

Historically (my personal hang-gliding training occurred in 1976), hang gliding training was essentially solo flight only. The instructor might run down the sand dune yelling instructions at you for maybe 9 seconds at a time, but the initial high altitude flight (launching from a mountainside and soon being over 1,000 feet AGL) was 100% on the student's own judgement and [admittedly minor] experience.

In the past ten years, the towing of hang gliders by powered aircraft has come into use for the training of hang glider pilots. There exist hang gliders large enough to support an instructor, the student, and landing gear. These training craft are then towed to altitude (typically 2,000 feet AGL) and released. The resulting flight instruction offers a tremendous improvement in the quality, thoroughness and safety of the training. The difference between the above mentioned 9-seconds of yelling, and a properly trained, certificated instructor in the hang glider for the duration of the flight lesson, often over 15 minutes in duration, is obvious. The enhancement to safety is unmistakable.

The turn-around time for the next flight is improved by about 2 hours, again resulting in better training and safer operation. The tandem hang glider is towed back to altitude from the landing area, rather than being disassembled, transported to the mountaintop, reassembled, pre-flighted and launched.

Following initial training, the solo flights may also be greatly improved by the use of tow aircraft.

There are many hang gliding training facilities throughout the country and abroad that utilize towing as an integral part of the curriculum. Those in Florida, for example, have no launch facilities except towing (not too many mountains down there). For these reasons, specialty aircraft have been developed to facilitate the safe and efficient towing of hang gliders to altitude.

These aircraft typically somewhat exceed the weight requirements of Part 103 and are permitted by exemption only. Due to the significant improvement to the safety of training, these exemptions are definitely in the interest of the public and the FAA and are routinely granted.

The proposed Light-Sport aircraft rules appear to be designed to address these types of issues, and to permit by regulation rather than exemption the types of operations deemed safe and proper by the FAA.

There are two glaring omissions from the new rule proposition.

- a) Towing seems not to be permitted at all, and
- b) Engines appear to be required to be normally aspirated.

The proliferation of training exemptions for towing hang gliders aloft shows FAA has understood the great improvement to safety in allowing these operations utilizing aircraft which do not strictly (typically weight limits) meet part 103 regulations. There obviously needs to be certification and training requirements for the tow pilot, the towed pilot and both aircraft, but the operation must be allowed under the rules. Otherwise, we will have bunches of exemptions to the new rule, just as before.

Additionally, the weight of the tandem glider and two pilots has shown a need for more power than a normally aspirated engine can easily develop. An example of a well-tried power plant that would not meet the proposed rule is the Rotax 914. This engine has an excellent service history, and provides additional power

to more safely tow heavy loads to altitude. Coupled with a Dragonfly tug (specially designed by Bailey from the ground up to tow hang gliders - Vso 23 KCAS, 110 HP), this combination quickly ascends to a safer altitude. The utilization of a Turbo-supercharger however, excludes this tug from the Light-Sport regulations being proposed, and would necessitate yet another need for an exemption.

Respectfully submitted:

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