



U.S. Department
of Transportation

**Federal Aviation
Administration**

Aviation Safety

800 Independence Ave
Washington, DC 20591

In the matter of the petition of

Luke Aikins

For an exemption from § 91.105(a)
(1)
of Title 14, Code of Federal
Regulations

Exemption No. 19096

Regulatory Docket No. FAA-2022-0315

DENIAL OF EXEMPTION

By letter dated February 28, 2022, and additional information provided on April 11, 2022, Mr. Luke Aikins, P.O. Box 728, Shelton, WA 98584, petitioned the Federal Aviation Administration (FAA) for an exemption from § 91.105(a)(1) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would authorize Luke Aikens and Andy Farrington to depart the flight deck and attempt to swap aircraft in-flight while both aircraft are at vertical dive. During the swap, both aircraft will be unoccupied.

Petition for Exemption

The petitioner requests relief from the following regulation:

Section 91.105(a) prescribes that during takeoff and landing, and while en route, each required flight crewmember shall (1) be at the crewmember station unless the absence is necessary to perform duties in connection with the operation of the aircraft or in connection with physiological needs; and (2) keep the safety belt fastened while at the crewmember station.

The petitioner supports its request with the following information:

The petitioner states he is a pilot that has been conducting a flight test program for an inspirational project called the Red Bull Plane Swap. The petitioner asserts that a grant of exemption would be in the public interest because it would promote aviation in science, technology, engineering, and math (STEM) and encourage students to seek a career in STEM.

The petitioner states this project will have two single-engine Cessna 182 airplanes climb to 14,000 feet, where the speed brakes will then be deployed and engines will be turned off. The petitioner states the goal of this project is for both pilots to leave their pilot stations, exit the airplanes, and assume the pilot station of the other airplane while both airplanes are falling in parallel during a vertical dive. The petitioner asserts that once the engines for both airplanes are turned off and both pilots have placed their airplanes at a 90-degree angle, the category of the aircraft will have changed mid-flight from airplanes to controlled, free-falling objects at 135 miles per hour; however, the petitioner states that he learned that aircraft cannot change category mid-flight and submitted this petition for exemption.

The petitioner claims the duration of the swap will take approximately 50 seconds and before the aircraft reaches 4,000 feet, both pilots will have successfully swapped airplanes. The pilots would then recover the airplane, retract the speed brake, and regain control of the airplanes.

The petitioner states the pilots for each airplane, Luke Aikins and Andy Farrington, both hold FAA commercial pilot certificates and have conducted over 20,000 skydives. The petitioner claims in preparation for this event, both pilots have performed over 100 vertical dive test-flights with safety pilots onboard, resulting in zero incidents.

The petitioner states this one-minute event will take place on April 24, 2022, over the desert of Arizona with no in-person spectators. The petitioner also states the swap will be livestreamed via the Hulu and all interested scientific organizations and well-known and respected sponsoring organizations are supportive of this project.

Regarding proposed safety mitigations the petitioner states there will be an on-site crash fire rescue team and both airplanes have been equipped with a parachute system that activates when a pre-determined speed and altitude is met. Additionally, the petitioner asserts that it will “have ground safety to visually confirm sterile airspace and ground space.” The petitioner further expresses, while on the ground, the safety coordinator has the option to also manually activate the parachute system.

On March 24, 2022, the FAA sent a letter to the petitioner requesting information on how granting the exemption would be in the public interest. In his response and in a subsequent conversation with the FAA on April 11, 2022, the petitioner expressed that he has made media and sponsor commitments regarding this event.

Federal Register Notice

The FAA has determined that good cause exists for waiving the requirement for *Federal Register* publication because any delay in acting on this petition would be detrimental to the petitioner.¹ The FAA understands from the petitioner that he has made commitments regarding this event based on the assumption that the FAA would grant the petition for exemption. Accordingly, the FAA is waiving notice and comment to ensure that the petitioner receives a timely response to his request, despite submission of the petition less than 60 days prior to the event. The FAA is providing a prompt decision so the petitioner is not adversely affected by delayed notification of the FAA's decision.

The FAA's Analysis

The FAA has considered the petition, and finds that granting an exemption from § 91.105(a) would not be in the public interest and cannot find that the proposed operation would not adversely affect safety.

First, the petition fails to address compliance with any other applicable regulations in title 14 of the Code of Federal Regulations during the proposed operation, such as maintaining vigilance to see and avoid other aircraft in accordance with § 91.113. The FAA does not evaluate these deficiencies in greater detail because the petitioner does not provide a sufficient public interest case. Additionally, granting the petitioner's request for relief would be contrary to previous denials of requests for relief from the same regulation to allow the flight crew to leave the flight deck and airplane during the operation of the airplane so as to allow the airplane to simulate a crash landing.²

Second, the FAA has determined that a grant of exemption is not in the public interest for the proposed operation. The petitioner states that he has been conducting the operation in compliance with FAA regulations by having an additional pilot on board the airplane designated as PIC while the airplane swap described in the petition for exemption occurs. Because the FAA cannot conclude that the operations for which relief is sought (i.e., an operation without a pilot in the airplane and at the controls) would not adversely affect safety, and because the petitioner can continue to perform this demonstration in compliance with FAA regulations by including an additional pilot for each airplane, there is no public interest in granting the exemption request.

¹ See 14 CFR 11.87(c).

² See Exemption No. 10095.

The FAA's Decision

In consideration of the foregoing, I find that a grant of exemption would not be in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 106(f), 40113, and 44701, delegated to me by the Administrator, the petition of Luke Aikins for an exemption from 14 CFR § 91.105(a) is hereby denied.

Issued in Washington, D.C., on April 22, 2022.

Sincerely,

/s/

Robert C. Carty
Deputy Executive Director, Flight Standards Service