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

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

May 13, 2015

Exemption No. 11576
Regulatory Docket No. FAA–2015–0362

Mr. Kurt von Strasser III
Ascent Aerial Video Productions
10300 West Charleston Boulevard, Suite 13−175
Las Vegas, NV 89135

Dear Mr. von Strasser:

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.

The Basis for Our Decision

By letter dated February 9, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Ascent Aerial Video Productions (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct aerial photos, videography, and cinematography for academic community awareness, to augment real estate property listing videos, and video production to small businesses.

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 Inspire 1 and Yuneec Typhoon Q500.

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. 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, Ascent Aerial Video Productions 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, Ascent Aerial Video Productions 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 DJI Inspire 1 and Yuneec Typhoon Q500 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.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 May 31, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Kurt von Strasser III
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UAS Integration office – Special Rules Coordinator
Federal Aviation Administration
U. S. Department of Transportation
Docket Management System
1200 New Jersey Ave., SE
Washington, DC 20590

Re: Introduction, Exemption for Use of UAS For Real Estate, Public Interest, Business Applications

February 9, 2015

To Whom It May Concern,

I, Kurt von Strasser, am writing pursuant to the FAA Modernization and Reform Act of 2012 and the procedures contained within 14 C.F.R. 11, to request that I, Kurt von Strasser, an owner and operator of small unmanned aircraft, be exempted from the Federal Aviation Regulations (FARs) listed below so that I, Kurt von Strasser, may operate my small ultra light weight unmanned aircraft system (UAS) commercially in airspace regulated by the Federal Aviation Administration (FAA).

As described herein I, Kurt von Strasser, am a licensed Realtor within the State of Nevada and obtaining licensing in the State of California. I am a licensed private pilot, certificate number: 561510978, having obtained my license in 1980. I am experienced in flying hobby helicopters for recreational purposes and have been flying RC fixed wing and rotor aircraft since 1975. I have added two state-of-the-art professional grade quad-copter UAS vehicles from well-known manufacturers (DJI & Yuneec)) to my inventory equipped with factory installed high resolution gimbaled camera systems with intent for aerial photos, videography / cinematography. The purpose of this will be to enhance academic community awareness for those individuals and companies unfamiliar with the geographical layout of the areas I serve, to augment real estate real property listing videos and to provide video production services to small businesses, following the exemption and approval for my operations by the FAA. My goal is to enhance academic research experience for the areas I serve as well as to provide a valuable and needed service for all levels of real estate operations while also reducing risk and liability from manned aircraft alternatives.

I am also a member of the AMA, Academy of Model Aeronautics and have flown small RC electric helicopters for over six (6) years without incident. I have been flying RC (radio controlled) fixed wing aircraft since 1976, also without incident, including electric fixed wing aircraft since 2005. Committed to safety with each flight. my exemption request would permit operation of ultra light weight, unmanned (piloted by remote control) and comparatively inexpensive UAS(s) in areas away from general public, airports, heliports and vehicular traffic. My general purpose for the use of the UAS will be to produce community videos, videos of

commercial and residential properties for sale or rental, and within property boundaries for individual homeowner real estate listing videos/photos and small business videos. Currently, similar lightweight, remote controlled UAS's are legally operated by unmonitored amateur hobbyists with no safety plan or controls in place to prevent catastrophe. I have personally designed and implemented safety protocols and controls to prevent public hazard and mitigate risk significantly over the alternative manned aircraft hazards/catastrophe. In addition, services performed by the UAS will allow for video which cannot be safely shot from conventional manned aircraft alternatives.

Additionally, I will notify any persons present in the operational area by posting temporary safety signs notifying all persons that aerial drone videography operations are taking place and to be alert to the presence of the UAS aircraft. Signs will be posted up to 30 minutes before flight operations and continue until all UAS operations are concluded at each site. This will act to further safety protocols exclusive to lightweight UAS's specific to real estate video and photography usage as I, Kurt von Strasser, record flight data and other information gained through permitted flight operations to share with the FAA through any required FAA reports to assist with future protocol and safety regulation.

Granting my, Kurt von Strasser's request comports with the Secretary of Transportations (FAA Administrators) responsibilities and authority to not only integrate UAS's into the national airspace system, but to also establish requirements for the safe operation of such aircraft systems [UAS's] in the national airspace system under Section 333(c) of the Reform Act specific to the use of UAS's for real estate/Realtor purposes and other small business applications. Further I will conduct my operations in compliance with the protocols described herein or as otherwise established by the FAA.

For the reasons stated below I, Kurt von Strasser, respectfully request the grant of an exemption allowing me to operate ultra light weight, remote controlled UASs for academic community awareness to benefit/stimulate attraction to the areas of operation in Las Vegas and its surrounding communities to enhance real estate listing videos for businesses and homeowners who cannot afford expensive, high-risk manned aircraft for the same purpose. My activities will promote local economic growth through increased employment and increased tax base, the provision of new services and enhancement of the real estate listing process while also producing a more efficient and more comprehensive real estate listing system, allowing consumers to better determine the value of the specific properties using enhanced online video capabilities. Furthermore, by using my UAS system as an alternative to heavier manned aircraft containing combustible fuel that poses potential public hazard, I will also be contributing to the safety of the local communities served.

