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

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

August 27, 2015

Exemption No. 12628
Regulatory Docket No. FAA–2015–1447

Mr. Michael R. Monar
Monar Aero
3250 West Crystal Street
Unit 3
Chicago, IL 60651

Dear Mr. Monar:

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 April 17, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Monar Aero (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct closed-set filming of motion pictures, music videos, web videos, corporate videos, television programs and commercials, and still 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, the FAA received one comment in support of the petition made to the docket.

Airworthiness Certification

The UAS proposed by the petitioner are the Monar Aero X8 and Monar Aero V4.

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 collection[1] 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, Monar Aero 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

[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.

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, Monar Aero 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 Monar Aero X8 and Monar Aero V4 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 September 30, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures

April 17, 2015

U.S. Department of Transportation
Docket Management System
1200 New Jersey Ave., SE
W. Building Ground Fl. Room W12-140
Washington, DC 20590

Monar Aero's Exemption Request Pursuant to Section 333 of the FAA Reform Act of 2012 To Operate Unmanned Aircraft Systems for Aerial Photography and Filming

FAA Regulatory Docket

Name And Address of Petitioner

Monar Aero
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I. Petition Summary

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012, Pub. L. No. 112-95 (2012), 126 Stat. 11 ("Section 333") and the Federal Aviation Administration's ("FAA") general exemption authority under 49 U.S.C. § 44701(f), Monar Aero, ("Petitioner") hereby petitions for exemptions from:

14 C.F.R. Part 21
14 C.F.R. 61.113(a) and (b)
14 C.F.R. 61.133(a)
14 C.F.R. 91.7(a)
14 C.F.R. 91.9(b)(2)
14 C.F.R. 91.103(b)(1)
14 C.F.R. 91.119(c)
14 C.F.R. 91.121
14 C.F.R. 91.151
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.F.R. 91.409(a)(2)
14 C.F.R. 91.417(a)-(b).

The proposed exemptions, if granted, would allow Petitioner to operate small, camera-mounted unmanned aircraft systems ("UAS") weighing 55 pounds or less including payload (i.e. camera, lens, remote head) for the purpose of closed-set filming of motion pictures, music videos, web videos, corporate videos, television programs and commercials, and still photography.

The Petitioner's UAS operations will take place only within closed and controlled, "sterile" set conditions under the auspices of experienced and qualified UAS operators. Monar Aero UAS, operating with no onboard crew and battery power, represent a

significant step forward in safety over larger traditional aircraft carrying crew and flammable fuel. All operations by Monar Aero will be conducted under protocols set forth

in Petitioner's Flight Operations and Procedures Manual ("FOPM"), the Motion Picture and Television Flight Operation Manual ("MPTFOM), and any additional rules established by the FAA specifically for UAS. Following the precedent of exemptions already granted by the FAA, approval of Monar Aero's petition will fulfill the mandate of Section 333 in providing for safe civil UAS operations in the National Airspace System ("NAS") and serves the public interest. The Petitioner respectfully asks that the FAA grant the requested exemptions without delay.

II. Background

A. Experience

Monar Aero's crew of seasoned film industry professionals posses nearly half a decade of experience in engineering, building, and operating UAS at a non-commercial level. Their proven and ultra stable UAS platforms carry the latest in feature film quality camera equipment such as the Red Dragon and Arri ALEXA Mini. The Petitioner's extensively tested lightweight UAS platforms can replace the far more dangerous full size helicopters now engaged in aerial cinematic capture.

B. Aircraft and Equivalent Level of Safety

As set forth in the Monar Aero FOPM, the operation of UAS will meet or exceed the current levels of safety attained by traditional aircraft engaged in cinematic capture. In accord with the key considerations noted in The Reform Act:

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

the Petitioner will abide by the following guidelines:

- Monar Aero's UAS will have a gross weight of not more than 55 pounds.
- UAS will be operated at a speed of no more than 50 knots.
- The minimum crew for UAS operations will consist of a Pilot In Charge ("PIC"), Camera Operator ("CO"), and a Visual Observer ("VO").
- Communication between PIC, Camera Operator and Visual Observer will be facilitated by hands free two way radio.
- A safety meeting must be conducted prior to each day's operations. All crew working within the, "Security Perimeter" must attend to be briefed on the planned operations.
- Flights will be performed at no more than 400 feet AGL.
- UAS will utilize a radio frequency spectrum for operation and control that complies with Federal Communications Commission ("FCC") requirements.
- UAS will not carry explosive materials or combustible fuels
- UAS flights will be performed within line of sight of the PIC and the Visual Observer
- The UAS crew will consist of at least one FAA licensed airman with a private pilot's license and third class medical certificate.
- UAS flights will last only 5-25 minutes each.
- UAS will land before battery levels go below 25%. Should battery levels drop to 25% unexpectedly, the Monar Aero UAS has programmed failsafe protocol whereby it will perform a pre-programmed, predictable, automated flight maneuver and return to a predetermined landing site within the defined "Security Perimeter."
- UAS operations will take place only within controlled and pre-determined "Security Perimeters."
- UAS are equipped with redundant safety mechanisms allowing them to operate safely after experiencing Command And Control ("C2") link failures. If a C2 link event occurs, including the loss of ground communications and/or the loss of a GPS signal, the Monar Aero UAS have the ability to perform a pre-programmed, predictable, automated flight maneuver and

return to a predetermined landing site within the defined "Security Perimeter."

