



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

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

August 31, 2015

Exemption No. 12675
Regulatory Docket No. FAA-2015-0883

Mr. Mike Elliott
Mr. George Purdy, IV
Drone Services Hawaii LLC
98-1827A Kaahumanu Street
Aiea, HI 96701

Dear Messrs. Elliott and Purdy:

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 letters dated March 27, 2015, and July 13, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Drone Services Hawaii LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photography, videography, education, and UAS training¹.

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. However, the FAA received five comments in support of the petition made to the docket.

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

Airworthiness Certification

The UAS proposed by the petitioner 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 collection². 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 Astraesus Aerial (*see* Docket No. FAA–2014–0352), 11109 to Clayco, Inc. (*see* Docket No. FAA–2014–0507), 11112 to VDOS Global, LLC (*see* Docket No. FAA–2014–0382), and 11213 to Aeryon Labs, Inc. (*see* Docket No. FAA–2014–0642), the FAA found that the enhanced safety achieved using an unmanned aircraft (UA) with the specifications described by the petitioner and carrying no passengers or crew, rather than a manned aircraft of significantly greater proportions, carrying crew in addition to flammable fuel, gives the FAA good cause to find that the UAS operation enabled by this exemption is in the public interest.

Having reviewed your reasons for requesting an exemption, I find that—

- They are similar in all material respects to relief previously requested in Grant of Exemption Nos. 11062, 11109, 11112, and 11213;
- The reasons stated by the FAA for granting Exemption Nos. 11062, 11109, 11112, and 11213 also apply to the situation you present; and
- A grant of exemption is in the public interest.

² Aerial data collection includes any remote sensing and measuring by an instrument(s) aboard the UA. Examples include imagery (photography, video, infrared, etc.), electronic measurement (precision surveying, RF analysis, etc.), chemical measurement (particulate measurement, etc.), or any other gathering of data by instruments aboard the UA.

Our Decision

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. 106(f), 40113, and 44701, delegated to me by the Administrator, Drone Services Hawaii LLC is granted an exemption from 14 CFR §§ 61.23(a) and (c), 61.101(e)(4) and (5), 61.113(a), 61.315(a), 91.7(a), 91.119(c), 91.121, 91.151(a)(1), 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), and 91.417(a) and (b), to the extent necessary to allow the petitioner to operate a UAS to perform aerial data collection. This exemption is subject to the conditions and limitations listed below.

Conditions and Limitations

In this grant of exemption, Drone Services Hawaii 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 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.nts.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



March 27, 2015

Drone Services Hawaii LLC

Mike Elliott/George K. Purdy IV

Owners

98-1827A Kaahumanu St.

Aiea, HI 96701

Phone (808) 225-2968 (Mike)

Phone (808) 559-0175 (George)

Fax (808) 445-1954

Re: Exemption Request Pursuant to Section 333 of the FMRA and Part 11 of the Federal Aviation Regulations, Seeking Exemption from:

14 C.F.R. Part 21 Subpart H

14 C.F.R. § 21.191(a)

14 C.F.R. § 45.23(b)

14 C.F.R. § 45.27

14 C.F.R. §§ 61.113(a) and (b)

14 C.F.R. § 91.119(c)

14 C.F.R. § 91.121

14 C.F.R. § 91.151(a)

14 C.F.R. § 91.405(a)

14 C.F.R. § 91.407(a) (1)

14 C.F.R. §§ 91.409(a) (1) and (2)

14 C.F.R. §§ 91.417(a) and (b).

Dear Sir or Madam:

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA) and 14 C.F.R. Part 11, Drone Services Hawaii hereby applies for an exemption from the listed Federal Aviation Regulations ("FARs") and any other necessary to allow operation of its small Unmanned Aircraft Systems ("UAS") for commercial photography and video Education, Training and Demonstration for Hawaii's Emergency First Responders to intergrade UAS into certain Departments of Government. Second is to educate Hawaii's Public and students participating in Science Technology Engineering and Math ("STEM") programs in the State of Hawaii. Drone Service Hawaii is owned and operated by two military Veterans deeply rooted in its communities. Early awareness and education on UAS Safety will have a major impact on the overall future of our youth and the ability to operate these UAS in a professional manner. Therefore by opening the door for future opportunities, employment, and business development.

Respectful and responsible UAS flying is of the highest priority and the corner stone of our company. UAS operations are conducted under the conditions outlined herein.

