



Administration

May 22, 2015

Exemption No. 11672 Regulatory Docket No. FAA–2015–0653

Mr. Todd Massey Owner Operator Aerial Impressions, LLC 6213 West Dixon Street Milwaukee, WI 53214

Dear Mr. Massey:

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 March 13, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Aerial Impressions, LLC (hereinafter petitioner or operator) for an exemption. The exemption would allow the petitioner to operate an unmanned aircraft system (UAS) to support the agriculture industry and conduct aerial photography, videography and land surveying.

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 Phantom 2 and DJI S1000+.

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. 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, Aerial Impressions, LLC is granted an exemption from 14 CFR §§ 61.23(a) and (c), 61.101(e)(4) and (5), 61.113(a), 61.315(a), 91.7(a), 91.119(c), 91.121, 91.151(a)(1), 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), and 91.417(a) and (b), to the extent necessary to allow the petitioner to operate a UAS to perform aerial data collection. This exemption is subject to the conditions and limitations listed below.

Conditions and Limitations

In this grant of exemption, Aerial Impressions, LLC 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 2 and DJI S1000+ 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 5 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 May 31, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures

Todd Massey
Owner Operator
Aerial Impressions, LLC
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aerialimpressionsMKE@gamil.com

Dear Madam or Sir,

Aerial Impressions is petitioning the Federal Aviation Administration (FAA) for an exemption to Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA) and 14 CFR Part 11 The exemption would allow operation of the DJI Phantom 2 and DJI S1000 unmanned aircraft systems (UAS) for the purpose of supporting the agriculture industry, aerial photography/video and land surveying. this document will outline requested relief from regulations pertaining to this exemption.

Aerial Impression agrees to operate within the boundaries set forth by this exemption. Along with rules and regulations that the FAA has in place Aerial Impressions plans to use additional safety precautions were they see fit to ensure safe sUAS operations. Implementation of lightweight small-unmanned systems is a tool that can greatly improve the safety standards of or National Airspace System (NAS). sUAS can fly operations that would traditionally would require manned aircraft, which carry pilots, gallons of flammable fuel. Please Allow Aerial Impressions to offer sUAS operations to its local market to promote the safe efficient and responsible use of sUAS.

Thank you for your time,

Todd Massey
Owner Operator

Aerial Impressions, LLC

414-899-8512

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Glossary of Abbreviations

AGL	Above Ground Level
ATC	Air Traffic Control
COA	Certificate of Authorization
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
MAAP	Mid Atlantic Aviation Partnership
NAS	National Airspace System
PIC	Pilot in Command
sUAS	Small Unmanned Aircraft Systems
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VO	Visual Observer
VLS	Visual Line of Sight

LIST OF ATTACHMENTS

Futaba 14sg operational manual
A2 Flight Control operational manual
DJI S1000+ operational Manual
DJI Phantom 2 operational manual
Naza M flight control operational manual

Section 1: Introduction and Interest of Petitioner

Aerial Impressions is a small business located in southeastern Wisconsin that intends to use two current DJI model UAV platforms, to gather images for industries such as of Real estate, Precision Framing, Geo-Reference Mapping and Golf courses Photography. Aerial Impressions is committed to offering safe and responsible sUAS flight operations.

It shall be the intent of every sUAS operator to make a responsible effort to not invade a person's reasonable expectation of privacy when operating the UAS while performing safe flight operations. When operating the sUAS, Aerial Impressions operators will abide by all FAA Regulations for flight and receive the proper authorization for flight.

Section 2: Unmanned Aerial Systems

General Information Pertaining to All Proposed UAS

Aerial Impressions will operate less than fifty-five pound sUAS, for the ability to conduct aerial imagery and videography, with payloads capable of supporting these missions.

Prior to each flight the PIC shall inspect the sUAS to ensure it is in a condition for safe flight. If the inspection reveals a condition that affects the safe operation of the sUAS, the aircraft will be prohibited from operating until the necessary maintenance has been performed and the sUAS is found to be in a condition for safe flight. Ground Control Station will be included in preflight inspections as well. Maintenance and Alterations must be properly documented in aircraft records. All discrepancies noted shall be documented as described in the Aerial Impressions Operators Manual pg.2 (Organization)

Any maintenance or alterations made to the sUAS shall be documented in a logbook as well as undergo test flight before it can return to service. Any repairs or alterations must meet the manufacturer's guidelines with particular attention to flight critical components that may not be

addressed in the manufacturer's manuals. Only personnel who are authorized shall perform such operations.

