# **CURRAN & CURRAN LAW**

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

Re: Exemption Request; Section 333 of the FAA Modernization & Reform Act and Part 11 of the Federal Aviation Regulations from 14 C.F.R. 45.23(b);14 CFR Part 21;14 CFR 61.113 (a) & (b); 91.7 (a); 91.9 (b) (2); 91.103(b); 91.109; 91.119; 91.121; 91.151 (a); 91.203(a) & (b); 91.405 (a); 91.407(a) (1); 91.409 (a) (2); 91.417 (a) & (b).

Dear Sir or Madam:

Petitioner hereby petitions the Secretary of Transportation and Federal Aviation Administration ("FAA") for exemption to the above referenced and below more fully described Federal Aviation Regulations, ("FARs") that currently may or may not apply to the recreational/business operations of model aircraft including small unmanned aerial vehicles/systems ("SUAVs").

### 1. Prefatory Statement to Petition

In June, 1981, the FAA published an advisory circular, AC 91-57, (an advisory publication giving non-regulatory information/guidance. Advisory circulars do not create or change regulations and are not binding on the public.) AC 91-57 was entitled "Model Aircraft Operating Standards" and gave non-regulatory suggestions to model aircraft operators on suggested procedures for operating their models. This was the sole publication by the FAA which addressed model aircraft and SUAVs for the next nearly 25 years.

In September 2005, the FAA appeared to turn its attention toward unprecedented attempts at regulating model aircraft specifically the more modern SUAVs. The FAA, for the first time in history now termed these devises as Unmanned Aerial Systems ("UAS") seemingly to align with their attempts at enforcement. The FAA published "AFS-400 UAS POLICY 05-01 - Unmanned Aircraft Systems Operations in the U. S. National Airspace System - Interim Operational Approval Guidance." This interim internal FAA memo expressly confirms that "[t]his policy is not meant as a substitute for any regulatory process." Still, it purported to "require" a Certificate of Authorization ("COA") or Waiver to use SUAVs. The new FAA policy relied on legal/regulatory "authority" on the non-regulatory, AC 91-57.

In February, 2007 the FAA, published a 2007 "policy statement" in the Federal Register. The 2007 Policy Statement starts by defining "unmanned aircraft" as "a device that is used, or intended to be used, for flight in the air with no onboard pilot" and it purported to include "a remotely controlled model airplane used for recreational purposes." The FAA termed these devices UAS and then purported to articulate the new FAA "policy" for "UAS" operations was that "no person may operate a "UAS" in the National Airspace System without specific authority." For the first time ever, the 2007 Notice purported to articulate two new alleged "rules": (1) Model aircraft can no longer be operated for a "business" purpose; and (2) a Model aircraft operated for a business purpose requires a COA, or special Certificate of Operating Authority and therefore is subject to the FARs.

Thereafter, beginning in 2007, and continuing to present, apparently based on these two new FAA internal "policies" and without citing to any actual federal law, or FARs, the FAA then sent various cease and desist notices to model aircraft SUAV operators describing the COA process and threatening to impose a \$10,000 fine if they did not comply with the new FAA policies which the FAA indicated created a "ban" on using SUAVs for any "business purpose."

In 2012, following the FAA's attempts to regulate using internal policy memos, Congress enacted the Federal Aviation Administration Reform and Modernization Act, ["FRMA"]. The FRMA allows the Secretary of Transportation to "exempt" SUAVs from existing Federal Law, FARs to the extent any federal law or FAR actually currently applies to SUAVs.

As the Secretary/FAA are no doubt aware, these issues are presently pending before the NTSB's full panel of Judges in *Pirker v. FAA*, Docket No. CP-217. Pending the NTSB president setting decision in the *Pirker* case, Petitioner respectfully makes this request as suggested by the FMRA and the FAA. See http://www.faa.gov/news/press\_releases/news\_story.cfm?newsId=16294. In the only other case in history where the FAA's attempts to regulate Model Aircraft/UAVs has been tested, in *Texas Equuisearch v. Federal Aviation Administration*, the U.S. Court of Appeals for the District of Columbia Circuit, Case No. 14-1061, the Court ruled that FAA informal email/mail orders attempting to enforce its Model Aircraft/UAVs internal policies are not legally binding.

