U.S. Department of Transportation

Federal Aviation Administration

July 20, 2015

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

Exemption No. 12092 Regulatory Docket No. FAA–2015–0729

Ms. Adele Scholl Mr. Jeffrey Scholl GravityShots.com, Inc. 172 Lidstrom Road Whitefish, MT 59937

Dear Ms. Scholl and Mr. Scholl:

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 March 13, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of GravityShots.com, Inc. (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct operations in the film industry, TV productions, real estate photography and video, surveying for development, agriculture inspection, and aerial mapping.

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 FreeFly CineStar 8, FreeFly CineStar 6, and DJI Inspire 1.

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<sup>1</sup>. 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, GravityShots.com, 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

<sup>&</sup>lt;sup>1</sup> 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.

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, GravityShots.com, 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 FreeFly CineStar 8, FreeFly CineStar 6, and DJI Inspire 1 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: <u>www.ntsb.gov</u>.

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 July 31, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures



Jeffrey & Adele Scholl 172 Lidstrom Rd. Whitefish, MT 59937 c: 406-253-9048 f: 866-333-4157 adele@gravityshots.com

3/13/2015

U. S. Department of Transportation Docket Management System 1200 New Jersey Ave., SE Washington, DC 20590

Dear Sir or Madam:

## GravityShots.com, Inc. seeks exemption from the following sections of 14 C.F.R.:

- 14 C.F.R. Part 21- Airworthiness and Certificate
- 14 C.F.R. Part 45.23 (b) Identification and Registration Marking
- 14 C.F.R. Part 91.7 (a) Airworthiness
- 14 C.F.R Part 91.9 (b)(2) Flight Manual
- 14 C.F.R. Part 91.103 Preflight Action
- 14 C.F. R Part 91.109 (a) Flight Instruction
- 14 C.F.R. Part 91.119 Minimum Safe Altitudes
- 14 C.F.R. Part 91.121 Altimeter Settings
- 14 C.F.R. Part 91.151 (a) Fuel Requirements in VFR Conditions
- 14 C.F.R. Part 91.203 (a) & (b) Certifications and Registration
- 14 C.F.R. Part 91.405 (a), 407 (a)(1), 409 (a)(1) & (2), 417 (a) & (b) Maintenance Inspections

GravityShots.com, Inc. seeks relief on the above sections of 14 C.F.R. for use of their sUAVs in the film industry, TV productions, real estate photography & video, surveying for development, agriculture inspection, aerial mapping.

Granting GravityShots.com, Inc. an exemption will greatly benefit the public for a number of reasons:

- Create a positive environment for sUAVs as whole. By creating breathtaking aerial imagery the public is drawn to our content. We advocate safety as a top priority and share safety concerns when flying.
  - 1. Learn to fly on hobby grade equipment first. Putting many hours into learning the orientations and performance of the equipment.
  - 2. Once you have gained hours you can advance to a smaller UAV.
  - 3. Always create a pre-flight check list and follow the FAA regulations set in place, do not fly above 400 feet, do not fly in restricted air space, within 5 miles of an airport
  - 4. Always have an observer with your pilot, to help create a safe environment for the sUAV and pilot. As the observer you can help educate the public. By asking them to stay back from the sUAV, do not allow the public to talk to the pilot while they are flying, making sure there is a safe take off and landing place free and clear of obstacles.
  - 5. Always keep your sUAV in visual line of sight.
  - 6. Always perform maintenance on your sUAV and check the validity. Make sure all equipment has been charged before each flight.
  - 7. Respect and maintain public privacy.
  - 8. Never fly over people or crowds.
  - 9. Never fly under the influence of alcohol or other substances.
  - 10. Never fly near or around power lines.
  - 11. Never fly in high winds or bad weather.
- Provide professional education to the public.
- Use of sUAVs verses full scale helicopters provide a safer environment for filming.
- Provide economic growth for the public by allowing the public to hire GravityShots.com, Inc.

# The exemption would not adversely affect safety, in fact it would create a safe environment and example of a professional operation adhering to the FAA standards that are currently set in place.