Aerial Impressions will follow all manufacturer's sUAS aircraft/component, maintenance, overhaul, replacement, inspection and life limit requirements, Aerial Impressions shall carry out their maintenance, inspections and record keeping requirements, in accordance with the operator's manual. Maintenance, inspection, and alterations must be noted in the aircraft logbook, including total flight hours, description of work

Each sUAS operated under the proposed exemption shall comply with all manufacturer System and Safety Bulletins.

Aerial Impressions technicians will receive and document training referenced in the manufacturer's operations manual.

Before conducting operations, the radio frequency spectrum used for operation and control of the sUAS shall comply with the Federal Communications Commission (FCC) or other appropriate government oversight agency requirements.

Equipment List

DJI Phantom 2

Aerial Impressions seeks an exemption to operate DJI Phantom 2 sUAS, for compensation or hire. The DJI Phantom 2 is comprised of a quad-rotor unmanned aircraft and a handheld ground control station. The Phantom II has a maximum gross weight of approximately 2.8 pounds, diameter (rotor span) 23.75 inches, width of 12.5 inches, and height of 8.1 inches. The Phantom II is equipped with four rotors driven by four lithium polymer battery powered electric motors.

Design and operational characteristics are provided in DJI Phantom 2 Operating Manual (Page 35). Flight crews shall conduct pre-flight inspections as documented in DJI Phantom 2 Operating Manual (Page 24)

ATTACHMENTS

DJI Zemuse H3 -3d Gimbal
DJI ISOD mini
DJI 2.4ghz. Data link
14sg Futaba radio transmitter
Gopro Hero 3+
DJI Naza M Flight controller

Phantom Specifications

Please refer to (Sec. 8.1) in the provided Phantom Operating Manual.

Nazi M Flight Control Specifications

Please refer to (Page 23) in the provided Nazi Flight Control Manual

Futaba 14sg specifications

Please refer to (Page 11) of the Futaba 14sg Control Manual

DJI S1000+

Aerial Impressions seeks an exemption to operate a DJI-S1000 sUAS for compensation or hire. The DJI-S1000+ is comprised of a multi-rotor unmanned aircraft and two handheld ground control stations. The DJI-S1000 has a maximum gross weight of approximately 24 pounds, diagonal wheelbase of 41.4 inches, and height of approximately 18 inches. The DJI-S1000 is equipped with eight rotors driven by eight lithium polymer battery powered electric motors.

Design and operational characteristics are provided in DJI S1000+ Operating Manual (Page 22).

Flight crews shall conduct pre-flight inspections as documented in DJI S1000+ Operating Manual (Page 4).

ATTACHMENTS

DJI A2 Flight Control

DJI Zemuse Gimbal for either Panasonic GH4 or Canon Mark III

DJI ISOD

DJI Light Bridge

2 Futaba 14sg Radio Transmitter

S1000 Specifications

Please refer to (Page 22) of the S1000+ Operating Manual

A2 Flight control specifications

Please refer to (Page 49) of the A2 Flight Control Manual

Futaba 14sg specifications

Please refer to (Page 11) of the Futaba 14sg Control Manual

Section 3: Unmanned Aircraft Pilot in Command (PIC)

Aerial Impressions Flight Crew, including PIC and Visual Observers (VO), will be qualified as directed by Aerial Impressions Operation Manual pg.3 (operators)

All flight crewmembers, including PIC and VO, will have an understanding of, and comply with, Title 14 Code of Federal Regulations, and/or Agency directives and regulations, applicable to the

airspace where the sUAS will operate. Specifically all flight crew members will receive training on the rules and responsibilities described in 14 CFR Part 91 Sections 91.111, 91.113 and 91.115 regarding cloud clearance, flight visibility and the pilot controller glossary, including standard ATC phraseology and communication.

