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

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

September 1, 2015

Exemption No. 12691
Regulatory Docket No. FAA−2015−1375

Mr. Jeremy Avants
Owner
From Above Photo Image
408 Winter Hawk
McGregor, TX 76657

Dear Mr. Avants:

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

By letter dated April 15, 2015 and letter posted August 8, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of From Above Photo Image (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography, aerial mapping, wildlife management, and UAS training[1].

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.

[1] The petitioner also requested authority to conduct UAS training. At this time, the FAA is unable to authorize UAS operations for training until a further assessment is completed. When the FAA completes its review, we will proceed accordingly and no further action will be required by the petitioner. However, the petitioner is permitted to train its own pilot in commands and visual observers in accordance with condition no. 14 and the other conditions and limitations in this exemption.

Airworthiness Certification

The UAS proposed by the petitioner are the DJI Phantom 3, DJI F550, and DJI S1000, and Trimble Ux5 HP.

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[2]. 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.

[2] 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.

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, From Above Photo Image 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, From Above Photo Image 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 Phantom 3, DJI F550, DJI S1000 and Trimble Ux5 HP 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

From Above Photo Image
Jeremy Avants, Owner
Phone: 512-971-9059
Jeremyinaustin@aol.com

April 15, 2015

Administrator
Federal Aviation Administration
U.S. Department of Transportation
Docket Management System
1200 New Jersey Ave. SE
Washington, Dc. 20590

Re: Petition of From Above Photo Image ("Petitioner") for an Exemption Pursuant request under Section 333 of the FAA Modernization and Reform Act of 2012

Dear FAA Administrators:

Pursuant to Section33 of the FAA Modernization and Reform act of 2012 and 14 C.F.R. Part 11,From Above Photo Image (Petitioner), hereby applies for an exemption from the Federal Aviation Regulation (FARs) identified below, to allow commercial operations of small unmanned aircraft and associated elements set forth in this Petition. ("UAS")

The requested exemption would permit the operation of small, unmanned relatively inexpensive sUAS under controlled conditions in airspace that is limited and predetermined to operate in aiding first responders, law enforcement, and fire departments in to situations that it would beneficial to seeing situations from above the area. As well as using the sUAS for aerial photography, aerial mapping, and wildlife management where current limitations require that a manned helicopter to be used in the Waco Texas area. In addition the Petitioner will also be providing training to public officials and persons interested in learning more about sUAS. Approval of this exemption would hereby enhance safety and fulfill the FAA Administrator's responsibilities to "...establish requirements for the safe operation of such aircraft systems in the national airspace system." Section 33(c) of the Reform Act.

The name and address of the applicants is:

From Above Photo Image
Jeremy Avants, Owner
Phone 512-971-9059
408 Winter Hawk
McGregor Tx. 76657

Regulations from which the exemption is requested:

14 CFR Part 21

14 C.F.R. § 45.23(b)

14 CFR § 61.3

14 C.F.R. § 91.7 (a)

14 CFR § 91.9 (b) (2)

14 C.F.R. § 91.103

14 C.F.R. § 91.109

14 C.F. R. § 91.119

14 C.F.R. § 91.121

14 CFR § 91.151 (a)

14 CFR § 91.203 (a) & (b)

14 CFR § 91.205(b)

14 CFR § 91.215

14 CFR § 91.405 (a)

14 CFR § 407 (a) (1)

14 CFR § 409 (a) (2)

14 CFR § 417 (a) & (b)

The Appendix describes the FARs from which an exemption is requested and summarizes the justification for each requested exemption.

The Petition is submitted to fulfill Congress' goal under Section 333(a) through (c) of the Reform Act, which directs the Secretary of Transportation to consider whether certain unmanned aircraft systems may operate safely in the national airspace system (NAS) before completion of the rulemaking required under Section 332 of the Reform Act. In making this determination, the Administrator must determine which types of UASs do not create a hazard to users of the NAS or the public or pose a threat to national security in light of the following:

• The UAS's size, weight, speed, and operational capability;

• Operation of the UAS in close proximity to airports and populated areas; and

• Operation of the UAS within visual line of sight of the operator.
Reform Act § 333 (a).

