilot training manual to ensure the pilot and observer are fully qualified on Stratis Imaging UASs. Third, is to conduct flights according the flight manual as stated in the Flight and Maintenance Manual, including safe abort procedures if an unsafe condition arises. Fourth, is to ensure the UASs are operationally safe as per the inspection and maintenance requirements as stated in the Flight and Maintenance Manual. Finally, Stratis Imaging sets the expectation that all UAS operators and participants are held to high standard of safety awareness while operating a UAS.

The Co-founders of Stratis Imaging have extensive technology experience in both imaging as well as in aviation to help ensure a safe, mature and experienced approach to digital imaging and technology development on a UAS platform. Co-Founder Laura Heller has over 12 years experience with aviation Engineering and Management of commercial airplane flight controls and avionics systems development. She has also completed ground school training for a private pilot's license and has hobbyist flight hours on several small UASs. Co-Founder Geoffrey Heller has over 20 years of Engineering Management and Software Engineering experience as well as experience with commercial software and hardware development. Additionally, he has extensive hobbyist hours designing, building, operating and maintaining UASs. As such, our qualifications, along with a certified pilot for UAS operation, provide the necessary qualifications for safe, compliant UAS operations.

II. UAS Description

Stratis Imaging requests Section 33 exemption for the following UASs:

- Stratis Model 1: A quadcopter built on a DJI Flamewheel F450 frame and running the Pixhawk flight controller
- Stratis Model 2: A hexacopter built on a Tarot Iron Man 680 Pro frame and running the Pixhawk flight controller

The weight of these UAS shall be compliant with the regulations stated as less than 55 lbs in the Section 333 Exemption guidance. Please see the Flight and Maintenance Manual for a detailed description and flight characteristics. As stated in the Flight and Maintenance manual as well as in the Pilot training manual, the pilot is responsible for UAS airworthiness which includes following the site check list, the UAV inspections, preflight checklist, and flight test.

III. UAS Operations

When conducting Stratis Imaging operations, the following requirements will be met. These requirements are embedded in the Stratis Flight and Maintenance Manual, where both the Pilot and Visual observers have full responsibility for compliance.

- Operations will be performed only at the request of and with the authorization and permission of clients or their authorized agents in order to facilitate commerce and raise awareness of the beneficial uses of small unmanned air systems so long as such operations are conducted within and under the conditions outlined herein or as may be established by the FAA as required by Section 333 Exemption.

- The UAS will not be operated at a speed exceeding 87 knots (100 miles per hour). The PIC and/or VO will 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 UAS operating airspeed recommended by the aircraft manufacturer as required by Section 333 Exemption.

- Operations will be conducted below 400 feet AGL, with instrumentation and telemetry set to report in feet AGL as required by Section 333 Exemption

- The UAS will 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 as required by Section 333 Exemption.

- All operations will utilize a visual observer (VO). The UAS 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 will be able to communicate verbally at all times, where electronic messaging or texting will not be used during flight operations. The PIC will be designated before the flight and cannot transfer his or her designation for the duration of the flight. The PIC will ensure that the VO can perform the duties required of the VO. These shall be as required by Section 333 Exemption.

- Operate and land the UAS prior to the manufacturer's recommended minimum level of battery power or with 5 minutes of remaining battery power, whichever is greater, as required by Section 333 Exemption.

- Operating documents will be immediately accessible to the PIC and/or VO during operations. We will be responsible for ensuring these documents are updated as necessary.

- Use the UAS' global positioning system (GPS) flight safety feature whereby it hovers and then slowly lands if communication with the remote control pilot is lost.

- Conduct all operations under the flight safety protocols contained in the operating documents and will actively analyze flight data and other sources of information to constantly update and enhance safety protocols.

- Contact respective airports if operations will be within 5 miles to advise them of his estimated flight time, flight duration, elevation of flight and other pertinent information.

- Upon any changes that affect UAS operations or flight characteristics, a functional flight test will be conducted prior to any further operations. The functional flight test will be conducted by a PIC with a VO and shall be at least 500 feet from other people, with no undue hazard to people or property.