Petitioner at all times has and operates his SUAVs following the safety guidelines of AC 91-57.

#### 2. Petition for Exemption

With the above preface, pursuant to Section 333 of the FAA Modernization and Reform Act of 2012 ("FMRA") and 14 C.F.R. Part 11, Burnz Eye View, Inc., developer and operator of Small Unmanned Aerial Vehicles ("SUAVs") equipped to conduct aerial photography/Inspection/ included but not limited to the following; Business Operations: over land, water-ways, and oceans; operation over/in non-restricted National Parks, National Forests, flight in non-navigable airspace, using non-intrusive recording devices, operation in otherwise unrestricted U.S. States/Territories hereby applies for an exemption from the listed Federal Aviation Regulations ("FARs") to allow commercial operation of its SUAVs, so long as such operations are conducted within and under the

conditions outlined herein or as may be established by the FAA as required by Section 333.

As described more fully below, the requested exemption would permit the operation of SUAVs under controlled conditions in airspace that is 1) limited; 2) predetermined; and 3) controlled as to access. The exemption would also provide safety enhancements to the already safe operations within the aerial photography, film and television industry presently using conventional aircraft and small, unmanned and relatively inexpensive SUAVs.

Approval of this exemption would thereby enhance safety and fulfill the Secretary of Transportation's (the FAA Administrator's) responsibilities to "...establish requirements for the safe operation of such aircraft systems in the national airspace system." Section 333(c) of the FMRA.

#### 3. Name and Address of the Petitioner

Burnz Eye View, Inc. Attn: Mark Burns Ph: 619-450-1908

Email: office@burnzeyeview.com

Address: 699 N. Vulcan Avenue, Suite 113, Encinitas, CA 92024

# 4. Regulations Petitioner Petitions for Exemption, If Such Regulations Apply to SUAVs

14 CFR Part 21 14 C.F.R. 45.23(b) 14 CFR 61.113 (a) & (b) 14 C.F.R. 91.7 (a) 14 CFR 91.9 (b) (2)	14 C.F.R. 91.121	14 CFR 91.405 (a) 14 CFR 407 (a) (1) 14 CFR 409 (a) (2) 14 CFR 417 (a) & (b)
14 C.F.R. 91.103	· · · · · ·	

This exemption application is expressly submitted to fulfill Congress' goal in passing Section 333 (a) through (c) of the Reform Act. This law directs the Secretary of Transportation to consider whether certain unmanned aircraft systems may operate safely in the national airspace system ("NAS") before completion of the rulemaking required under Section 332 of the FMRA. In making this determination, the Secretary is required to determine which types of SUAVs/UASs do not create a hazard to users of the NAS, or the public, or pose a threat to national security in light of the following:

- A. The SUAVs size, weight, speed, and operational capability;
- B. Operation of the SUAVs in close proximity to airports and populated areas;
- C. Operation of the SUAVs within visual line of sight of the operator. FMRA §333 (a).

Lastly, if the Secretary determines that such vehicles "may operate safely in the national airspace system, the Secretary shall establish requirements for the safe operation of such aircraft in the national airspace system." *Id.* §333(c) (emphasis added). The Petitioner interprets this provision to place the duty on the Secretary/FAA

Administrator to not only process applications for exemptions under section 333, but for the Secretary/Administrator to affirmatively craft conditions for the safe operation of the SUAVs, if it should be determined that the conditions set forth herein do not fulfill the statutory requirements for approval.

The Federal Aviation Act expressly grants the Secretary/FAA Administrator the authority to issue exemptions. This statutory authority, by its terms, includes exempting civil aircraft, as the term is defined under §40101 of the Act, which currently may or hereafter may include SUAVs, from the requirement that all civil aircraft must have a current airworthiness certificate.

The Secretary/FAA Administrator may grant an exemption from a requirement of a regulation prescribed under subsection (a) or (b) of this section or any sections 44702-44716 of this title if the Secretary/FAA Administrator finds the exemption in the public interest. 49 U.S.C. §44701(f). See also 49 USC §44711(a); 49 USC §44704; 14 CFR §91.203 (a) (1).