If the Administrator determines that such vehicles "may operate safely in the national airspace system, the Secretary shall establish requirements for the safe operation of such aircraft in the national airspace system." Id. § 333(c) (emphasis added).

The Secretary has delegated his aviation authority to the Administrator of the FAA.

The Federal Aviation Act expressly grants the FAA the authority to grant exemptions from its regulatory requirements for civil aircraft, a term defined under §40101 of the Act, which includes sUASs. The Administrator may grant an exemption from a requirement of a regulation prescribed under subsection (a) or (b) of this section or any sections 44702-44716 of the Federal Aviation Act if Administrator finds the exemption in the public interest. 49 U.S.C. § 44701(f) See also 49 USC § 44711(a); 49 USC § 44704; 14 CFR §91.203 (a) (1).

From Above Photo Image (Petitioner) is a professional photographer and construction engineer, who earns a living taking photos and doing survey layout for a major construction corporation in the Waco area. We have been flying UASs aircraft more the four years and have complete knowledge of the working these types of systems. As survey engineers we understand that precision and safety are key to any successful operation. Recently From Above Phot Imaging was asked to assist in locating a person that had hidden in the woods after breaking in to a home. The "PIC" arrived at the scene went over the flight plan with local law enforcement and proceeded to fly a grid area over the area of the fugitive. While never spotting the individual he later admitted that he saw the UAS and thought he was caught thus giving himself up to authorities. We have also been inquired about adding a thermal imaging camera for find hot spots from ground fire to prevent the spread of such fires protecting lives, home, and livestock.

The of equipment and software being used today has pushed From Above Photo Image in multiple avenues on what UASs have to offer. As survey engineers we have been testing with 3d

aerial imaging to prove low cost and precise detail which normally would take months and multiple crews to achieve. With the use of sUAS we are able to collect the data and transform it useful information in hours not months.

We are now seeking avenues of compensation for the services we can provide but are asking for special permission from the FAA to do so. Many competitors are actively flying sUAS to conduct aerial photography and mapping for commercial proposes, notwithstanding the FAA's stated prohibition. We also have the congressional mandate in sections 332 and 333 of the FAA Revitalization and Reform Act of 2012 that the FAA move quickly to accommodate the economic and societal benefits that can result from widespread deployment of sUAS technology. Accordingly, From Above Photo Image applies for authorization under the Federal Aviation Act, and the FARs rules to undertake the following activities for commercial purposes. Unless the Petition is granted, From Above Photo Imaging will be at a significant competitive advantage if we, as we prefer, to complies with FAA policy.

Vehicle
From Above Photo Image will use only sUAS as stated.

- Weigh less then, but no more than 55lbs
- Remain at all times within visual sight of PIC and spotter
- Remain in communication with spotter via phone, 2way radio, or direct contact.
- All flights will be flown at or below 400' AGL.
- Controlled speeds of 45 knots or less
- All flights will be ended at or before flight batteries reach no less than 20% reserve capacity.
- Ships are equipped with multiple failsafe features and GPS.
- sUAS used will have the ability to move in vertical horizontal positions at the same time, also be able to hover in place.
- Will on only carry video equipment aboard craft and pose no threat to national security.

From Above Photo Image flight profiles in more detail as follows. All flights made will have a preflight inspection of the UAS for any visible damage that will affect safe flight. Check all batteries to insure proper voltage and inspect for possible hazards they may or may not cause during flight. Upon flight of the sUAS the pic will remain at an AGL no more 10' to test functions and characteristics to insure that all systems are in proper working order. Upon determining that all systems are working the PIC will begin predetermined flight path. If systems provide any evidence of improper function the PIC will terminate flight, inspect, and or repair the system before restarting flight procedure. The PIC will carry with sUAS and fill out a detailed preflight, flight, and post flight log book. Flights for aerial mapping will be flown over construction sites and property for mapping details for contracted clients. Aerial Mapping locations are generally unpopulated areas and pose little threat to property and or persons. Use of sUAS for local Law Enforcement, First Responders, And Fire Departments will be used in locations and injection with the request of said officials to assist in operations in a predetermined safe to operate UAS location. The assistance of operations to said officials will be but not limited to assisting with search and rescue, control fire perimeter, look for persons of interest, and to

