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

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

September 3, 2015

Exemption No. 12746
Regulatory Docket No. FAA−2015−1840

Mr. Gregory Walden
Akin Gump Strauss Hauer and Feld
Counsel
1333 New Hampshire Avenue NW.
Washington, DC 20036

Dear Mr. Walden:

This letter is to inform you that we have granted your request for exemption. It transmits our decision, explains its basis, and gives you the conditions and limitations of the exemption, including the date it ends.

By letter dated May 8, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of Bitcentral, Inc. (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct UAS-based news workflows for television broadcasters.

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 S900, DJI S1000+, DJI Phantom 2 Vision+, DJI Phantom 3, and DJI Inspire 1.

The petitioner requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*. In accordance with the statutory criteria

provided in Section 333 of Public Law 112−95 in reference to 49 U.S.C. § 44704, and in consideration of the size, weight, speed, and limited operating area associated with the aircraft and its operation, the Secretary of Transportation has determined that this aircraft meets the conditions of Section 333. Therefore, the FAA finds that the requested relief from 14 CFR part 21, *Certification procedures for products and parts, Subpart H—Airworthiness Certificates*, and any associated noise certification and testing requirements of part 36, is not necessary.

The Basis for Our Decision

You have requested to use a UAS for aerial data collection[1]. 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, Bitcentral, Inc. 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.

[1] Aerial data collection includes any remote sensing and measuring by an instrument(s) aboard the UA. Examples include imagery (photography, video, infrared, etc.), electronic measurement (precision surveying, RF analysis, etc.), chemical measurement (particulate measurement, etc.), or any other gathering of data by instruments aboard the UA.

Conditions and Limitations

In this grant of exemption, Bitcentral, Inc. 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 S900, DJI S1000+, DJI Phantom 2 Vision+, DJI Phantom 3, and DJI Inspire 1 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 September 30, 2017, unless sooner superseded or rescinded.

Sincerely,

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

Enclosures

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May 8, 2015

United States Department of Transportation
Federal Aviation Administration
Docket Management System
1200 New Jersey Avenue, NE
Washington, DC 20590

Filed in www.regulations.gov

Re: Petition for Exemption of Bitcentral, Inc. under Section 333 of the FAA Modernization and Reform Act, 49 U.S.C. 44701(f), and 14 C.F.R. Part 11

Bitcentral, Inc., by itself and through its counsel, hereby seeks an exemption from certain Federal Aviation Regulations enumerated below, as authorized by Section 333 of the FAA Modernization and Reform Act ("Section 333"), Subsection 44701(f) of the Federal Aviation Act, and pursuant to the procedures set forth in Part 11 of the Federal Aviation Regulations, to allow Bitcentral to operate the DJI-manufactured S900, S1000+, Phantom 2 Vision+, Phantom 3, Inspire 1, and later models manufactured by DJI, to develop UAS-based news workflows for television broadcasters.

Because the relief requested herein is in all material respects similar to the relief requested in previously granted exemptions, and because Bitcentral agrees to abide by and comply with the terms and conditions in those exemptions, as revised in three respects as requested below, Bitcentral respectfully requests summary processing of this petition.

Bitcentral is the leading provider of television news production systems in the United States with over 200 local TV stations using our technology to manage their entire video workflow from camera to air. Bitcentral customers include broadcasters such as Gannett, CNN, Hearst, Fox, etc. For example, local affiliates of CNN (with which FAA has recently announced a partnership) send the video obtained from a local UAS operation using Bitcentral's workflow technology. UASs provide not only a better image to the audience they provide an entirely unique point of view. Local broadcasters serve the public good by delivering compelling video images on local news every day. UASs will enable broadcasters to provide the public with images that cannot be

captured from the ground or even a helicopter. This fosters a better awareness of the community in which people live as well as providing a more realistic view of news and events. Broadcasters already use helicopters and have well-established guidelines on privacy and ethical use of video shot from the air. UAS operations would adhere to the broadcasters' journalistic standards and comply with current local, state and federal regulations.

Bitcentral is interested in developing practical UAS-based workflows for broadcasters. It is easy to produce compelling video from the air with a UAS; however, the process by which it makes it to your TV in the living room is what Bitcentral specializes in. Refining this process requires a lot of hard work to make it reliable, repeatable and safe. Getting into the field and covering real events is what it takes to engineer and document a process that news operations can follow as well as sharing this process with the FAA and all broadcasters as practical experience for what will eventually become a common newsgathering practice.