## Pilot & Company Background with years of experience:

Jeffrey Scholl started flying remote controlled aircrafts at an early age. He continued his passion for flying and received his full scale pilot's license at the age of 17. He attended University of North Dakota and obtained a degree in Aerospace and Computer Science, as well as a commercial instrument rating . *(See Appendix 1. for a digital copy)* 

In 1999, Jeffrey Scholl created GravityShots.com and was registered with the state of Montana. *(See Apendix 2.)* In early 2000, Jeffrey started building and flying RC helicopters, single rotor. He built and mastered gas and electric machines. He would compete on the national level in 3D flying with the gas powered helicopters. Around this same time, he started GravityShots.com, Inc. and started taking

photographs from the air. Attached is one of his first systems that he designed and a photo of him flying it.





This photo shows Jeffrey Scholl with a gas powered helicopter in 2002.



2005 GravityShots.com, Inc. acquired Commercial Liability Insurance, with Evanston Insurance Company. *(See Appendix 3. for a digital copy)* No claims have been made with 10 years of liability coverage. Currently in 2015, their policy is held with Seneca Insurance Liability Insurance: Aerial Pak<sup>™</sup> Insurance Policy 2015. *(See Appendix 4. for a digital copy)* 

This policy offers Comprehensive General Liability Coverage:

- Protects you from claims arising out of bodily injuries to the general public, or from damage to the property of others.
- Protection extends up to your policy limits. Included is coverage for premises-operations and products-completed operations.
- Limits of \$500,000 per occurrence/ \$1,000,000 aggregate are standard; \$1,000,000 per occurrence / \$2,000,000 aggregate is also available.
- ✓ Standard General Liability policies will exclude damage arising from the operation of aircraft; Aerial Pak™ includes coverage for Remote Controlled Aerial Photography equipment provided the maximum payload does not exceed 25 pounds and the aircrafts engine delivers under eight (8) horsepower.
- ✓ Note: Aerial Pak™ is intended to provide coverage for bodily injury and property damage claims arising from the operation of approved equipment. The policy contains an exclusion "personal injury" and "advertising injury" coverage. This coverage may be

available for an additional premium, through a separate policy.

In November of 2010, Jeffrey started flying and building multi-rotor platforms. Together with his wife, Adele as the observer, they gathered hours of safely flying these platforms.

Jeffrey's skills as a full scale and RC pilot are unique with many years of experience. From the first time that he took the sticks with his single rotor RC helicopters, he has learned to fly all crafts in manual mode. Not relying on GPS guidance or way point flying. He believes that you must learn to master the craft, before you can use these automated features, as they are not always reliable.

Through constant research and development Jeffrey Scholl stays on top of updates and advancements in technology.

### Current sUAV Systems that GravityShots.com, Inc. operates:

#### 1. FreeFly CineStar 8

(See Attached Appendix 5. CineStar 8 Manual & Appedix 7. for The Flight Electronics Manuals) First Flight 3/28/2014 - Total Flight Time: 61182 secs / 1019.42 min / 16:59:42 (132 files/flights)

The CineStar is the next evolution in professional heavy lift multi-rotor helicopters. Drawing on vast experience in the areas of professional aerial cinematography, engineering and manufacturing, Quadrocopter and FreeFly Systems have collaborated to create the ultimate aerial platform. Extensive R&D has been invested in the CineStar to create a reliable and robust system for aerial video and photo professionals, allowing for longer flight times, heavier payloads and smoother footage.

## **Technical Properties:**

- Weight Including Motors: ~3050g (6.72 lbs)
- Dimensions: 1000 x 900 x 350mm
- Max Payload: ~5445g (12 lbs)
- Construction: Gen 2 Carbon Fiber
- Propeller: Tiger Carbon 15x5 MR
- Tiger 4012 Brushless Motors
- MikroKopter GPS way point flying electronics
- Quadrocopter Edition of Dual Sky XM5010
- QuadroPower 10,000mAh (6s) Lipo w/ EC5 Connector Battery (Allowing 10 minute flights)
- CineStar Build Guide DVD



### 2. FreeFly CineStar 6

*(See Attached Appendix 6. CineStar 6 Manual & Appedix 7. for The Flight Electronics Manuals)* First flight 1/8/14 -Total Flight Time: 132329 secs / 2205.29 min / 1.12:45:29 (333 files/flights)

The CineStar 6 is the smaller version of the CineStar 8 with 6 motors.