I have attached detailed information on the two UAS proposed. The following is a short summary of each system:

UAS #1 DJI Inspire 1 Quad
Manufacturer: DJI
Model: Inspire 1 T600
Weight: 2935 g / 6.47 Pounds
Passenger Capacity: 0 (unmanned)
Size (dimensions): 438x451x301 mm (17.24x17.76x11.85 inches)
Max Speed: 22 mps (72.18 fps / 49.21 mph)
Max Flight Time: 18-25 mins
Max Ceiling (software limited): 400 ft AGL
Operations: Line of Sight
Controller: Dedicated Commercial Controller with 2 km maximum rated operating distance

UAS #2 Yuneec Typhoon Q500
Manufacturer: Yuneec Electric Aircraft
Model: Typhoon Q500
Weight: 1700 g / 3.75 Pounds
Passenger Capacity: 0 (unmanned)
Size (dimensions): 420x420x240 mm (16.53x16.53x9.45 inches)
Max Speed: 22 mps (72.18 fps / 49.21 mph)
Max Flight Time: 25 minutes
Max Ceiling (software limited): 400 ft AGL
Operations: Line of Sight
Controller: Dedicated Commercial Controller with 2 km maximum rated operating distance

Specifically, each UAS is:

A lightweight (< 7.0 lb gross weight with all on-board equipment), battery operated 4- motor rotorcraft in the form of a quadcopter that takes off and lands vertically, manufactured by DJI, Model Inspire 1 , or manufactured by Yuneec, Model Typhoon Q500, each with the following equipment:

– An on-board flight computer with GPS navigation and location ability that receives signals for flight controls from a ground-based transmitter/controller;
– An on-board camera capable of capturing imagery in the form of full color, high definition still photos and video;
– An on-board telemetry system that delivers flight data from the on-board flight computer to the on-board radio transmitter including altitude AGL, horizontal and vertical speed, compass direction of flight and direction back to its launch site;
– A 600mW, 5.8GHz on-board radio transmitter that transmits live video from the on-board camera plus all the flight data from the telemetry system described above;

The Ground Station Includes:
– A Pilot in Command (PIC) in operational control of a flight operation from beginning to end and who controls the UAS while in the air;
– A 100mW, 2.4GHz radio transmitter/controller operated by the PIC to control the UAS while in flight;
– A radio receiver receiving live video and flight data from the on-board camera and computer projects it all together onto a screen for the PIC to view during flight;
– A Visual Observer (VO) is a person who provides a

Thank you for reviewing my request.

Respectfully Submitted,

Kurt von Strasser

Kurt von Strasser III
REALTOR® Urban Nest Real Estate

Private Pilot, Single Engine Land VFR
Drone Pilot

Kurt von Strasser

Ascent Aerial Video Productions

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UAS Integration Office – Special Rules Coordinator
Federal Aviation Administration
U. S. Department of Transportation
Docket Management System
1200 New Jersey Ave., SE
Washington, DC 20590

February 10, 2015

Re: Petition for Exemption for Use of UAS for Real Estate, Public Interest, Small Business Applications Under Section 333, Title 14

Pursuant to Section 333 off the FAA Modernization and Reform Act of 2012, and 14C.P.R. Part 11, I Kurt von Strasser and my Company, Ascent Aerial Video Productions, hereby applies for an exemption from the Federal Aviation Regulations identified below and to permit the commercial use of use of ultra-light unmanned aerial systems for photography and videography.

This exemption is made based on information outlined in this petition, as well as the accompanying DJI Inspire 1 Operators Manual (Appendix D), the Yuneec Typhoon Q500 Operators Manual (Appendix E) and my own Ascent Aerial Video Productions Operational Manual (Appendix C). The UA aircraft were selected specifically because of their proven capability for stable, reliable controlled flight as well as a gyro stabilized flight mode, GPS aided navigation, an on-board compass, blinking LED's on the bottom, a failsafe mode for returning home, and ground station based telemetry of flight operations. These devices are offered for general sale around the world and have often been used as Model Aircraft in the USA. Each has extensive manufacturers support including operating manuals, video training, software updates and customer support.

I. Petitioner's Contact Information:

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Las Vegas, NV 89135
Phone: 702.907.7515
Email: kbs@parkavenueventures.net

II. The Specific Sections of Title 14 of the Code of Federal Regulations From Which Kurt von Strasser III Requests Exemption are:

14 CFR 21; 14 C.F.R. 45.23(b); 14 CFR 61.113 (a) & (b); 14 C.F.R. 91, et seq.; 14 CFR 407 (a) (1); 14 CFR 409 (a) (2); and, 14 CFR 417 (a) & (b).

