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

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

June 23, 2015

Exemption No. 11892
Regulatory Docket No. FAA–2015–0463

Mr. Jaron Denson
Drone Tech Aerial Cinematography
34135 Mulholland Highway
Malibu, CA 90265

Dear Mr. Denson:

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 February 22, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Drone Tech Aerial Cinematography (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial filming/photography, motion picture and television, aerial surveying and real estate filming/photography.

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, a comment was submitted to the public docket. The comment did not address the merits of the petition.

Airworthiness Certification

The UAS proposed by the petitioner are the Gryphon Dynamics GD-X8, DJI Inspire 1, DJI S900, and the DJI Phantom 2.

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 relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*, and any associated noise certification and testing requirements of part 36, is not necessary.

The Basis for Our Decision

You have requested to use a UAS for aerial data collection and closed set motion picture and filming. 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, Drone Tech Aerial Cinematography 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 and closed set motion picture and filming. This exemption is subject to the conditions and limitations listed below.

Conditions and Limitations

In this grant of exemption, Drone Tech Aerial Cinematography 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 Gryphon Dynamics GD-X8, DJI Inspire 1, DJI S900, and the DJI Phantom 2 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 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 June 30, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures

Drone Tech Aerial Cinematography
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34135 Mulholland Hwy
Malibu, CA 90265

PH: (310) 748-9978

February 22, 2015

U.S. Dept. of Transportation, Docket Operations
West Building Ground Floor, Room w12-140
1200 New Jersey Avenue, SE.,
Washington, DC 20590

Re: Exemption Request under Section 333 of the FAA Reform Act and Part 11 of the Federal Aviation Regulations

Dear Sir or Madam:
Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 and 14 C.F.R. Part 11, Drone Tech Aerial Cinematography (DTAC) seeks an exemption from Federal Aviation Regulations ("FARs") detailed below for the following described Remotely Piloted Aircraft Systems (RPAS), which includes the remotely piloted aircraft or rotorcraft, ground based equipment and operators. The requested exemption would support an application for a commercial Certificate of Authorization (COA) to use the following RPASs to support the following operations: Aerial Filming/Photography, Motion Picture and Television, Aerial Surveying and Real Estate Filming/Photography.

Regarding the Unmanned Aircraft System

a) Petitioners should describe how the proposed UAS operation will be safely conducted to minimize risk to the NAS or to persons and property on the ground. Specifically, petitioners should describe the design and operational characteristics for the type(s) of UAS they intend to operate, e.g. aircraft performance and performance limitations, operating procedures, and aircraft loading information in as much detail as possible. This could be provided in the petition or in an Aircraft Flight Manual or similar document.

DTAC utilizes an array of multiple size rotorcraft to enable operators to utilize the smallest aircraft possible for the job requirement, thus minimizing potential risk. Please review the following document, "Aircraft Quick Reference Guide", for a more detailed look at the various aircraft to be operated. In addition manufacturer supplied manuals have been provided along with this submission. Here is a brief explanation of the RPASs in general:

The Remotely Piloted Aircraft Systems (RPAS)

a) Rotorcraft range from a fully loaded weight of 3lbs to <55lbs, are battery operated, range from having 4 motor to 8 motor rotorcraft, has a vertical takeoff and landing capacity (VTOL), are manufactured by DJI and Gryphon Dynamics, Models: DJI Phantom2, DJI Inspire1, DJI S900, Gryphon Dynamics X8 and have been equiped by DTAC to carry the following equipment in flight:
b) An on-board flight management suite with GPS navigation and location ability that receives signals for flight controls from a ground-based transmitter/controller. Has the ability to enter into a "failsafe" mode so that it may return to the launch area safely in the

event of a loss of link. Loss of GPS enables a failsafe that allows the rotorcraft to do a controlled landing at its current location.

c) An on-board camera capable of capturing imagery in the form of full color, high definition still photos and video.

d) An on-board telemetry system that delivers flight data from the on-board flight computer to the on-board radio transmitter, back to the Pilot In Command (PIC) including Altitude (AGL), horizontal and vertical speed, compass direction of flight and direction back to the aircraft launch site.

e) A 500mW, 5.8GHz ISM band on-board radio transmitter that transmits live video from the on-board camera plus all the flight data from the telemetry system described above.

a) A 2.4GHz ISM band radio receiver that receives commands from the PIC to control the RPAS while in flight.

