

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

Federal Aviation Administration

September 22, 2015

Exemption No. 12961 Regulatory Docket No. FAA-2015-2725

Mr. David King Owner WiskCal, LLC dba RentaSky P.O. Box 804 Pickerington, OH 43147

Dear Mr. King:

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

By letter dated June 6, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of WiskCal, LLC dba RentaSky (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography and video.

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 is a 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 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, WiskCal, LLC dba RentaSky 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, WiskCal, LLC dba RentaSky 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 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 enclosed 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 September 30, 2017, unless sooner superseded or rescinded. Sincerely,

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

Enclosures

RentaSky - WiskCal LLC P.O.Box 804 Pickerington, OH 43147 614-581-3021 DaveKing@WiskCal.com



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

Dear Sir or Madam:

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (the Reform Act), WiskCal LLC (dba: RentaSky) and owner David L. King hereby apply for an exemption from Federal Aviation Regulations (FARs) detailed below to allow for commercial operations of small unmanned aerial systems for the primary purpose of aerial photography and video.

RentaSky will offer safe, low altitude, and cost effective aerial imaging to the communities we serve. A variety of industries will benefit; Home Real Estate, Commercial Real Estate, Marketing, Land Development, Construction, and Property Inspections.

RentaSky will operate a DJI Inspire 1, a small unmanned aerial system (sUAS) equipped with advanced flight control systems, high definition camera and gimbal, and advanced safety features. The sUAV will be operated by a responsible PIC (pilot in command) and VO (visual operator), in turn offering a safe and valuable experience to our clients.

- 1. The DJI Inspire 1 has a maximum takeoff weight of less than 6.5 pounds and thus offers a lightweight, small and compact video platform compared to manned aircraft.
- 2. The DJI Inspire 1 offers significant safety, noise, emission, security and environmental benefits not available to larger manned aircraft.
- 3. The DJI Inspire 1 has numerous safety features such as failsafe mode, automatic landing should signal between PIC and UAS be interrupted, GPS based altitude and distance locks, flight limiting features and low battery warnings.
- 4. Dual controllers provide the PIC (pilot in command) to focus on operating the sUAS while a second individual operates the camera.
- 5. Inspire 1 safety features are addressed in more detail in the attached Inspire 1 user manual.

The safe operation of the UAS will be the first priority before, during and after every operation.

- 1. All sUAS operations will be conducted at Visual Line Of Sight (VLOS) at no more than 200 feet AGL.
- 2. No sUAS operations will be conducted within 5 NM of an airport and will be in FAA class G airspace.

- 3. No sUAS operations will occur directly over densely populated areas, un-approved government buildings, power lines, or major roads.
- 4. All sUAS operations will take place during daylight hours under conditions equivalent to Visual Flight Rules (VFR) with the UAS no more than 1000 ft from the PIC.
- 5. All sUAS operations will have a PIC and VO present and all operations will be within visual line of sight (VLOS) of both the PIC and VO.
- 6. PIC and VO will be able to verbally communicate at all times.
- 7. The UAS will yield to all manned aircraft at all times.
- 8. All required permits and permissions will be obtained from local and state government should they be required.
- 9. A pre-flight inspection by the PIC will be performed prior to each flight to assure that the UAS is safe for flight. A post-flight inspection will also be performed as an added level of safety.
- 10. Full aircraft inspections will be completed in accordance with manufactures instructions.
- 11. At no time shall the UAS be operated with missing or manufacturer unapproved parts, or in any condition that could pose a hazard to any other aircraft or structure or person on the ground.
- 12. The sUAS will not be operated at a battery level below 20%.
- 13. Prior to all UAS operations a pre-flight meeting will be held by the PIC to determine the parameters of flight in a given location, any hazards present, weather conditions, safety procedures at the specific location and approximate duration and route of flight.
- 14. The PIC will have a minimum of 10hrs flying time and operated atleast 50 individual flights of similar sUAS multirotor aircrafts.

It is my belief that small unmanned aerial systems, used by experienced and responsible operators, following the policies outlined above, operating in privacy conscious way; will in turn offer aerial imaging to the general public in ways that are more cost effective, safe, and efficient than the traditional methods of manned aircraft.

I respectfully request the FAA to grant an exemption to RentaSky – WiskCal LLC, for commercial UAS aerial photography operations under the Reform Act of 2012.

If any of procedures, policies, or content of this request do not meet the requirements of an exemption, it is RentaSky's intention to adjust its policies in accordance to the FAA's requirements outlined in the granted exemption.

Sincerely,

David L. King – Owner of RentaSky, WiskCal LLC P.O.Box 804 Pickerington, OH 43147 614-581-3021 DaveKIng@WiskCal.com



EXEMPTION REQUESTS AND EQUIVALENT LEVEL OF SAFETY

RentaSky - WiskCal LLC, requests an exemption from the following regulations as well as any additional regulations that apply to the operation of DJI Inspire 1 or similar sUAS's for the purpose of aerial photography and video.

