



U.S. Department
of Transportation

**Federal Aviation
Administration**

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

September 21, 2015

Exemption No. 12924
Regulatory Docket No. FAA-2015-2406

Mr. Zachary Melms
Peak 3 LLC
7731 Bethany Circle
Anchorage, AK 99507

Dear Mr. Melms:

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 May 29, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Peak 3 LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography, videography, and cinematography.

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 Inspire 1, DJI Phantom 2, and DJI Phantom 3.

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 collection¹. 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, Peak 3 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.

¹ Aerial data collection includes any remote sensing and measuring by an instrument(s) aboard the UA. Examples include imagery (photography, video, infrared, etc.), electronic measurement (precision surveying, RF analysis, etc.), chemical measurement (particulate measurement, etc.), or any other gathering of data by instruments aboard the UA.

Conditions and Limitations

In this grant of exemption, Peak 3 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 Inspire 1, DJI Phantom 2, and DJI Phantom 3 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

May 29, 2015

U.S. Department of Transportation
Washington DC 20590

Re: Exemption Request Pursuant to Section 333 of the FAA Reform Act and Part 11 of the Federal Aviation Regulations from: 14 CFR 21 subpart H; 14 CFR 45.23(b); 14 CFR 61.113(a) and (b); 14 CFR 91.7(a); 14 CFR 91.9(b)(2); 14 CFR 91.103; 14 CFR 91.109; 14 CFR 91.119(c); 14 CFR 91.121; 14 CFR 91.151(a); 14 CFR 91.203 (a) and (b); 14 CFR 91.405 (a); 14 CFR 91.407 (a) (1) 14 CFR 91.409 (a)(1) and (2); 14 CFR 91.417(a) and (b).

Dear Sir or Madam:

I, Zachary Melms, Managing Member of Peak 3 LLC, am writing pursuant to the FAA Modernization and Reform Act of 2012 and the procedures contained within 14 C.F.R. 11, to request that Peak 3 LLC, an owner and operator of small unmanned aircraft, be exempted from the Federal Aviation Regulations ("FARs") listed below so that Peak 3 LLC, may operate unmanned aircraft system ("UAS") commercially in airspace regulated by the Federal Aviation Administration ("FAA").

As described herein I, Zachary Melms, am experienced in flying hobby helicopters/planes for recreational purposes without incident. Currently Peak 3 LLC is exploring the use of UAS platforms manufactured by DJI including the DJI Inspire 1, Phantom 2 and Phantom 3 Quadcopters. Our intent is to use these platforms for aerial videography/cinematography/photography, enhancing academic community awareness for individuals and companies unfamiliar with the geographical layout of communities and lands throughout Alaska, and to augment real estate listing videos - following exemption and approval by the FAA. I have flown RC Helicopters/Planes for over five (5) years without incident. Peak 3 LLC is committed to safety with each flight.

Peak 3 LLC's exemption request would permit its operation of lightweight, unmanned (piloted by remote control) and comparatively inexpensive UASs in tightly controlled and limited airspace. Predetermined areas of operation, cordoned off locations and corresponding enhancements to current safety controls will allow Peak 3 LLC to operate within current safety parameters while innovating new ones. Currently, similar lightweight, remote controlled UASs are legally operated by amateurs with no flight experience, safety plan or controls in place to prevent catastrophe. Based on our commitment to safety it is reasonable the FAA grants this exemption to Peak 3 LLC to operate similar lightweight UASs. This will act to further safety protocols specific to lightweight UASs as Peak 3 LLC collects flight data and other information gained through permitted flight operations.

Granting Peak 3 LLC's request comports with the Secretary of Transportation's (FAA Administrator's) responsibilities to not only integrate UASs into the national airspace system, but to "...establish requirements for the safe operation of such aircraft systems [UASs] in the national airspace system" under Section 333(c) of the Reform Act. Further, Peak 3 LLC will conduct its operations in compliance with the protocols described herein or as otherwise established by the FAA.

