



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

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

August 19, 2015

Exemption No. 12532
Regulatory Docket No. FAA-2015-1921

Mr. Philip Madison
208 Anita Drive
Paducah, KY 42003

Dear Mr. Madison:

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 May 13 and July 30, 2015, you petitioned the Federal Aviation Administration (FAA) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial data collection for aerial videography and cinematography.

See Appendix A for the petition submitted to the FAA describing the proposed operations and the regulations that the petitioner seeks an exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested exemption would not set a precedent, and any delay in acting on this petition would be detrimental to the petitioner.

Airworthiness Certification

The UAS proposed by the petitioner are the DJI Phantom and DJI Phantom 3.

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 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, Mr. Philip Madison 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, Mr. Philip Madison is hereafter referred to as the operator.

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.

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 Phantom and DJI Phantom 3 when weighing less than 55 pounds including payload. Proposed operations of any other aircraft will require a new petition or a petition to amend this exemption.
2. Operations for the purpose of closed-set motion picture and television filming are not permitted.
3. The UA may not be operated at a speed exceeding 87 knots (100 miles per hour). The exemption holder may use either groundspeed or calibrated airspeed to determine compliance with the 87 knot speed restriction. In no case will the UA be operated at airspeeds greater than the maximum UA operating airspeed recommended by the aircraft manufacturer.
4. The UA must be operated at an altitude of no more than 400 feet above ground level (AGL). Altitude must be reported in feet AGL.
5. The UA must be operated within visual line of sight (VLOS) of the PIC at all times. This requires the PIC to be able to use human vision unaided by any device other than corrective lenses, as specified on the PIC's FAA-issued airman medical certificate or U.S. driver's license.
6. All operations must utilize a visual observer (VO). The UA must be operated within the visual line of sight (VLOS) of the PIC and VO at all times. The VO may be used to satisfy the VLOS requirement as long as the PIC always maintains VLOS capability. The VO and PIC must be able to communicate verbally at all times; electronic messaging or texting is not permitted during flight operations. The PIC must be designated before the flight and cannot transfer his or her designation for the duration of the flight. The PIC must ensure that the VO can perform the duties required of the VO.
7. This exemption and all documents needed to operate the UAS and conduct its operations in accordance with the conditions and limitations stated in this grant of exemption, are hereinafter referred to as the operating documents. The operating documents must be accessible during UAS operations and made available to the Administrator upon request. If a discrepancy exists between the conditions and limitations in this exemption and the procedures outlined in the operating documents, the conditions and limitations herein take precedence and must be followed. Otherwise, the operator must follow the procedures as outlined in its operating documents. The operator may update or revise its operating documents. It is the operator's responsibility to track such revisions and present updated and revised

documents to the Administrator or any law enforcement official upon request. The operator must also present updated and revised documents if it petitions for extension or amendment to this grant of exemption. If the operator determines that any update or revision would affect the basis upon which the FAA granted this exemption, then the operator must petition for an amendment to its grant of exemption. The FAA's UAS Integration Office (AFS-80) may be contacted if questions arise regarding updates or revisions to the operating documents.

