BEFORE THE
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C.

IN THE MATTER OF

Petition of AeroCine, LLC d/b/a Aerobo for Amendment to Exemption No. 11150A

Docket Number: FAA-2014-0400

COMMENTS OF THE SMALL UAV COALITION

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Introduction

The Small UAV Coalition\(^1\) is pleased to provide its comments in support of the petition by AeroCine, LLC d/b/a Aerobo ("Aerobo") for an amendment to Exemption No. 11150A to permit Aerobo:

(1) for closed-set filming, to operate the 3D Robotics X8+, 3D Robotics Solo, DJI Inspire 1, DJI S1000, Aerobo, and Aerobo X12:
   a. At night
   b. From a moving platform
   c. Controlled by an experienced pilot who does not hold an airman certificate, under the supervision of a person who holds an airman certificate
   d. Where the Aerobo X12 weighs over 55 lbs.; and
(2) for covering breaking news events, to operate a UAV weighing no more than 4.4 lbs.
   a. Over persons not involved in the UAS operation
   b. Over private property without obtaining the consent of the owner

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\(^1\) Members of the Small UAV Coalition include 3D Robotics, AirMap, AGI, Amazon Prime Air, Botlink, DJI Innovations, Drone Deploy, Flirtey, Google[x] Project Wing, GoPro, Intel, Kespry, Parrot, PrecisionHawk, Strat-Aero, Verizon Ventures, and Zero Tech.
c. With issuance of a Notice to Airmen ("NOTAM") "contemporaneously" with the news event.

Members of the Small UAV Coalition share an interest in advancing regulatory and policy changes that will permit the operation of small UAVs in the near term, within and beyond the line of sight, with varying degrees of autonomy, for commercial, consumer, recreational and philanthropic purposes.

We applaud the Federal Aviation Administration ("FAA") for accelerating the pace of exemptions. The Coalition believes there are additional steps the FAA can take to broaden the authority to conduct commercial operations. In particular, the FAA has the authority and the discretion to grant the relief requested by Aerobo in its petition for amendment.

**Closed-set filming**

By their nature, closed-set filming operations do not pose risks to persons not involved with the filming who are not on the set. While filming may be conducted over private property, inherent in closed-set filming is the knowledge and consent of the private property owners, as well as all those who are on the set, whether or not they are involved in the UAV operation.

Nighttime operations and operations from a moving platform are common situations for closed-set filming. In comments the Coalition filed in response to the FAA's small UAS ("sUAS") proposed rule, 80 Fed. Reg. 9544 (Feb. 23, 2015), we urged the FAA to allow nighttime operations and operations from moving vehicles with appropriate safeguards. Operating a small UAV in place of a helicopter provides a significant increase in safety for all persons on the set. Aerobo notes that (1) it will use a second visual observer who will wear an assisted-vision device with night vision technology, (2) the UAV will be lit with LEDs, and (2) the operations team will conduct a dry run during daytime.

For the moving platform, Aerobo states that a person other than the pilot or visual observer will operate the moving platform, so that the attention of pilot and visual observer will be solely on the operation of the UAV. With adequate notice to persons on the set, operating a UAV from a moving platform should not pose a safety risk.

Given Aerobo’s safety measures and the nature of a closed-set, the Coalition supports the requested relief.

