December 9, 2014

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

RE: Exemption Request Section 333 of the FAA Reform Act

Dear Sir or Madam:

This petition is being submitted on our behalf without legal counsel or consulting services.

Pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 (the Reform Act), and 14 C.F.R. Part 11, Extreme Media Productions, a full service video production company, hereby applies for an exemption from the Federal Aviation Regulations (FARs) listed below to allow operation of our Small Unmanned Aircraft System (sUAS) commercially in airspace regulated by the Federal Aviation Administration (FAA) so long as such operations are conducted with and under the conditions outlined herein or as may be established by the FAA as required by Section 333.

The requested exemption would permit Extreme Media Productions to pursue its commercial interests in providing services to clients using a small advanced sUAV in the following areas:

- Real Estate
- Marketing
- Surveying
- Industrial
- Surveying
- Special Events

Extreme Media Productions states that all sUAS flights will occur over private or controlled access property will do so with the property owner's consent and knowledge and that only people who have consented or otherwise have agreed to be in the area where videography will take place.

Additionally, Extreme Media Production's sUAS pilot holds an FAA Private Pilots License with a Class III Medical Certificate. If observers are not qualified pilots, they will attend a ground school to understand the proper roles of an observer, communication procedures, proper visual scan techniques, operations at non-towered airports and appropriate sections of the Aeronautical Information Manual (AIM).

Regulations from which exemption is requested:

14 C.F.R. Part 21
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. 91.109
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) & (b)
14 C.F.R. 91.205(b)
14 C.F.R. 91.215
14 C.F.R. 91.401 – 91.417

Unmanned Aircraft System

sUAVs are often seen as superior to helicopters as an aerial video gathering platform due to the smaller devices cheaper equipment and personnel cost, reduced noise and as such, a much smaller environmental impact which promotes public safety.

Extreme Media Productions is petitioning for an exemption to operate a DJI Phantom 2 Vision Plus with a built-in stabilized HD camera and GPS safety features which limit its ability to limit the height it flies above ground level (AGL), to limit the radius of the distance it flies from the operator and to exclude it from operations within designated Class B, C and D airspace including a no-fly zone feature. The DJI Phantom 2 Vision Plus also has a failsafe function that is triggered in the event communication is lost between the sUAS and the main controller transmitter. At that time, the sUAS will return to its point of takeoff and land safety. If the connection is restored, the PIC can regain control of flight and land manually.

These specifications meet with the Model Aircraft Operating Standards as set below:

- The petitioner will only operate its sUAS in line-of-sight of a pilot and/or observer and will operate at sites that are 'sufficient distance' from populated areas within the sterile area described in the FOPM. Such operations will ensure that the sUAS will "not create a hazard to users of the national airspace system or the public."
- When flying the sUAS within three (3) miles of an airport, airport operators will be notified and the operator will give the right-of-way to avoid flying in the proximity of full-scale aircraft.

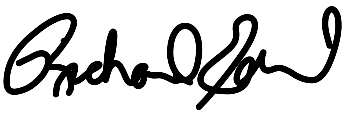
- Maximum flight time for each operation will be 30 minutes.
- Flights will be terminated when battery levels reach 25%, allowing sufficient reserve flight time to safely land the sUAS.
- The sUAS will be programmed so it will not be operated at an altitude that exceeds 400 feet AGL, and not more than 200 feet above an elevated platform from which videography is planned.
- Minimum crew for each operation shall consist of: sUAS pilot, a visual sUAS observer, and the camera operator.
- The sUAS PIC will be an FAA licensed airman holding a minimum of a Private Pilot certificate and a current FAA medical certificate.
- The sUAS operated by the petitioner weighs less than 25 pounds, including all payload (i.e. camera, lens, and stabilized gimbal).
- The sUAS will operate at speeds of no more than 50 knots, can hover, and can simultaneously move vertically and horizontally.
- Given the small size of the sUAS and the restricted sterile environment within which it will operate, Extreme Media Productions' operations adhere to the Reform Act's safety requirements.

The fact the pilot holds an FAA Private Pilot license demonstrates Extreme Media Productions' high regard for safe operations with an understanding of FARs, pre-flight inspections, knowledge of operations and differences in airspace classifications, maintenance and repair, as well as being trained to high safety standards.