The PIC must possess at least a current private pilot certificate and third class medical certificate. The PIC must also meet the flight review requirements specified in 14 CFR Section 61.56 in an aircraft in which the PIC is rated on his/her pilot certificate.

Prior to operations conducted for the purpose of aerial imagery and videography (or similar operations), the PIC must have accumulated and logged, in a manner consistent with 14 CFR Section 61.51(b), a minimum of 25 hours of total time as a sUAS pilot and at least ten hours logged as a sUAS pilot with similar sUAS type (fixed wing or rotary). Prior documented flight experience that was obtained in compliance with applicable regulations may satisfy this requirement. Training, proficiency, and experience building flights are requested to be conducted under this grant of exemption to accomplish the required flight cycles and flight time. During training, proficiency, and experience building flights, all persons not essential for flight operations will be considered non-participants and the PIC will operate the sUAS with appropriate distance from non-participants in accordance with 14 CFR Section 91.119. operations), the PIC must have accumulated and logged in a manner consistent with 14 CFR Section 61.51(b), a minimum of five hours as a sUAS PIC operating the make and model of the sUAS to be utilized for operations under this requested exemption, and three take-offs and landings in the preceding 90 days. Training, proficiency, experience-building, and take-off and landing currency flights are requested to be conducted under this grant of exemption to accomplish the required flight time and 90 day currency. During training, proficiency, experience building, and take-off and landing currency flights all personnel not essential for flight operations are considered non participants, and the PIC must operate the sUAS with appropriate distance from nonparticipants in accordance with 14 CFR Section 91.119.

All operations must utilize a VO. The VO may be used to satisfy the Visual Line of Sight (VLOS) requirement as long as the PIC always maintains VLOS capability. The VO and PIC must be able to communicate verbally at all times. This condition and limitation is consistent with all FAA approved Exemptions

Section 4: Operations of sUAS

At all times the sUAS must remain close enough to the operator for the operator to be capable of seeing the aircraft with vision unaided by any device other than corrective lenses.

Small unmanned aircraft may not operate over any persons not directly involved in the operation.

Daylight-only operations (official sunrise to official sunset, local time).

Must yield right-of-way to other aircraft, manned or unmanned.

First-person view camera cannot satisfy "see-and-avoid" requirement but can be used as long as requirement is satisfied in other ways.

Maximum airspeed of 30 mph

Maximum altitude of 400 feet above ground level.

Minimum weather visibility of 3 miles from control station.

No operations are allowed in Class A (18,000 feet & above) airspace.

Operations in Class B, C, D and E airspace are allowed with the required ATC permission.

Operations in Class G airspace are allowed without ATC permission

No person may act as an operator or VO for more than one unmanned aircraft operation at one time.

No careless or reckless operations.

Requires preflight inspection by the operator.

The sUAS shall remain clear and yield the right of way to all other manned aviation operations and activities at all times.

The sUAS shall be operated at an altitude of no more than 400 feet above ground level (AGL). All altitudes reported to ATC will be in feet.

The multi-rotor sUAS shall not be flown at a ground speed exceeding 30 mph.

sUAS Operations will be conducted under visual meteorological conditions (VMC). The sUAS will not be operated less than 500 feet below or less than 2000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.

If the sUAS loses communications or loses its GPS signal, it must return to a predetermined location within the planned operating area and land or be recovered.

The sUAS PIC must abort the flight in the event of unpredicted obstacles or emergencies in accordance with operating documents.

The sUAS PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough power to fly at normal cruising speed to the intended landing point and land the sUAS with 25% battery power remaining.

The sUAS operated in accordance with this proposed exemption shall be identified by serial numbers, registered in accordance with 14 CFR part 47, and have identification (Number)

markings in accordance with 14 CFR part 45, Subpart C. Markings will be as large as practicable.

The sUAS documents required under 14 CFR 91.9 and 91.203 shall be available to the PIC at the Ground Control Station of the sUAS anytime the aircraft is operating. Those documents shall be available to the Administrator or any law enforcement official upon request.