III. The Extent of relief Kurt von Strasser III seeks and the Reason He Seeks Such Relief:

I, Kurt von Strasser III, am a licensed Private Pilot, certificate number 561510978, having obtained my license in 1980.

I, Kurt von Strasser III, submit this application in accordance with the Reform Act, 112 P.L. 95 §§ 331-334, seeking relief from any currently applicable FARs operating to prevent me, Kurt von Strasser III, contemplated commercial cinematic, academic and other flight operations within the national airspace system.

The Reform Act in Section 332 provides for such integration of civil unmanned aircraft systems into our national airspace system as it is in the public's interest to do so. My, Kurt von Strasser III's, ultra-light weight UAS meets the definition of "small unmanned aircraft" as defined in Section 331 and therefore the integration of my ultra-light weight UAS is expressly contemplated by the Reform Act. I would like to operate my ultra-light weight UAS prior to the time period by which the Reform Act requires the FAA to promulgate rules governing such craft. Thereby, providing direct experience and valuable information for formal regulation that can be administered uniformly to all real estate related UAS aerial video and photography.

The Reform Act guides the Secretary in determining the types of UAS's that may operate safely in our national airspace system. Considerations include: The weight, size, speed and overall capabilities of the UAS's; whether the UAS will be operated near airports or heavily populated areas; and, Whether the UAS will be operated by line of sight. 112 P.L. 95 § 333 (a). Each of these items reflect in favor of an exemption for me. My UAS aircraft utilize four (4) counter-rotating propellers for balance, control and stability. My UA's are equipped with GPS and auto return safety technology. My UA Maximum Takeoff Weight is less than seven (7) pounds and four (4) pounds each, respectively, (far below the maximum 55 pound limit); including

camera with gimbal and any other payload. Each would be classified as an ultra-light UAS aircraft.

I consider safety as foremost with each flight. My small unmanned aircraft are designed to hover in place via GPS and operate in less than a 24 knot (15 mph) wind. For safety, stability and fear of financial loss I will not fly in winds exceeding 16 kph (10 mph). Built in safety systems include a GPS mode that allows my UAS to hover in place when radio controls are released. With three modes to choose from, I utilize the Smart Mode* (see Manufacturer's Operating Manual) for aerial videography / photography. This is the safest, most reliable and stable mode to prevent accident and hazard. When pilot communication is lost the UA is designed slowly return and descend to point of takeoff. I do not operate my UAS near airports, Hospitals nor Police heliports, and do not operate near areas where general public is within fifty to one hundred (50-100) yards depending on location, conditions and weather.

Horizontal Ground Speed for most drone videography requirements are typically less than 7-10 miles per hour which further adds to safety. Maneuvers are limited in scope and gently performed (as opposed to more radical recreational use) due to the need to keep the camera steady for video purposes. Flight paths are planned out in advance, as opposed to recreational flight and therefore safer than many recreational flights since speed, maneuvers and flight paths are very conservative and preplanned.

During any planned operation of the my UAS, I first scout the area and flight path, determine what obstacles, if any, are present, where to post warning signs notifying persons that aerial drone photography is taking place and any other conditions from lighting, line of sight issues and power lines that I should be aware of to conduct safe operations. I clearly mark the area of the flight path with warning signs indicating that the UAS will in operating for 30 minutes prior to the flight and until all flight operations have ceased.

I maintain a second observer at all times who remains within 10 yards of the PIC position and who is responsible for assigning in spotting for obstacles, people, vehicles and manned aircraft as well as keeping track of the UAS position.

I am constantly on alert for any manned aircraft (Police/Medical helicopters, private and commercial aircraft of any type, model aircraft, etc.) and prepared to land/abort immediately to the nearest and safest ground point should a manned aircraft approach my location or I suspect manned aircraft may approach near my location. My UAS is capable of vertical and horizontal operations, and are flown only within my line of sight of me, as the remote control pilot (PIC).

Utilizing battery power rather than combustible fuels, flights generally last between three (3) to eight (8) minutes, with an altitude under one hundred fifty (150) feet. I utilize a fresh fully charged battery with each flight as a safety precaution; full flight

time limit for each battery is eighteen (18) minutes to twenty five (25) as specified by the manufacturers and consistently twenty one (21) to twenty five (25) minutes as tested.

My flight equipment provides for the monitoring of battery levels during flight. I do not operate my UAS at or below manufacture recommend minimum charge levels for operation; preferring to remain well within a safe operating range to insure adequate communication between radio control and UAS to eliminate potential for crash, loss of control or hazard. Reserve batteries are at hand with each event to insure replacement for a sufficient safe level of operation. I do not believe in taking risk that may cause a crash, that could create hazard to the public, public or private property or manned aircraft and have no desire to lose my very substantial investment in my UAS equipment.

As of this time I have completed over 200 practice flights with over 40 hours of UAS airborne operations as a hobbyist simulating flights for future commercial use to gain familiarization with the characteristics of my specific UAS models' operations and performance under different temperature and weather conditions. I also practice regular weekly computerized simulated flights to maintain adequate skills and response reflex time, all this for the sake of safety. I have no less than 5 hours of flight time logged in each model proposed herein within the past 90 day period.

