

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

**TYPE CERTIFICATION OF UNMANNED AIRCRAFT SYSTEMS –
NOTICE OF POLICY – REQUEST FOR COMMENTS**

Docket No. FAA-2019-1038

COMMENTS OF THE SMALL UAV COALITION

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The Small UAV Coalition¹ (Coalition) provides its comments in response to the FAA’s Request for Comments on its Notice of Policy regarding Type Certification of Unmanned Aircraft Systems, 85 Fed. Reg. 505 (Feb. 3, 2020). As a general matter, the Coalition strongly supports the FAA’s decision to use its special conditions basis for type certification of unmanned aircraft systems (UAS), and designate “some” UAS as a “special class” under 14 C.F.R. 21.17(b). The Coalition supports the inclusion of UAS intended for package delivery in this special class.

Small UAS, as defined in Part 107 to weigh not more than 55 pounds on takeoff (including any payload), as well as UAS that are relatively heavier (but far below the 12,500 pound small aircraft limit in Part 23), present a substantially lower and very different risk profile than manned aircraft. The Coalition agrees with the FAA’s conclusion that UAS-specific features (e.g., no direct human intervention from within or on the aircraft; unique configurations of the vehicle; use of batteries) “are the very unique, novel, and/or unusual features the special class category was designed to

¹ Members of the Small UAV Coalition are listed at www.smalluavcoalition.org.

accommodate.” 85 Fed. Reg. at 5906. There are no airworthiness standards yet to address UAS in the standard category.

The Coalition does not object to FAA’s proposal to reserve discretion to issue type certificates under 14 C.F.R. 21.17(a) for other UAS, whether fixed-wing or rotorcraft, or its proposal to address type certification of passenger-carrying UAS in future policy or rulemaking.

In the absence of generally applicable airworthiness standards, the Coalition understands that an applicant for a type certificate for a UAS will be required to develop airworthiness criteria particular to the UAS and its intended use, and demonstrate an equivalent level of safety to existing type certification standards. The Coalition applauds the FAA’s proposal to move forward with UAS type certification, and use its experience gained from special airworthiness conditions for companies that are already seeking UAS type certification, to develop a general set of standards for a class of UAS.

UAS (without occupants) pose no risk to passengers or crew. Battery-powered UAS do not produce emissions that will pollute the environment. Small UAS will predominantly operate in non-controlled airspace, at low altitudes posing a negligible risk to other manned aircraft, and at a weight and speed that present a lower risk of impact with any manned aircraft and lower risk of injury or damages from such impact. This is not to assert that UAS pose no risk, but rather that the risks are much lower, and different, thereby warranting a different set of airworthiness standards and associated type certification process.

The Coalition also supports the development of reliability and durability performance criteria for UAS type and airworthiness certification. In particular, the Coalition endorses in concept the hours and population density matrix in the draft Advisory Circular as a means of compliance based on operational data to demonstrate a sufficient degree of durability and reliability.

Before airworthiness standards criteria and requirements are in place, the Coalition supports the FAA's continuing to use its section 44807 authority to authorize commercial package delivery operations using a non-certificated UAS, provided that the applicant (1) is actively pursuing UAS type and airworthiness certification and (2) agrees to comply with a set of conditions and limitations that address the identified risks. The Coalition also supports the continued use of section 44807 to authorize operations of UAS that weigh more than 55 pounds. Mindful of the statutory expiration of section 44807 on September 30, 2023, the Coalition believes the FAA and industry should work together, with all deliberate speed, to develop a set of airworthiness standards that can take the place of section 44807 by its expiration.

In this regard, assuming section 44807 is not extended by Congress, the Coalition urges the FAA to continue to allow operations under Part 107, including waivers granted under Part 107, indefinitely. Section 44807's sunset is prospective. Section 44807 terminates the "authority . . . for the Secretary to determine if certain unmanned aircraft systems may operate safely in the navigable airspace system[.]" 49 U.S.C. 44807(d). The Secretary initially made such determinations in granting exemptions under section 333 of Public Law 112-95, the predecessor to section 44807. The Secretary also based Part 107, including waivers granted under that rule, on section 333. Most

recently, exemptions granted to allow commercial package delivery and other exemptions for operations of UAS over 55 pounds rely on section 44807.

The Coalition believes that the operational conditions and limitations in Part 107, as well as those granted by waiver and exemption under Part 107 and section 44807, achieve an adequate level of safety with respect to the risk of collision with other aircraft or persons or property on the ground. Further, type and airworthiness certification for non-waivered operations under Part 107 may certainly not be necessary.

The Coalition fully supports the four recommendations the Drone Advisory Committee (DAC) submitted to the FAA at the DAC meeting on February 27, 2020, based on the materials developed by Task Group Six (BVLOS). These recommendations briefly summarized below, echo several of the Coalition's comments herein:

- Recommendation 1 – the FAA should develop incremental type certification under 14 C.F.R. 21.17(b) that varies with risk and complexity
- Recommendation 2 – Section 44807 exemptions should be used until an applicant receives a type certificate, provided the applicant is actively pursuing type certification, thereby allowing an applicant sufficient time to resolve the exemption issues through operational data
- Recommendation 3 – the FAA should provide clear, actionable guidance on the process by which applicants may show suitable mitigations of air risks and obtain approval for BVLOS operations

- Recommendation 4 – the FAA should form a working group, with timelines, to evaluate the applicability of Parts 23 and 25, section-by-section, to UAS operations.

With respect to Recommendation 4, the Coalition will offer the time and resources of its members to participate in and contribute to this working group.

In sum, the Coalition supports the FAA’s proposed policy in full and commends the FAA for its continued forward-looking approach to safe, ubiquitous UAS integration.

Respectfully submitted,



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