For the reasons stated below, Peak 3 LLC respectfully requests the grant of an exemption allowing it to operate lightweight, remote controlled UAS's.

1. CONTACT INFORMATION:**Point of Contact:**

Zachary Melms
(406) 599-3557
peak3llc@gmail.com

Address:

7731 Bethany Circle
Anchorage, AK, 99507

2. The Specific Sections of Title 14 of the Code of Federal Regulations From Which Peak 3 LLC Requests Exemption are:

- 14 CFR 21;
- 14 C.F.R. 45.23(b);
- 14 CFR 61.113 (a) & (b); 14 C.F.R. 91, et seq.;
- 14 CFR 407 (a) (1);
- 14 CFR 409 (a) (2); and, 14 CFR 417 (a) & (b).

3. The Extent of Relief Peak 3 LLC Seeks and the Reason It Seeks Such Relief:¹

Peak 3 LLC submits this application in accordance with the Reform Act, 112 P.L. 95 §§ 331-334, seeking relief from any currently applicable FARs operating to prevent Peak 3 LLC's contemplated commercial cinematic, research and other flight operations within the national airspace system. The Reform Act in Section 332 provides for such integration of civil unmanned aircraft systems into our national airspace system as it is in the public's interest to do so. Peak 3 LLC's lightweight UASs meet the definition of "small unmanned aircraft" as defined in Section 331 and therefore the integration of Peak 3 LLC's lightweight UASs are expressly contemplated by the Reform Act. Peak 3 LLC would like to operate its lightweight UASs prior to the time period by which the Reform Act requires the FAA to promulgate rules governing such craft.

The Reform Act guides the Secretary in determining the types of UASs that may operate safely in our national airspace system. Considerations include:

- The weight, size, speed and overall capabilities of the UAS;
- Whether the UAS will be operated near airports or populated areas; and,
- Whether the UAS will be operated by line of sight.

112 P.L. 95 § 333 (a). Each of these items militates in favor of an exemption for Peak 3 LLC.

Peak 3 LLC's UASs utilize four to eight counter-rotating propellers for extreme balance, control and stability. They each weigh less than 55 pounds, including cinematic or other equipment. Each of Peak 3 LLC's small unmanned aircraft are designed to primarily hover in place and operate at less than a 50 knot maximum speed. They are capable of vertical and horizontal operations but operate only within the line of sight of the remote control pilot. In addition to the remote control pilot, Peak 3 LLC uses a spotter, such that, at minimum, two Peak 3 LLC personnel govern the safe flight of an Peak 3 LLC UAS at all times.

¹ The FAA has the authority to issue the exemption sought by Peak 3 LLC pursuant to the Federal Aviation Act, 85 P.L. 726 (1958), as amended (the "Act").

Utilizing battery power and not combustible fuels, flights generally last between five and twenty minutes. Peak 3 LLC does not operate its UASs with less than twenty five percent battery capacity. Safety systems in place include a GPS mode that allows Peak 3 LLC's UASs to hover in place if communication with the radio control pilot is lost and then slowly descend the UAS at twenty five percent battery capacity. Further, Peak 3 LLC's fleet is programmed, in some instances, to return to a safety point if communications are lost.

Peak 3 LLC does not operate its UASs near airports and generally does not operate them near populated areas. To date, Peak 3 LLC has only operated its fleet for training purposes away from populated areas. Peak 3 LLC only operates its UASs in predetermined areas and only in compliance with well regarded safety protocols such as those contained within the well established and commonly known Motion Picture and Television Operations Manual.

Peak 3 LLC's operation of its fleet of small unmanned aircraft will not "create a hazard to users of the national airspace system or the public." 112 P.L. 95 § 333 (b). Given the small size and weight of Peak 3 LLC's UASs, combined with their operation in cordoned off and well-controlled areas, Peak 3 LLC's fleet falls within Congress's contemplated safety zone when it promulgated the Reform Act and the corresponding directive to integrate UASs into the national airspace system. Indeed, Peak 3 LLC's UASs have a demonstrable safety record and do not pose any threat to the general public or national security.