#### **Technical Properties:**

- Weight Including Motors: ~2595g (5.72 lbs)
- Dimensions: 1000 x 900 x 350mm
- Max Payload: ~3628g (8 lbs)
- Construction: Gen 2 Carbon Fiber
- Propeller: Dual Sky Propeller Set & Motors
- MikroKopter GPS way point flying electronics
- Quadrocopter Edition of Dual Sky XM5010
- QuadroPower 10,000mAh (6s) Lipo w/ EC5 Connector Battery (Allowing 10 minute flights)
- CineStar Build Guide DVD



## 3. DJI Inspire 1 (See Attached Appendix 8. & 9. Manual and Safety Guidelines)

DJI's most advanced technology comes together in the Inspire 1, an easy to use, all-in-one flying platform that empowers you to create the unforgettable. Never before has such power been put into a ready-to-fly system that anyone can fly.

#### **Technical Properties:**

- Professional DJI flight control system
- 3-axis gimbal stabilized 4K camera
- HD wireless video transmission
- Full remote camera control capability
- App controlled manual camera settings
- GPS-free indoor stabilization
- Allowing 10 minute flights



GravityShots.com, Inc. Safety Policies in place:

#### **Before starting**

- Check the reliability of the Multi-Rotor.
- The flight battery and transmitter battery must be fully charged.
- Always turn on the transmitter first and then the Multi-Rotor.
- Watch for visible damage such as loose screws, broken, unbalanced or damaged propellers, faulty connectors or solder joints, broken pipes, etc.
- The propeller must be in a good condition and securely mounted. The rotors must spin smoothly. Please ensure that there are no objects are in the rotational plane of the propellers or within a distance that poses a risk of obstruction. Rotating propeller ends are dangerous to touch never touch a rotating propeller with fingers or other body parts.
- Ensure the appropriate to the audible beeps when auto lipo-detection is enabled. 6 \* beep means 6s Lipo
- Ensure that the selected channel on the remote control is free and that you're within range of the transmitter.
- Ensure the sensors are calibrated (when the motors are off move yaw and gas stick into upper left corner until it beeps).
- Different settings can result in fundamentally different flight characteristics and occupation of the Channel functions. Make sure that you are familiar with the setting and its features.
- After starting the motors, check that all motors are running and rotate evenly. Please fly carefully at a low altitude until you know that everything is working fine.

- Perform a pre-flight check (see checklist below).
- Start manually switch off altitude control and GPS.

#### **Checklist (pre-flight check)**

- Weather conditions are suitable.
- Frame and all screws are tight.
- Propeller not damaged and tightly fixed.
- Battery fully charged and securely mounted.
- Transmitter battery charged and the antennas are free.
- Channel of the transmitter is not busy. If 35/40/70MHz or other MHz-RC-controls are in operation simultaneously, the used channels must be checked with the other pilots (not necessary for 2.4 GHz systems).
- Check RC(TX/RX) operation range (on the ground!) from time to time (and before 1st flight).
- Ensure there is nothing in the danger zone of the propeller.
- Ensure enough space for launch and flight.
- Ensure the GPS module (if any) has GPS fix. If CH or PH is active it will beep every second. Check that when you switch to GPS mode, there will be an audible beep.
- For manual start ensure GPS and altitude controls are turned off.
- Ensure sensors are calibrated and that the right setting is loaded.
- Ensure the trim of the remote control is in neutral position.

### During the flight

- Do not take risks! Your own safety and that of your environment depend on the good behavior of the pilot. Always maintain a safe distance from people, animals and objects. Improper operation can cause serious injury and property damage! Never fly towards viewers and avoid flying over spectators.
- Keep in mind that viewers could get close to the Multi-Rotor, without being aware of potential dangers.
- Always turn off the Multi-Rotor first and disconnect the flight battery before turning off the transmitter.
- Only fly in line of sight. In the case of manual control, you must be able to see the position and altitude. Never fly over 500 feet.
- Never rely 100% on functions such as GPS, compass, or altitude control. You must always be able to take manual control of the Multi-Rotor.
- Reduce the throttle or switch off the motors in case of a crash or failure.
- Do not fly in restricted air space, such as in the vicinity of airports, etc.
- Pay attention to under-voltage warning -flying on an empty battery can cause damage to the Lipos and crash.
- If a defect or malfunction has occurred, it must be corrected before the next start.
- When using GPS, take note that the position of the Multi-Rotor can change suddenly.

#### After the flight

- Disconnect the battery and check all over for damage. Make sure that there is no damage to the propellers.
- See the Handling and safety precautions of Lipos.
- If the Multi-Rotor is involved in a crash or hard landing the sensors and electronics might be damaged. Before the next start everything must be checked.