The FAA should also grant exemption authority for Aerobo to operate a UAV over 55 lbs. (here, the Aerobo X12) in a closed-set environment, considering the safeguards employed in closed-set filming environments – including the standard conditions and limitation the FAA includes in section 333 exemptions) -- and Aerobo’s testing experience operating the heavier UAVs with the payload demands of the filmmaker. The Coalition does not believe that weight should be a determinative factor where a UAV over 55 lbs. may be operated safely. Indeed, the FAA, in granting Yamaha’s petition to operate its UAV weighing 141 lbs. with a payload of up to 61 pounds, recognizes that heavier UAVs may be safety operated.
The Coalition supports Aerobo’s request to use a non-FAA certificated pilot to operate the UAVs under the supervision of an FAA-certificated airman. The Coalition, in its comments to the FAA’s sUAS proposed rule, urged the FAA to adopt small UAS operator qualifications that matched the skills necessary to operate the particular UAV as well as the basic knowledge gained in FAA ground school training. The FAA is proposing to require a small UAS operator to pass only an aeronautical knowledge test, and not require the holding of a commercial, private, recreational, or sport pilot certificate. 80 Fed. Reg. at 9588 (proposed Part 107, Subpart C). In a closed-set filming environment, there may be less of a need to understand certain airspace rules. Assuming Aerobo’s pilots are skilled in operating the small UAVs that Aerobo will operate in closed-set filming, the FAA should grant the requested relief. As the Coalition has stated in its comments on the sUAS proposed rule and in comments in section 333 proceedings, the FAA has the statutory authority and discretion to exempt a UAS operator from the airman certification requirements in Part 61. Although the Coalition does not believe a visual observer should be required to be a certificated airman, Aerobo’s offer to use such a person to supervise the UAS pilot provides a further margin of safety.

Covering breaking news events

The Coalition supports Aerobo’s request in covering a breaking news event to operate one or more micro UAVs over persons not involved in the UAS operation and without obtaining consent of private property owners. In Coalition comments on the FAA’s sUAS proposed rule, we urged the FAA to allow small UAV operations over non-involved persons with appropriate conditions and limitations, noting that without such permission news gathering operations using a UAS would not be practical. As a result, news operations would continue to operate manned helicopters to cover breaking news events, increasing the safety risks to persons on the ground as well as to helicopter operators. Aerobo seeks an exemption to operate only UAVs weighing no more than 4.4 lbs. In the preamble to the FAA’s sUAS proposed rule, the FAA solicited comment on adopting a microUAS provision that would allow a UAV weighing no more than 4.4 lbs. to fly over persons not involved with the UAS operation, given the lower risks of a lighter UAV operating at slower speeds. 80 Fed. Reg. at 9556-58. The Coalition strongly supports the adoption of such a micro UAS provision. We assume that covering a breaking news event will not require Aerobo to fly its UAVs faster than the FAA’s suggested airspeed limit of 30 knots.

In the absence of a final sUAS rule, an exemption from 14 C.F.R. 91.119 is likely required. The Coalition notes that manned helicopters are allowed to operate below the minimums set forth in section 91.119 if the operation is conducted “without hazard to persons or property on the ground” and in compliance with any routes or altitudes the FAA may prescribe for helicopters.” 14 C.F.R. 91.119(d). Given that UAS operations to cover breaking news events will be conducted within the visual line of sight of the operator, with an adequate battery power reserve, the Coalition believes the requested relief should be granted. We note that Aerobo will cover its UAVs with a “soft foam-like material” and the UAVs will contain a parachute that would be deployed automatically in a number of scenarios, such as loss of power, an extreme pitch, or if the barometer malfunctions. These extra precautions will ensure the safety of micro UAV operations over non-involved persons, including private property owners. A small, indeed micro, UAS operation poses much less risk of a hazard than manned helicopters.
Finally, the Coalition agrees with Aerobo that the requirement to obtain a NOTAM at least 24 hours in advance of the operation does not work for covering breaking news events. Aerobo asks instead that the FAA issue a NOTAM “contemporaneously with a UAS operation when responding to a breaking news event.” We understand that the FAA is now capable of issuing a NOTAM within minutes when warranted (such as a rapid change in weather). We believe a small UAS operator should work with the appropriate FAA offices and establish a protocol for timely NOTAM request and authorization to cover breaking news events that will require operations contemplated in this amendment petition. Accordingly, the Coalition supports Aerobo’s request to obtain an appropriate NOTAM soon after notifying the appropriate FAA office and providing all relevant information.

Respectfully submitted,

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