The Burnz Eye View, Inc.'s SUAVs are multi-rotorcraft equipped with an on board NAZA computer stabilization controller and GPS, weighting 55 lbs or less and most typically less than 20 lbs., including camera/payload. They operate, under normal conditions, at speeds of 5-40 KIAS and at a speed of no more than 50 KIAS and have the capability to hover and move in the vertical and horizontal plane independently/ simultaneously. They will operate in line of sight and will operate only within the areas described herein. Such operations will insure that the SUAVs will "not create a hazard to users of the NAS or the "public" as described in the FMRA §333(b).

Given the small size of the SUAVs involved, and the limited environment within which they will operate, the Petitioner falls squarely within that zone of safety (an equivalent level of safety) in which Congress envisioned that the FAA must, by exemption, allow commercial operations of SUAVS to commence immediately. Also, due to the size of the SUAVs and the restricted areas in which the relevant SUAVs will operate, approval of the application presents no national security issue.

Given the clear direction in FMRA §333, the authority contained in the Federal Aviation Act, as amended, the strong equivalent level of safety surrounding the proposed operations, and the significant public benefit, including enhanced safety, reduction in environmental impacts (including reduced emissions associated with allowing SUAVs for filming operations rather than full-sized aircraft, the grant of the requested exemptions is in the public interest. Accordingly, the Petitioner respectfully requests that the FAA grant the requested exemption without delay.

#### 5. Limitations and Conditions

The Petitioner proposes that the exemption requested herein be issued pursuant the limitations and conditions listed herein. These conditions/limitations provide for an even higher level of safety to operations under the current regulatory structure which apply to actual certificated aircraft because the proposed operations represent a safety enhancement to the already very safe SUAVs filming operations conducted by recreational SUAVs and conventional aircraft.

These limitations and conditions to which Burnz Eye View agrees to be bound when conducting business/commercial operations under this FAA issued exemption include:

- A. The SUAVs maximum take-off weight ("MTOW") will be less than 55 lbs., usually less than 25 lbs.
- B. Flights will be operated within the line of sight of the Operator and/or observer. Maximum total flight time for each operational flight will be 60 minutes or less. Flights will be terminated and not less than 10% battery power reserve, which should that occur prior to the 60 minute limit.
- C. The Operator may designate and supervise another experienced SUAV operator to operate the SUAVs subject to the supervision and direction of the Operator.
- D. Flights will be operated at an altitude of no more than 500 feet above ground level ("AGL") underneath navigable airspace. Minimum crew for each business operation will consist of the SUAVs' Operator, the Visual Observer/Camera Operator, if required for the operation. Flights will not be operated in Class A, B, C, or D airspace but may be operated in class E and G airspace, provided the SUAVs Operator/Observer maintains visual line of sight with the SUAVs and safe separation from actual certificated aircraft in the airspace.
- E. Briefing will be conducted in regard to the planned SUAVs operations prior to each day's production activities. It will be mandatory that all personnel who will be either Operator or visual observer/camera operator be present for this briefing. The Operator will review weather, flight battery requirements, landing and takeoff distances and aircraft performance data before initiation of flight. The SUAVs and batteries to be used will be safety inspected prior to flight using appropriate checklists.
- F. The Operator will attempt to obtain the consent of all persons involved in the filming and ensure that only consenting persons will be allowed within 25 feet of the flight operation.
- G. Operator and observer/camera operator will have been trained in operation of SUAVs generally and received up-to-date information on the particular SUAVs to be operated.
- H. Operator and Observer/Camera Operator shall at all times during flight operation, be in direct voice/radio communication.
- I. Written and/or oral permission from the relevant property holders may be obtained. All required permissions and permits may be obtained from territorial, state, county or city jurisdictions, including local law enforcement, fire, or other appropriate governmental agencies. If the SUAVs loses communications or loses its GPS signal, the UAS will have capability to return to home/pre-determined location within the Security Perimeter and land.
- J. The SUAVs will have the capability to abort a flight, in case of unpredicted obstacles or emergencies. The Operator shall carry/use appropriate LIPO battery

protective bags and fire extinguishing equipment.

