

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

---

**IN THE MATTER OF**

**Petition of Causey Aviation Unmanned, Inc. for Exemption**

**Docket No. FAA-2020-0532**

---

**COMMENTS OF THE SMALL UAV COALITION**

**Gregory S. Walden  
McGuireWoods Consulting, LLC  
2001 K Street NW, 4<sup>th</sup> floor  
Washington, DC 20006  
*Counsel to the Small UAV Coalition***

August 4, 2020

Filed with [www.regulations.gov](http://www.regulations.gov)

---

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

---

**IN THE MATTER OF**

**Petition of Causey Aviation Unmanned, Inc. for Exemption**

**Docket No. FAA-2020-0532**

---

**COMMENTS OF THE SMALL UAV COALITION**

The Small UAV Coalition<sup>1</sup> is pleased to provide comments in support of the petition by Causey Aviation Unmanned, Inc. (“CAU”) for an exemption pursuant to 49 U.S.C. §44807 and from multiple provisions of Parts 43, 61, 91, and 135 to operate the Flytrex FTX-M600P unmanned aircraft system (“UAS”) to conduct parcel delivery for compensation or hire under a Part 135 air carrier operator certificate. CAU is a participant in the North Carolina Integration Pilot Program (“IPP”), but the company is owned by a charter services company that holds both Part 135 and Part 145 certificates. Thus, CAU is owned and operated by persons who have participated in manned aviation for decades and therefore steeped in the safety culture. CAU intends to expand the scope of its Part 135 operations upon receipt of necessary FAA regulatory approvals and waivers.

Members of the Small UAV Coalition support advancing regulatory and policy changes to permit UAS operations beyond visual line of sight (“BVLOS”), with varying degrees of autonomy, for commercial and other civil purposes. In particular, the Coalition has long advocated for a UAS air carrier rule to provide a performance-based certification process tailored to the different risk profile of small drones. Currently, the FAA does not permit a waiver for BVLOS commercial package delivery under Part 107, and therefore a Part 135 operator certificate is necessary.

However, there is clear congressional intent that the FAA should begin this initiative as soon as possible. Section 348 of the FAA Reauthorization Act of 2018 directs the FAA to within one year update its rules to authorize small UAS operators to carry property for compensation or hire. This rulemaking shall, *inter alia*,

- (1) Use performance-based requirements.

---

<sup>1</sup> Members of the Small UAV Coalition may be found on the Coalition’s website: [www.smalluavcoalition.org](http://www.smalluavcoalition.org)

- (2) Consider varying levels of risk to other aircraft and to persons and property on the ground . . . and tailor performance-based requirements to appropriately mitigate risk.
- (3) Consider the unique characteristics of highly automated, small unmanned aircraft systems.

49 U.S.C. §44808(b).

The Coalition believes that granting CAU's petition will assist the FAA in developing a UAS air carrier rule consistent with congressional intent that will obviate such petitions in the future.

The Flytrex UAS has been operating commercial package delivery operations in Reykjavik, Iceland since 2017 in partnership with Iceland's largest restaurant aggregator. Flytrex now holds a certificate issued by the Iceland Transport Authority, under which it operates 13 routes serving nearly 50% of the local population.

The FTX-M600P is a hexacopter, equipped with a tubular corridor geofence to keep it within a 100-foot diameter around predetermined routes. The UAS is designed to fly fully-automated operations in populated environments. Packages are delivered to customers living in detached homes with front and/or back yards, by means of a tethered mechanism, when the customer approves the delivery via smartphone. The only takeoffs and landings occur at the distribution center. The UAS weighs under 33 lbs. with maximum payload of 6.6 lbs.

CAU will initially operate extended visual line of sight ("EVLOS") operations, in which visual observers will be used to maintain line of sight whenever conditions require. Thus, once an air conflict hazard is detected by the remote pilot in command or a visual observer, the remote pilot commands the UAS to clear the airspace. The maximum range for the UAS is 6.2 miles. CAU expects to graduate to BVLOS operations through obtaining type certification for BVLOS airworthiness standards. The Coalition supports granting EVLOS authority with the opportunity to authorize BLVOS with adequate mitigations.

Among the safety features of the UAS is a Flight Termination System, which is automatically triggered by a power outage or aggressive or erratic movements. The termination triggers a ballistic parachute that lands the UAS.

Flytrex is currently seeking type, production, and airworthiness certification for its UAS in the United States. The manuals that support this certification are proprietary, and the Coalition therefore defers to the FAA with respect to the airworthiness of the Flytrex UAS. Congress required the FAA in Section 345 of the FAA Reauthorization Act to establish a process for "accepting risk-based consensus safety standards related to the design, production and modification of small unmanned aircraft systems." Subsection 345(e) provides that such a process may obviate type and airworthiness certification, although the FAA has indicated that it will use its existing special conditions authority to allow for type and airworthiness certification for small UAS. The Coalition is mindful that several companies in addition to Flytrex are going through the existing type, production, and airworthiness certification processes, and believes that the experience from these certification processes should inform the development of consensus safety standards.

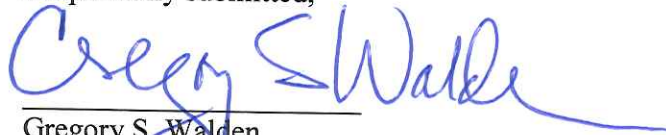
CAU seeks exemptions from several operating rules in Parts 43, 91, and 135. Given that CAU will operate its UAS largely in Class G airspace about 230 feet AGL during cruise and descending to about 65 feet AGL for delivery, and for the reasons stated in its petition, the Coalition believes that relief from these rules is also warranted.

With respect to pilot certification, CAU's remote pilots will hold a Part 107 remote pilot certificate and will have successfully completed CAU's FAA-approved Part 135 training program tailored to the UAS. The Coalition believes that this training will suffice and that a Part 61 pilot certificate would not add any additional relevant skills or training.

UAS package delivery promises untold societal benefits, including reducing stress on transportation infrastructure and transporting goods with lower environmental impact than traditional surface or airborne transportation methods. The Coalition considers granting CAU's petition an additional step towards developing a mature certification and a regulatory framework for integrating all types of UAS operations in the navigable airspace, and delivering on the promise of environmentally-friendly efficient and safe delivery of supplies that will save lives.

For the above reasons, including Flytrex's experience in Iceland, the Coalition supports granting CAU's petition in full.

Respectfully submitted,



Gregory S. Walden  
McGuireWoods Consulting, LLC  
2001 K Street NW, 4<sup>th</sup> floor  
Washington, DC 20006  
202-872-2928  
[gwalden@mwcllc.com](mailto:gwalden@mwcllc.com)

*Counsel to the Small UAV Coalition*

August 4, 2020