Ground Based Equipment

b) A 100mW, 2.4GHz radio transmitter/controller operated by the PIC to control the RPAS while in flight.

c) A 5.8GHz video receiver that displays live video and flight data from the on-board camera and fuses it all together onto a screen for the PIC to monitor during flight operations.

Operators

a) A Pilot in Command (PIC) in operational control of a flight operation from beginning to end and who controls and is responsible for the safe operation of the RPAS while in the air and on the ground. PIC is also responsible for certifying the airworthiness of the RPAS and performs maintenance when required.

b) A Visual Observer (VO) is a trained person who provides a second pair of eyes to visually track and aid in see and avoid while RPAS is in flight. The Visual Observer is within verbal communication range of the PIC for the extent of the flight.

2. *Petitioners should describe any procedures they would implement, such as pre-flight inspections, maintenance, and repair, to ensure that the UAS is in a condition for safe flight. This could be provided in the petition, an Aircraft Flight Manual, a Maintenance and Inspection Manual, or similar document.6 Rev. 9/25/2014 NOTE: The Aircraft Flight Manual and Maintenance and Inspection Manual may be separate documents or combined in a single document.*

NOTE: Any Document That is Listed Under Drone Tech Aerial Cinematography (DTAC) Documentation is Considered Proprietary to DTAC's Operation and in NOT for public Release.

Please refer to the following documents submitted along with this petition:

Drone Tech Aerial Cinematography Documentation	
Item	File Name
Operations Checklist	Operations Checklist_DTAC_REV0_021415.pdf
Maintenance and Inspection Manual	Maintenance and Inspection Manual_DTAC_REV0_021615.pdf
Aircraft Performance Data/Limitations/Loading	Aircraft Quick Reference Guide_DTAC_REV0_021815.pdf
Aircraft Logs	Logs_DTAC_REV0_021415.pdf

Manufacturer Documentation	
Item	File Name
Phantom2 Operations Manual	PHANTOM2_User_Manual_v1.4_en.pdf
Inspire 1 Operations Manual	Inspire_1_User_Manual_v1.0_en.pdf
DJI S900 Operations Manual	S900_User_Manual_v1.2_en.pdf
Gryphon Dynamics X-8	Gryphon Dynamics-X8.pdf
DJI A2 Flight Controller Operations Manual	A2_Quick_Start_Guide_v1.2_en.pdf

Drone Tech Aerial Cinematography follows checklist oriented procedures for Pre-Flight, Flight, Post Flight, Emergency Issues and Maintenance and Repair. All maintenance and repairs are to be performed by a DTAC authorized technician and all issues or discrepancies will be logged in the appropriate aircraft log book. A checklist style approach combined with appropriate documentation will ensure safe flight operations. These checklist and logbooks are always on site and available to the PIC during every operation and are available upon request.

3. *The petitioner should describe the Radio Frequency (RF) spectrum used for control of the UAS and associated equipment that is part of the UAS (i.e., sensors, cameras, etc.), and whether it complies with Federal Communications Commission (FCC) or other appropriate government oversight agency requirements. NOTE: Petitioners should be able to provide the FCC approval letter or show compliance with FCC requirements upon request.*

Please review, "Aircraft Quick Reference Guide_DTAC_REV0_021815.pdf". All aircraft utilize FCC compliant PIC command links and video links.

Regarding the Unmanned Aircraft PIC

4. *Petitioners should describe the qualifications required of any PIC(s) who will be directly responsible for the operation of the UAS, including information such as: the level of airman certificate held; any applicable training related to the operation; and any minimum hours of*

flight experience required by the PIC(s), both total flight time and the time with the particular UAS. If the operation would use visual observers, petitioners should describe their roles and qualifications.