14 C.F.R. 61.113(a) and (b)

RentaSky will use specially trained staff to conduct the sUAS operations. While these individuals will not hold commercial pilot licenses, they will have atleast 10hrs of flying time, have conducted atleast 50 individual flights and read sUAS manufactures manuals and operating procedures. In addition each PIC and VO will be required to sign a document confirming the understanding of RentaSky operating and safety policies and the granted RentaSky exemption. The sUAS will not carry property for compensation or hire since they will be used solely to provide our clients with aerial imaging. Without an exemption, the pilot would be required to hold a commercial pilot certificate under §61.133. However, the risk associated with the contemplated operations is less than the risk posed by a traditional aircraft. The sUAS will fly at altitudes well below the permissible limits for other civil aircraft, eliminating the risk to other aircraft, and within a geographical envelope under the sole control of RentaSky clients. Requiring a commercial pilot certificate would provide no appreciable safety benefit and would needlessly impose additional cost on RentaSky. Because the contemplated operations would not comply with §61.113(b)(1) and none of the other exceptions to paragraph (a) apply, relief is needed from both paragraphs (a) and (b).

14 CFR Part21, Subpart H: Airworthiness Certificates

This part establishes the procedures for the issuance of an airworthiness certificate.

While the FAA continues to work to develop airworthiness standards for UAS, we request an experimental certificate be issued for the UAS operated by the applicant under either or both of the following provisions:

21 .191 Experimental certificates.

Experimental certificates are issued for the following purposes:

Research and development. Testing new aircraft design concepts, new aircraft equipment, new aircraft installations, new aircraft operating techniques, or new uses for aircraft.

Showing compliance with regulations. Conducting flight tests and other operations to show compliance with the airworthiness regulations including flights to show compliance for issuance of type and supplemental type certificates, flights to substantiate major design changes, and flights to show compliance with the function and reliability requirements of the regulations.

Since the experimental certificate can be used for commercial purposes such as market surveys, sales demonstrations, and customer crew training, we would expect that an experimental certificate would permit our commercial purpose as well.

The aircraft will not carry persons or property and will only fly under strict operational requirements. As RentaSky's sUAS also carries no combustible fuel, weighs less than 6.5 pounds

and is constructed primarily of plastics and composites, we propose the UAS is at least as safe, if not significantly safer than conventionally certified aircraft used within similar parameters.

If an experimental airworthiness certificate is not appropriate for this application, then we request an exemption of 14 CFR Part21, Subpart H, and the requirement for an airworthiness certificate in general, citing the equivalent level of safety outlined in the previous paragraph.

14 CFR 91.203(a) & (b) Civil aircraft: Certifications required.

The regulation provides that an airworthiness certificate, with the registration number assigned to the aircraft and a registration certificate must be aboard the aircraft.

Additionally, subparagraph (b) provides that the airworthiness certificate be "displayed at the cabin or cockpit entrance so that it is legible to passengers or crew."

As the sUAS is too small to carry documentation, does not have an entrance and does not carry a crew, we propose the following in order to meet the intent of 91.203 and provide an equivalent level of safety. All documents deemed appropriate by the FAA for this aircraft will be located at the operational ground station for each flight in proximity to the PIC and VO and will be available for inspection on request. In order to identify the aircraft, we propose to use the manufacturer's model and production codes located on the aircraft as well as a RentaSky logo affixed to the aircraft as well.

14 CFR 91.9 Civil aircraft flight manual, marking, and placard requirements.

This regulation provides that no person may operate an aircraft unless a current, approved flight manual is in the aircraft. The intent of this requirement is to ensure that flight manual information is available to the aircrew while operating the aircraft.

RentaSky requests an exemption to this requirement as the UAS cannot, given its size, carry the flight manual. To meet an equivalent level of safety, we propose to have the current manufacturer's flight manual and the RentaSky flight manual at the operational ground station of each flight, available to both the PIC and VO.

14 CFR 91.119 Minimum safe altitudes: General.

The regulation provides that over sparsely populated areas the aircraft cannot be operated closer than 500 feet to any person, vessel, system, or structure. Since the UAS will be operating at a maximum 200 feet AGL, we cannot comply with this requirement and thus ask for an exemption. In order to provide an equivalent level of safety, we propose the following.

The UAS will only be operated within VLOS of the PIC and VO at a maximum range of 1000 feet from the ground station.

A preflight safety risk assessment will be completed prior to each flight to ensure the UAS is in a condition for safe flight and that the planned operation can be completed safely. RentaSky's Flight Manual and Pre-Flight Checklist is included as Appendix A and Appendix B.

The UAS will not be operated within 5 NM of any airport and will only be operated with the consent of property manager and/or owner.

14 CFR 91.121 Altimeter settings.

The regulation provides that aircraft shall maintain cruising altitudes by reference to an altimeter setting available within 100 nautical miles of the aircraft.

The UAV will always be flying below 200 feet AGL within VLOS of the PIC and VO that will provide separation from terrain, structures and other aircraft. Also, the UAS will continually transmit an AGL reading back to the controller at the ground station and the AGL lock in the UAS's software will be set to 400 feet, providing an equivalent level of safety.