# 6. Description of Regulations Which May Apply From Which Petitioner Requests Exception 14 C.F.R. Part 21, Subpart H: Airworthiness Certificates 14 C.F.R. §91.203 (a) (1)

Subpart H, entitled Airworthiness Certificates, establishes the procedural requirements for the issuance of airworthiness certificates as required by FAR §91.203 (a) (1). Given the size and limited operating area associated with the SUAVs to be utilized by the Petitioner, an exemption from Part 21 Subpart H meets the requirements of an equivalent level of safety under Part 11 and Section 333 of the FMRA. The Federal Aviation Act (49 U.S.C.§44701 (f)) and Section 333 of the FMRA both authorize the FAA to exempt aircraft from the requirement for an airworthiness certificate, upon consideration of the size, weight, speed, operational capability, and proximity to airports and populated areas of the particular SUAVs. In all cases, an analysis of these criteria demonstrates that the UAS operated without an airworthiness certificate, in the restricted environment and under the conditions proposed will be at least as safe, or safer, than a conventional aircraft (fixed wing or rotorcraft) operating with an airworthiness certificate without the restrictions and conditions proposed.

The SUAVs to be operated hereunder is less than 55 lbs. fully loaded, is by definition unmanned and carries neither a pilot nor passenger, carries no explosive materials or flammable liquid fuels, and operates exclusively within a limited flight area. Unlike other civil aircraft, operations under this exemption will be tightly controlled and monitored by the Operator and will also remain within the requirements of, and in compliance with, local public safety requirements. These safety enhancements, which already apply to civil aircraft provide a greater degree of safety to the public and property owners than conventional operations conducted with airworthiness certificates issued under 14 C.F.R. Part 21, Subpart H. Lastly, application of these same criteria demonstrates that there is no credible threat to national security posed by the UAS due to its size, speed of operation, location of operation, lack of explosive materials or flammable liquid fuels, and inability to carry a substantial external load.

#### 14 C.F.R. § 45.23 (b). Marking of the Aircraft

The regulation requires; When marks include only the Roman capital letter "N" and the registration number is displayed on limited, restricted or light-sport category aircraft or experimental or provisionally certificated aircraft, the operator must also display on that aircraft near each entrance to the cabin, cockpit, or pilot station, in letters not less than 2 inches nor more than 6 inches high, the words "limited," "restricted," "light-sport," "experimental," or "provisional," as applicable.

Even though the SUAVs will have no airworthiness certificate, an exemption may be needed as the SUAVs will have no entrance to the cabin, cockpit or pilot station on which the word "Experimental" can be placed. Given the size of the SUAVs, two-inch lettering will be impossible. The word "Experimental" will be placed on the fuselage in compliance with §45.29 (f). The equivalent level of safety will be provided by having the SUAVs marked on its fuselage as required by §45.29 (f) where the pilot, observer and others working with the SUAVs will see the identification of the SUAVs as

"Experimental." The FAA has issued the following exemptions to this regulation to Exemptions Nos. 10700, 8738, 10167 and 10167A.

#### 14 C.F.R. § 61.113 (a) & (b): Private Pilot Privileges and Limitations: Operator.

Sections 61.113 (a) & (b) limit private pilots to non-commercial operations. Because the SUAVs is unmanned and will not carry a pilot or passengers, the proposed operations can achieve the equivalent level of safety of current operations by requiring the Operator operating the aircraft to have a FAA ground school course rather than a commercial pilot's license to operate this small SUAVs. Unlike a conventional aircraft that carries the pilot and passengers, the SUAVs is remotely controlled with no living thing on board. The area of operation is controlled and restricted, and all flights are planned and coordinated in advance. The level of safety provided by the requirements included herein exceed that provided by a single individual holding a commercial pilot's certificate operating a conventional aircraft. The risks associated with the operation of the SUAVs are so diminished from the level of risk associated with commercial operations contemplated by Part 61 when drafted, that allowing operations of the SUAVs as requested with a private pilot as the Operator exceeds the present level of safety achieved by 14 C.F.R. §61.113 (a) & (b).