I, Kurt von Strasser III, am extremely cautious when operating of my UAS/ultra light weight unmanned aircraft and will not "create a hazard to users of the national airspace system or the public." 112 P.L. 95 § 333 (b). Given the small size and weight of my UAS it falls well within Congress's contemplated safety zone when it promulgated the Reform Act and the corresponding directive to integrate UAS's into the national airspace system. Kurt von Strasser III's UAS, used in hobby flight, has a demonstrable safety record and does not pose any threat to the general public or national security. The UAS aircraft used are late model units manufactured by leading manufacturers (brand names) in the industry, DJI and Yuneec. Each has extensive experience in Unmanned Aerial Video Flight Systems and provides extensive software, flight manuals, operational information, specifications and customer support on their products.

IV. How Kurt von Strasser III's Request Will Benefit the Public as a Whole:

Aerial videography for geographical awareness and for real estate marketing has been around for a long time through manned fixed wing aircraft and helicopters. For small budget real estate companies and average homeowners the expense of such aerial videography is cost prohibitive. Only large companies and high end Realtors or luxury homeowners can afford to absorb such expense. Depriving non-luxury homeowners and lower budget Realtors from a valuable marketing tool. Manned aircraft pose a threat to the public through potential catastrophic crash, each having

the potential result of loss of life, damage to property and substantial cost involved in responding to, handling the emergency and the subsequent investigation and clean up. Each such manned aircraft event also involves combustible fuel that in the past has exploded and burned on impact. Police helicopters have made emergency hard landings within city limits. My, Kurt von Strasser III's, UAS pose no such threat since size and lack of combustible fuel alleviates almost all potential threat to the public.

Congress has already proclaimed that it is in the public's interest to integrate commercially flown UAS's into the national airspace system, hence the passing of the Reform Act. Granting my, Kurt von Strasser III's, exemption request furthers the public interest through academic/visual awareness of the geographical benefits in and around the Las Vegas area. My ultra-light weight UAS is battery powered and creates no emissions that can harm the environment. The consequence of my ultra-light weight UAS crashing is far less than a full size helicopter or fixed wing aircraft; which are manned, heavy, contain combustible fuel and can cause catastrophic devastation to the public.

The public's interest is furthered by minimizing ecological and crash threat by permitting aerial video/photo capture through my battery operated ultra-light weight UAS's. Permitting me, Kurt von Strasser III, to immediately fly within national air space furthers economic growth. Granting my exemption request substantially furthers the economic impact for the Las Vegas and surrounding communities and cities for companies looking to relocate or build in the areas as well as individuals looking to relocate for career advancement through academic and geographical awareness. Both of which serve as a stimulus to the communities involved.

V. Reasons Why Kurt von Strasser III's Exemption Will Not Adversely Affect Safety or How the Exemption Will Provide a Level of Safety At Least Equal to Existing Rule:

My, Kurt von Strasser III's, exemption will not adversely affect safety. Quite the contrary, for the reasons stated permitting me, Kurt von Strasser III, to log more flight time in FAA controlled airspace, with communication with the FAA, will allow me to contribute to the innovation and implementation of new and novel, as of yet undiscovered safety protocols for Realtors that can be embraced by the NAR, AAR, and TAR for development in cooperation with the FAA. In addition I, Kurt von Strasser III, submit the following representations of enhancements to current aerial videography and photography for real estate:

My UAS aircraft weigh less than 5 pounds complete with a small ultra-light weight high quality factory installed gimbaled high definition camera; I only operate my UAS below 300 feet[9] (well within the 400 foot permissible ceiling set by the FAA

Modernization and Reform Act of 2012); my UAS only operates for 3-8 minutes average per flight; I land my UAS significantly prior to manufacturer recommended minimum level of battery power which my flight systems monitor throughout the flight; I pilot my UAS through remote control only by line of sight; My UAS has GPS a flight safety feature whereby it hovers and then returns to the point of takeoff, then slowly lands if communication with the remote control pilot is lost; I actively analyze flight data and other sources of information to constantly update and enhance safety protocols; I only operate in reasonably safe environment that are strictly controlled, are away from power lines, elevated lights, airports and actively populated areas; I conduct extensive pre-flight inspections and protocol according to all manufacturers recommendations as well as that of the AMA (Academy of Model Aeronautics) , during which safety carries primary importance; I always obtains all necessary permissions prior to operation; and, I have procedures in place to abort flights in the event of safety breaches or any potential danger.

My, Kurt von Strasser III's, safety protocols provide a level of safety equal to or exceeding existing rules. It is important to note that absent the integration of commercial UAS into our national airspace system, helicopters are the primary means of aerial video and photography for community awareness and real estate. While the safety record of such helicopters is remarkably astounding, there have been incidents involving loss of life as well as extensive property damage; it is far safer to operate a battery powered ultra-light weight UAS.