Drone Service Hawaii requests such authorization to conduct controlled training scenarios with local government departments. (ex: police, fire, department of land and natural resources, and local federal agencies such as National Oceanic Administration)

The Training Mission's to include: Search and rescue, natural disaster, hazmat incidents, fire events, and public education. We are a mobile company designed to travel to all 8 Hawaiian Islands to educate government and communities on UAS. Drone Services Hawaii is sensitive to the unique situation of Hawaii and its native people. We are culturally sensitive to Hawaii's needs and will personally protect Hawaii's best interest because Hawaii is our home. Drone Services Hawaii's training operations will help define the role of UAS technology intergraded with emergency services and the local population as they become more educated and define appropriate uses in the community. The opportunity for future employment in the field of UAS is promising and will provide Hawaii's returning Veterans, graduates with degrees in the field of STEM and the physically challenged a career in UAS.

Co-Owner and Repair Shop Manager, Mr. George Purdy who resides on the Island of Lanai, and is currently an Airport Fire Equipment Operator at Lanai Airport, for the past 17yrs. George's knowledge for the past 30 years of operating and building RC Models, from Cars to Quadcopters and his trial and error with practical application makes him uniquely qualified. George's first-hand knowledge of his community and its assets and limitations helped to create and develop the Lanai Airport Emergency Plan with the assistance of the Maui Airport District Office. This plan includes and is not limited to working with its community for an aircraft disaster and among other community emergencies that may arise. He knows the importance of FAA's mission on air safety. His personal mission is to help the state of Hawaii should they choose to use UAS and to become educated about how to implement a program and to intergrade FAA's mission on being safe. He also has good working relationships with current Hawaii FAA Staff and the state of Hawaii's Department of Transportation. This will assist in executing a well-organized education program based off of FAA and Airport Rescue Fire Fighting ("ARFF") training. George Purdy is a father of two and is very involved with his local school's STEM programs, He was contacted by the school counselor because of his knowledge and practical application to give a couple of classes. The goal of these classes was to educate students and to introduce them to drone technology and air space safety in 2014. George is a strong believer in what the FAA is doing and understands the "Big Picture". First responder education, community and personal safety along with training is his background. George strives daily to personally accomplish these goals and pass it on to the youth of his community.

Training syllabus for emergency service:

1. UAS Safety Over View Guidelines, FAA regulations and ARFF's application on air safety.
2. Communications. What is available?
3. Privacy issues?
4. Permission to operate on property?
5. UAS Aircraft Familiarization.
6. Table top exercise. (Mutual-Aid Resources working together.)
7. UAS integration into actual real life scenario exercise.
8. Debrief: Does it work? What doesn't work? What have we learned?

Public Education:

Attend Public events and distribute educational information from FAA News, UAS industry news, keeping people informed and a simple flight demonstration if open space is available. Drone Services Hawaii's goal is to be available to the community, to have that face to face interaction and educate our community. Provide information if questions arise. Also to be armed with information and supply resources to educate our communities.

STEM Programs Hawaii's DOE:

Support our local students by explaining FAA regulation on air safety and why it is important to be respectful and responsible operators. Providing information to be sent home, therefore the influential adults in the student's life know what the student has learned and what the responsibilities are if the household decides to purchase a UAS. A big goal of Drone Services Hawaii is to provide opportunities to our local youth and introduce them to the future of UAS technology in a professional, responsible, and educational environment.

We are writing to request that Drone Services Hawaii ("DSH"), an owner and operator of small unmanned aircraft, be exempted from the Federal Aviation Regulations ("FARs") listed below so that DSH, may operate its small unmanned aircraft systems ("UAS") for the purpose of education and safety in airspace regulated by the Federal Aviation Administration ("FAA"); as long as such operations are conducted within and under the conditions outlined herein or as may be established by the FAA as required by Section 333. Drone Services Hawaii has been actively involved in the Education development of UAS/ UAV in Hawaii.

Aircraft

Drone Services Hawaii will operate the DJI Inspire 1, Model T600, with a total weight of 2935g or 6.47lbs. The dimensions are 438mm x 451mm x 301mm or 17.24inch x 17.75inch x 11.85 inches. Under still air the Maximum speed is no more than 22m/s or 49mph with a cruising speed of 11m/s or 25mph. The DJI Inspire 1 has the ability to hover and move along a vertical and horizontal plane simultaneously. The DJI Inspire 1 has four motors, Motor Model DJI 3510, powered by a 6-cell 4500mAh or 5700mAh Lithium Polymer battery. There are four propellers, Propeller Model DJI 1345, in use. The DJI Inspire 1 will be controlled with the C1 remote controller with an operating frequency of 2.400GHz – 2.483GHz. The live video feed will have an operating frequency of 5.728GHz – 5.850GHz. DJI Inspire 1 has a program to limit height it will be set to 200ft AGL.