5. *5. Petitioners should describe the medical standards and certification of the PIC(s) directly responsible for the operation of the UAS.*

As previously stated by the FAA in prior exemptions, Drone Tech Aerial Cinematography will comply with the following:

a) The PIC must possess at least a private pilot certificate and a third-class airman medical certificate. 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.

b) DTAC may not permit any PIC to operate unless the PIC meets the operator's qualification criteria (200 flight cycles and 25 hours of total time as a UAS rotorcraft pilot and at least 10 hours logged as a UAS pilot with a similar UAS type, 5 hours in the make and model UAS authorized under this exemption), training program, and currency requirements (three take-offs and three landings in the preceding 90 days). The PIC must also demonstrate 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 must be logged in a manner consistent with 14 CFR § 61.51(b). The VO is also required to complete the operator's training requirements. A record of training must be documented and made available upon request by the Administrator. Flights for the purposes of training the operator's PICs and VOs (training, proficiency, and experience-building), 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

c) The RPAS will only be operated in the field with both a PIC and a VO in accordance with current FAA Policy.

<u>Regarding the Operation of the Unmanned Aircraft</u>

6. Petitioners should fully describe their intended UAS operation(s). Petitioners should describe how the proposed operation(s) would not adversely affect safety, or how they would provide a level of safety at least equivalent to that provided by the rule from which exemption is sought. Petitioners should address any plans to implement clearly defined operational borders and procedures to ensure public safety, which includes persons and property both in the air and on

the ground. This can be described in the petition, in an Operations Manual, or similar document. NOTE: The FAA will closely examine the proposed operation(s) with respect to safety of flight, NAS safety considerations, and the safety of the non-participating persons and property during the operational period and within the operational area.

a) DTAC's intended operations will be limited to the following: Aerial Filming/Photography, Motion Picture and Television, Aerial Surveying and Real Estate Filming/Photography. Additionally, we request that we be allowed to support our local community and use our systems with prior consent to benefit first responders who might require assistance, including Fire Fighters, Police, Sheriff, Search and Rescue ect.., while remaining subject to all limitations cited in this application.
b) All DTAC's Remotely Piloted Aircraft Systems are powered by batteries, are smaller, lighter, quieter and more maneuverable than larger manned aircraft running on combustible fuel. DTAC's aircraft operate at lower altitudes with no personnel on board and will thereby reduce current risk levels and thereby enhance safety and diminish the likelihood of death or serious bodily injury. With relatively small payload as compared to its manned counterparts and maximum flight time not exceeding 30minutes, DTAC's aircraft and procedures offer little to no risk to national security, the public and NAS.

7. Petitioners should specify the proposed maximum operating speed and altitude, and describe minimum flight visibility and distance from clouds for their intended operation(s). Petitioners should describe potential hazards and safety mitigations associated with these proposed conditions. These issues can be addressed in the petition, an Operations Manual, or similar document.

Please review attached documents for the requested information: "Operations Checklist_DTAC_REV0_021415.pdf" and "Aircraft Quick Reference Guide_DTAC_REV0_021815.pdf". Aircraft will not to be operated above 500ft AGL.

8. Petitioners should describe the characteristics of the area of intended operation(s) and the associated potential hazards, in accordance with the statutory mandate under Section 333 7 Rev. 9/25/2014 regarding proximity to populated areas. These issues can be addressed in the petition, an Operations Manual, or similar document.

As stated before in similar cases approved by the FAA, Drone Tech Aerial Cinematography will comply with the following:

a) The UA may not be operated over congested or densely populated areas. Ultimately, it is the PIC's responsibility to maintain the minimum safe altitudes required by § 91.119.
b) Regarding distance from nonparticipating persons, the operator must ensure no persons are allowed within the perimeter of 500 feet from the area of primary filming except those consenting to be involved and necessary for the filming production. This provision may be reduced to no less than 200 feet if it would not adversely affect safety and the Administrator has approved it. For example, an equivalent level of safety may be determined by an aviation

safety inspector's evaluation of the filming production area to note terrain features, obstructions, buildings, safety barriers, etc. Such barriers may protect nonparticipating persons (observers, the public, news media, etc.) from debris in the event of an accident. This is also consistent with the same FAA Order 8900.1, V3, C8, S1.

c) 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 prior to the beginning of every flight.

9. Petitioners should describe if they intend to operate in the proximity of any airports, in accordance with the statutory mandate under Section 333 regarding proximity to airports.

Drone Tech Aerial Cinematography will not operate within the proximity of 5 miles of an airport unless the appropriate prior written authorization is given for such operations. DTAC will comply with prior rulings from the FAA conditions and limitations:

a) The UA may not operate within 5 nautical miles of the geographic center of a non-towered airport as denoted on a current FAA-published aeronautical chart unless a letter of agreement with that airport's management is obtained, and the operation is conducted in accordance with a Notice to Airmen (NOTAM) as required by the operator's Air Traffic Organization (ATO) issued Certificate of Waiver or Authorization (COA). The letter of agreement with the airport management must be made available to the Administrator upon request.