Under the requested exemption, Extreme Media Productions ensures all operators have completed sUAS education and training programs including all applicable regulations and guidance documents; including aeronautical background information such as charts, NOTAMS and Aircraft Circulars; Radio Communications Procedures; Human Factors and Crew Resource Management; Basic sUAS Aerodynamics; Weather factors; Airmanship and Decision-making and Safe Operations Procedures.

We respectively request exemption under Section 333 to enable Extreme Media Productions to operate efficient, limited, low-risk commercial sUAS operations for the activities stated respecting at all times the space and privacy of citizens and property while keeping airspace safe.

Sincerely submitted,



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EXEMPTION REQUESTS AND EQUIVALENT LEVEL OF SAFETY

Extreme Media Production requests an exemption from the following regulations as well as any additional regulations that may technically apply to the operation of the sUAV System:

14 CFR Part 21, Airworthiness Certificates
This part establishes the procedures for the issuance of an airworthiness certificate. While the FAA continues to work to develop airworthiness standards for Unmanned Aerial Systems, we request an experimental certificate be issued for the DJI Phantom 2 Vision Plus under either, or both, of the following provisions:
21.191 Experimental certificates. Experimental certificates are issued for the following purposes:
(a) Research and development. Testing new aircraft design concepts, new aircraft equipment, new aircraft installations, new aircraft operating techniques, or new uses for aircraft.
(b) Showing compliance with regulations. Conducting flight tests and other operations to show compliance with the airworthiness regulations including flights to show compliance for issuance of type and supplemental type certificates, flights to substantiate major design changes, and flights to show compliance with the function and reliability requirements of the regulations. Since the experimental certificate can be used for commercial purposes such as market surveys, sales demonstrations, and customer crew training, we would expect that an experimental certificate would permit our commercial purpose as well. The aircraft will not carry persons or property, will not carry fuel, and will only fly under strict operational requirements. Combined with the UA's light weight, being constructed primarily of carbon fiber and plastic, we propose that the UA will be at least as safe, if not safer, than a conventionally certificated aircraft performing the same mission. If an experimental airworthiness certificate is not appropriate for this application, then we request an exemption of 14 CFR Part 21, Subpart H, and the requirement for an airworthiness certificate in general, citing the equivalent level of safety outlined in the previous paragraph.

14 CFR 45.23 Display of marks; general and 45.29 Size of marks
These regulations provide that each aircraft must display "N" and the aircraft's registration number in letters at least 3 inches high. Additionally, the aircraft must display the word "EXPERIMENTAL" in letters at least 2 inches high near the entrance to the cabin, cockpit, or pilot station. The sUAV does not have an entrance in which the word "EXPERIMENTAL" can be placed, and may not have a registration number assigned to it by the FAA. We propose to achieve an equivalent level of safety by including the word "EXPERIMENTAL" in the placard on the top of the aircraft, as shown above, where the PIC, VO and others in the vicinity of the aircraft while it is preparing for launch will be able to see the designation. Additionally, we feel that the permanent placard discussed in the previous paragraph will provide the aircraft's registration information at the ground station. Finally, we will display at the ground station a high contrast flag or banner that contains the words "Unmanned Aircraft Ground Station" in letters 3 inches high or greater. Since the aircraft will operate within 3/4 NM of the ground station, the banner should be visible to anyone that observes the aircraft and chooses to investigate its point of origin.

14 CFR 61.113 Private pilot privileges and limitations: Pilot in Command and 61.133 Commercial pilot privileges and limitations.
The regulation provides that no person who holds a Private Pilot certificate may act as pilot in Command of an aircraft for compensation or hire. Subparagraph (b) allows a private pilot to act as pilot in command 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. Our proposed operations require that the PIC must hold at least a Private Pilot Certificate issued by the FAA and since the aircraft cannot carry passengers or property, we feel we meet the intent of 61.113 Subparagraph (b) even though the intent of this application is to conduct a business.

14 CFR 91.7 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 CFR 91.9 Civil aircraft flight manual, marking, and placard requirements.
This regulation provides that no person may operate an aircraft unless a current, approved flight manual is in the aircraft. We assume that the intent of this requirement is to ensure that flight manual information is available to the aircrew while operating the aircraft. We request an exemption to this requirement since the aircraft is not only too small to carry documentation, the documentation would not be available to the crew during flight operations. To obtain an equivalent level of safety and meet the intent of 91.9, we propose that a current, approved sUAS Flight Manual must be available to the crew at the ground station anytime the aircraft is in, or preparing for, flight.