14 CFR 91.151 Fuel requirements for flight in VFR conditions.

The regulation provides that no person may begin a flight in an airplane under day-VFR conditions unless there is enough fuel to fly to the first point of intended landing and to fly after that for at least 30 minutes.

The UAS is smart battery powered and continually transmits battery charge information back to the ground station to be evaluated by the PIC who will return the UAS back to the ground station prior to the battery showing 20% remaining capacity. We feel that this combined with the fact that the UAS will have a maximum range of 1000 feet from the ground station provides an equivalent level of safety.

14 C.F.R. 91.405(a), 91.407(a) (1), 14 C.F.R. 91.409(a) (1)&(2) and 14 C.F.R. 91.417(a) & (b) Maintenance, Preventive Maintenance, and Alterations.

We propose that the PIC perform maintenance and inspection and "be authorized to approve the aircraft for return to service." As provided for in Appendix A, the PIC will inspect the aircraft prior to every flight to ensure it is in airworthy condition. A maintenance check will also be performed at intervals instructed by the manufacturer, DJI. Any general maintenance and repair or replacement of components will be completed by the PIC following the manufacturer's recommendations and documented in accordance with 91.417. In any case where the UAS cannot be returned to service by the PIC, or is suspected to be unsafe, the UAS will not be operated until returned to all manufacturer specifications. We feel that due to the simplicity, size, robustness and construction of the aircraft, the PIC can assure an equivalent level of safety.

8900.227 Paragraph 16(cXa) PIG Medical. and Paragraph 16(eX1) Observer Medical

This policy provides that both the PIC and observer must have a valid FAA second-class medical certificate issued under part 67 in order to perform as a pilot or observer. We feel that requiring the PIC and VO to meet the same medical requirements as a commercial pilot carrying passengers in a large aircraft is an unnecessary burden.

Since the UAV is of small size, unmanned, has an auto return home feature, will be operating at low altitudes, will not operate over a densely populated area, and required to be in VLOS of the IC and VO at all times, we feel both the PIC and VO requiring vision corrected to 20/20 and a valid state issued driver's license supports medical requirements.

APPENDIX A

RentaSKy Flight Parameters and Restrictions

- 1. All flights will occur in FAA Class G airspace at no more than 200 feet AGL and no further than 1000ft from the PIC.
- 2. The sUAS will not be flown faster than 40mph or as limited by FAA regulations.
- 3. All operations will utilize a PIC and VO with the PIC and VO able to communicate verbally at all times.
- 4. All operations will occur only during daylight hours and in weather conditions equivalent to VFR.
- 5. All operations will occur at VLOS from the PIC and VO.
- 6. The PIC and VO will have a pre-flight meeting at the site of the operation just prior to the flight to assess weather, area of operation, topography, flight time, route, hazard mitigation and overall operational and safety parameters. Also during this meeting, the pre-flight aircraft checklist (see Appendix B) will be implemented.
- 7. PIC is responsible for maintaining an established safe emergency landing plan if at any time during the operation conditions become unfavorable due to unforeseen hazards, safety concerns, or weather.
- 8. All operations will be reviewed prior to flight and conducted with the full permission of the property owner or manger.
- 9. Flight planning will include the termination of the flight with 20% battery remaining, as determined by the data link between the UAS and ground station.
- 10. The UAV will at all times give way to manned aircraft.
- 11. Prior to every flight, a highly visible launch banner will be placed at the site of the ground station to allow an outside observer to determine the location of the UAS's origin and command point.
- 12. All permits required by state and local governments will be obtained prior to any operations.
- 13. No flight operations will occur without a successful pre-flight inspection by the PIC before each flight to determine that the UAS is in a condition for safe flight.
- 14. At the conclusion of each flight a post-flight inspection will be done to assess the condition of the UAS.
- 15. A full aircraft check will be performed in accordance with manufactures instructions.
- 16. Replacement of parts shall only be done according to manufacturer's instructions.
- 17. All flight operations will be logged in a flight logbook.
- 18. All maintenance done and inspections performed will be lodged in a maintenance log.
- 19. Check for software updates weekly and upload to UAS as needed to continually keep the UAS software as current as possible.

APPENDIX B

RentaSky Pre-Flight Checklist

- 1. Ensure the area identified for flight is considered FAA Class G airspace, winds conditions are less than 15mph, and weather conditions are favorable.
- 2. Identify all potential obstructions and safety hazards in or near the area planned for flight.
- 3. Inspect all propellers for proper tightness and that they are free of cracks, dings, chips and excessive wear.
- 4. Inspect all wiring and motors.
- 5. Inspect the airframe for cracks or damage.
- 6. Inspect battery voltage of UAS on-board battery and Remote Controller/Transmitter battery to ensure there is sufficient energy in both systems for safe flight.
- 7. Turn off wifi wireless on all devices located the person or within 10ft of the PIC and VO.
- 8. Recalibrate compass according to manufacturer's instructions.
- 9. Always turn on Remote Controller/Transmitter before turning on UAS battery.
- 10. Ensure that a link between Transmitter and UAS is established and that GPS link is established.
- 11. Engage throttle, lift aircraft off the ground and verify the aircraft responds properly to all inputs and hovers accurately.