AIRCRAFT AND EQUIVALENT LEVEL OF SAFETY.

The UAS will weigh less than 55 lbs.

The UAS will have a maximum operating speed of no more than 50mph.

Flights will be operated within line of sight of the Pilot in Command (PIC) and/or Visual Observer (VO).

Maximum flight time for each operational flight will be 30 minutes. Flights will be terminated at 25% battery power reserve or 30 minutes of flight time whichever occurs first.

Flights will be operated at an altitude of no more than 200 feet Above Ground Level (AGL) and remain in the line of sight.

Minimum crew for each operation will consist of the UAS Pilot, the Visual Observer (VO) and may include but not limited to a Camera Operator.

The UAS pilot will be a designated Pilot in Command (PIC).

A briefing will be performed regarding the planned UAS operations prior to each day's flight.

The flights will occur no closer than a 5 mile radius of the geographic center/Airport Reference Point (ARP) of a tower controlled or uncontrolled airport.

If operations will be within a 5 mile radius of the geographic center/Airport Reference Point (ARP) of a tower controlled or uncontrolled airport the respective airports will be contacted advising them of the estimated flight time, flight duration, elevation of flight and other pertinent information.

The PIC and VO will have been trained in operation of UAS and receive up-to-date information for the particular UAS to be operated.

The PIC and VO will be able to communicate by voice, radio, and/or text at all times.

If the UAS loses communications with the remote controller or loses GPS signal, the UAS will have the capability to return to a pre-determined location within a designated location and land autonomously.

The UAS will have the capability to abort a flight in case of unpredicted obstacles, weather, or emergencies.

UAS has in its program to limit height and distance from PIC.

See user manual for more information.

Summary the FAA may publish in the Federal Register:

14 C.F.R. 21 and 14 C.F.R. 91: Airworthiness Certificates, Manuals and alike. 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 DSH permit exemption from Part 21 because DSH meet 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 A. 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. DSH 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 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 Flight log.

14 C.F.R. § 91.121 regarding altimeter settings is inapplicable insofar as DSH UAS's utilize electronic global positioning systems and internal gyroscopes to provide spatial coordination. Also preprogram height and distance.

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 such information by flight log at the DSH Office.

B. 14 C.F.R. § 45.23: Marking of the Aircraft. Applicable Codes of Federal Regulation require aircraft to be marked according to certain specifications. DSH are, by definition, unmanned. They therefore do not have a cabin, cockpit or pilot station on which to mark certain words or phrases. Further, two-inch lettering is difficult to place on such small aircraft.

C. 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. DSH can achieve an equivalent level of safety as achieved by current Regulations because DSH do not carry any pilots or passengers.

Further, while helpful, a pilot license will not ensure remote control piloting skills, though DSH pilot vetting and training programs (based upon completion of an FAA Approved Ground School and a self-administered UAS flight training program and internal procedures) will. All Further, the risks attendant to the operation of DSH is far less than the risk levels inherent in the commercial activities outlined in 14 C.F.R. § 61, et seq.

D. 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. DSH will never operate at an altitude greater than 200 AGL. DSH will, however, operate its UAS's in sectioned off areas with security perimeters, providing a level of safety at least equivalent to those in relation to minimum safe altitudes. Given the size, weight, maneuverability and speed of DSH, an equivalent level of safety will be achieved.

E. 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 DSH should its requested exemption be granted. DSH conducts an extensive maintenance program that involves regular software updates and constant inspection for assessment of any damaged hardware. Therefore, an equivalent level of safety will be achieved. All UAS can now be maintained here in Hawaii on the island of Lanai. Future Clients of DSH will have the same level of maintenance thru DSH repair shop in the state of Hawaii.

