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

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

June 18, 2015

Exemption No. 11853
Regulatory Docket No. FAA–2015–1169

Mr. Brett Burke
Owner/President
CCLD Technologies Inc
2705 Faith Industrial Drive
Buford, GA 30519

Dear Mr. Burke:

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 March 24, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of CCLD Technologies Inc (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct commercial operations for inspections for cell phone towers and other tall structures.

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 is the Aibotix X6.

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, CCLD Technologies 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

[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.

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, CCLD Technologies 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 Aibotix X6 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 June 30, 2017, unless sooner superseded or rescinded.

Sincerely,

John S. Duncan
Director, Flight Standards Service

Enclosures

CCLD Technologies Inc

2705 Faith Industrial Drive,

Buford GA, 30519

Email: bburke@ccldtech.com

Petition: March 24th 2015

U.S Department of Transportation, Docket Operations

Federal Aviation Administration

West Building Ground Floor, Room w12-140

1200 New Jersey Avenue, SE, Washington DC 20590

Subject: Request for exemption of certain conditions from the Title 14, Code of Federal Regulations (14 CFR) for CCLD Technologies.

Sir or Madam:

CCLD Technologies Inc. is here by requesting exemption from specific regulations of Title 14 of the Code of Federal Regulations. These exemptions are in accordance with the Section 333 of the FAA Modernization and Reform Act of 2012.

According to current FAA rules and regulations all recreational unmanned aviation flying must be kept below 400 feet AGL and the pilot must keep line of sight on the aircraft.

CCLD Technologies Inc. is requesting for the permission of the FAA to be able to use a unmanned Ariel vehicle for commercial use to fly and inspect cell phone towers, and other tall structures for consumers. In doing so CCLD will abide by all FAA regulations such as, staying under 2,000 feet AGL and will not fly in restricted areas. If exemption is allowed, CCLD will be able to provide high definition Laser scanning as well as Thermal Imaging for inspections to detect cracking in towers, bridges, and other structures, as well as provide full data extraction for construction companies for build outs, as built surveys and progression builds. Being able to

conduct such inspections will help each state's Department of Transportation detect and correct any bridge, road or structure damage before it causes harm for the community.

In order to maintain a completely safe operating environment CCLD will not, in any circumstances will never enter Class B, C, or D airspaces. CCLD will also keep all awareness of any TFR's, restricted/prohibited areas. CCLD will not come within three nautical miles of any active airfields or airports. We will fly in areas that we have been given clearance to fly in, and file NOTAMs at least 24 hours to operating. CCLD will notify all parties affected by the area being flown by our UAV. CCLD will conduct and receive any prior authorizations required from local areas before flight is confirmed.

AIRCRAFT DISCRPTION:

CCLD Technologies would be operating with the Aibotix X6. This is a 6 bladed multi rotor aircraft that weighs less than 14 pounds. It is made of Carbon Fiber Reinforced Polymer. Its dead weight is 7 pounds; its takeoff weight is 10.3 pounds. Its max speed is 31 MPH. 30 minute flight times. It is equipped with accelerometer, magnetometer, barometer, ultrasonic sensors and gyroscope. It operates on Lithium- Polymer 10,000 Milliamp batteries. This is a (VTOL) Vertical Takeoff and landing aircraft.

CCLD Inc. will operate an unmanned aircraft weighing less than 14 pounds and is bright green in color, which will make it highly visible and identifiable. Our Aircraft will possess all programmable failsafe's such as lost communications, lost geospatial positioning, and lost magneto features, as well as instantaneous overrides. All operations with our UAV will be kept in the line of sight of the pilot. It will not cause hazard to users or any surrounding by standers or to the users of the national airspace system, or pose a threat to the national security. The UAS will maintain 2 way communication with all crewmembers and observers as well as the local CTAF or other necessary operational frequencies during the flight.

With this petition CCLD Technologies Inc. is requesting an examination of its UAS by the FAA to be exempt from certain parts of Title 14 Code of Federal Regulations.

CCLD Technologies Inc. will use the Aibotix x6 aircraft strictly for business purposes. We will operate under all normal conditions at a speed no more than 22 knots (KIAS) and has the capability to hover. We will always be kept in line of sight of pilot in control. Operation guidelines are within the 100 foot radius surrounding the telecommunications or utility structure and under 400 feet AGL.

REQUEST FOR EXEPTION FROM:

§21.1(a)(1)(iii): This part prescribes procedural requirements for issuing and changing airworthiness certificates.