- A preflight inspection will be conducted by the PIC and/or VO prior to operations. Any condition that may affect the safe operation of the UAS will not be flown in operations until the UAS has been restored to a safe flight condition. The PIC is responsible to ensure that the UAS is airworthy as part of the preflight inspection. Refer to the UAS User's Manual.

- The UAS operators will follow the manufacturer's recommended maintenance; overhaul, replacement, inspection, and life limit requirements for the UAS' and will comply with all manufacturer safety bulletins as described in the UAS Flight and Maintenance manual.

- Have procedures in place to abort flights in the event of safety breaches or potential danger.

IV. UAS Pilot in Command (PIC)

- The UAS will be operated by a PIC who holds either an airline transport, commercial, private, recreational, or sport pilot certificate. The PIC will 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 will 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.

- The operators will ensure that the PIC demonstrates the ability to operate the UAS safely and within regulations under this requested exemption. This includes 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).

- Dedicated training sessions will be conducted as necessary to ensure the PIC is qualified to operate the UAS. During training, proficiency, and experience-building flights, all persons not essential for flight operations are to be considered nonparticipants, and the PIC will operate the UA with appropriate distance from nonparticipants.

Additional Requirements:

- The PIC shall successfully complete the pilot training as described in the pilot training manual prior to operation of the UAS'. This includes a minimum of 20 hours of flight hours on either Stratis Imaging's UAS and/or UAS of similar configuration.
- The VO shall successfully complete the VO training as described in the pilot training manual prior to the operation of the UAS.

V. RF Communications

The UAS' will operate under the following Radio Frequencies. All frequencies are used in compliance as per FCC Part 18 rules for operating in the specified ISM frequency bands.

Flight Control:

- Control frequency / Working Frequency: 2.4 GHz ISM
- Control Channel Numbers of Transmitter: 16
- Communication Distance: >1.5km
- Receiver Sensitivity: > - 100 dBm
- Power Consumption of Transmitter: < 20 dBm
- Working Current/Voltage: 100mA @ 5V

Telemetry (Bi-Directional):

- Telemetry Transmitter Frequency: 915 Mhz ISM
- Communication Distance: >1.5km
- Receiver Sensitivity: > - 100 dBm
- Power Consumption of Transmitter: <= 20 dBm

- Working Current/Voltage: 100mA @ 5V

Camera / Live Video to Monitor:

- Video Transmitter Frequency: 5.8 Ghz ISM
- Communication Distance: >200m
- Receiver Sensitivity: > - 100 dBm
- Power Consumption of Transmitter: <= 20 dBm
- Working Current/Voltage: 100mA @ 5V

VI. Public Benefit

Utilizing UAS for the purposes of aerial image data gathering and analysis is a growing industry that takes advantage of the small, lightweight, and less expensive technologies. Contrasted with manned aircraft, there is substantial more versatility, far less cost, and significant reduction in risk to the public by utilizing UASs. Additionally, more extensive research and development can be conducted to enhance image data gathering and analysis technologies. This is one of Stratis Imaging's primary intentions. Because of this research and development, valuable new technologies will be developed. This can add jobs to the economy, improve industry efficiency, and increase awareness of our environment in ways not previously possible. By granting this exemption, these benefits can be achieved to the betterment of public overall.

VII. Confidentiality

We request that the FAA refrain from publishing any of the Stratis Imaging's provided documents to the public. This includes the UAS Flight and Maintenance Manual as well as the UAS Flight Training Manual. These documents are intended for Stratis employees and the FAA personnel only who are responsible for the evaluation and determination of this exemption request.

VIII. Summary

Stratis Imaging requests an exemption from the below list of regulations for UAS commercial operations, including data collection and analysis services as well as research and development.

14 C.F.R 61.101(e)(4) and (5)
14 C.F.R. 61.113(a)
14 C.F.R. 61.23(a) and (c)
14 C.F.R. 91.7 (a)
14 C.F.R. 91.119(c)
14 C.F.R. 91.121
14 C.F.R. 91.151(a) (1)
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)

The public will benefit by virtue of additional employment, safer methods of data gathering, and potentially new technologies available to industry. It is our commitment to comply with all of the conditions and limitations stated within the exemption, should it be granted.

Please contact the undersigned for any further information or questions regarding this petition. Thank you for your consideration.

Respectfully,

Laura Heller
Founder, Stratis Imaging, Inc.