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

IN THE MATTER OF

Petition of Unmanned Services, Inc. for Amendment to Exemption No. 12033
Docket Number: FAA-2015-1302

COMMENTS OF THE SMALL UAV COALITION

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March 30, 2016

Filed with www.regulations.gov
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Introduction

The Small UAV Coalition\(^1\) is pleased to provide its comments in support of the petition by Unmanned Services, Inc. ("USI") for an amendment to Exemption No. 12033 to permit USI to operate its small unmanned aircraft system ("sUAS") (1) from a moving platform; (2) at night; (3) using as Pilot in Command ("PIC") a pilot with "military UAS rated piloting experience of at least 150 hours and who has passed an FAA ground school knowledge test within the last 24 months; and (4) transferring control from one PIC to another qualified pilot during flight operations.

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. 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 USI in its petition for amendment.

Operations from a moving platform

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 operations from moving vehicles with appropriate safeguards. Operating a small UAV in place of a helicopter provides a significant increase in safety. USI states it has significant experience operating UAS from

\(^1\) Members of the Small UAV Coalition include AirMap, AGI, Amazon Prime Air, Botlink, DJI Innovations, Flirtey, Google[x] Project Wing, Intel, Kespry, Parrot, PrecisionHawk, Strat-Aero, T-Mobile, Verizon Ventures, and Zerotech.
moving boats, cars, and golf carts. USI points out that neither the PIC nor a visual observer will operate the moving platform so that their attention will be focused on the UAS operation.

**Operations at night**

In comments on the FAA’s sUAS NPRM, the Coalition urged the FAA to revise proposed section 107.29 to allow sUAS operations beyond the proposed window between the hours of official sunrise and official sunset. We stated that FAA should allow nighttime sUAS operations where such operations may be conducted safely without any appreciable increase in risk to other aircraft or persons on the ground and where the sUAS operator is able safely to perform the see-or detect-and-avoid responsibilities.

Accordingly, the Coalition urged the FAA to revise this section to allow the Administrator or his delegate to authorize nighttime operations, through exemption, deviation authority (certificate of waiver or authorization), or certification, upon a demonstration of a level of safety equivalent to daylight operations, in consideration of the technological capabilities of the sUAS – including any lighting equipage – the capability of the sUAS operator, the presence of one or more visual observers, the particular use scenario, and the operating environment, including the degree of illumination. The Coalition believes the authority Congress provided in section 333 of the FAA Modernization and Reform Act of 2012 gives the FAA the discretion to authorize nighttime operations in advance of and independent of its sUAS rulemaking.

USI explains that it will employ a second visual observer for night operation who will use an assisted-vision device such as binoculars or a monocle with night-vision technology. The UAV will be lit with an anti-collision light system including navigation lights and position strobe lights, and not flown above 200 feet above ground level, so that the UAV can be seen by the operator, other aircraft operators in the same airspace, and persons on the ground.

The Coalition supports reasonable distance requirements and other conditions to ensure the takeoff and landing areas are clear and that the sUAS operators are properly trained in nighttime operations.\(^2\)

**Operations using a pilot with military UAS experience**

The Coalition supports USI’s request to use non-FAA certificated pilots to operate the sUAS, given the 150 hours of military UAS operating experience USI will require the pilot(s) to have logged. The Coalition, in its comments to the FAA’s sUAS proposed rule, urged the FAA to adopt small UAS operator qualifications that match 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 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). USI states that its military-experienced pilot(s) will have passed an FAA ground school aeronautical knowledge test within the last 24 months. As

\(^2\) The Coalition has previously supported the petitions of Industrial Skyworks (FAA 2014-1060), Ars Electronica (FAA 2014-1095), Aerobo (FAA 2014-0400), SkyPhilly (FAA 2014-0908), Alaska Aerial Media LLC (FAA 2015-0173), and Firestorm UAV (2015-0931), to conduct nighttime operations.
the Coalition has stated in its comments on the sUAS proposed rule and in comments in section 333 proceedings, the FAA has the statutory exemption authority and discretion to exempt a UAS operator from the airman certification requirements in Part 61, and should do so here. The military UAS operating experience requirement is more likely to provide a greater margin of safety than the manned aircraft flying experience required for an airman certificate under Part 61.

Transferring PIC control during flight operations

The Coalition supports USI’s request for authority to transfer operational control from one qualified PIC to another qualified pilot during flight operations. We are not aware of the reason USI believes it needs this authority, but provided the visual line of sight requirement and communications with the visual observer are maintained, we believe this authority may be granted without an increase in safety risk.

For the reasons stated above, the Coalition supports USI’s petition for amendment.

Respectfully submitted,

[Signature]
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