4. How Peak 3 LLC's Request Will Benefit the Public As A Whole:

Aerial videography for geographical awareness and for real estate marketing has been around for a long time through manned fixed wing aircraft and helicopters. For small budget production companies and average homeowners the expense of such aerial videography is cost prohibitive. Only large companies and high end film companies can afford to absorb such expense. Which is where the option of less expensive unmanned systems becomes affordable to anyone. Manned aircraft pose a threat to the public through potential catastrophic crashes that Alaska has come to expect every year. Alaska has a very busy airspace, which is why Peak 3 LLC is pursuing a 333 Exemption to lead the way for other businesses and or enthusiast UAS operators. Peak 3 LLC's main goal is to prove to public that UAS can be safely used for community awareness and commercial purposes. Peak 3 LLC's UAS pose no threat due to their size, maneuverability and lack of combustible fuel - alleviating any potential threat to the public.

Granting Peak 3 LLC's exemption request furthers the public interest. Peak 3 LLC conducts research into safe UAS operations every time it flies one of its UASs. Flight data, visual inspections, recorded observations and flight analyses are compiled to further enhance current safety protocols. Allowing Peak 3 LLC to log more flight time directly relates to its research and its ability to further enhance current safety measures. Third, the public has an interest in reducing the danger and emission associated with current aerial cinematic capture methods, namely, full size helicopters. Peak 3 LLC's UASs are battery powered and create no emissions. If an Peak 3 LLC UAS crashes there is no fuel to ignite and explode. The impact of Peak 3 LLC's lightweight UASs is far less than a full size helicopter, notwithstanding the statistically noteworthy safety record of full size helicopters used in motion picture capture. The public's interest is furthered by minimizing ecological and crash impacts by permitting motion picture capture through Peak 3 LLC's lightweight UASs.

Additionally congress has pronounced that it is in the public's interest to integrate commercially flown UASs into the national airspace system, hence the passing of the Reform Act.

5. Reasons Why Peak 3 LLC's Exemption Will Not Adversely Affect Safety Or How The Exemption Will Provide a Level of Safety At Least Equal To Existing Rule:

Peak 3 LLC's exemption will not adversely affect safety. Quite the contrary, for the reasons stated, permitting Peak 3 LLC to log more flight time in FAA controlled airspace will allow Peak 3 LLC to innovate and implement new and novel, as of yet undiscovered safety protocols. In addition, Peak 3 LLC submits the following representations of enhancements to current aerial videography, photography and aerial surveying techniques:

- Peak 3 LLC utilizes UASs weighing less than 55 pounds;
- Peak 3 LLC only operates its UASs below 400 feet;
- Peak 3 LLC's UASs only operate for 5-20 minutes per flight;
- Peak 3 LLC lands its UASs when they reach 25% battery power;
- Peak 3 LLC's remote control pilots operate Peak 3 LLC's UASs by line of sight;
- Peak 3 LLC staffs each flight with a remote control pilot and spotter with communication systems enabling real time communication between them;
- Peak 3 LLC's UASs have GPS flight modes whereby they hover and then slowly land if communication with the remote control pilot is lost or battery power is below 25%;
- Peak 3 LLC actively analyses electronic flight data and other sources of information to constantly update and enhance safety protocols;
- Peak 3 LLC only operates in reasonably safe environment that are strictly controlled, are away from power lines, elevated lights, airports and actively populated areas;
- Peak 3 LLC conducts extensive briefings prior to flight, during which safety carries primary importance;
- Peak 3 LLC always obtains all necessary permissions and permits prior to operation; and,
- Peak 3 LLC has procedures in place to abort flights in the event of safety breaches or potential danger.