First, the potential loss of life is diminished because UAS's carry no people on board and I only operate my UAS in specific areas away from mass populations. Second, there is no fuel on board a UAS and thus the potential for fire or explosions is greatly diminished.

Third, the small size and extreme maneuverability of my UAS allows me to remotely pilot away from and avoid hazards quickly and safely. Lastly, given its small size and weight, even when close enough to capture amazing images, my UAS need not be so close to the objects they are focused on through the technology and use of post editing software allowing pan, tilt and zoom.

Accordingly, my UAS has been experimentally operated for familiarization/competency and will continue to operate at and above current safety levels.

VI. A Summary the FAA May Publish in the Federal Register:

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

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 my UAS aircraft permits exemption from Part 21 because my UAS aircraft meet (and exceeds) 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 UAS's from the airworthiness certificate requirement in consideration of the weight, size, speed, maneuverability and proximity to areas such as airports and dense populations. My current and projected UAS's meet or exceed each of the 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 on board pilots or passengers, and given the size of the UAS's, this Regulation is inapplicable. An equivalent level of safety will be achieved by maintaining a safety/flight manual delineating areas of where safety can be defined. 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 my UAS utilizes electronic global positioning systems with a barometric sensor.

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 any such required certifications and registrations by me and any proposed PIC's of the UAS proposed.

14 C.F.R. § 45.23: Marking of the Aircraft.

Applicable Codes of Federal Regulation require aircraft to be marked according to certain specifications. My UAS are, by definition, unmanned. They therefore do not have a cabin, cockpit or pilot station on which to mark certain words or phrases. Further, two-inch lettering is difficult to place on such small aircraft with dimensions smaller that minimal lettering requirement.

Regardless, I propose that each UA will carry its appropriate "N" number if one is issued by the FAA, in such size as can reasonably fit upon the sides of the aircraft in at least two locations on the booms or fuselage. If an N number is not obtained from the FAA, I will mark the related UAS in the largest possible lettering by placing the word "EXPERIMENTAL" on its fuselage as required by 14 C.F.R. §45.29 (f) so that I the pilot, or anyone assisting me as a spotter with the UA will see the markings. The FAA has previously issued exemptions to this regulation through Exemptions Nos. 8738, 10167, 10167A and 10700.

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. The FAA has previously ruled in its exemption that a Private Pilot's Certificate is required for flight of the UAS for commercial purposes. I, Kurt von Strasser III, am a licensed private pilot and will assure that all PIC's proposed to operate any of the UAS aircraft also have at minimum a Private Pilot's certificate and current Class Three medical.

My UAS's do not carry any pilots or passengers. The risks attended to the operation of my UAS is far less than the risk levels inherent in the commercial activities outlined in 14 C.F.R. § 61, et seq. Thus, allowing me and any other Private Pilot Certified PIC to operate the proposed UAS's to meet and exceed current safety levels in relation to 14 C.F.R. §61.113 (a) & (b).

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

14 C.F.R. § 91.119 prescribes safe altitudes for the operation of civil aircraft. It allows helicopters to be operated at lower altitudes in certain conditions. My UAS will never operate at an altitude greater than 300 AGL; safely below the standard of 400 AGL. I will however operate my UAS in safe areas away from public and traffic, providing a level of safety at least equivalent to or below those in relation to minimum safe altitudes. Given the size, weight, maneuverability and speed of my UAS, an equivalent or higher level of safety will be achieved.

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

The above-cited 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 only apply to aircraft with an airworthiness certificate. They will not, therefore, apply to my proposed UAS's. However, as a safety precaution I require the PIC to perform a comprehensive pre-flight and post-flight inspection of the UAS, adhering to the manufacturers' recommendations and checking all flight systems, power system, rotors and electronics including battery levels. The UAS has significant self-diagnostic software and systems checks built into its operations. Any system not reporting correctly and fully functional shall result in an aborted flight until the problem is identified and solved and the systems once again report 100% green and good to go.

A Summary the FAA May Publish in the Federal Register: A. 14 C.F.R. 21 and 14 C.F.R. 91: Airworthiness Certificates, Manuals and similar. 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 my UAS permits exemption from Part 21 because my proposed UAS's 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 UAS's from the airworthiness certificate requirement in consideration of the weight, size, speed, maneuverability and proximity to areas such as airports and dense populations. My UAS's both meet or exceeds each of the 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's, this Regulation is inapplicable. An equivalent level of safety will be achieved by maintaining a manual. The FAA has previously issued exemptions to this regulation in Exemption Nos. 8607, 8737, 8738, 9299, 9299A, 9565, 9565B, 10167, maintenance program that involves regular software updates and curative measures for any damaged hardware. Therefore, an equivalent level of safety will be achieved.

In summary, Kurt von Strasser III 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 commercially operate my two small ultra-light weight unmanned aircraft vehicles (UA's) in community awareness, for the public good and for real estate operations and small business operations, to develop economic platforms for real estate to enhance the experience of those seeking to relocate to any such area served.