8. Any UAS that has undergone maintenance or alterations that affect the UAS operation or flight characteristics, e.g., replacement of a flight critical component, must undergo a functional test flight prior to conducting further operations under this exemption. Functional test flights may only be conducted by a PIC with a VO and must remain at least 500 feet from other people. The functional test flight must be conducted in such a manner so as to not pose an undue hazard to persons and property.
9. The operator is responsible for maintaining and inspecting the UAS to ensure that it is in a condition for safe operation.
10. Prior to each flight, the PIC must conduct a pre-flight inspection and determine the UAS is in a condition for safe flight. The pre-flight inspection must account for all potential discrepancies, e.g., inoperable components, items, or equipment. If the inspection reveals a condition that affects the safe operation of the UAS, the aircraft is prohibited from operating until the necessary maintenance has been performed and the UAS is found to be in a condition for safe flight.
11. The operator must follow the UAS manufacturer's maintenance, overhaul, replacement, inspection, and life limit requirements for the aircraft and aircraft components.
12. Each UAS operated under this exemption must comply with all manufacturer safety bulletins.
13. Under this grant of exemption, a PIC must hold either an airline transport, commercial, private, recreational, or sport pilot certificate. The PIC must also hold a current FAA airman medical certificate or a valid U.S. driver's license issued by a state, the District of Columbia, Puerto Rico, a territory, a possession, or the Federal government. The PIC must also meet the flight review requirements specified in 14 CFR § 61.56 in an aircraft in which the PIC is rated on his or her pilot certificate.
14. The operator may not permit any PIC to operate unless the PIC demonstrates the ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption, including evasive and emergency maneuvers and maintaining appropriate distances from persons, vessels, vehicles and structures. PIC qualification flight hours and currency must be logged in a manner consistent with

14 CFR § 61.51(b). Flights for the purposes of training the operator's PICs and VOs (training, proficiency, and experience-building) and determining the PIC's ability to safely operate the UAS in a manner consistent with how the UAS will be operated under this exemption are permitted under the terms of this exemption. However, training operations may only be conducted during dedicated training sessions. During training, proficiency, and experience-building flights, all persons not essential for flight operations are considered nonparticipants, and the PIC must operate the UA with appropriate distance from nonparticipants in accordance with 14 CFR § 91.119.

15. UAS operations may not be conducted during night, as defined in 14 CFR § 1.1. All operations must be conducted under visual meteorological conditions (VMC). Flights under special visual flight rules (SVFR) are not authorized.
16. The UA may not operate within 5 nautical miles of an airport reference point (ARP) as denoted in the current FAA Airport/Facility Directory (AFD) or for airports not denoted with an ARP, the center of the airport symbol as denoted on the current FAA-published aeronautical chart, unless a letter of agreement with that airport's management is obtained or otherwise permitted by a COA issued to the exemption holder. The letter of agreement with the airport management must be made available to the Administrator or any law enforcement official upon request.
17. The UA may not be operated less than 500 feet below or less than 2,000 feet horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.
18. If the UAS loses communications or loses its GPS signal, the UA must return to a pre-determined location within the private or controlled-access property.
19. The PIC must abort the flight in the event of unpredicted obstacles or emergencies.
20. The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough available power for the UA to conduct the intended operation and to operate after that for at least five minutes or with the reserve power recommended by the manufacturer if greater.
21. Air Traffic Organization (ATO) Certificate of Waiver or Authorization (COA). All operations shall be conducted in accordance with an ATO-issued COA. The exemption holder may apply for a new or amended COA if it intends to conduct operations that cannot be conducted under the terms of the attached COA.
22. All aircraft operated in accordance with this exemption must be identified by serial number, registered in accordance with 14 CFR part 47, and have identification (N-Number) markings in accordance with 14 CFR part 45, Subpart C. Markings must be as large as practicable.

23. Documents used by the operator to ensure the safe operation and flight of the UAS and any documents required under 14 CFR §§ 91.9 and 91.203 must be available to the PIC at the Ground Control Station of the UAS any time the aircraft is operating. These documents must be made available to the Administrator or any law enforcement official upon request.
24. The UA must remain clear and give way to all manned aviation operations and activities at all times.
25. The UAS may not be operated by the PIC from any moving device or vehicle.
26. All Flight operations must be conducted at least 500 feet from all nonparticipating persons, vessels, vehicles, and structures unless:
 - a. Barriers or structures are present that sufficiently protect nonparticipating persons from the UA and/or debris in the event of an accident. The operator must ensure that nonparticipating persons remain under such protection. If a situation arises where nonparticipating persons leave such protection and are within 500 feet of the UA, flight operations must cease immediately in a manner ensuring the safety of nonparticipating persons; and
 - b. The owner/controller of any vessels, vehicles or structures has granted permission for operating closer to those objects and the PIC has made a safety assessment of the risk of operating closer to those objects and determined that it does not present an undue hazard.