Peak 3 LLC's safety protocols provide a level of safety at least equal to existing rules, and in nearly every instance, greater than existing rules. It is important to note that absent the integration of commercial UASs into our national airspace system, helicopters are the primary means of aerial motion picture capture. While the safety record of such helicopters is remarkably astounding, it is far safer to operate a battery powered lightweight UAS. First, the potential loss of life is diminished because UASs carry no people on board and Peak 3 LLC only operates them in specific areas away from mass populations. Second, there is no fuel on board a UAS and thus the potential for fire or explosions is greatly diminished. Third, the small size and extreme maneuverability of Peak 3 LLC's UASs allow our remote control pilots to avoid hazards. Lastly, given their small size and weight, even when close enough to capture amazing images, Peak 3 LLC's UASs need not be so close to the objects they are focused on. Accordingly, Peak 3 LLC's UASs have operated and will continue to operate at and above current safety levels.

6. A Summary The FAA May Publish in the Federal Register:

- A. 14 C.F.R. 21 and 14 C.F.R. 91: Airworthiness Certificates, Manuals and The Like.

14 C.F.R. 21, Subpart H, entitled Airworthiness Certificates, sets forth requirements for procurement of necessary airworthiness certificates in relation to FAR § 91.203(a)(1). The size, weight and enclosed operational area of Peak 3 LLC's UAS permits exemption from Part 21 because Peak 3 LLC's UAS meets (and exceeds) an equivalent level of safety pursuant to Section 333 of the Reform Act. The FAA is authorized to exempt aircraft from the airworthiness certificate requirement under both the Act (49 U.S.C. § 44701 (f)) and Section 333 of the Reform Act. Both pieces of legislation permit the FAA to exempt UAS's from the airworthiness certificate requirement in consideration of the weight, size, speed, maneuverability and proximity to areas such as airports and dense populations. Peak 3 LLC's current and projected UAS's meet or exceed each of the elements.

14 C.F.R. 91.7(a) prohibits the operation of an aircraft without an airworthiness certificate. As no such certificate will be applicable in the form contemplated by the FARs, this Regulation is inapplicable.

14 C.F.R. § 91.9 (b) (2) requires an aircraft flight manual in the aircraft. As there are no on board pilots or passengers, and given the size of the UAS's, this Regulation is inapplicable. An equivalent level of safety will be achieved by maintaining a safety/flight manual delineating areas of where safety can be defined. The FAA has previously issued exemptions to this regulation in Exemption Nos. 8607, 8737, 8738, 9299, 9299A, 9565, 9565B, 10167, 10167A, 10602, 10700 and 32827.

14 C.F.R. § 91.121 regarding altimeter settings is inapplicable insofar as my UAS utilizes electronic global positioning systems with a barometric sensor.

14 C.F.R. § 91.203 (a) and (b) provides for the carrying of civil aircraft certifications and registrations. They are inapplicable for the same reasons described above. The equivalent level of safety will be achieved by maintaining any such required certifications and registrations at Peak 3 LLC.

B. 14 C.F.R. § 61.113: Private Pilot Privileges and Limitations: PIC.

Pursuant to 14 C.F.R. §§ 61.113 (a) & (b), private pilots are limited to non-commercial operations. Peak 3 LLC, can achieve an equivalent level of safety as achieved by current Regulations because my UAS does not carry any pilots or passengers. Further, while helpful, a pilot license will not ensure remote control piloting skills. The risks attended to the operation of my UAS is far less than the risk levels inherent in the commercial activities outlined in 14 C.F.R. § 61, et seq. Thus, allowing Peak 3 LLC, to operate UAS meets and exceeds current safety levels in relation to 14 C.F.R. §61.113 (a) & (b).