Currently, area awareness and real estate aerial videography/photography relies primarily on the use of larger aircraft running on combustible fuel, posing potential risk to the public. Granting my request for exemption will reduce current risk levels and thereby enhance safety.

My UAS aircraft do not contain potentially explosive fuel, they are far smaller, lighter and more maneuverable than conventional real estate video and photographic aircraft with much less flight time and do not require transit to and from the "shoot" location to an Airport, resulting in far less required time airborne and therefore exposure & liability. Further, I operate at lower altitudes and in controlled airspace eliminating potential public risk flying to and from established airports and

operations take place well below pattern altitude. All of my operations are conducted with a pre-flight aircraft inspection, flight path inspection, and actual flights are normally conducted at very low altitudes and speed with conservative maneuvers necessary for video cinematography.

I, Kurt von Strasser III, have been informally analyzing flight information and will compile safety protocols and the implementation of a flight operations manual for real estate and similar small business usage that exceeds currently accepted means and methods for safe flight. Formal collection of information shared with the FAA will enhance the FAA's internal efforts to establish protocols for complying with the FAA Modernization and Reform Act of 2012.

There are no personnel on board my, UAS and therefore the likelihood of death or serious bodily injury is significantly diminished. My operation of UAS's, weighing less than seven (7) pounds and travelling at far lower speeds within limited areas will provide an equivalent level of safety as that achieved under current FARs.

Accordingly I respectfully request that the FAA grant my exemption request and am willing to cooperate in sharing information to benefit the FAA, safety of manned aircraft, and the general public at large.

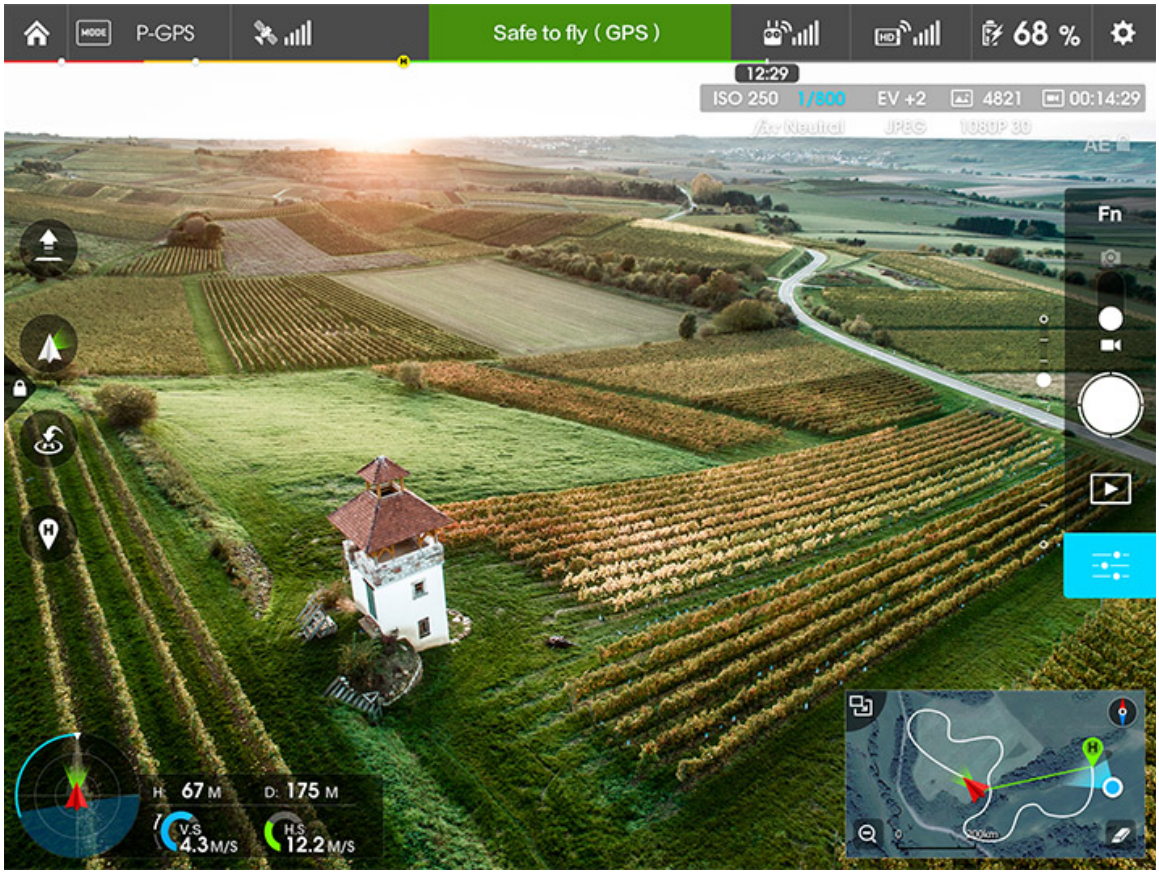
Respectfully Submitted,

Kurt von Strasser III (ES)