Any sUAS incidents, accidents or flight operations that transgress the lateral or vertical boundaries of the operational area as defined by the applicable COA shall be reported to the FAA's UAS Integration Office (AFS-80) within 24 hours. Accidents shall be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: www.ntsb.gov.

Unless otherwise specified in this petition, the sUAS PIC, and the sUAS operations shall comply with all applicable parts of 14 CFR including, but not limited to, parts 45, 47, 61 and 91.

Intended Area of Operations

The sUAS shall not be operated over congested or densely populated areas. These areas include but are not limited to the yellow areas depicted on World Aeronautical Charts (WAC), Sectional Aeronautical Charts (Sectionals), or Terminal Area Charts (TAC). Each work site will also be evaluated based on local conditions.

Operations of sUAS may be conducted at distances less than 500 feet from participating persons, vessels, vehicles or structures that perform an essential function in connection with these special purpose operations. Operations closer than 500 feet from the PIC, VO, operator trainees and essential persons are permitted when operationally necessary; but never so close to present an undue hazard. This is consistent with Exemption No. 11138.

Operations of sUAS may be conducted at distances less than 500 feet from unoccupied vessels, vehicles or structures owned by the land owner/controller when the land owner/controller grants such permission, and the PIC makes a safety assessment of the risk from operations and determines that it does not present an undue hazard to persons or property. This is consistent with Exemption No. 11138.

Flight operations will be conducted at least 500 feet from all nonparticipating persons unless barriers or structures are present that sufficiently protect nonparticipating persons from the sUAS and/or debris in the event of an accident. HAZON shall 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 sUAS, flight operations will cease immediately. This is consistent with Exemption No. 11138.

All operations of sUAS shall be conducted with the permission from the land owner/controller or authorized representative. Permission from the land owner/controller or authorized representative will be obtained for each flight to be conducted.

Airport Proximity

The sUAS will not operate within 5 nautical miles of an airport reference point as denoted on a current FAA-published aeronautical chart unless a letter of agreement with that airport's management is obtained, and the operation is conducted in accordance with a NOTAM as required by the operator's COA. The letter of agreement with the airport management will be made available to the Administrator upon request. This is consistent with Exemption No 11159.

Visual Line of Site

The sUAS must be operated within VLOS of the PIC and VO at all times. This requires the PIC to be able to use human vision to see the sUAS unaided by any device other than corrective lenses, as specified on the PIC's FAA issued medical certificate.

All sUAS operations must utilize a VO. 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. The PIC and VO 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 functions.

The sUAS will not be operated by the PIC from any moving device or vehicle. Operations will not be conducted during night as defined in 14 CFR 1.1.

PreFlight Safety (14 CFR § 91.7(b))

Aerial Impressions will conduct preflight safety risk assessments to determine that the sUAS is in a condition for safe flight (14 CFR Section 91.7(b)) and that the planned operation can be completed safely. Specific procedures are addressed in Aerial Impressions Operators manual pg.6

Flight Standards District Offices (FSDOs)

Aerial Impressions operations do not require a notification to Flight Standards District Offices (FSDOs). They will not be engaging in the type of sUAS that would warrant contact.

Certificate of Waiver or Authorization

Aerial Impressions shall obtain an Air Traffic Organization (ATO) issued Certificate of Waiver or Authorization (COA) prior to conducting any operations under this requested grant of exemption. Additionally, Aerial Impressions will request a Notice to Airmen (NOTAM) not more than 72 hours, but not less than 48 hours prior to the operation.

Weather

sUAS Operations will be conducted under visual meteorological conditions (VMC). The sUAS will not be operated less than 500 feet below or less than 2000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC. All PIC must also abide by all sUAS manufacturer's guidelines for weather operation limitations and standards.

Section 5: Requested Exemptions from Regulations

Considered Regulation	Title	Recommended Action
14 C.F.R Part 21.185	Certificate	Aerial Impressions recommends that in consideration of the size, weight, speed and limited operating area associated with these aircraft and their operation, the Secretary of Transportation determines that these aircraft meet the conditions of Section 333. Relief is not necessary.