C. 14 C.F.R. 91.119: Minimum Safe Altitudes.

14 C.F.R. § 91.119 prescribes safe altitudes for the operation of civil aircraft. It allows helicopters to be operated at lower altitudes in certain conditions. My UAS will never operate at an altitude greater than 400 AGL. Peak 3 LLC, will however operate its UAS in safe areas away from public and traffic, providing a level of safety at least equivalent to or below those in relation to minimum safe altitudes. Given the size, weight, maneuverability and speed of my UAS, an equivalent or higher level of safety will be achieved.

D. 14 C.F.R. 91.405 (a);; 407 (a) (1);; 409 (a) (2);; 417(a) & (b): Maintenance Inspections.

The above-cited Regulations require, amongst other things, aircraft owners and operators to "have [the] aircraft inspected as prescribed in subpart E of this part and shall between required inspections, except as provided in paragraph (c) of this section, have discrepancies repaired as prescribed in part 43 of this chapter. . . ."

These Regulations only apply to aircraft with an airworthiness certificate. They will not, therefore, apply to Peak 3 LLC's UAS. However, as a safety precaution Peak 3 LLC inspects its UAS before and after each flight and follows a maintenance program that involves regular software updates and curative measures for any damaged hardware. Therefore, an equivalent level of safety will be achieved.

E. Summary:

Peak 3 LLC seeks an exemption from the following Regulations: 14 C.F.R. 21 and 14 C.F.R. 91: Airworthiness Certificates, Manuals and The Like. 14 C.F.R. 21, Subpart H, entitled Airworthiness Certificates, sets forth requirements for procurement of necessary airworthiness certificates in relation to FAR § 91.203(a)(1). The size, weight and enclosed operational area of my UAS permits exemption from Part 21 because Peak 3 LLC's UAS meets an equivalent level of safety pursuant to Section 333 of the Reform Act. The FAA is authorized to exempt aircraft from the airworthiness certificate requirement under both the Act (49 U.S.C. § 44701 (f)) and Section 333 of the Reform Act. Both pieces of legislation permit the FAA to exempt UAS's from the airworthiness certificate requirement in consideration of the weight, size, speed, maneuverability and proximity to areas such as airports and dense populations. My UAS meets or exceeds each of the elements. 14 C.F.R. 91.7(a) prohibits the operation of an aircraft without an airworthiness certificate. As no such certificate will be applicable in the form contemplated by the FARs, this Regulation is inapplicable. 14 C.F.R. § 91.7(b) (2) requires an aircraft flight manual in the aircraft. As there are no pilots or passengers, and given the size of the UAS's, this Regulation is inapplicable. An equivalent level of safety will be achieved by maintaining a manual. The FAA has previously issued exemptions to this regulation in Exemption Nos. 8607, 8737, 8738, 9299, 9299A, 9565, 9565B, 10167, maintenance program that involves regular software updates and curative measures for any damaged hardware. Therefore, an equivalent level of safety will be achieved.

7. Additional Information

Zachary Melms, managing member of Peak 3 LLC and the primary Pilot in Command (PIC), has flown small remote control multi rotors for over five (5) years without incident. In that time Zachary Melms has obtained substantial experience and knowledge on how to safely operate remote control aircraft and UAVs. As Peak 3 LLC's primary PIC Zachary Melms is fully committed to safety with each flight.

Granting Peak 3 LLC's request for exemption will reduce current risk levels and thereby enhance safety. Currently, motion picture image capture relies primarily on the use of larger aircraft running on combustible fuel. Peak 3 LLC's craft do not contain potentially explosive fuel, are smaller, lighter and more maneuverable than conventional rotor aircraft. Further, Peak 3 LLC operates at lower altitudes and in controlled airspace. Peak 3 LLC has been analyzing flight data and other information in compiling novel safety protocols and the implementation of a flight operations manual that exceeds currently accepted means and methods of safe flight.

There are no people on board Peak 3 LLC's UASs and therefore the likelihood of death or serious bodily injury is significantly limited. Peak 3 LLC's operation of its UASs, weighing less than 55 pounds and travelling at speeds lower than 50 knots in cordoned off areas will provide at least an equivalent level of safety as that achieved under current FARs.