Fred Fourcher, the CEO of Bitcentral, is a 3,500-hour instrument rated private pilot and recipient of the AOPA Sharples Award for the most significant contribution to aviation by an individual in 2007. Mr. Fourcher is also the founder and past President of the Southern California Pilots Association, which has grown to hundreds of members across Southern California. Mr. Fourcher is also a member of the National Association of Broadcasters and is considered an industry thought leader. Mr. Fourcher's goal is to combine practical knowledge from aviation and broadcast in order to help facilitate a productive, safe and reliable way that UAS can be used by broadcasters to deliver compelling images and unique points of view to the public.

The DJI-manufactured UASs will be used to cover news and weather events and to shoot promotional video. Each of the three DJI UAS models has unique abilities for broadcast operations and part of our process will be to determine the best UAS for each kind of event. For example the DJI Phantom weighing less than 3 pounds may be more suitable for operations closer to people however the 10-pound S1000+ can support a zoom lens camera and could operate at a distance.

The UAS operator will hold a private pilot certificate with a class III medical certification and will operate the UAS in compliance of the terms and conditions of the 333 exemption. In addition any private pilot employed by Bitcentral will undergo thorough training and prove proficiency in the operations of the UAS and have at least 50 hours operating of the UAS types outlined above.

The name of the applicant is Bitcentral, Inc. The primary Bitcentral contact is the company CEO, Fred Fourcher. The address is 4340 Von Karman, Suite 400, Newport Beach, CA 92660. E-mail: fred@bitcentral.com, phone 949 417 4111 web: www.bitcentral.com

Exemptions requested

14 C.F.R. Part 21 (airworthiness certification)
14 C.F.R. Part 27 (normal category rotorcraft)
14 C.F.R. 61.113 (a) and (b) (pilot certification and qualification)
14 C.F.R. 91.7(a) (airworthiness)
14 C.F.R. 91.119(b) and (c) (minimum safe altitudes)
14 C.F.R. 91.151(a) and (b) (fuel requirements in VFR conditions)
14 C.F.R. 91.405 (a) and (b) (maintenance)
14 C.F.R. 91.407(a)(1) (approval for return to service)
14 C.F.R. 91.409(a) (annual and airworthiness certification inspection)
14 C.F.R. 91.417(a) and (b) (maintenance records)

Safety equivalence or no adverse effect on safety

Unmanned Aerial Vehicle and System

The FAA is well familiar with the DJI models, as it has granted several exemptions under section 333 for operators proposing to use this unmanned aircraft. See, for example, Exemption No. 11406 (Stringer News Service), No. 11437 (Marcus D. Melhus), No. 11423 (Stunning Heights), and No. 11425 (Elevated Images). In the event of a loss of GPS signal, the UAVs will not lock in its position and automatically go to ATTI mode and remain stable. Should there be a loss of power, the pilot has control of the UAVs to perform auto rotation capability and land the aircraft. If a UAV encounters an unexpected obstacle, the pilot will either divert the flight or maintain the UAV in a safe hover position away from the obstacle.[1]

Given its small size, operational capabilities, and restricted area in which the UAVs will operate, an exemption from Part 21, Subpart H, Airworthiness Certificates, and 14 C.F.R. 91.7(a), is warranted, as Bitcentral's UAVs satisfy the equivalent level of safety as compared with manned aircraft and meets the criteria in section 333. Operating the UAVs without an airworthiness certificate under the conditions proposed will be safer than current broadcasters operating a manned helicopter with an airworthiness certificate and not subject to such conditions.

[1] We believe that, based on previously filed petitions, FAA is in possession of the manufacturer's manual for each DJI UAS model type Bitcentral proposes to operate. We will provide any manual to the FAA upon request.

The DJI models are all light-weight: the Inspire 1 with payload is less than 6.5 pounds; the DJI Phantom is only 2.8 pounds, and the S900 and S1000+ are about 10 pounds. As the FAA has found in granting an exemption to Clayco, Exemption No. 11109, at page 10:

> The limited weight significantly reduces the potential for harm to participating and nonparticipating individuals or property in the event of an incident or accident. The risk to an onboard pilot and crew during an incident or accident is eliminated with the use of a UA for the aerial filming operations.

For the reasons outlined above, Bitcentral also seeks an exemption from the certification requirements for normal category rotorcraft in Part 27.