F. Summary

Drone Services Hawaii seeks an exemption from the following Regulations: 14 C.F.R. 21, subpart H; 14 C.P.R. 45.23(b); 14 C.F.R. §§ 61.113 (a) & (b); 14 C.F.R. § 91.7 (a); 14 C.F.R. § 91.9 (b)(2); 14 C.F.R. § 91.103(b); 14 C.F.R. § 91.109; 14 C.F.R. § 91.119; 14 C.F.R. § 91.121; 14 C.F.R. § 91.151(a); 14 C.F.R. §§ 91.203(a) and (b); 14 C.F.R. § 91.405 (a); 14 C.F.R. § 91.407 (a) (1); 14 C.P.R. § 91.409 (a)(2); 14 C.P.R. § 91.409 (a)(2); and, 14 C.P.R. §§ 91.417 (a) & (b) to operate its Inspire 1 for education and demonstration to Hawaii's Emergency Services, Community education and DOE STEM program's. Drone Services Hawaii will offer education to change the present and change the future. Hawaii's economic future is bright if DSH is granted the opportunity to educate our state to be respectful and responsible operators as hobbyist and future professionals of UAS. Granting DSH request for exemption will reduce current risk levels and thereby enhance safety. Further, DSH operates at lower altitudes and in controlled airspace. DSH owners have strong ties to its Government and communities to affect change if exemption is granted. UAS's and therefore the likelihood of death or serious bodily injury are significantly limited. DSH respectfully requests that the FAA grants its exemption request without delay. The FAA has the authority to issue the exemption sought by Drone Services Hawaii pursuant to the Federal Aviation Act, 85 P.L. 726 (1958), as amended (the "Act").

Sincerely,

Mike Elliott (Co-Owner)

A handwritten signature in black ink, appearing to read "Mike Elliott", with a stylized flourish at the end.

George K. Purdy IV (Co-Owner)

A handwritten signature in black ink, appearing to read "George K. Purdy IV", with a stylized flourish at the end.

July 13, 2015
Mike Elliot
George Purdy
Drone Services Hawaii LLC.

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

Re: Amendment to Docket No.FAA-2015-0883 in pursuant of Section 333 FAA Reform Act and part 11 of the Federal Aviation Regulations in Regulatory Docket No. FAA -2015-0883.

Dear Sir/Madams:

Drone Services Hawaii Received a letter on Friday July 9, 2015 stating it does not comply with the requirements of & 11.81. For you to consider the request any further, we are sending what is being requested.

1. The reason why granting the request would be in the Public interest; that is; how it would benefit the public as a whole.
2. Any additional information, views, or arguments to support your request.

See below for response.

Public interest granting the petition would be in the public interest because:

1. The Congress of the United States has determined that early accommodation of sUAS into the National Airspace System advances the public interest. The Committee Report leading the House to adopt H.R. 658 said: "The successful integration of unmanned aircraft systems (UAS) into the National Airspace System (NAS) can support more than 23,000 high paying jobs in the United States. . . . The absence of a plan to integrate UASs into the NAS is a barrier to such job creation"1 Granting the Petition represents a step toward such integration, in the absence of a comprehensive regulatory regime for sUAS, and thus would serve the Congressional goal and the public interest.
2. Granting the Petition will facilitate a new era in Emergency Response activities here in Hawaii, one in which the responders themselves have a tool to safely, quickly and remotely assess a situation without placing lives in harm's way. In comparison, the EOD robots have saved countless lives since their inception, a feat that will become common place for aerial assessments. For the present day improvement on the island of Lanai a sUAS is needed because this island has no Aerial assets stationed on island. Any aircraft support is 2hr or more depending on time of day. Hurricane season in Hawaii is upon us now sUAS will play a big role in recovery efforts when a hurricane hits Hawaii this year. This will be a huge tool for State and County Civil Defense in developing recovery plans for emergency service to execute. The State of Hawaii is 5,000 miles away from the west coast of the United States, Drone Services Hawaii LLC is request to be granted exemption because of these reasons.
3. Granting the Petition will enable Drone Services Hawaii LLC the Petitioner to demonstrate the commercial viability across the State of Hawaii creating new safety techniques and tactics with new aeronautical technology, thereby improving the efficiency of Emergency Responders around the

world and making for a safer society. The rules from which Petitioner seeks exemption artificially and irrationally limit the effective use of new technologies to expand Emergency Response safety and improve the efficiency of markets, thereby subverting the public interest.

Exemptions Granted based upon similar request demonstrated by Drone Services Hawaii LLC.

DSH has an exemption written following FAA's request and represent the state of Hawaii's communities in mind with safety as its number 1 goal. In Grants of Exemption Nos. 11062 to Astraeus Aerial No. 11109 to Clayco Inc. No. 11112 to VDOS Global LLC No. 11213. The following exemption dockets where also granted. Docket No.11269, 11888, 11895, 11311, 11918, 11905, 11925 and 11962.

Sincerely,
George Purdy
Drone Services Hawaii LLC.