



AIR LINE PILOTS ASSOCIATION, INTERNATIONAL

7950 Jones Branch Drive, Suite 400S | McLean, VA 22102 | 703-689-2270 | 888-FLY-ALPA

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April 19, 2022

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Agency Information Collection

Activities: Requests for Comments

AGENCY: Federal Aviation Administration (FAA), DOT

ATTN: Docket No. 2120-0776

Title: ALPA Comments to Clearance of Renewal Approval of Information Collection 2120-0776, Airspace Authorizations in Controlled Airspace.

Dear Sir or Madam:

The Air Line Pilots Association, International (ALPA) represents the safety interests of over 62,000 professional airline pilots flying for 38 airlines in the United States and Canada. ALPA's long-held position is that all aircraft in shared airspace must operate to the same high level of safety.

ALPA has reviewed the request for comment 2120-0776 from the Federal Aviation Administration (FAA), which proposes collecting information related to requests to operate Drones also known as Unmanned Aircraft Systems (UAS) in controlled airspace under 14 CFR Part 107 ("Part 107") and small UAS under 49 U.S.C. 44809(a)(5). Until the FAA produces a safety Risk Management Document (SRMD), as required by their Safety Management System (SMS) Order 8000.869B, it cannot be fully determined whether the current information being collected is adequate to verify if safe operations can be conducted, and whether to authorize or deny the requested operation of UAS in controlled airspace.

The FAA must ensure adequate safety precautions are implemented before authorizing routine, higher-risk Drone operations in controlled airspace. The goal is to prevent Drone aircraft from interfering with, or increasing the collision risks with manned aviation, particularly during critical phases of flight.

ALPA believes that the FAA's current minimum requirements for information in a Low Altitude Authorization and Notification Capability (LAANC) application are not sufficient. Additional information should include aircraft registration, make, and model. Post-flight information needs to be required, including, duration and number of flights, failure of a critical system, i.e. C2, Detect and Avoid, auto guidance functions, Geo-Fencing, power system, and if any abnormal or emergency occurred.

For ALPA and other airspace users to understand how the level of safety is maintained when Drones are approved for operation in the National Airspace System (NAS), the FAA needs to provide airspace users, including ALPA, with operational data from current LAANC authorizations. Risk analysis and associated mitigating measures that would apply to Drones operated in controlled airspace (i.e., Class B, Class C, or Class D airspace or within the lateral boundaries of the surface area of Class E airspace) cannot be fully determined without this critical information. These mitigations are necessary to achieve an equivalent level of safety or target level of safety for Drone operations under the FAA airspace authorizations program(s) and are needed to issue approvals via the LAANC approvals. In particular, we note the following areas of concern that should be addressed to ensure safe operations:

1. **Operation of Drone** The FAA's approach to authorizing Part 107 Drone operations in controlled airspace is overly simplistic and raises issues to the understanding and regulatory oversight for the safe integration of Drone(s) in the NAS today by the FAA.
 - a. The FAA has been authorizing Drone operations via the LAANC program since 2018 to more than 726 airports¹ and is now adding small UAS under 49 U.S.C. 44809(a)(5). ALPA urges the FAA to collect and provide relevant operational data related to these authorizations to the Advance Aviation Advisory Committee (AAAC), Drone Safety Team (DST), FAA Safety Risk Management panels (SRMP), and other FAA forums so a complete data-based safety analysis can be conducted.
 - b. Unless otherwise documented by an SRMD, the FAA should be applying safety mitigations for LAANC operations that would likely include the requirement for remote pilot competence testing, Remote identification, and geofencing before being authorized to operate within the LAANC program.

Recommendation: The FAA should establish an operationally-focused SRMD to evaluate the risk associated with granting airspace authorization or a waiver of 14 CFR 107.41 ("airspace waiver") and small UAS under 49 U.S.C. 44809(a)(5), issued by the FAA using the LAANC program. This Panel must be supplied with FAA-derived operational data for the Panel to use in their analysis.

2. **Operations within the LAANC Program:** These operations are expected over congested areas, over uninvolved persons, and very close to aerodromes. There must be a means to ensure that the Drone can operate safely, that it remains within the defined airspace, and that its operation(s) do not create a hazard to persons, objects and other aircraft.
3. **Command and Control (C2) Link Failure Modes, Strategies, and Mitigations:** C2 link failures are one of the most common failures on a UAS; lost-link mitigations should require safe modes to prevent fly-away(s) or other scenarios. Additionally, the radio frequency spectrum that is commonly accessed for UAS is unprotected. Recommendation: If a lost link occurs, mitigations like auto-hover, auto-land, return-to-home, and geofencing boundary protection must be incorporated into the navigation and control systems for a Drone to safely land (without harm to person or property) or reestablish C2.

In summary, our concerns with the information collection activities surround: (1) The lack of collected information/data that is made available to FAA SRMP(s) to determine if the use of LAANC and a web portal to process authorization requests to conduct Part 107 and 44809(a)(5) flight operations of UAS is in controlled airspace, without the necessary safety risk evaluation. (2) The FAA has not determined through their SMS process the true risk that UAS operating in controlled airspace introduces to the NAS, so it is unclear whether the data collected is adequate.

ALPA appreciates the opportunity to comment on the subject document. If you have any questions, please do not hesitate to contact Mark Reed, Engineering and Air Safety at Mark.Reed@alpa.org or 703-689-4231

Sincerely,



Captain Vas Patterson
ALPA RPAS team lead
Airline Pilots Association Int.

¹ FAA Website: https://www.faa.gov/uas/programs_partnerships/data_exchange/