Accordingly, Peak 3 LLC respectfully requests that the FAA grant its exemption request without delay.

Respectfully Submitted,



Zachary Melms, Managing Member
Peak 3 LLC

Appendix A

Protocols and Controls

Protocols and Controls

Aerial Cinematography, Photography, Inspection and Research Videos

Safety for public on the ground as well as manned aircraft above is an essential and utmost consideration for aerial videos and photography. As such, safety protocols and controls must be implemented through pre-flight preparation and during flight.

Pre-Flight Protocol:

- Check batteries with voltage meter to insure fully charged and ready for use.
- Inspect batteries for damage or leakage that may affect proper operation.
- Inspect propellers for cracks, chips or damage that may cause sudden loss of propulsion
 - or
- unmanageable/uncontrolled flight.
- Check weather forecasts for wind advisory or other conditions that may impact flight.
- Consult five (5) mile radius map for airport vicinity.
 - Contact respective airport to advise of estimated flight time, estimated flight duration, estimated elevation of flight, and any other pertinent information.
- Inspect flight area for
 - vicinity of public safety helipads/heliports
 - vicinity of medical helipads/heliports
 - vicinity of light poles
 - vicinity or utility wires
 - vicinity of trees
 - flocks of birds that may cause interference and potential flight impact
 - vicinity of any elevated obstructions that may pose potential flight hazard o vicinity of roadways with moderate to heavy traffic that can be distracted o public gatherings that may attract viewers
 - optional point of control for best visual site of UAS while in flight
- Takeoff and landing
 - inspect area for best and safest point of takeoff and landing
 - if in a subdivision or area that is within 150 feet of a residential street, post warning sign(s)/stand(s) "Attention Aerial Photography In Progress - Remain Back 150 Feet"

Flight Protocol:

- Takeoff and land from same location
- Remain alert to birds, sound or aircraft, curious public, and approaching vehicles
- Do not allow anyone to engage in conversation or distract the remote control pilot
- Restrict flight to minimal elevation sufficient to acquire desired results
- Remain prepared for emergency landing at all times
- Pay attention to flight time
 - If possible set a timer as a safety alert
- Land UAS and shut down propulsion immediately following landing

Post Flight:

- A. Disconnect battery to prevent accidental activation of propulsion system
- B. Secure UAS in a safe location
- C. Remove all warning signs from public access areas

Emergency or Suspected Hazard:

- Immediately land UAS at safest and closest ground location in the event:
 - Manned aircraft is heard or seen in vicinity of flight
 - There is a public gathering within established safety boundary wanting to observe flight
 - Pilot is being distracted from focusing on flight and safety
 - Sudden change in weather (wind bursts)
 - Sudden increase in vehicular traffic in vicinity of flight
 - Birds enter into proximity of flight
 - Any sudden unsafe event that can cause collision, distraction or interruption of control

Appendix B

Safe Flight Manual

Peak 3 LLC - Safe Flight Manual

Aerial Cinematography, Photography and Real Estate Videos

Safety for public on the ground as well as manned aircraft above is an essential and utmost consideration for aerial videos and photography. Maintaining a record of safe flight for FAA request and determining future UAS safety protocols is imperative.

Date: _____ Location: _____

Pre-Flight Inspection: YES NO Comment: _____

	circle	circle	comments
Weather	good	fair	
Visibility	good	fair	
Wind Speed	low	medium	

Proximity to airport: _____ (see attached map showing approximate location of flight)