Reason for Exemption:

CCLD Technologies Inc. requests approval to produce documentation verified and signed by a licensed A&P which states that that the aircraft in use will adhere to the MIL-HDBK-516B Airworthiness Certification Criteria in lieu of any conventional aircraft airworthiness processes until such time as the administration establishes a standard for national regulation for commercial unmanned aircraft operations pursuant to Report 112-381.

§61.113(a): No person who holds a private pilot certificate may act as pilot in command of an aircraft that is carrying passengers or property for compensation or hire; nor may that person, for compensation or hire, act as pilot in command of an aircraft.

Reason for Exemption:

CCLD Technologies INC. will not pilot any aircraft carrying passengers or property. However we do request approval to operate in a commercial capacity for compensation or hire for the purposes of doing inspections on tall structures, and roadways until such time as the administration establishes a standard for national regulation for commercial unmanned aircraft operations pursuant to Report 112-381. CCLD Technologies employs a private pilot single engine land; rotorcraft – helicopter certificate holder who can competently act as pilot in command over the unmanned aircraft.

§91.203(a)(1): Except as provided in §91.715, no person may operate a civil aircraft unless it has within it the following: An appropriate and current airworthiness certificate. Each U.S. airworthiness certificate used to comply with this subparagraph.

Reason for Exemption:

CCLD Technologies Inc. requests approval to produce documentation verified and signed by a licensed A&P which states that that the particular aircraft in use will adhere to the MIL-HDBK-516B Airworthiness Certification Criteria in lieu of any conventional aircraft airworthiness processes required by Part 91.203(a)(1) until such time as the administration establishes a standard for national regulation for commercial unmanned aircraft operations pursuant to Report 112-381. The airworthiness documentation based on MIL-HDBK-516B will be accessible by the ground based flight crew during all operations.

§91.203(a)(2): Except as provided in §91.715, no person may operate a civil aircraft unless it has within it the following: An effective U.S. registration certificate issued to its owner or, for operation within the United States, the second copy of the Aircraft registration Application as provided for in §47.31(c), or a registration certification issued under the laws of a foreign country.

Reason for Exemption:

CCLD Technologies Inc. requests exemption from producing registration for its aircraft. This request couples with the request for exemption for airworthiness under §21.1(a)(1)(iii) in this

petition. This request acknowledges Order 8130.20 regarding registration requirements for United States civil aircraft seeking airworthiness and requests relief until such time as the administration establishes a standard for national regulation for commercial unmanned aircraft operations pursuant to Report 112-381.

Reason for Exemption:

Given the unmanned nature of the aircraft, CCLD Technologies Inc. requests that it be approved to have an airworthiness documentation based on MIL-HDBK-516B accessible to the ground based flight crew at all times.

§91.9(b)(2): No person may operate a U.S.-registered civil aircraft For which an Airplane or Rotorcraft Flight Manual is not required by §21.5 of this chapter, unless there is available in the aircraft a current approved Airplane or Rotorcraft Flight Manual, approved manual material, markings, and placards, or any combination thereof.

Reason for Exemption:

CCLD Technologies Inc. will be operating small, unmanned aircraft that do not possess a type certificate, relieving it of the requirements for §21.5. Given the nature of the unmanned aircraft, CCLD Technologies Inc. wishes to require an aircraft manual present with the flight crew at ground level in lieu of making the aircraft manual available in the aircraft.

CCLD Technologies is a telecommunication company that has been in operation for 16 years. We have formed and held many multi-million dollar accounts in which we have done service for in the past. CCLD Technologies plans to monitor and inspect all aspects of the safety portion of the Departments of Transportation, ensuring the public roadways and bridges are safe for the population to travel on.

Pilots:

All pilots will maintain currency on the UAS by performing at least three launch and recovery operations that include maneuvering within the preceding 90 days.

Name: Cory O'Leary

Specs:

Private Pilot License

Training completed a Delta Connection Academy in Sanford, FL.

AMA Member

Certified since 2009.

Observer's:

All observers will maintain relevant currency according to FAR part 61 and be updated on all current UAS protocol. In addition to that all observers will meet the following requirements:

1. FAR Part 91 training

2. Knowledge of the capabilities of the unmanned aircraft in operation

3. Crew Resource training

4. Participation in preflight planning and mission planning

5. Capacity to visually and audibly detect aircraft intrusions exceeding one nautical mile.

CCLD Technologies Inc. holds the highest regard for the rules and regulations of the FAA in protecting the general public as well as not to disrupt or interfere with the United States National Airspace System.

On Behalf of all UAS advocates in both the public and private sections who are working toward a safe integration of the UAS world and the NAS world, we want to thank you for your consideration of this petition for exception, an also look forward to your comments and or feedback on how we can continue to expand this outstanding technology.

Brett Burke

Owner/ President

CCLD Technologies Inc.

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