10. The UAS must be operated within visual line-of-sight (VLOS), in accordance with the statutory mandate under Section 333(b)(1). Petitioners should describe how they intend to comply with his mandate.

Drone Tech Aerial Cinematography will only operate its rotorcraft within unaided VLOS of the PIC and the designated Visual Observer (VO). PIC and VO will be within verbal communication range. Only one VO is allowed to work with the PIC during a flight.

11. Petitioners should describe any procedures they would implement for conducting a preflight safety risk assessment to determine that the UAS is in a condition for safe flight (14 CFR § 91.7(b)) and that the planned operation can be completed safely. These procedures can be addressed in the petition, an Aircraft Flight Manual, Operations Manual, or similar document.

Please see the following submitted documents, "Operations Checklist_DTAC_REV0_021415.pdf", "Maintenance and Inspection Manual_DTAC_REV0_021615". Additionally PIC and owner of Drone Tech Aerial Cinematography (Jaron J Denson) has 5 years of experience engineering, repairing, manufacturing and flying RPASs for a US DOD contractor, holds a M.S. Mechanical Engineering, B.S. Physics and is qualified to repair and certify aircraft for safe flight in the NAS.

12. If petitioners intend to conduct operations which have existing requirements to notify Flight Standards District Offices (FSDOs) prior to operations – such as motion picture and television filming, or pipeline and powerline patrol – petitioners should describe their intended coordination in this regard for their proposed operation(s).

As previously stated by the FAA in similar cases, Drone Tech Aerial Cinematography will comply with the following FAA conditions and limitatinos:

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 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; 23
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.

Drone Tech Aerial Cinematography herby requests an exemption from the following FAR's:

Section 61.113(a) and (b) *prescribes that—*

(a) No person who holds a private pilot certificate may act as a pilot in command (PIC) of an aircraft that is carrying passengers or property for compensation or hire; nor may that person, for compensation or hire, act as PIC of an aircraft.

(b) A private pilot may, for compensation or hire, act as PIC of an aircraft in connection with any business or employment if—

(1) The flight is only incidental to that business or employment; and

(2) The aircraft does not carry passengers or property for compensation or hire.

Drone Tech Aerial Cinematography's PIC will hold a Private Pilots Certificate and third class medical certificate to conduct commercial operations. In the case of RPASs the FAA has ruled in the past that a private pilots certificate will suffice as an equivalent level of saftey for commercial operations of a remotely piloted aircraft.

Section 91.7(a) *prescribes that –*

No person may operate a civil aircraft unless it is in an airworthy condition.

Drone Tech Aerial Cinematography has produced and presented its own documentation in conjunction with manufacturer documentation to ensure that the associated rotorcraft are operating in an airworthy condition. Airworthiness will be declared by the PIC any discrepancy or issues that arise will be documented in the aircraft repair logs and repaired by a DTAC authorized technician or OEM manufacturer depending on complexity of repair.

Section 91.119(c) *prescribes that –*

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

(c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

Drone Tech Aerial Cinematography desires to operate below 500ft AGL in order to complete low level aerial missions and remain out of airspace potentially occupied by manned aircraft. DTAC will operate under our own safety protocols which include:

a) Operating in a controlled environment where risk will be mitigated by being aware of surrounding obstacles, airports and actively populated areas by reviewing VFR charts and directing any questions or concerns to the appropriate FSDO.
b) Performing safety briefs with all participating personnel.
c) Posting signs or personnel to keep public away from flight operations.
d) Performing modifications as necessary to any of our documentation, protocols or checklist to update or enhance safety protocols.
e) Contact appropriate airports or FSDO as appropriate if the operations are within 5 miles of an airport and advise them of our operations and get prior written consent where applicable to our operations.

Section 91.121

requires, in pertinent part, each person operating an aircraft to maintain cruising altitude by reference to an altimeter that is set "to the elevation of the departure airport or an appropriate altimeter setting available before departure."