declare an area safe for human life where that it would be unsafe for entry. As a professional photographer being able to see and photograph objects from an elevated position changes the way we all see things. It also can give an aspect that cannot be achieved from the ground or a manned aircraft. All flights for photography proposes will be done with same safety procedures as any other flight and may be used for but not limited real estate agencies, property owners, personal photos, news reporters, and farmers.

From Above Photo Image will continue in learning and teaching the awareness of fling sUASs in accordance to FAA rule and regulations. Also we attend any training provided by the FAA proper use of sUAS in the future. From Above Phot Image will always prove ample airspace for manned aircraft and will terminate operation of UAS if the other aircraft are area not to interfere with manned aircraft operation.

From above Photo Image proposed operations satisfy the criteria provided in Section 333 of the Reform Act relating to size, weight, speed, operating capabilities, proximity to airports and populated areas and operation within visual line of sight and national security. The Petition justifies grant of the requested exemptions allow the Petitioner to obtain aerial photography with sUAS.

Respectfully Submitted,

Jeremy Avants: Owner
From Above Photo Image

Appendix

FAR section	Subject	Justification
14 CFR § 45.23(b)	Requirement to display registration number on vehicle	Insufficient space on vehicle
14 CFR Part 21	Aircraft certification requirements and procedures	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 61.3	Requirement for pilot certificate	Part 61 requirements designed for manned aircraft, not sUAS; petition describes training for sUAS operator
14 CFR § 91.7 (a)	Airworthiness requirement	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.9 (b) (2)	Requirement for manual to be available in the cockpit	No one aboard to read manual
14 CFR § 91.103(b)	Requirement for crew members to be onboard	Unmanned vehicle
14 CFR § 91.109	Requirement for dual controls during flight instruction	No one aboard to operate controls
14 CFR § 91.119	Minimum altitudes for safe flight	Safety requires operation below these altitudes
14 CFR § 91.121	Altimeter settings	No one aboard to read altimeter
14 CFR § 91.151(a)	Fuel requirements	Vehicle does not use fuel

14 CFR § 91.203 (a) & (b)	Requirement for registration and airworthiness certificates to be onboard	No one aboard to read certificates
14 CFR § 91.205(b)	Cockpit instruments	No one aboard to read
	requirement	instruments
14 CFR § 91.215	Transponder requirement	Vehicle has insufficient useful load; will be operated below ATC radar coverage
14 CFR § 91.405 (a)	Inspection requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.407(a) (1)	Inspection approval requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.409 (a) (2)	Airworthiness inspection	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.417 (a) & (b)	Maintenance records requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS

From Above Photo Image
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- Weigh less then, but no more than 55lbs
- Remain at all times within visual sight of PIC and spotter
- Remain in communication with spotter via phone, 2way radio, or direct contact.
- All flights will be flown at or below 400' AGL.
- Controlled speeds of 53 knots or less
- All flights will be ended at or before flight batteries reach no less than 20% reserve capacity.
- Ships are equipped with multiple failsafe features and GPS.
- sUAS used will have the ability to move in vertical horizontal positions at the same time, also be able to hover in place.
- Will on only carry video equipment aboard craft and pose no threat to national security.