The PIC, VO, operator trainees or essential persons are not considered nonparticipating persons under this exemption.

27. All operations shall be conducted over private or controlled-access property with permission from the property owner/controller or authorized representative. Permission from property owner/controller or authorized representative will be obtained for each flight to be conducted.
28. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the applicable COA must be reported to the FAA's UAS Integration Office (AFS-80) within 24 hours. Accidents must be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: www.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 August 31, 2017, unless sooner superseded or rescinded.

Sincerely,

/s/

John S. Duncan

Director, Flight Standards Service

Enclosures

Philip Madison
208 Anita Drive
Paducah, KY 42003
270.392.1952

May 13, 2015

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

Re: Exemption Pursuant to Section 333

To whom it may concern;

I am seeking relief from the following portions of 14 CFR's:

91.7(a)
91.119(c)
91.121
91.151(a)
91.405(a)
91.407(a)(1)
91.409(a)(1)&(2)
91.417(a)&(b)

I intend to operate the DJI Phantom 1 and DJI Phantom 3 Professional "quad-copter style" unmanned aircraft systems (UAS) in the western Kentucky region for the purpose of aerial data collection to produce images/video for use in aerial videography/cinematography and augmenting real estate listing videos (or similar operations), commercial advertisings, educational videos, industrial training/safety programs and educational products.

As for my accreditations with model aircraft, I am a current and active member in the Academy of Model Aeronautics (AMA) since March 9, 2005 and hold a AMA Turbine Waiver (#FW 9880) for fixed wing turbine powered aircraft since September 12, 2008. Over the past several years I have also earned the status of Contest Director for the AMA and held the responsibility of numerous model aircraft events with zero incidents.

I am currently employed in the video production industry, with over 16 years on the job experience in all aspects of video production. It is my intent to include the products of aerial videography and cinematography from the UAS platform into current production work. Throughout the past two years I have practiced at the hobby/recreation level UAS

activities with the DJI Phantom 1 platform and have accumulated more than 40+ hours of flight time, WITHOUT INCIDENT.

Following are the justifications as to why I am seeking relief from each section:

91.7(a) – It is my understanding that no FAA regulation standard exists for determining the airworthiness of the UAS I intend to operate, the regulation is inapplicable.

91.119(c) – The intended operations under this exemption would need to occur at altitudes fewer than 400 feet and closer than 500 feet to person, objects or structures.

91.121 – The manufactured platform intended uses a barometric altimeter, GPS derived altitude and ultrasonic reference relative to ground capabilities to establish altitude while the FAA requires any altitude reported to be in feet AGL.

91.151(a) – The manufactured system does not have the ability to adhere to this regulation.

91.405(a) – This section does not apply to UAS.

91.407(a)(1) – This section does not apply to UAS.

91.409(a)(1)&(2) - This section does not apply to UAS.

91.417(a)&(b) - This section does not apply to UAS, however it is my intent to keep a flight log with basic information about each activity/flight of the UAS involved.

It is my intent to comply with the following conditions of UAS operations for the purpose:

1. All operations authorized by this grant of exemption are limited to the platform aircraft as described in their respective operating guidelines and documents from the manufacturers for the DJI Phantom 1 and DJI Phantom 3 Professional.
2. Each aircraft will NOT exceed 55 pounds in weight. (*Estimated approximate weight for each individual aircraft is less than 4.5 pounds.*)
3. The UAS will not fly in excess of an indicated airspeed of 35 knots.
4. The UAS will be operated at an altitude of no more than 400 feet above ground level (AGL), as indicated by the procedures specified in the operating documents.
5. 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). All UAS

operations will be conducted during a minimum of “fair” weather situations deemed safe by the operator.