In support of Bitcentral's request for an exemption from 14 C.F.R. 91.405(a), 91.407(a)(1), 91.409(a)(1) and (2), and 91.417(a) and (b), Bitcentral will adhere to the following inspection and maintenance program: Bitcentral will inspect the UAV before and after each operation, as well as perform daily, weekly, monthly, and annual inspections, as set forth in its Pilot Operating Handbook (provided to the FAA separately from this document). Before each flight, the pilot in command will inspect the UAV to ensure it is in a safe condition for flight. The preflight inspection will account for any discrepancy, such as an inoperable component, item, or equipment. Bitcentral will not initiate a flight if the inspection reveals a condition that adversely affects the safety of operations, and will not operate that UAV until it is found to be in a safe condition. Any UAV that has undergone maintenance or an alteration that affects the UAV's operation or flight characteristics will undergo a functional flight test before return to service.

Bitcentral will follow DJI's UAV requirements relating to components, maintenance, overhaul, replacement, inspection and life limits. Bitcentral will record all maintenance, alterations, and the functional flight test in the UAV logbook, including total flight hours, description of work accomplished, and the signature of the UAV technician who returned the UAV to service. These records with be used to establish similar criteria as aircraft best practices, like Mean Time Between Failures, Total Time Since New, Time Between Inspections, Time Since Inspection, Time Since Overhaul and others through tracking, hours, landings, cycles and dates on each rotable and consumable part of the UAV as part of a proposed industry wide program with DJI.

Bitcentral's UAVs are equipped with an altimeter that provides the pilot with a constant digital display of altitude. Moreover, the UAVs will be operated within the visual line of sight of the pilot in command and observer and below 400 feet, above vacant property. Accordingly, Bitcentral does not believe an exemption from 14 C.F.R. 91.121 is required.

In support of Bitcentral's request for an exemption from fuel requirements in 14 C.F.R. 91.151(a) and (b), Bitcentral notes that its UAVs are battery-powered and are operated for brief periods of time, within the battery capacity of the UAV.

UAV and UAS Operator Qualifications and Training

In support of Bitcentral's request for an exemption from the pilot certification and qualifications requirements in 14 C.F.R. 61.113(a) and (a), Bitcentral asserts that an equivalent level of safety is achieved by the UAV-specific experience of its Pilots. Each Bitcentral pilot will hold a current FAA pilot certificate with the class III medical certification and have at least 50 hours of UAS operation of the DJI platforms. The FAA considers the overriding safety factor for the limited operations proposed by the petitioner to be the airmanship skills acquired through UAS-specific flight cycles, flight time, and specific make and model experience, culminating in verification through testing.

Accordingly, the FAA should grant appropriate exemption relief to permit Bitcentral to use pilots who have successfully completed commercial UAS training and have also gained flying experience using the DJI UAS platforms.

UAV and UAS Operating Parameters

Bitcentral will operate its UAVs in full compliance with the terms and conditions of the exemption, the particular manufacturer's manual, and in accordance with its handbook. All flights will be conducted within the visual line of sight of the pilot in command. Although a UAV may be operated in a metropolitan area, it will be flown below 400 feet AGL, and Bitcentral will notify the appropriate Flight Standards District Office "("FSDO") and Air Traffic Control for any operation within five miles of an airport.

Bitcentral will limit its operations to daytime Visual Flight Rules ("VFR") plus 30 minutes before sunrise and 30 minutes after sunset (dusk), with each operation ending no later than 30 minutes after sunset. The UAVs are equipped with LED lighting visible for 3 miles. Accordingly, we do not believe an exemption from 14 C.F.R. 91.209 is necessary.

Bitcentral seeks an exemption from the requirement in 14 C.F.R. 91.119, subsection (b), that an aircraft must remain at least 1,000 feet above any congested area or open air assembly of persons, and subsection (c), that an aircraft must remain at least 500 feet above any person or structure in an area other than populated or congested, and not closer than 500 feet to any person, vehicle, or structure. These requirements were adopted with fixed-wing, manned aircraft operations in mind. While Bitcentral may operate its UAVs in a metropolitan area, the UAVs will be operated within the visual line of sight of the pilot and an observer. Combined with the

technological capabilities of the UAVs, Bitcentral submits that its operational limitations provide an equivalent level of safety to that provided in section 91.119.

Request to revise standard terms and condition

In three respects, Bitcentral requests the FAA modify its standard terms and conditions to accommodate news gathering operations while maintain an equivalent level of safety.