14 CFR 91.109 Flight Instruction; Simulated instrument flight and certain flight tests.
The regulation states "No person may operate a civil aircraft that is being used for flight instruction unless that aircraft has fully functioning dual controls." The sUAS System ground-based control station consists of a hand-held radio transmitter and while it does not offer a second set of "controls", both the student and instructor can, and will, operate the single set of controls simultaneously. With both student and instructor having "hands-on" the controls during flight, this technique meets the intent 91.109 and provides an equivalent level of safety.

91.119 Minimum safe altitudes: General.
The regulation states that over sparsely populated areas the aircraft cannot be operated closer than 500 feet to any person, vessel, vehicle, or structure. Since the typical mission of the sUAS would be photography or survey of persons, vessels, vehicles or structures it would be necessary to operate closer than 500 feet to the items listed. Operations will only be flown over property or persons where permission has been obtained and careful pre-planned has been performed. The aircraft will be operated at a low altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface. Therefore we maintain that due to the small size of the UAS, the hazard to persons, vehicles and structures is minimal compared to manned aircraft, which should be considered in granting the exemption.

CFR 91.121 Altimeter settings.
The regulation requires that aircraft shall maintain cruising altitudes by reference to an altimeter setting available within 100 NM of the aircraft. The sUAS will always fly below 400 feet AGL and will not need to maintain cruising altitudes in order to prevent conflict with other aircraft. An Above Ground Level altimeter measurement above the takeoff point is transmitted via radio from the sUAS on-board computer to the display screen held by the PIC, providing a constantly updated AGL readout.

14 CFR 91.151 Fuel requirements for flight in VFR conditions.
The regulation provides that no person may begin a flight in an airplane under day-vFR conditions unless there is enough fuel to fly to the first point of intended landing and to fly after that for at least 30 minutes. We feel the intention of this paragraph is to provide an energy reserve as a safety buffer for delays to landing. The sUAV is battery operated and the maximum duration of flight from a single battery charge is 12 minutes with a 20% reserve. Since the aircraft will never fly more than 3/4 NM from the point of intended landing, a full battery charge at launch will ensure that we meet the reserve energy requirement of this paragraph. We request an exemption to the word "fuel" and ask for an equivalent interpretation with the word "energy".

14 CFR 91.203(a) & (b) Civil aircraft: Certifications required.
The regulation provides that an airworthiness certificate, with the registration number assigned to the aircraft and a registration certificate must be aboard the aircraft. Additionally, subparagraph (b) provides that the airworthiness certificate be "displayed at the cabin or cockpit entrance so that it is legible to passengers or crew." At a maximum gross weight of 5.3 pounds, the sUAS is too small to carry documentation, does not have an entrance, and is not capable of carrying passengers or crew. To obtain an equivalent level of safety and meet the intent of 91.203, we propose that documents deemed appropriate for this aircraft by the FAA will be co-located with the crew at the ground control station and available for inspection upon request. In order to identify the aircraft, we propose that the information found on airworthiness and registration certificates be permanently affixed to the aircraft via placard containing the following information plus the word "EXPERIMENTAL" to satisfy the requirement of 14 CFR 45.23.

14 CFR Subpart E 91.401- 91.417 - Maintenance, Preventive Maintenance, Alterations
The regulation provides that the operator is primarily responsible for maintaining the aircraft in an airworthy condition, including compliance with part 39 and 43. Paragraphs 91.407 and 91.409 require that the aircraft be "approved for return to service by a person authorized under 43.7" after maintenance and inspection. It is our intention that the PIC perform maintenance and inspection of the aircraft and "be authorized to approve the aircraft for return to service." The PIC will ensure that the aircraft is in an airworthy condition prior to every flight and in addition conduct detailed inspections after every two hours of flight. Maintenance performed by the PIC is limited to repairing small cracks, replacing a propeller, checking electrical connections and updating software and firmware for the on-board computer. All other maintenance will be performed by the manufacturer or their designated repair facility. The PIC will document work performed in accordance with 91.417. We feel that due to the size, construction, and simplicity of the aircraft, the PIC can ensure an equivalent level of safety.