14 C.F.R. Part 45.23(b)		Aerial Impressions sUAV shall 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 will be as large as practicable. Relief is not necessary.
` '		The FAA has found in previous grants of exemption that a PIC with a private pilot certificate operating a sUAS would not adversely affect operations in the NAS or present a hazard to persons or property on the ground. Request relief with limitations and conditions specified in this petition.
\ '	Commercial pilot privileges and	The FAA has found in previous grants of exemption that a PIC with a

	limitations	private pilot certificate operating a sUAS would not adversely affect operations in the NAS or present a hazard to persons or property on the ground. Request relief with limitations and conditions specified in this petition.
14 C.F.R. Part 91.7(a)	Civil Aircraft Airworthiness	Aerial Impressions recommends that in consideration of the size, weight, speed and limited operating area associated with this aircraft and its operation, the Secretary of Transportation determines that these aircraft meet the conditions of Section 333. Relief is not necessary.
14 C.F.R. Part 91.9(b)(2) &(c)	, ,	The FAA has previously determined that relief from these sections is not necessary. Relevant materials may be kept in a location accessible to the PIC in compliance with the regulations. Relief is not necessary.
14 C.F.R. Part 91.103	Preflight Action	Aerial Impressions will perform. Relief is not necessary.
14 C.F.R. Part 91.109(a)	Flight Instruction	Aerial Impressions will conduct all
		flight training through procedures specified in Training Instruction during dedicated training sessions. Based on previous decisions made by the FAA for sUAS petitions regarding this regulation, relief is not necessary.
14 C.F.R. Part 91.119(c)	Minimum Safe Altitude	Aircraft will be operated below 400 AGL, but not over congested areas. Request relief with limitations and conditions specified in this petition.
	Altimeter Settings	The proposed aircraft have a

		barometric altimeter and GPS derived altitude capabilities. Aerial Impressions recommends that the altimeter be set to zero feet AGL rather than local barometric pressure or field altitude before flight. Considering the limited altitude of the proposed operations. Request relief with limitations and conditions specified in this petition.
14 C.F.R. Part 91.151(a)	Fuel Requirements in VFR	Prior relief has been granted for manned and unmanned aircraft to operate at less than prescribed minimums. Request relief with limitations and conditions specified in this petition.
14 C.F.R. Part 91.203(a) and (b)	Certifications Required	Original intent of these regulations was to display an aircraft's airworthiness, certification and registration documents so they would be easily available to inspectors and passengers. Based on the FAA Memorandum subject, "Interpretation regarding whether certain required documents may be kept at an unmanned aircraft's control station," dated August 8, 2014, relief is not necessary.
14 C.F.R. Part 91.405(a)	Maintenance Required	Request relief with limitations and conditions specified in this petition.
14 C.F.R. Part 91.407(a)(1)	Operation after Maintenance	Request relief with limitations and conditions specified in this petition.
14 C.F.R. Part 91.409(a)(1) and (2)	Inspections	Request relief with limitations and conditions specified in this petition.
14 C.F.R. Part 91.417(a) and (b)	Maintenance Records	Request relief with limitations and conditions specified in this petition.

Protection of Rights and Privacy

UAS Pilot in Command, Gimbal Operators and Spotter or any other person involved in flight mission is to observer and privacy rights or expectations of the public. Any person involved in any unlawful flights that may jeopardize someone's privacy right or expectations will be held accountable for their actions.

Public Interest

Aerial Impressions is a small local business supporting and promoting the safe and responsible implementation of sUAS into our national airspace (NAS). Aerial Impressions will offer local market an accredited sUAS option to aid in aerial imagery gathering. Aerial Impressions use small unmanned units that have the capacity to perform work that would require a full scale fixed winged aircraft and pilot, reducing risk to people and property.

Conclusion

In conclusion if granted relief for :14 CFR § 61.113(a) & (b) 14 CFR § 91.7(a) 14 CFR § 91.119(c) 14 CFR § 91.151(a) 14 CFR § 91.405(a). Aerial Impression believes they can perform safe, efficient and responsible flight operations. Promoting legal flight operations solutions to ensure greater public safety and discouraging unlawful use. While lessen risk to pilots, property and civilians due to the implementation of lightweight small unmanned systems.

Sincerely,

Todd Massey
Owner Operator

Aerial Impressions, LLC

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