# 14 C.F.R. §91.7(a): Civil aircraft airworthiness.

The regulation requires that no person may operate a civil aircraft unless it is in airworthy condition. As there will be no airworthiness certificate issued for the aircraft, should this exemption be granted, no FAA regulatory standard will exist for determining airworthiness. Given the size of the aircraft and the requirements contained herein for the use of safety check lists prior to each flight, an equivalent level of safety will be provided.

# 14 C.F.R. § 91.9 (b) (2): Civil Aircraft Flight Manual in the Aircraft.

Section 91.9 (b) (2) provides: No person may operate a U.S.-registered civil aircraft ..

(2) For which an Airplane or Rotorcraft Flight Manual is not required by §21.5 of this chapter, unless there is available in the aircraft a current approved airplane or Rotorcraft Flight Manual, approved manual material, markings, and placards, or any combination thereof.

The SUAVS, given its size and configuration has no ability or place to carry such a flight manual on the aircraft, not only because there is no pilot on board, but because there is no room or capacity to carry such an item on the aircraft.

The equivalent level of safety will be maintained by keeping the SUAVs operation manual and appropriate checklists at the ground control point where the pilot flying the SUAVs will have immediate access to it. The FAA has issued the following exemptions to this regulation: Exemption Nos. 8607, 8737, 8738, 9299, 9299A, 9565, 9565B, 10167, 10167A, 10602, 32827, and 10700.

## 14 C.F.R. § 91.103: Pre-flight action

This regulation requires each pilot in command to take certain actions before flight to insure the safety of flight. As FAA approved rotorcraft flight manuals will not be provided for the aircraft an exemption will be needed. An equivalent level of safety will be provided as set forth hereinabove. The Operator will take all actions including reviewing weather, flight battery requirements, landing and takeoff distances and aircraft performance data before initiation of flight using appropriate checklists.

# 14 C.F.R. §91.109: Flight instruction:

Section 91.103 provides that no person may operate a civil aircraft (except a manned free balloon) that is being used for flight instruction unless that aircraft has fully functioning dual controls.

SUAVs and remotely piloted aircraft, by their design do not have fully functional dual controls. Flight control is accomplished through the use of a radio transmitter that communicates with the aircraft via a receiver in the SUAVs. The FAA has approved exemptions for flight training without fully functional dual controls for a number of aircraft and for flight instruction in experimental aircraft. See Exemption Nos.5778K & 9862A. The equivalent level of safety provided by the fact that neither a pilot nor passengers will be carried in the aircraft and by the size and speed of the aircraft.

#### 14 C.F.R. §91.119: Minimum safe altitudes

Section 91.119 establishes safe altitudes for operation of civil aircraft. Section 91.119 (d) allows helicopters to be operated at less than the minimums prescribed, provided the person operating the helicopter complies with any route or altitudes prescribed for helicopters by the FAA. This exemption is for a SUAVS and the exemption requests authority to operate at altitudes up to 500 AGL underneath navigable airspace and in class E and G airspace maintaining safe separation from actual aircraft, an exemption may be needed to allow such operations.

The equivalent level of safety will be achieved given the size, weight, speed of the UAS as well as the location where it is operated. No flight will be taken without the permission of the property owner or local officials. Because of the advance notice to the property owner and participants in the filming activity, attempts will be made to contact all affected individuals regarding the planned flight operations. Compared to flight operations with aircraft or rotorcraft weighting far more than the maximum 55lbs. proposed herein, and the lack of flammable fuel, any risk associated with these operations is far less than those presently presented with conventional aircraft. In addition, the low-altitude operations of the SUAVs will ensure separation between these SUAVs operations and the operations of conventional aircraft that must comply with Section 91.119.

#### 14 C.F.R. §91.121 Altimeter Settings

This regulation requires 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." As the SUAVs may not have a barometric altimeter, but instead a GPS altitude read out, an exemption

may be needed. An equivalent level of safety will be achieved by the operator, pursuant to the Manual and Safety Check list, confirming the altitude of the launch site shown on the GPS altitude indicator before flight.

### 14 C.F.R. § 91.151(a): Fuel Requirements for Flight in VFR Conditions

Section 91.151 (a) prohibits an individual from beginning "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."