Kurt von Strasser III
REALTOR® Urban Nest Real Estate
Private Pilot, Single Engine Land VFR
Quad Drone Pilot & Cinematographer

APPENDIX A

Sample Flight Screen with Live Data (Inspire 1UAS)
Specifications Overview



UAS #1 DJI Inspire 1 Quad
Manufacturer: DJI
Model: Inspire 1 T600
Weight: 2935 g / 6.47 Pounds
Passenger Capacity: 0 (unmanned)
Size (dimensions): 438x451x301 mm (17.24x17.76x11.85 inches)
Max Speed: 22 mps (72.18 fps / 49.21 mph)
Max Flight Time: 18-25 mins
Max Ceiling (software limited): 400 ft AGL
Operations: Line of Sight
Controller: Dedicated 2.4 GHz, Commercial Controller with 2 km maximum rated operating distance

APPENDIX B

Sample Flight Screen with Live Data (Yuneec Typhoon Q500 1UAS)
Specifications Overview

UAS #2 Yuneec Typhoon Q500
Manufacturer: Yuneec Electric Aircraft
Model: Typhoon Q500
Weight: 1700 g / 3.75 Pounds
Passenger Capacity: 0 (unmanned)
Size (dimensions): 420x420x240 mm (16.53x16.53x9.45 inches)
Max Speed: 22 mps (72.18 fps / 49.21 mph)
Max Flight Time: 25 minutes
Max Ceiling (software limited): 400 ft AGL
Operations: Line of Sight
Controller: Dedicated 10ch, 2.4GHz Commercial Controller with 2 km maximum rated operating distance

APPENDIX E

Operational Policies for all Unmanned Aircraft Systems
Real Estate and Small Business Video Operations
Ascent Aerial Video Productions
Kurt von Strasser

1. The unmanned aircraft system (UAS) will weigh less than 7 pounds, including energy source(s) and equipment and shall not be loaded with any unauthorized payloads.

2. The UAS will not be flown at a ground speed exceeding 35 MPH.

3. Flights will be operated at an altitude of no more than 300 feet above ground level (AGL), as indicated by the procedures specified in the operator's manual. All altitudes reported to ATC must be in feet AGL.

4. The UAS will 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.

5. All operations will utilize a visual observer (VO). 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.

6. Prior to each flight the PIC will 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 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. The Ground Control Station, if utilized, will be included in the preflight inspection. All maintenance and alterations will be properly documented in the aircraft records.

Pre-Flight Protocol:

1. Check batteries with voltage meter to insure fully charged and ready for use. Inspect batteries for damage or leakage that may affect proper operation.
2. Inspect propellers for cracks, chips or damage that may cause sudden loss of propulsion or unmanageable/uncontrolled flight.
3. Check weather forecasts for wind advisory or other conditions that may impact flight. Consult five (5) mile radius map for airport vicinity.
4. Contact respective airport to advise of estimated flight time, estimated flight duration, estimated elevation of flight, and any other pertinent information as may be required by distance.

a. Inspect flight area for:
    i. vicinity of public safety helipads/heliports
    ii. vicinity of medical helipads/heliports
    iii. vicinity of light poles
    iv. vicinity of utility wires
    v. vicinity of trees or any other obstacles
    vi. flocks of birds that may cause interference and potential flight impact
    vii. vicinity of any elevated obstructions that may pose potential flight hazard
    viii. vicinity of roadways with moderate to heavy traffic that can be distracted
    ix. public gatherings that may attract viewers
    x. optional point of control for best visual site of UAS while in flight Takeoff and landing
b. inspect area for best and safest point of takeoff and landing

5. if in a subdivision or area that is within 150 feet of a residential street, post warning sign(s)/stand(s) "Attention Aerial Photography In Progress – Stay Back 150 Feet "

Flight Protocol:

Takeoff and land from same location whenever possible.

1. remain alert to birds, sound or aircraft, curious public, and approaching vehicles
2. do not allow anyone to engage in conversation or distract the remote control pilot (PIC) restrict flight to minimal elevation sufficient to acquire desired results
3. remained prepared for emergency landing at all times pay attention to flight time
4. if possible set a timer as a safety alert
5. land UAS and shut down propulsion immediately following landing

Post flight:

1. disconnect battery to prevent accidental activation of propulsion system
2. secure UAS in a safe location
3. remove all warning signs from public access areas

Emergency or Suspected Hazard:

Immediate land UAS at safest and closet ground location in the event

- manned aircraft is heard or seen in vicinity of flight
- there is a public gathering within established safety boundary wanting to observe flight

- pilot is being distracted from focusing on flight and safety
- sudden change in weather (wind bursts)
- sudden increase in vehicular traffic in vicinity of flight
- birds enter into proximity of flight

7. If the UAS has undergone maintenance or alterations that affect the UAS operation or flight characteristics, e.g. replacement of a flight critical component, will undergo a functional test flight in accordance with the operator's manual. The PIC who conducts the functional test flight will make an entry in the UAS aircraft records of the flight. The requirements and procedures for a functional test flight and aircraft record entry will be added to the operator's manual.

