

Weight increase for Terrafugia flying car

Flyer

Dave Calderwood



The Terrafugia Transition flying car has been allowed a weight increase to 1,800 pounds (816kg) to allow it to include car-type safety features.

The US aviation authority, the FAA, has agreed to an exemption to the Light Sport Aircraft rule which limits LSA aircraft to 1,320 lb (600kg). Terrafugia had already been allowed a 110 lb increase to 1,430 lb, the same as amphibious LSA.

The increase to 1,800 lb gross weight is a substantial hike but it's necessary, said Terrafugia, to include a safety cage, energy absorbing crumple zones, and cabin features found in modern cars.

Terrafugia quantified the potential safety benefits of the Transition as part of its application for the increase. An analysis of LSA accidents indicated that flying a Transition instead of the accident airplane could have reduced the severity of injuries in the vast majority of accidents and could have more than halved the number of fatalities. In addition to its automotive safety features, the Transition's ability to land and drive in bad weather could have helped to avoid nearly half of the accidents studied.



Terrafugia Transition flying car with folded wings for road use.

Terrafugia CEO/CTO Carl Dietrich said, "The willingness of the FAA to consider safety-driven innovation in novel ways, as evidenced by both this Grant of Exemption and the Part 23 rulemaking that is currently underway, is critical to the advancement of the aviation industry. We look forward to continuing to work with the FAA to develop products that increase both the safety and utility of personal aviation."

In addition to the increase in takeoff weight, a corresponding stall speed increase to 54 knots was also granted, to accommodate size constraints imposed by road operation. The standard LSA stall speed limit is 45kt.

Terrafugia Transition video

https://www.youtube.com/watch?time_continue=2&v=rs8oqYUOYT0

