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

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

September 2, 2015

Exemption No. 12710
Regulatory Docket No. FAA−2015−1141

Mr. Jason W. Lines
Aerovista, LLC
7440 South Juniper Street
Tempe, AZ 85283

Dear Mr. Lines:

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 posted to the public docket on April 22, 2015, and letter dated July 20, 2015 you petitioned the Federal Aviation Administration (FAA) on behalf of Aerovista, LLC (hereinafter petitioner or operator) for an exemption. The petitioner requested to operate an unmanned aircraft system (UAS) to conduct project and construction management, inspections and monitoring, environmental review projects, aerial surveying; agricultural projects, educational and research projects, remote sensing projects, wildlife and forestry monitoring projects, aerial filmmaking, photography and real estate purposes, and search and rescue.

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 3D Robotics Solo and SenseFly eBee RTK.

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, Aerovista, LLC 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

[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.

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, Aerovista, LLC 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 3D Robotics Solo and SenseFly eBee RTK 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

Aerovista, LLC - Petition for Exemption

This Other document was issued by the **Federal Aviation Administration** (FAA)

For related information, **Open Docket Folder**

Comment Now!

Content

Request for Section 333 Exemption Photography
April 22, 2015
by/for
Jason W Lines, Aerovista LLC
This document constitutes an exemption Request under Section 333 of the FAA Modernization and Reform Act of 2012 for Aviation Unmanned to perform Aerial Photography by/for Jason W Lines, Aerovista LLC. The main use of this UAS would be recording real-estate photos, video, and associated data. The UAS systems that I plan to use is a 3d Robotics SOLO and will be referenced in this document as SOLO.
1. The safe operation to the NAS and/or persons and/or property will be kept to a minimum by always flying the UAS within visual eye contact, less than 400 ft above ground and never directly above persons or public places. The orientation of flights will be such that the pilot in command (PIC) always has a visual on the rear mounted LED flight Indicator. Additional safety features on the SOLO include, GPS navigation, return to home, low voltage, and enhanced failsafe.
2. Pre-flight inspection would be checking battery condition/level in both the transmitter and UAS. The binding/link feature will not let the UAS start if communication is not established. A check for power-lines, antennas and other overhead objects would be performed. Wind conditions would be monitored and be a factor for flying.
3. The PIC will be only myself. I have completed 47.4 hours of flight training in a Cessna 172, as well as 173 logged landings, without mishap. I have completed ground school at an FAA approved school, and have passed the written PAR exam.
4. I'm in good mental and physical health . No arrests or felonies. I have recently undergone an extensive background check for a position of public trust in relation to my work with the U.S. Department of Health and Human Services.
5. The intended use of this UAS is to provide video marketing material for real estate and business. As well as provide imaging and surface mapping data to agriculture and other businesses which would require those services.
6. All photo flights for hire would have the date, time, GPS coordinates along with the camera metadata recorded on a hard drive and also backed up to a DVD. This data would be kept readily available for a period of 1 year after each aerial flight for hire.
7. Equipment and Specifications.
3DR SOLO
Up to 26 minutes of flight time (20 with camera and Gimbal),
Top speed: 55 mph
Max Altitude: 400ft, per FAA rules
Weight: 1600 g; 1760 g with Solo Gimbal and GoPro
Wifi range: up to a half a mile, depending on environment
Controller with color screen and live flight data
Pixhawk 2 flight controller software
Customizable color LEDs for orientation
Solo Battery: 14.8 V LiPo (5200mAh)
Rechargeable controller batter: 2600 mAh/7.2 Vdc; lasts 4 hours (extendable battery available)
10x4.5 self tightening props
880 kV motors
Plug and play with 3-axis Solo Gimbal from 3DR

Respectfully,
Jason W Lines

ID: FAA-2015-1141-0001

Document Information

Date Posted:
Apr 22, 2015

Show More Details

Submitter Information

Submitter Name:
Jason lines

Mailing Address:
7440 South Juniper Street

City:
Tempe

Country:
United States

State or Province:
AZ

ZIP/Postal Code:
85283-5013

Comments

0
Comments Received *

Docket Information

This document is contained in
FAA-2015-1141

Related Dockets:
None

Related RINs:
None

Related Documents:
None

* This count refers to the total comment/submissions received on this *document*, as of 11:59 PM yesterday. Note: Agencies review all submissions, however some agencies may choose to redact, or withhold, certain submissions (or portions thereof) such as those containing private or proprietary information, inappropriate language, or duplicate/near duplicate examples of a mass-mail campaign. This can result in discrepancies

7440 S Juniper St
Tempe, Arizona 85283
602-492-6157

between this count and those displayed when conducting searches on the Public Submission document type. For specific information about an agency's public submission policy, refer to its website or the Federal Register document.