*Similar granted petitions are as follows:* 2/18/2015 Picture Factory, Inc., 2/13/2015 Capital Aerial Video, LLC., 2/10/2015 Blue-Chip UAS, 2/3/2015 Helinet Aviation Services, LLC., 2/3/2015 Alan D. Purwin, 1/29/2015 Slugwear, bda Likeona Tree, 1/29/2015 Team 5, 1/29/2015 Shotover, 1/23/2015 AeroCine, 1/23/2015 Burnz Eye View, 1/6/2015 Douglas Trudeau, 12/10/2014 Clayco, 10/10/2014 Flying Cam, 9/25/2014 Astraeus Aerial, 9/25/2014 Aerial MOB, 9/25/2014 Pictorvision, 9/25/2014 HeliVideo Productions, 9/25/2014 Snaproll Media, 9/25/2014 RC Pro Productions Consulting, dba Vortex Aerial.

In Summary, GravityShots.com, Inc. with its pilot and observer seek exemption from the following regulations: 14 C.F.R. Part 21, 14 C.F.R. Part 45.23 (b), 14 C.F.R. Part 91.7 (a), 14 C.F.R Part 91.9 (b)(2), 14 C.F.R. Part 91.103, 14 C.F. R Part 91.109 (a), 14 C.F.R. Part 91.119, 14 C.F.R. Part 91.121, 14 C.F.R., Part 91.151 (a), 14 C.F.R. Part 91.203 (a) & (b) , 14 C.F.R. Part 91.405 (a), 407 (a)(1), 409 (a)(1) & (2), 417 (a) & (b), to commercially operate their sUAVs, weighing under 55 pounds, in a safe manure and to provide the public awareness and safety.

If granted the exemption from the FAA Gravityshots.com, Inc. will continue to abide by the FAA regulations and policies set in place. If granted the exemption GravityShots.com will submit a Certificate of Waiver or Authorization (COA) before any commercial jobs are performed. Commercial operations would include but are not limited to, aerial footage for the film industry, TV productions, real estate, surveying for development, agriculture inspection, aerial mapping.

Sincerely,

Sile

Adele Scholl Jeffrey Scholl GravityShots.com, Inc. 172 Lidstrom Rd. Whitefish, MT 59937 adele@gravityshots.com

## Appendix Table of Contents:

- 1. United State of America FAA Commercial Pilot License *Attachment1\_JeffPilotLicense.jpg*
- 2. June 16, 1999 GravityShots.com business registration with the state of Montana Attachment2\_ GravityShotsBusiness.jpg
- 3. 2005 GravityShots.com Proof of Liability Insurance Evanston Insurance Company *Attachment3\_CommercialLiability2005.pdf*
- 4. 2015 GravityShots.com Proof of Liability Insurance Seneca Specialty Insurance Company: *Attachment4a\_GRAVI-1 PROOF.pdf, Attachment4b\_GravityShotsPolicy.pdf*
- 5. FreeFly CineStar 8 Manual Attachment5\_cinestar8Manual-v3.pdf
- 6. FreeFly CineStar 6 Manual Attachment6\_cinestar6Manual-v8.pdf
- 7. Mikrokopter Electronics Manual See Link http://www.mkmanual.com/
- 8. DJI Inspire 1 User Manual V1.0 Attachment8\_Inspire\_1\_User\_Manual\_v1.0\_en.pdf
- 9. DJI Inspire 1 Safety Guidelines v1.0 Attachment9\_Inspire\_1\_Safety\_Guidelines\_en.pdf
- 10. Copy of NNumbers from the FAA Attachment10\_NNumbers.jpg
- 11. Copy of FAA Aircraft registration documentation: AC Form 8050-1 -Attachment11a\_8050-1\_Inspire1.jpg Attachment11b\_8050-1\_Cinestar6.jpg Attachment11c\_8050-1\_Cinestar8.jpg
- Copy of Affidavit of Ownership For Amateur-Built Aircraft: AC Form 8050-88 -Attachment12a\_8050-88\_Inspire1.jpg Attachment12b\_8050-88\_Cinestar6.jpg Attachment12c\_8050-88\_Cinestar8.jpg
- 13. Copy of Aircraft Bill of Sale: AC Form 8050-2 -Attachment13a\_8050-2\_Inspire1.jpg Attachment13b\_8050-2\_Cinestar6.jpg Attachment13c\_8050-2\_Cinstar8.jpg
- 14. Copy of the USPS receipt of the mailed FAA Aircraft registration docuements on 3/11/2015 -Attachment14\_USPSFAA.jpg