The battery powering the SUAVs provides approximately between 10-60 minutes of powered flight. To meet the 30 minute reserve requirement in 14 CFR §91.151, SUAVs flights would be limited to approximately 10 minutes in length. Given the limitations on the SUAVs proposed flight area and the location of its proposed operations within a predetermined area, a longer time frame for flight in daylight or night VFR conditions is reasonable.

Petitioner believes that an exemption from 14 CFR §91.151(a) falls within the scope of prior exemptions. See Exemption 10673 (allowing Lockheed Martin Corporation to operate without compliance with FAR 91.151 (a)). Operating the SUAVs in controlled area where only people and property owners or official representatives who have signed waivers will be allowed, with less than 30 minutes of flight operation time, does not give rise to the type of risks that Section 91.151(a) was intended to alleviate particularly given the size and speed of the SUAVs. Additionally, limiting SUAV flights to 20 minutes would greatly reduce the utility for which the exemption will be granted.

Petitioner believes that an equivalent level of safety can be achieved by limiting flights to 60 minutes or no less than 10% of battery power, whichever happens first. This restriction would be more than adequate to return the SUAVs to its planned landing zone from anywhere within its limited operating area.

Similar exemptions have been granted to other operations, including Exemptions 2689F, 5745, 10673, and 10808.

# 14 C.F.R. §91.203 (a) and (b): Carrying Civil Aircraft Certification and Registration

The regulation provides in pertinent part:

- (a) Except as provided in § 91.715, no person may operate a civil aircraft unless it has within it the following:
  - (1) An appropriate and current airworthiness certificate. . . .
- (b) No person may operate a civil aircraft unless the airworthiness certificate required by paragraph (a) of this section or a special flight authorization issued under §91.715 is displayed at the cabin or cockpit entrance so that it is legible to passengers or crew.

The SUAVs fully loaded weighs no more than 55 lbs and typically less than 20 lbs. And is operated without an onboard pilot. As such, there is no ability or place to carry certification and registration documents or to display them on the SUAVs.

An equivalent level of safety will be achieved by keeping these documents at the ground control point where the operator/pilot flying the SUAVs will have immediate access to them, to the extent they are applicable to the SUAVs. The FAA has issued numerous exemptions to this regulation. A representative sample of other exceptions includes Exemption Nos. 9565, 9665, 9789, 9789A, 9797, 9797A, 9816A, and 10700.

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

These regulations require that an aircraft operator or owner "shall have that aircraft inspected as prescribed in subpart E of this part and shall between required inspections, except as provided in paragraph © of this section, have discrepancies repaired as prescribed in part 43 of this chapter...," and others shall inspect or maintain the aircraft in compliance with Part 43.

Given that these section and Part 43 apply only to aircraft with an airworthiness certificate, and the requirements of pre-flight inspection required herein, these sections will not apply to the applicant. Routine and pre-flight maintenance will be accomplished by the operator. An equivalent level of safety will be achieved because these SUAVs are very limited in size and will carry a very small payload and operate only in restricted areas for limited periods of time. If mechanical issues arise the SUAVs can land immediately and given its small size poses very little risk to persona or property. The operator will ensure that the SUAVs is in working order prior to initiating flight, perform required maintenance, and keep a log of any maintenance performed. Moreover, the operator is the person most familiar with the aircraft and best suited to maintain the aircraft in an airworthy condition to provide the equivalent level of safety.

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# 7. Publication Summary

Pursuant to 14 C.F.R. Part 11, the following summary is provided for publication in the Federal Register, should it be determined that publication is needed:

Petitioner seeks an exemption from the following rules:

14 C.F.R. §21, subpart H; 14 C.F.R 45.23(b);14 C.F.R. §§ 61.113( a) & (b);91.7 (a); 91.9 (b) (2);91.103(b);91.109; 91.119; 91.121; 91.151(a);91.203(a) and (b); 91.405 (a); 91.407 (a) (1); 91.409 (a) (2); 91.409 (a) (2) and 91.417 (a) & (b) to operate commercially a SUAVS vehicle (55lbs or less) for Aerial Photography Operations.