Airport notified: YES NO Date: _____ Time: _____

Phone Number: _____ Contact Name: _____

Nearest major intersection: _____

Proximity to medium traveled road: _____

Proximity to heavily traveled road: _____

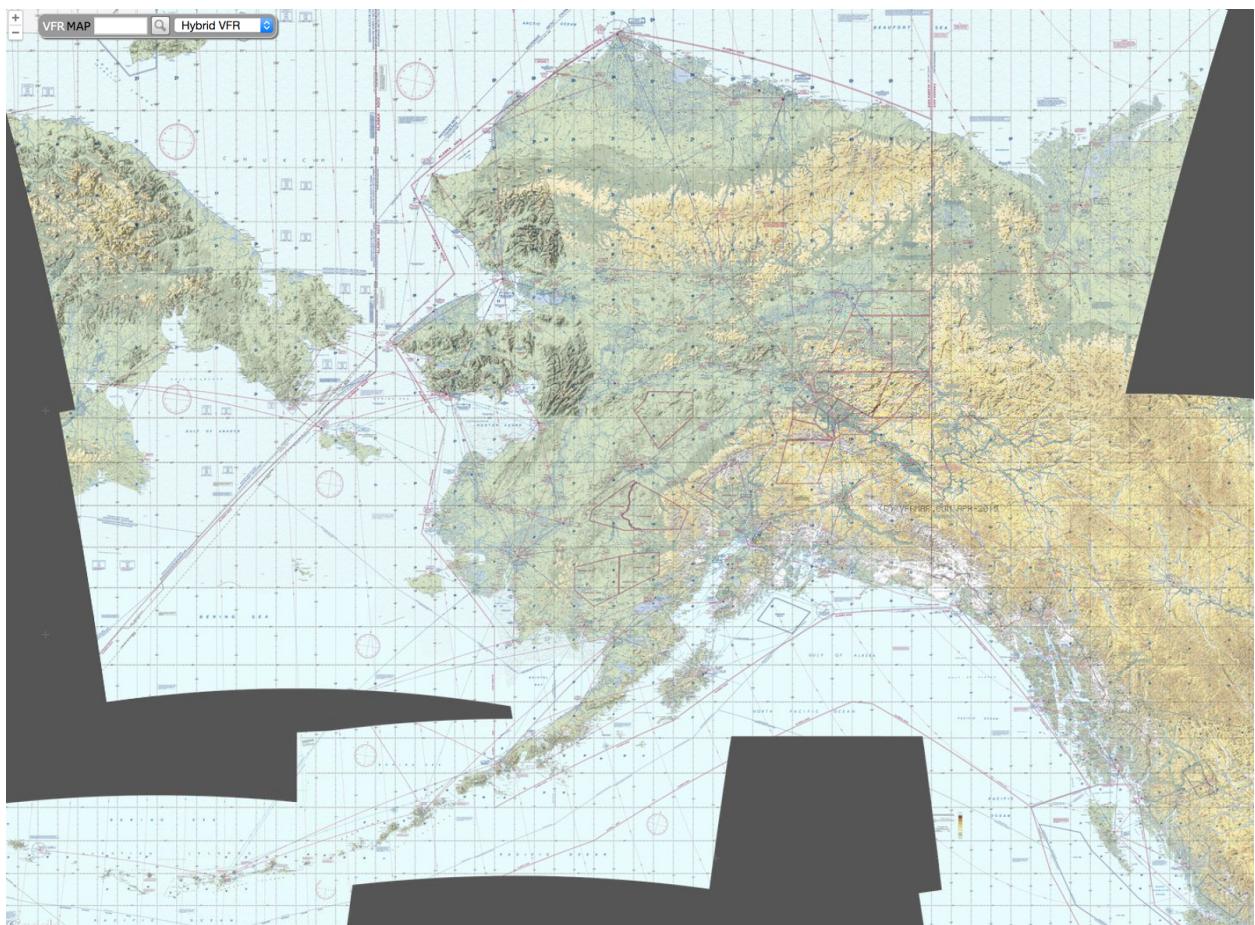
Proximity to congested population: _____

Approx. Takeoff Time	
Approx. Landing Time	
Estimated Elevation	

Safety Concerns:

Appendix C

Alaska - VFR Aeronautical Charts



Alaska overview VFR Aeronautical Chart



Anchorage VFR Aeronautical Chart