6. The UAS must be operated within visual line of sight (VLOS) of the Pilot In Command (PIC) at all times. This requires the PIC to be able to use human unaided vision by any device other than corrective lenses.

7. ALL operations must utilize a visual observer (VO). The UAS will be operated within the VLOS of the 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. The PIC must be designated before the flight and cannot transfer the designation for the duration of the operation. The PIC must ensure that the VO is capable to perform the functions prescribed.

8. The operating documents and this grant of exemption 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 upon request. The operator must also present updated and revised documents if he 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 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.

9. Prior to each flight, the PIC must inspect the UAS to ensure it is in a condition for safe flight. If the inspection reveals a condition that affects the safe operation of the UAS, the UAS is prohibited from operating until the necessary maintenance has been performed and the UAS is found to be in a condition for safe flight. The Ground Control Station must be included in the preflight inspection. All maintenance and alterations must be properly documented in the aircraft records.

10. Any UAS 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. The PIC who conducts the functional test flight must make an entry in the aircraft records.

11. The operator must follow the UAS manufacturer's aircraft/component, maintenance, overhaul, replacement, inspection, and life limit requirements.

12. The operator must carry out its maintenance, inspections, and record keeping requirements, in accordance with the operating documents. Maintenance, inspection,

and alterations must be noted in the aircraft records, including total flight hours, description of work accomplished, and the signature of the authorized person returning the UAS to service.

13. Each UAS operated under this exemption must comply with all manufacturer Safety Bulletins.

14. The UAS may not operate within 5 nautical miles of an airport reference point as denoted on a current FAA-published aeronautical chart.

15. The UAS may not be operated less than 500 feet below, or less than 2,000 horizontally from a cloud or when visibility is less than 3 statute miles from the PIC.

16. If the UAS loses communications or loses its GPS signal, it must be designed to return to a pre-determined location within the planned operating area and land or be recovered in accordance with the operating documents.

17. The PIC must abort the flight in the event of unpredicted obstacles or emergencies in accordance with the operating documents.

18. The PIC is prohibited from beginning a flight unless (considering wind and forecast weather conditions) there is enough power to fly at normal cruising speed to the intended landing point and land the UAS with 25% battery power remaining.

19. All aircraft operated in accordance with this exemption must be identified by manufacturers applied and recorded serial number.

20. Before conducting operations, the radio frequency spectrum used for operation and control of the UAS must comply with the Federal Communications Commission (FCC) or other appropriate government oversight agency requirements.

21. Documents relating to the manufactures operating manual, usage guide, maintenance recommendations and granted exemption notice must be available to the PIC at all times. These documents must be made available to the Administrator or any law enforcement official upon request.

22. The UAS must remain clear and yield the right of way to all manned aviation operations and activities at all times.

23. The UAS may not be operated by the PIC from any moving device or vehicle.

24. The UA may not be operated over congested or densely populated areas without prior notice of activity and purpose to responsible party involved.

25. All operations shall be conducted over private or controlled-access property with permission from the land owner/controller or authorized representative. Permission

from land owner/controller or authorized representative will be obtained for each operation to be conducted.

26. The operator must have a motion picture and television operations manual (MPTOM) as documented in this grant of exemption.

27. 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:

1. Dates and times for all flights;
2. Name and phone number of the operator for the UAS aerial filming conducted under this grant of exemption;
3. Name and phone number of the person responsible for the on-scene operation of the UAS;
4. Make, model, and serial or N-Number of UAS to be used;
5. Name of UAS PICs involved in the aerial filming;
6. 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;
7. Signature of exemption holder or representative; and
8. 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.

28. 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.