Drone Tech Aerial Cinematography's PIC has live aircraft position data through the RPAS's command link, GPS based altitude data is available to the PIC at all times. There is no provision on the aircraft for a traditional altimeter. The AGL reading of the altitude should provide an equivalent level of safety in keep the aircraft within intended airspace.

Section 91.151 *prescribes, in pertinent part, that –*

(a) No person may begin a flight in an airplane under VFR conditions unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed—

(1) During the day, to fly after that for at least 30 minutes; or

(2) At night, to fly after that for at least 45 minutes.

(b) No person may begin a flight in a rotorcraft under VFR conditions unless (considering wind and forecast weather conditions) there is enough fuel to fly to the first point of intended landing and, assuming normal cruising speed, to fly after that for at least 20 minutes.

Drone Tech Aerial Cinematography will comply with the following to achieve an equivalent level of saftey:

a) Operate rotorcraft during official daylight hours and not operated within 500 feet below or 2000ft horizontally from a cloud or when visibility is less than three miles for the PIC.
b) Takeoff only when there is enough power to fly the first point of intended landing and assuming normal cruise speeds, land the RPAS with 25% battery power remaining.

Section 91.405(a) *requires, in pertinent part,*

that an aircraft operator or owner shall have that aircraft inspected as prescribed in subpart E of the same part and shall, between required inspections, except as provided in paragraph (c) of the same section, have discrepancies repaired as prescribed in part 43 of the chapter.

Section 91.407(a)(1) *prescribes that no person may operate any aircraft that has undergone maintenance, preventive maintenance, rebuilding, or alteration unless it has been approved for return to service by a person authorized under § 43.7 of the same chapter.*

Section 91.409(a)(2) *prescribes, in pertinent part, that no person may operate an aircraft unless, within the preceding 12 months, it has had an inspection for the issuance of an airworthiness certificate in accordance with part 21 of this chapter.*

Section 91.417(a) and (b) *prescribes, in pertinent part, that—*

(a) Each registered owner or operator shall keep the following records for the periods specified in paragraph (b) of this section:

(1) Records of the maintenance, preventive maintenance, and alteration and records of the 100-hour, annual, progressive, and other required or approved inspections, as appropriate, for each aircraft (including the airframe) and each engine, propeller, rotor, and appliance of an aircraft. The records must include—

(i) A description (or reference to data acceptable to the Administrator) of the work performed; and'

(ii) The date of completion of the work performed; and

(iii) The signature and certificate number of the person approving the aircraft for return to service.

(2) Records containing the following information:

(i) The total time in service of the airframe, each engine, each propeller, and each rotor.

(ii) The current status of life-limited parts of each airframe, engine, propeller, rotor, and appliance.

(iii) The time since last overhaul of all items installed on the aircraft that are required to be overhauled on a specified time basis.

(iv)The current inspection status of the aircraft, including the time since the last inspection required by the inspection program under which the aircraft and its appliances are maintained.
(v) The current status of applicable airworthiness directives (AD) and safety directives including, for each, the method of compliance, the AD or safety directive number and revision date. If the AD or safety directive involves recurring action, the time and date when the next action is required.
(vi)Copies of the forms prescribed by § 43.9(d) for each major alteration to the airframe and currently installed engines, rotors, propellers, and appliances. (b) The owner or operator shall retain the following records for the periods prescribed: (1) The records specified in paragraph (a)(1) of this section shall be retained until the work is repeated or superseded by other work or for 1 year after the work is performed. (2) The records specified in paragraph (a)(2) of this section shall be retained and transferred with the aircraft at the time the aircraft is sold. (3) A list of defects furnished to a registered owner or operator under § 43.11 shall be retained until the defects are repaired and the aircraft is approved for return to service.

Drone Tech Aerial Cinematography has submitted documentation and procedures that outlines the process for required inspections and aircraft maintenance logs to account for the repair of aircraft issues and discrepancies.

Additionally Drone Tech Aerial is aware that the FAA has submitted conditions and limitations on similar exemption request and DTAC is able and willing to fully comply with those same conditions and limitations with our own aircraft and their corresponding limitations.

Drone Tech Aerial Cinematography is willing to modify or amend any part of this request to satisfy the need for an equivalent level of safety. Please contact us at any time if you require additional information or clarification. We look forward to working with your office.

Sincerely,

Jaron J Denson
Drone Tech Aerial Cinematography
310-748-9978