Brand and model

Brand	Model	Weight	Operating Speed
DJI	Phantom 3	2.82lbs	30mph
DJI	F550	6lbs	40mph
DJI	S1000	28lbs	45mph
Trimble	Ux5 Hp RTK	6.4lbs	53mph

From Above Photo Image flight profiles in more detail as follows. All flights made will have a preflight inspection of the UAS for any visible damage that will affect safe flight. Check all batteries to insure proper voltage and inspect for possible hazards they may or may not cause during flight. Upon flight of the sUAS the pic will remain at an AGL no more 10' to test functions and characteristics to insure that all systems are in proper working order. Upon determining that all systems are working the PIC will begin predetermined flight path. If systems

provide any evidence of improper function the PIC will terminate flight, inspect, and or repair the system before restarting flight procedure. The PIC will carry with sUAS and fill out a detailed preflight, flight, and post flight log book. Flights for aerial mapping will be flown over construction sites and property for mapping details for contracted clients. Aerial Mapping locations are generally unpopulated areas and pose little threat to property and or persons. Use of sUAS for local Law Enforcement, First Responders, And Fire Departments will be used in locations and injection with the request of said officials to assist in operations in a predetermined safe to operate UAS location. The assistance of operations to said officials will be but not limited to assisting with search and rescue, control fire perimeter, look for persons of interest, and to declare an area safe for human life where that it would be unsafe for entry. As a professional photographer being able to see and photograph objects from an elevated position changes the way we all see things. It also can give an aspect that cannot be achieved from the ground or a manned aircraft. All flights for photography proposes will be done with same safety procedures as any other flight and may be used for but not limited real estate agencies, property owners, personal photos, news reporters, and farmers.

From Above Photo Image will continue in learning and teaching the awareness of fling sUASs in accordance to FAA rule and regulations. Also we attend any training provided by the FAA proper use of sUAS in the future. From Above Photo Image will always prove ample airspace for manned aircraft and will terminate operation of UAS if the other aircraft are area not to interfere with manned aircraft operation.

From above Photo Image proposed operations satisfy the criteria provided in Section 333 of the Reform Act relating to size, weight, speed, operating capabilities, proximity to airports and populated areas and operation within visual line of sight and national security. The Petition justifies grant of the requested exemptions allow the Petitioner to obtain aerial photography with sUAS.

By granting From Above Photo Image the section333 exemption it would be in the public interest as follows.

- sUAS is safer to human life and property than a manned aircraft carrying persons and flammable fuels that would be catastrophic if crash occurs.
- The ability to gain access to environments that could potentially be harmful for a person to be exposed to.
- Reducing the environmental footprint over burning high rates of fuel consumed by manned aircraft.
- Creating far less noise pollution than manned aircraft.
- Reduction of cost over manned aircraft allowing more data to be obtained by a wider scope of interested parties.

Respectfully Submitted,

Jeremy Avants: Owner
From Above Photo Image

Appendix

FAR section	Subject	Justification
14 CFR § 45.23(b)	Requirement to display registration number on vehicle	Insufficient space on vehicle
14 CFR Part 21	Aircraft certification requirements and procedures	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 61.3	Requirement for pilot certificate	Part 61 requirements designed for manned aircraft, not sUAS; petition describes training for sUAS operator
14 CFR § 91.7 (a)	Airworthiness requirement	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.9 (b) (2)	Requirement for manual to be available in the cockpit	No one aboard to read manual
14 CFR § 91.103(b)	Requirement for crew members to be onboard	Unmanned vehicle
14 CFR § 91.109	Requirement for dual controls during flight instruction	No one aboard to operate controls
14 CFR § 91.119	Minimum altitudes for safe flight	Safety requires operation below these altitudes
14 CFR § 91.121	Altimeter settings	No one aboard to read altimeter
14 CFR § 91.151(a)	Fuel requirements	Vehicle does not use fuel
14 CFR § 91.203 (a) & (b)	Requirement for registration and airworthiness certificates to be onboard	No one aboard to read certificates
14 CFR § 91.205(b)	Cockpit instruments	No one aboard to read

	requirement	instruments
14 CFR § 91.215	Transponder requirement	Vehicle has insufficient useful load; will be operated below ATC radar coverage
14 CFR § 91.405 (a)	Inspection requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.407(a) (1)	Inspection approval requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.409 (a) (2)	Airworthiness inspection	Designed for manned aircraft; not suitable for off-the-shelf sUAS
14 CFR § 91.417 (a) & (b)	Maintenance records requirements	Designed for manned aircraft; not suitable for off-the-shelf sUAS