Federal Aviation Administration

Memorandum

Date: July 3, 2014

To: James Williams, Manager, UAS Integration Office, AFS-80

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Subject: Operation of UAS as Public Aircraft for Educational Purposes

This responds to your memo of March 2013 asking whether a university holding a COA as a public aircraft operator may use its COA to train university students to fly UAS within the limits of the commercial purpose and governmental function provisions of the statute, 49 USC 40125(a)(1) and (2). We have determined that education is not a valid governmental function that supports the operation of an aircraft, whether manned or unmanned. Accordingly, UAS training cannot be conducted as a public aircraft operation. The plain language of the statute, its legislative history, and the FAA's own past approach all prevent us from finding that education is a governmental function. Our analysis follows.

As in our previous interpretation regarding public aircraft UAS operations, the following apply:

- Unmanned aircraft systems (UAS) are aircraft and are subject to the public aircraft statute just as manned aircraft. Our approach to manned aircraft operations applies to unmanned aircraft.
- Provisions of the statute regarding flight crewmembers and qualified non-crewmembers are not applied to UAS analysis.
- The statutory prohibition on compensation is interpreted broadly, based on a concept of non-competition with civil entities, and is as stated in the Public Aircraft Operations Advisory Circular AC 00-1.1A.[1]

[1] **What Constitutes a "Commercial Purpose" that Removes Someone from PAO Status?** In general, the FAA interprets the commercial purpose prohibition in 49 U.S.C. § 40125(a)(1) to mean that there can be no type of reimbursement to government entities for PAO, except under the one set of specific circumstances described in that section. Specific instances of whether an operation has a commercial purpose may be submitted for interpretation to the FAA Office of the Chief Counsel, International Law, Legislation, and Regulations Division (see Appendix 2). As detailed in Paragraph 8 above, a government entity may contract with a private operator (and pay that operator) to conduct a PAO on behalf of the government entity. The statutory prohibition on commercial purpose prevents a government entity from getting paid or reimbursed to operate a PAO, not for paying for contracted services.

- Public aircraft operations are generally not subject to the regulations in 14 CFR Chapter I except those that affect all aircraft, such as air traffic operations. Public aircraft UAS COAs are issued to provide a means to operate a UAS under 14 CFR 91.113.

We have previously noted that the current unavailability of routine civil operation of UAS has caused a considerable rush by government entities to qualify as public aircraft operators and be the sole source for near-unregulated UAS operations. As operators new to the public aircraft process, state institutions have been unaware that significant restrictions exist in the statute. Much of the interest has been expressed by state educational institutions seeking to become valid public aircraft operators of UAS. Dozens of public universities and colleges have applied for UAS COAs as public aircraft operators. These educational entities have been required to show that they are a qualified state government entity under paragraph (C) or (D) of 49 USC 40102(a)(41), and most of them have done so successfully.

However, the next step, assessing the reason for the operation (the governmental function), quickly becomes complex.

Section 40125(a)(2) of the statute states –

> The term "governmental function" means an activity undertaken by a government, such as national defense, intelligence missions, firefighting, search and rescue, law enforcement (including transport of prisoners, detainees, and illegal aliens), aeronautical research, or biological or geological resource management.

Since the statute does not include education as a listed government function, the question is whether that list can be rationally expanded by the FAA to include education as a valid governmental function for purposes of the operation of public aircraft. We acknowledge that the list in the referenced paragraph is not exclusive; the presence of the term "such as" indicates that other functions may qualify. But each expansion of that list must be considered for its effect on increasing the number of unregulated operations of uncertificated aircraft and a proposed function's relationship to the core needs of states to conduct the kind of government business expressed in the statute.[2] The list of functions that Congress chose may be characterized as core functions that a state must accomplish in order to operate as a state.

A state may, of course, choose to consider education at any level a governmental function for its own purposes, but a state may not expand on its own initiative the list of governmental functions in § 40125(a)(2) to include any activity it chooses as a basis for public aircraft operation. If Congress had intended the list to mean any activity, it would have used the term "any activity," rather than the term "an activity…such as" and then provide a rather restrictive list. That state and local governments provide education is such a widespread concept that it is rational to presume that if Congress meant education to be included, Congress would have done so, rather like it included law enforcement, search and rescue, firefighting and natural resource management.

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[2] We have previously determined that helicopter emergency medical services qualify as part of the "search and rescue" function listed in the statute. Accordingly, government providers of HEMS may not charge for the services provided as they are presumed to be a government activity funded by a state or local government.

Nothing in the statute or its limited legislative history suggests that the FAA may authorize the broad expansion of the statute that including education would require. Instead, the more recent actions by Congress in amending the public aircraft statute have been to walk back those limits since establishing the concept in 1958. The current provisions addressing both commercial purpose and governmental function, previously part of definitions, were moved to the substantive sections as recently as 2000, and were unchanged when the statute was amended in 2008 and 2012. No change was made to the public aircraft statute when Congress recently addressed UAS operations elsewhere.

Nor would reading the statute to include education be consistent with the FAA's past approach. If the FAA now were to read a concept as broad as education into the statute, it could exponentially expand the operation of unregulated aircraft. As a concept, education is not restricted to age or curriculum, and would include aviation education such as flight schools. All manned flight schools are civil operations, and are subject to significant regulation – none use public aircraft to teach students to fly, nor would we allow uncertificated pilots operating unregulated aircraft to teach others. The same must hold true for UAS, as the statute contains no distinction in the type of aircraft used to conduct a public aircraft operation. Accordingly, we must answer in the negative your question of whether a university could, in essence, conduct a UAS flight school using its COA.

You also asked whether some limited form of education could be found governmental. It would not be defensible to include education as a governmental function but then draw artificial limits on its scope, such as the level of education being provided, the curriculum, or the aircraft that can be used. Since our agency mission is the safe operation of the national airspace, including the safe integration of UAS into it, any analysis of whether the list of governmental functions can reasonably be expanded to include education must contain a clear consideration of the overall effect that such a change would have on aviation as a whole. There is nothing in the law or its minimal legislative history to suggest that Congress intended education to be a governmental function that a state needs to carry on its business free of aviation safety regulations.

Accordingly, we are unable to conclude that §40125(a)(2) may be expanded to include education as a general governmental function. While a school at any level may validly qualify for a public aircraft UAS COA as a part of a state, operation of a public aircraft UAS is limited to one of the listed governmental functions. A COA may not be used to operate a UAS flight school, or conduct other UAS operations to provide education as part of any curriculum that does not otherwise qualify as a governmental function.

Since education is not a governmental function, we have not included any analysis of the commercial purposes term of the statute discussing what constitutes permissible funding of educational operations.