- Telemetry data including battery level, speed, altitude, GPS satellite lock, and flight mode will downlink from the UAS to a ground-based on-screen display
- Monar Aero will obtain consent from all persons involved in the aerial filming scenario. Persons not involved in filming will not be allowed within 100 feet of the operation.
- All required permissions and permits will be obtained from territorial, state, county, or city jurisdictions, including local law enforcement, fire or other appropriate government agencies.
- The PIC and VO must be trained in UAS operation, and the particular UAS craft to be operated, as per the Monar Aero FOPM.
- In the event that the, "Security Perimeter" is breached and/or potential safety breaches are imminent, operations will be breached following protocol outlined in the FOPM.

III. Specific Exemptions Requested by Monar Aero Under Section 333.

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

14 C.F.R. 21, Subpart H, entitled Airworthiness Certificates, sets forth requirements for procurement of necessary airworthiness certificates in relation to FAR § 91.203(a)(1). The size, weight and enclosed operational area of Monar Aero's UAS permits exemption from Part 21 because Monar Aero's UAS 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 Section 333 of the Reform Act. Both pieces of legislation permit the FAA to exempt UASs from the airworthiness certificate

requirement in consideration of the weight, size, speed, maneuverability and proximity to U.S. areas such as airports and dense populations. Monar Aero's UAS meet or exceed each of these 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, this Regulation is inapplicable. An equivalent level of safety will be achieved by maintaining a manual at the flight operations center. The FAA has previously issued exemptions to this regulation in Exemption Nos. 8607, 8737, 8738, 9299, 9299A, 9565, 9565B, 10167, 10167A, 10602, 10700 and 32827.

14 C.F.R. § 91.121 regarding altimeter settings is inapplicable insofar as Monar Aero's UAS utilize electronic global positioning systems, accelerometers and multiple integrated gyroscopes to provide spatial coordination.

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 certifications and registrations at the Monar Aero's flight operations center.

B. 14 C.F.R. § 45.23: Marking of The Aircraft.

Monar Aero UAS are unmanned and relatively small, without a traditional cabin or fuselage on which to place registration markings. Petitioner's UAS will be identified by individual serial number, registered in accordance with 14 C.F.R. Part 47, and have identification (N-Number) markings in accordance with 14 C.F.R. Part 45, Subpart C. Markings will be as large as practicable.

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. Monar Aero UAS do not carry pilots or passengers and as such can achieve an U.S. equivalent level of safety as achieved by current Regulations. Unlike conventional manned aircraft, all of the Petitioner's UAS operations are controlled from the ground and held within cordoned off and controlled, "Security Perimeters." In addition to possessing a private pilots license, the PIC will have attained the necessary remote piloting skills and knowledge as outlined in the Monar Aero FOPM. Consequently, the safety risks of operating a relatively small, unmanned Monar Aero UAS are significantly less than those associated with operating conventional manned commercial operations. Thus, allowing operation of a Monar Aero

UAS by a private pilot as the PIC exceeds the present level of safety sought by 14 C.F.R. §61.113 (a) & (b).

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

Section 91.119 establishes safe altitudes for operation of civil aircraft. In pertinent part, it states that:

"(d) **Helicopters, powered parachutes, and weight-shift-control aircraft.** If the operation is conducted without hazard to persons or property on the surface-"

Monar Aero UAS will only operate within an established, "Security Perimeter" below 400 AGL, providing an equal or greater level of safety provided in relation to minimum safe altitudes. In contrast to conventional helicopters, Petitioner's UAS carry no passengers, pilots, or explosive fuels, thus an equivalent or greater level of safety will be realized.

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

These 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 apply only to aircraft with an airworthiness certificate, they will not apply to Monar Aero operations should its exemption be granted. As outlined in the FOPM, Monar Aero conducts its own strict maintenance regimen. The operator will be responsible for inspections and any maintenance necessary. As provided for in the FOPM, the operator will fulfill all system checks prior to flight to verify that the UAS is in good working order. Any discrepancies will be repaired and noted in the Maintenance Log. Should discrepancies arise

during an operation, the UAS will be grounded immediately in accordance with mission abort protocol prescribed in the FOPM. An equivalent level of safety will be achieved because the UASs operate no higher than 400 AGL, are subject to extensive maintenance regimens, weigh less than 55 pounds, are more maneuverable than conventional manned aircraft, and can easily be landed should mechanical issues arise.

IV. Summary

Monar Aero seeks an exemption from the following Regulations:

14 C.F.R. 21, subpart H; 14 C.F.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.F.R. § 91.409 (a)(2); 14 C.F.R. § 91.409 (a)(2); and, 14 C.F.R. §§ 91.417 (a) & (b) to operate commercially its fleet of small unmanned vehicles and lightweight unmanned vehicles for the purpose of closed-set filming of motion pictures, music videos, web videos, corporate videos, television programs and commercials, and still photography.

As already established by previous UAS exemptions granted by the FAA, commercial use of UAS by the film industry will serve to increase the level of safety afforded to aerial cinematic capture. UASs reduce risk by eliminating the need for manned aircraft weighing thousands of pounds and carrying large amounts of explosive fuel. Monar Aero UASs, weighing less than 55 pounds, operating under battery power and within strict, "Security Perimeters" mitigate risk to human life. These factors justify Monar Aero's petition for exemption and

satisfy the criteria provided in section 333 of the Reform Act of 2012. Monar Aero will comply with the same conditions and limitations as provided in numerous section 333 exemptions granted recently for closed set filming and other purposes. Accordingly, we respectfully ask the FAA to grant this petition in summary fashion, and obviate Federal Register publication and public comment.

Kind Regards,

Michael R. Monar