Approval of exemptions allowing commercial operations of SUAVs for aerial photography/Inspection for the following; Business Operations: over land, water-ways, and oceans; operation over/in non restricted National Parks, National Forests, flight in non-navigable airspace, using non-intrusive recording devices, operation in otherwise unrestricted US States/Territories will enhance safety by reducing risk. Conventional film operations, using jet or piston power aircraft, operate at extremely low altitudes, just

feet from the subject being filmed, and in extreme proximity to people and structures; and present the risks associated with vehicles that weigh in the neighborhood of 4,000 lbs., carrying large amounts of jet A or other fuel. In addition such actual certificated aircraft must fly to and from the film location. In contrast, a SUAVs weighing fewer than 55 lbs., and powered by batteries rather than fuel, eliminates virtually all of that risk. The SUAV is driven/carried to the film set, not flown. The SUAVS will carry no passengers or crew and, therefore, will not expose any crew to the risks associated with manned aircraft flights.

The operation of SUAVs, weighing less than 55 lbs., conducted in the strict conditions outlined above, will provide at least an equivalent level of safety supporting the grant of the exemptions requested herein, including exempting the Petitioner from the requirements of Part 21 and allowing commercial operations. These lightweight aircraft operate at slow speeds, close to the ground, and in a line of sight, relatively sterile environment and are, as a result, far safer than conventional operations conducted with actual aircraft/helicopters operating in close proximity to the ground and people.

### 8. Privacy

All business/commercial flights which occur over private or controlled access property will be with the property owner's prior consent and knowledge. Filming will be of people who have also consented to being filmed or otherwise have agreed to be in the area where filming will take place. Petitioner will not infringe on any individual or landowner privacy rights.

Limited nighttime operations may be conducted. Nighttime as defined FARs in Section is as follows 1.1. "Night means the time between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time." Night operations may be conducted by the SUAVs following the guidelines above and provided such operations have sufficient lighting so that Petitioner/Operator maintains visual line of sight. Allowing SUAVs this exemption will provide a far safer nighttime filming alternative to the current full size aircraft operations.

#### 9. Conclusion

The FAA's purported "ban" on business/commercial Model Aircraft/UAVs operations has actually had the current effect of causing American skies to be less safe. There are many actual certificated pilots who are exceptionally qualified to fly model aircraft/SUAVs with their model aircraft/SUAVs experience, private, commercial or ATP pilot training, licenses and instructor ratings. However, these experienced operators and licensed pilots familiar with the FARs, airspace and safe operating procedures are currently reluctant to commercially operate model aircraft/SUAVs or be involved, for fear of the FAA seeking an enforcement action against them or their actual pilot's licenses.

Presently, during the pendency of these issues in the *Pirker* case, it defies safety or regulatory logic that according to the FAA's current alleged "ban" on business operations of SUAVs, your average enthusiastic 12 year old, who's well meaning Father bought him a quadcopter SUAV equipped with a camera, can operate his SUAV

wherever he wants and take whatever recreational video/pictures subject only to the suggestions of FAA AC 91-57 and yet an FAA certificated private/commercial/ATP pilot cannot be paid to use far higher quality and equipped SUAVs to take an aerial photo, search for missing persona or aerially inspect a farmer's field, despite the significant improvement in safety over non-pilots operating SUAVs recreationally and real aircraft used for aerial photography.

Satisfaction of the criteria provided in Section 333 of the FMRA of 2012, and requiring the SUAV's Operator to have or obtain medical a certificate and an actual pilot's license and considering the small size, weight, speed, operating capabilities, limited operations in proximity to airports and populated areas and operation within visual line of sight and national security – all of which provide more than adequate justification for the grant of the requested exemptions allowing business /commercial operation of applicant's SUAVs for aerial photography/inspection as requested herein.

If this firm can be of any further assistance in processing this request, or you have any other questions or concerns, please do not hesitate to contact me directly, in writing.

CURRAN & CURRAN LAW

Michael D. Curran, Esq./ATP/CFII/MEI

cc: James Williams, FAA

Les Dorr, FAA, Allison Duquette, FAA