First, paragraph 16 of the standard terms and conditions provides: *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.*

This limitation makes it impractical to cover news and events in a large city. For example in the Los Angeles basin this would eliminate over 500 square miles from news coverage. That is almost the size of the City of Los Angeles at 468 square miles. Bitcentral proposes a practical modification to the 5 nautical mile limitation for purpose of this exemption. We would propose revising the distance requirement to 1 mile of an ARP. Bitcentral proposes to maintain safety with respect to persons on the ground by limiting the altitude of operations between one mile and 5 miles from an ARP to below 200 feet AGL. Bitcentral also proposes to notify airport management of any operation within 5 miles of an ARP, but does not believe a letter of agreement is necessary or practical for news gathering operations in which there is little if any lead time before an operation begins.

Second, paragraph 26 of the standard terms and conditions (adapted from FAR 91.119(c), from which Bitcentral seeks an exemption above), provides: *All Flight operations must be conducted at least 500 feet from all nonparticipating persons, vessels, vehicles, and structures.*

This limitation would also unduly limit the coverage of news. This rule is appropriate for a 2,000 lb. aircraft operating at over 100 miles per hour. For a UAV 3 to 10 lb. UAV operated by a certificated pilot, this limitation is not necessary to protect the public safety. Broadcasters have significant concerns about liability and would not permit an operation that could endanger any person on the ground. The DJI UAV models can each be operated with appropriate distances from individuals so as to protect the public safety.

Third, paragraph 27 of the standard terms and conditions provides: *All operations shall be*

conducted over private or controlled-access property with permission from the property owner.

Today broadcasters operate manned helicopters over private property and do not have to obtain permission from property owners. This condition would severely limit the ability of broadcasters to cover news as they do today for the benefit of the public. The UAS models Bitcentral intends to operate have safety features that ensure the UAV does not come close to persons other than the operator during takeoff and landing. In many situations, the UAV will simply transit the airspace above private property; no notice or consent is practical or necessary for such a brief period in which the UAV traverses private property. At the site of a news event, the UAV may hover or circulate for a period of time over private property, but at a safe altitude with technological features to maintain altitude and return to base in a loss link scenario. Currently, manned helicopters hover and circulate over private property to film a news event. Operation of a small and very light UAV poses a significantly smaller risk to persons on the ground.

Public interest

Bitcentral works with local broadcasters to provide news coverage never before obtainable from the ground or by manned helicopter. Bitcentral will provide its broadcast customers with the ability to cover news and events using a UAV for both testing and operations. This video will provide the public with a perspective on news and events they have never seen before. In addition, Bitcentral's engineering and documentation of the workflow process will benefit the broadcast industry, the UAV industry, the public, and the FAA.

The FAA's May 6 announcement of a partnership with CNN to conduct practical research of news gathering operations over people not directly involved with the operations shows that the FAA regards such operations to be in the public interest provided that research and study can confirm the safety of such operations. Bitcentral is willing to work with the FAA, through CNN or independently as part of this Pathfinder project.

Operating UAVs under the limitations proposed by Bitcentral will avoid any risk of harm to pilots as well as persons and people on the ground that would be present during the operation of manned helicopters. Finally, UAV operations will also require a much smaller energy footprint than with manned helicopters.

Operations limited to the United States

Bitcentral does not intend to operate its UAV outside of the United States.

Summary for Federal Register

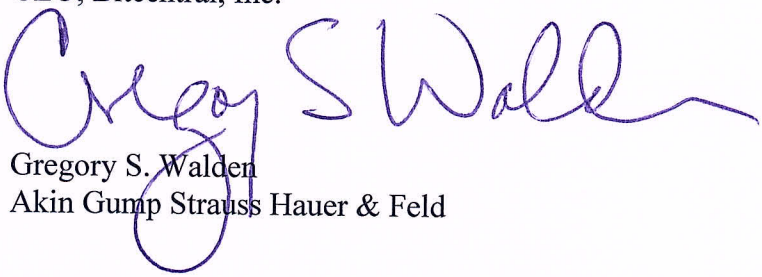
Bitcentral submits the following summary to be included in the Federal Register, should the FAA determine that publication of a summary is required.

Aerial videography for the television, print and online news industry

Because granting this petition would not set a precedent, and indeed would be consistent with the terms and conditions of previous exemptions, Bitcentral respectfully requests the FAA dispense with Federal Register publication and public comment.

Sincerely,

Fredric Fourcher
CEO, Bitcentral, Inc.



Gregory S. Walden
Akin Gump Strauss Hauer & Feld