



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

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

July 23, 2015

Exemption No. 11263A
Regulatory Docket No. FAA-2014-0727

Mr. Jean-Christophe Zufferey
CEO
SenseFly Ltd.
Route de Genève 38
(Z.I. Châtelard Sud)
1033 Cheseaux-Lausanne
Switzerland

Dear Mr. Zufferey:

This letter is to inform you that we have granted your petition for an amendment. It explains the basis for our decision, describes its effect, and lists any changes to the original conditions and limitations.

By letter dated May 12, 2015, you petitioned the Federal Aviation Administration (FAA) on behalf of SenseFly Ltd. (hereinafter petitioner or operator) for an amendment to your current exemption. That exemption from §§ 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) of Title 14, Code of Federal Regulations (14 CFR) allows the petitioner to operate a UAS to perform aerial data collection. You requested an amendment to add the Sensefly eXom.

In your petition, you indicate that there has been no change in the conditions and reasons relative to public interest and safety that were the basis for granting the original exemption.

The FAA has determined that good cause exists for not publishing a summary of the petition in the Federal Register because the requested amendment to the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to the petitioner. The unmanned aircraft authorized in the original grant are comparable in type, size, weight, speed and operating capabilities to those in this petition.

Airworthiness Certification

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 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.

Our Decision

The FAA has determined that the justification for the issuance of Exemption No. 11263 remains valid and is in the public interest. Therefore, under the authority contained in 49 U.S.C. 106(f), 40113, and 44701, delegated to me by the Administrator, the operator is granted an amendment to add new aircraft to its UAS operations.

The operator shall add this amendment to its original exemption.

Conditions and Limitations

All conditions and limitations within Grant of Exemption No. 11263 remain in effect except as follows. Condition No. 1 has been updated to reflect the additional aircraft.

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 Sensefly eBee and Sensefly eXom 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.

This exemption terminates on April 30, 2017, unless sooner superseded or rescinded.

Sincerely,

/s/

John S. Duncan
Director, Flight Standards Service

Enclosures



Jim Williams

UAS Integration Office
Federal Aviation Administration
800 Independence Avenue SW
Washington, DC 20591

May 12th, 2015

Re: Re: Docket FAA 2014-0727, Petition for Amendment to Exemption No. 11263

Dear Mr. Williams:

SenseFly received FAA Exemption No. 11263 on April 1, 2015 authorizing senseFly under section 333 of the FAA Modernization and Reform Act of 2012 to operate its unmanned aircraft system (“UAS”), the eBee, for various commercial purposes. In this present petition for an amendment to Exemption No. 11263, senseFly seeks to operate its recently developed eXom UAS for the same purposes.

The eXom, weighting 3.7 pounds (Maximum Take Off Weight), contains a rich array of advanced integrated sensors. These sensors work together to provide the user with full situational awareness and support obstacle avoidance:

- Five ‘Navcam’ vision sensors allow the operator to see in the direction the drone is moving via its flight control software, without needing to turn the system’s TripleView camera head. This technology is unique in such a lightweight UAS, similar to the visual parking sensors in modern cars, but brought into a 3D flight environment.
- Five ultrasonic proximity sensors work in harmony with eXom’s Navcams to ensure the operator always knows the drone’s distance from nearby objects. (The drone’s shock-absorbent carbon fiber shrouding is also always on hand to protect its rotors in case of surface contact.)
- Numerous other sensors, including inertial measurement units, barometers, magnetometers, GPS and magnetic encoders, maximize the drone’s stability and safety.

eXom offers different flight modes to suit every project: semi-automatic mode (waypoint navigation) or interactive ScreenFly mode (using the supplied joypad to navigate and orientate the drone via computer screen). The Screenfly mode includes flight assistance features such as cruise control and distance lock. In any situation, RC-based manual control always remains available as a backup function.

The eXom is particularly safe. It was developed with flexible material absorbing potential shocks, and SenseFly R&D team has developed also a unique carbon-fiber shrouding protecting the propellers. We have added also redundancy in our command and control system. In case something happens to the primary autopilot, the eXom will switch automatically to the secondary autopilot.

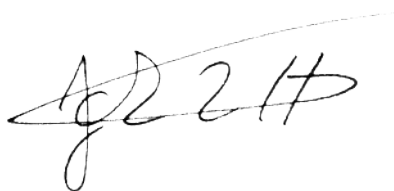
SenseFly will comply with all of the conditions and limitations imposed in Exemption 11263 except that condition/limitation number 1 will need to be revised to include the eXom UAS. The list of "operating documents" will also need to be revised to include senseFly's (operating manual and safety assessment) for the eXom UAS, which will be provided separately to the FAA. Other than these revisions, there will be no change in the conditions and reasons relative to public safety that were the basis for the initial grant of exemption.

Because the requested amendment would not set any precedent or otherwise raise any novel issue, and because senseFly seeks to begin these operations without delay, senseFly respectfully requests the FAA to determine that good cause exists to dispense with publication of the summary of this petition in the Federal Register and grant the requested amendment expeditiously by summary means.

Thank you for your consideration of this petition.

Sincerely,

Jean-Christophe Zufferey (CEO)

A handwritten signature in black ink, appearing to read "JC Zufferey", with a long horizontal line extending from the end of the signature.