8. The operator will follow the manufacturer's UAS aircraft/component, maintenance, overhaul, replacement, inspection, and life limit requirements. When unavailable, aircraft maintenance/component
/overhaul, replacement, and inspection/maintenance requirements will be established and identified in the operator's manual. At a minimum, requirements for the following will be included in the operator's manual:

a. Actuators / Servos;
b. Transmission (single rotor);
c. Power plant (motors);
d. Propellers;
e. Electronic speed controller;
f. Batteries;
g. Mechanical dynamic components (single rotor);
h. Remote command and control;
i. Ground control station (if used); and
j. Any other components as determined by the operator;

9. The Pilot In Command (PIC) will possess at least a private pilot certificate and current third class medical certificate and at least a valid driver's license.

10. Prior to operations the PIC will have accumulated and logged, in a manner consistent with 14 CFR § 61.51(b), a minimum of 200 flight cycles and 25 hours of total time as a UAS rotorcraft pilot and at least ten hours logged as a UAS pilot with a similar UAS type (single blade or multirotor). Prior documented flight experience that was obtained in compliance with applicable regulations may satisfy this requirement. Training, proficiency, and experience-building flights can also be conducted to accomplish the required flight cycles and flight time.

11. Prior to operations the PIC will have accumulated and logged, in a manner consistent with 14 CFR § 61.51(b), a minimum of five hours as UAS pilot operating the make and model of UAS to be utilized for operations and three take-offs and three landings in the preceding 90 days. Training, proficiency, experience-building, and take-off and landing currency flights can be conducted to accomplish the required flight cycles and flight time.

12. The UAS may not be operated directly over any person, except authorized and consenting personnel, below an altitude that is hazardous to persons or property on the surface in the event of a UAS failure or emergency.

13 The operator will request all non-authorized and consenting persons to remain clear of the operational area by not less than 100 feet.

14. The UAS will abort the flight in the event of unpredicted obstacles or emergencies in accordance with the operator's manual.

15. Each UAS operation will be completed within 15 minutes maximum flight time or with 25% battery power remaining, whichever occurs first.

16. If the operational area is within 5 miles of any airport, the PIC will obtain an Air Traffic Organization (ATO) issued Certificate of Waiver or Authorization (COA) prior to conducting any operations. This COA will also require the operator to request a Notice to Airman (NOTAM) not more than 72 hours in advance, but not less than 48 hours prior to the operation.

17. All aircraft operated in accordance will 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. If this registration is not available from the FAA, then each such aircraft shall be marked "Experimental."

18. Each UAS operated will comply with all manufacturer Safety Bulletins.

19. The radio frequency spectrum used for operation and control of the UA will comply with the Federal Communications Commission (FCC) or other appropriate government oversight agency requirements.

20. If operating within five (5) miles of the center of any airport, at least three days before scheduled flight, the PIC or operator will submit a written Plan of Activities to the local FSDO with jurisdiction over the area of proposed flight area. 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

c. Make, model, and serial or N-number of UAS to be used;

d. Name and certificate number of UAS PIC involved

e. A statement that the operator has obtained permission from property owners and/or local officials to conduct the flight operations; the list of those who gave permission must be made available to the inspector upon request;

f. Signature of exemption-holder or representative; and

g. A description of the flight activity, including maps or diagrams of any area, city, town, county, and/or state over which flights will be conducted and the altitudes essential to accomplish the operation.

22. The documents required under 14 CFR §§ 91.9 and 91.203 will be available to the PIC at the Ground Control Station of the UAS any time the aircraft is operating. 23. The UA will remain clear and yield the right of way to all other manned operations and activities at all times (including, but not limited to, ultralight vehicles, parachute activities, parasailing activities, hang gliders, etc.).

24. UAS operations will not be conducted during night, as defined in 14 CFR § 1.1. All operations will be conducted under visual meteorological conditions (VMC). Flights under special visual flight rules (SVFR) are not authorized.

25. The UAS will 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.

26. The UAS will not operate in Class B, C, or D airspace without written approval from the FAA. The UAS may not operate within 5 nautical miles of the geographic center of a non- towered airport as denoted on a current FAA-published aeronautical chart unless a letter of agreement with that airport's management is obtained, and the operation is conducted in accordance with a NOTAM as required by the operator's COA. The letter of agreement with the airport management must be made available to the Administrator upon request.

27. Any incident, accident, or flight operation that transgresses the lateral or vertical boundaries of the operational area as defined by the applicable COA will be reported to the FAA's UAS Integration Office (AFS-80) within 24 hours.

END

APPENDIX D

DJI Inspire 1 Operators Manual

(See Separate Attachment)

File: DJI Inspire Operations Manual

APPENDIX E

Yuneec Typhoon Q500 Operators Manual

(See Separate Attachment)

File: Yuneec Yyphoon Q500 Operations Manual