Jason Lines, Aerovista LLC
7440 S Juniper St.
Tempe, Arizona 85283
Telephone: 602-492-6157
Email: jlines@aerovista.biz

July 20, 2015

U. S. Department of Transportation
Docket Management System
West Building Ground Floor, Room w12-140
1200 New Jersey Avenue, SE
Washington DC 20590

RE: Exemption Request Section 333 of the FAA Reform Act

Dear Sir or Madam:

We respectfully request exemption under Section 333 of the FAA Reform ACT and Part 11 of the Federal Aviation Regulations.

Petitioner:

Jason Lines, Aerovista LLC (AEROVISTA)
7440 S Juniper St.
Tempe, AZ 85283
Telephone: 602-492-6157
Email: jlines@aerovista.biz

AEROVISTA intends to incorporate the use of sUASs for a variety of projects which may include but not be limited to project and construction management, inspections and monitoring; environmental review projects; aerial surveying; agricultural projects; educational and research projects; remote sensing projects, wildlife and forestry monitoring projects; aerial filmmaking, photography and real estate purposes; search and rescue, etc.

Specific Section(s) seeking exemption:

14 C.F.R Part 21
14 C.F.R. 45.23(b)
14 C.F.R. 61.113(a) and (b)
14 C.F.R. 91.7(a)
14 C.F.R. 91.9(b)(2)
14 C.F.R. 91.109
14 C.F.R. 91.119

14 C.F.R. 91.121
14 C.F.R. 91.151(a)
14 C.F.R. 91.203(a) and (b)
14 C.F.R. 91.215
14 C.F.R. 91.104 through 91.417

Extend of relief requested:

To permit commercial operation of Small Unmanned Aircraft Systems (sUASs) for operations conducted within and under the conditions outlined herein or as may be established by the FAA as required by Section 333.

Said exemption would permit the operation of sUASs under controlled conditions in limited, predetermined and controlled airspace. Upon granting of this proposed exemption request, AEROVISTA would conduct commercial operations of sUASs meeting or exceeding all operational and safety requirements per Section 333.

Public Benefit:

1. Project and construction management, inspections and monitoring. The use of sUASs on construction sites may improve the safety of workers, local residents and general public by assessing potential dangerous situations. Falls and injuries may be reduced or eliminated through a more thorough review of the construction sites. In some cases, sUASs may reduce the reliance of helicopters or small aircraft to monitor said sites. This may improve safety as well as reduce environmental impact by reducing energy usage;
2. Environmental Review projects. The use of sUASs during the process of reviewing projects as required by 24 C.F.R. 50.4, 58.5 and 58.6 would provide a more in-depth Environmental Review of the project site as well as surrounding areas. Reliance of helicopters or small aircraft may be eliminated;
3. Aerial surveying. The use of sUASs in connection with aerial surveying of smaller areas may eliminate the use of helicopters or aircraft. This could provide a more cost effective, safer and more energy efficient product;
4. Agricultural projects. Wildlife and Forestry projects. The use of sUASs could assist with surveying agricultural projects as well as wildlife and forestry projects by providing information when problems occur, vermin infestation, fire hazards, etc.;
5. Remote Sensing projects. The use of sUASs could provide views and information for remote and inaccessible areas. This could promote worker safety as well as reduce the reliance on helicopters and aircraft;
6. Educational and Research projects. The use of sUASs could provide information for said projects in a more cost effective and efficient manner than other available options;

7. Aerial filmmaking, photography and real estate purposes. The use of sUASs may provide a point of view previously unavailable through other means. They would be more cost effective, efficient and more safely than helicopters and aircraft; and
8. Search and rescue. The use of sUASs may provide assistance to local law organizations during search and rescue missions. SUASs may reach areas unattainable or viewable with helicopters and aircraft. SUASs may be implemented quicker as time is of the essence during search and rescue operations.

Reasons why the exemption would not adversely affect safety or how the exemption would provide a level of safety at least equal to the existing rule.

Proposed operations using sUASs provide increased safety enhancement especially when compared with helicopters and aircraft for the following reasons:

1. The sUASs will weigh less than ten (10) pounds;
2. Flights will be operated within the visual line of sight of the pilot;
3. Maximum total flight time for each operational flight will be thirty (30) minutes. Flight times may be less than thirty (30) minutes as the UAS will continuously monitor battery reserve and return to the ground station with at least 20% battery power reserved;
4. Flights will be operated at an altitude of 200 feet AGL. Flights will never exceed 400 feet AGL;
5. Minimum crew for each operation will consist of the sUAS pilot and a Visual Observer;
6. A briefing will be conducted daily by all personnel working with said sUAS;
7. All onsite personnel and client employees will be required to execute a waiver. Verbal/written consent will be required of all persons within 100 feet of flight operation;
8. Written and/or oral permission from relative property owners will be obtained prior to operating the sUAS;
9. All permits, permissions, etc. will be obtained from local government offices as required;
10. The sUAS operated will weigh less than 55 pounds including payload (camera, lens, gimbal, etc.); and
11. The sUAS will operate at speeds less than 50 knots, hover and simultaneously move vertically and horizontally;
12. The sUAS will have the capability to return and land at the pre-determined location with the Security Perimeter should the sUAS lose communication or GPS signal during any operations;
13. The sUAS will have the capability to abort a flight in case of unpredicted obstacles or emergencies;
14. Operations will not be conducted over densely populated areas or heavily traffic highways; and
15. Operations will not be conducted within five (5) NM of an airport or heliport.

AEROVISTA will abide by all regulations including the following:

1. 14 C.F.R. Part 21, Certification Procedures for Products and Parts. Airworthiness Certificates;
2. 14 C.F.R. 45.23 Display of marks; general and 45.29 Size of marks;
3. 14 C.F.R. 61.113 Private pilot privileges and limitations: Pilot in Command and 61.133 Commercial pilot privileges and limitations;
4. 14 C.F.R. 91.7 Civil aircraft airworthiness;
5. 14 C.F.R. 91.9 Civil aircraft flight manual, marking and placard requirements;
6. 14 C.F.R. 91.109 Flight instruction; Simulated instrument flight and certain flight tests;
7. 14 C.F.R. 91.119 Minimum safe altitudes: general;
8. 14 C.F.R. 91.121 Altimeter settings;
9. 14 C.F.R. 91.151 Fuel requirements for flight in VFR conditions;
10. 14 C.F.R. 91.203 Civil aircraft: Certifications required;
11. 14 C.F.R. 91.205 Powered civil aircraft with standard category U.S. airworthiness certificates: Instrument and equipment requirements;
12. 14 C.F.R. 91.215 ATC transponder and altitude reporting equipment and use;
13. 14 C.F.R. 91.401 Applicability;
14. 14 C.F.R. 91.403 General;
15. 14 C.F.R. 91.405 Maintenance required;
16. 14 C.F.R. 91.407 Operation after maintenance, preventive maintenance, rebuilding or alteration;
17. 14 C.F.R. 91.409 Inspections;
18. 14 C.F.R. 91.411 Altimeter system and altitude reporting equipment tests and inspections;
19. 14 C.F.R. 91.413 ATC transponder tests and inspections;
20. 14 C.F.R. 91.415 Changes to aircraft inspection programs; and
21. 14 C.F.R. 91.417 Maintenance records.

Privileges of exemption outside the United States.

AEROVISTA may wish to exercise the privileges of this exemption outside the United States should a contract with a governmental office require same. All required rules and regulations will be followed should this occur.

Equipment and Specifications.

3DR SOLO KIT ~ 3DR solo, 3DR Solo Gimbal, 3DR Solo Controller, 3DR Solo Propeller Set – Black, 3DR Solo Battery Charger, 3DR Solo Controller Charger

Specifications:
Up to 26 minutes of flight time (20 with camera and Solo Gimbal),
HD video streaming to mobile
Top speed: 55 mph
Max Altitude: 400ft, per FAA rules
Weight: 1600 g; 1760 g with Solo Gimbal and GoPro
Wifi range: up to a half a mile, depending on environment
Controller with color screen and live flight data
Pixhawk 2 flight controller software
Customizable color LEDs for orientation
Solo Battery: 14.8 V LiPo (5200mAh)
Rechargeable controller batter: 2600 mAh/7.2 Vdc; lasts 4 hours (extendable battery available)
10x4.5 self tightening props
880 kV motors
Plug and play with 3-axis Solo Gimbal from 3DR

SenseFly EBEE RTK

Specifications:

Weight (inc. supplied camera) Approx. 0.73 kg (1.61 lb)
Wingspan 96 cm (38 in)
Material EPP foam, carbon structure & composite parts
Propulsion Electric pusher propeller, 160 W brushless DC motor
GNSS/RTK receiver L1/L2, GPS & GLONASS
Battery 11.1 V, 2150 mAh
Maximum flight time 40 minutes
Nominal cruise speed 40-90 km/h (11-25 m/s or 25-56 mph)
Radio link range Up to 3 km (1.86 miles)
Maximum coverage (single flight) 8 km² / 3 mi² (974 m / 3,195 ft alt. AGL)
Wind resistance Up to 45 km/h (12m/s or 28 mph)
Multi-drone operation Yes (inc. mid-air collision avoidance)
Automatic 3D flight planning Yes
Linear landing accuracy Approx. 5 m (16.4 ft)

Please feel free to contact our office if there are any additional questions or concerns.