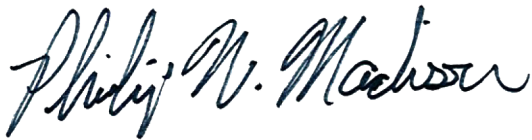
28. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the within this operational exemption must be reported to the FAA's UAS Integration Office (AFS-80) within 24 hours. Accidents must be reported to the National Transportation Safety Board (NTSB) per instructions contained on the NTSB Web site: www.nts.gov.

Along with this petition, I submit the following for review as indicators for operation of the UAS prescribed for approval in this exemption:

- DJI Phantom Flying Flow Chart
- DJI Phantom Quick Start Manual
- DJI Phantom User Manual
- DJI Phantom 3 Professional Quick Start Guide
- DJI Phantom 3 Professional User Manual
- Proposed Motion Picture and Television Flight Operation Manual

If more information or documentation is needed to approve this exemption for the intended use of the UAS, please contact me at 270.392.1952.

Thank you,

A handwritten signature in black ink that reads "Philip N. Madison". The signature is written in a cursive, flowing style with a large initial 'P'.

Philip Madison

Philip Madison
208 Anita Drive
Paducah, KY 42003
270.392.1952

July 30, 2015

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

Re: Additional Information Requested for Docket FAA-2015-1921

To whom it may concern;

Pursuant to the FAA Modernization and Reform Act of 2012 I am writing in request for an exemptions from the current Federal Aviation Regulations ("FARs") listed below so that I may operate small ultra light weight unmanned aircraft system ("UAS") commercially in airspace regulated by the Federal Aviation Administration ("FAA"). I believe that such activity is already occurring by "unauthorized" operators and it is my goal to work with the FAA through this exemption request to operate within the constraints of the current FAR.

I have over 15+ years experience in television/film production as well as 10+ years experience in remote control models, all without incident. The opportunity to integrate such UAS aerial platforms in a safe and controlled manor through this exemption, if approved, will aid in the development of an already "booming" media industry.

Data collected by the operation of this exemption is intended for use as images/video for videography/cinematography, real estate, web-based videos/websites, commercial advertisings, educational videos, training/safety videos and potentially search and rescue operations if necessary and requested by local area agencies.

PUBLIC GOOD

With this exemption I plan to provide a platform for aerial data/imaging in a manor that is not cost prohibitive as has been historically with manned aircraft. Congress has already decided that it is in the public's interest to integrate commercially flown UAS into the national airspace system and passed the Reform Act.

Aerial videography for geographical awareness, real estate marketing and video production has been around for a long time through manned fixed wing aircraft and helicopters. But for small business owners, its expense has been cost-prohibitive. Granting this exemption will allow me to provide this service at a much lower cost.

Further, the small UAS being utilized in this application will pose no threat to the public given its small size and lack of combustible fuel when compared to larger manned aircraft. The UAS is battery powered and creates no emissions that can harm the environment. The operation of this UAS will minimize ecological damage and promote economic growth by providing video based information to businesses & individuals in the area.

This exemption, if granted, will also further economic impact for the area by providing an opportunity for companies looking to build and individuals looking to relocate for careers to have information available to them through academic and geographical awareness. These serve as a stimulus to the community.

CONCLUSION

Finally, I am requesting this exemption to perform safe operations of the listed UAS at low-level altitudes and only around those completely informed and agreed upon the operation, thus virtually eliminating the potential risk to the public. The systems that I operate keep very accurate data logs that will also allow me to constantly evolve my personal guidelines under this exemption and be information that can eventually be transferred along to the FAA for review in efforts to enhance the efforts on future protocols in complying with the FAA Modernization and Reform Act of 2012.

The UAS platforms I intend to operate have no personnel on board, and therefore any likelihood of death or serious injury is significantly diminished.

All UAS used are very lightweight and operated at very low speeds within limited areas, which again provides a great level of safety.

I hope to operate the UAS in a safe manor and to utilize such a platform in the advancement of aerial data collection. If more information or documentation is needed to approve this exemption for the intended use of the UAS, please contact me at 270.392.1952.

Thank you,

Philip Madison