

Federal Register
Docket No. FAA-2001-11133
Rule: Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft
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Subject: Incomplete Alternative Evaluation in the NPRM

To Whom It May Concern:

The proposed NPRM for the Certification of Aircraft and Airmen for the Operation of Light-Sport Aircraft is incomplete and therefore should be rescinded until other alternatives are evaluated and the most appropriate selected. The NPRM only discusses two alternatives, providing no consideration or discussion of other possibilities. In such a complex and ambitious rule, it appears that careful consideration should be given to other more potentially cost-effective alternatives that can provide the same, or even greater benefit to the general public, maintain safety, and receive much more widespread acceptance from the ultralight and general aviation communities. One such alternative will be presented herein.

On page 5397 of the Federal Register, two alternatives are presented. They are:
Alternative 1. Status Quo - Strictly Enforce Current Regulations.
Alternative 2. Proposed Rule.

The “problem” is not stated as such, but is outlined under the initial paragraph under “Status Quo Alternative” same page, stating that the alternative presents a “situation in which the FAA would issue training exemptions from part 103 indefinitely. This would perpetuate “rulemaking by exemption” which does not qualify as a viable alternative.” It is then stated that the FAA issued the exemptions under the assumption that they would soon be superceded by rulemaking, thus providing justification for exemption issuance.

There is no need to argue this position. In fact the FAA is to be commended for the issuance of the training exemptions, as ultimately many lives must have been saved. Not only have lives been saved within the legal 103 community, but also appropriate training has been provided to those operators who have operated outside of Part 103 and the exemptions there to. These include the “Fat Ultralights” as is termed and described in the paragraphs that follow those quote above, on page 5397.

I do however; desire to argue that the proposed rule is not the only viable alternative to the status quo. I also desire to argue that the proposed rule will gain little, if any acceptance from many of the operators of fat ultralights, and exempted trainers. In doing so, the following is presented as a more desirable alternative, one that will gain much

wider acceptance among the ultralight and general aviation contingents. This alternative will be presented herein as Alternative 3 (other alternatives may also be more beneficial).

Alternative 3.

Alternative 3 is a request to amend and revise the FAA regulations for the recreational pilot certificate (rec pilot). In addition, Alternative 3 includes revision of Part 103 to incorporate current exemption limitations by rule, and allowance of qualifying ultralight organizations to continue to administer such.

Further development of Alternative 3 needs outlining. I will not attempt to write an entire ruling, as has been done in the case of this NPRM, however, I will try to touch on as many issues that immediately surface in it's regards.

Alternative 3, Changes to the Recreational Pilot Rating

For rec pilot, it should first be noted that some changes to this certification are already outlined in the NPRM, mainly for operation in classes B, C, and D, airspace. This is commendable. The NPRM states that since rec pilot was initially instated in 1989, that just 638 certificates had been issued, and that only 338 were active in January 2001. The NPRM also states by admission that "Despite the efforts discussed above to address sport and recreation general aviation needs, those rules, for various reasons, have not achieved the regulatory goals we set out to achieve." In addition, the NPRM states "Neither the recreational pilot certificate nor the primary category airworthiness certificate regulations have accommodated the sport and recreational flying community." Although the goals for rec pilot are not specifically stated, it appears that the attempt was made to accommodate flying for fun, yet at a more reasonable cost, with more restrictions as a tradeoff for less training. Additionally, an apparent goal of rec pilot was to provide a stepping-stone for pilots to upgrade into higher certifications. These goals are admirable, and appear to be the same goals intended for the current NPRM. No further discussion of rec pilot's failure of acceptance is given except the statement that it was "for various reasons". Not requiring any conjecture, the primary reason for limited participation in rec pilot is that the difference in cost between rec and private pilot rating were so negligible, that the added privileges of the full private pilot rating was much more desirable. Therefore, it did not generate significant participation from those seeking cost-effective leisure and licensure to fly.

Specifically, the initial intent of rec pilot was to develop growth and participation in light aviation. Apparently, last minute changes were made to the final rule to eliminate the one feature that would have distinguished rec pilot from the private rating and would have made all of the difference in the world as to it's acceptance and participation. This was the last minute inclusion that all rec pilots would be required to obtain the FAA medical.

Aside from removing the medical requirement in favor of a driver's license, self-certifying medical, a few other minor changes to rec pilot are needed to achieve its wide acceptance. Some are those same limitations proposed to be changed in the current NPRM. Others areas needing revision are the 50-mile cross country limitation, and the

altitude limitation. I have submitted a separate comment letter on the altitude issue, as this is common to the proposed limitations on the sport pilot rating.

Alternative 3, Changes to Part 103, Ultralight Regulations.

We have heard it said many times that we should not reopen Part 103 as it may be jeopardized. Interestingly, there is a cursory reopening of rec pilot, with out its loss or jeopardy. The simple fact of the matter is best demonstrated within the proposed NPRM that states:

“103 covers ultralight activities, an increasing number of ultralight vehicles are operating outside the current regulations. This is because the vehicles either exceed the part 103 ultralight weight limit (254 pounds) or they have two seats. For many operators, installing any new equipment or using new materials (some of which increase the level of safety) causes the vehicle to exceed the weight requirements of part 103.

Seeing the need for training to reduce accidents, manufacturers have built two-place training vehicles and organizations have established programs to qualify ultralight flight instructors. However, these vehicles do not meet the current definition of ultralight vehicle, and are not manufactured, certificated, or maintained to a standard. So, while the FAA currently does not require certification for ultralight vehicle operators, flight instructors, or vehicles, we issued exemptions to allow these larger ultralights to be used for training, but not for other sport or recreational flight.”

By admission, in the above statement and in other areas of the NPRM, the FAA

1. Recognizes that the vehicles operating outside of the limitations of 103 are still “Ultralights”
2. Recognizes that exceedences of the limitations have resulted in added safety.
3. That the operation of 2 seat “vehicles” have contributed to the added safety and training.
4. Acknowledges the existence of ultralights that are over weight in statements referring to them as “fat ultralights”.
5. Finds fault in the fact that the two seat trainers and fat ultralights are not “manufactured, certificated, nor maintained to a standard” yet conversely finds acclamation in the added safety that has resulted from their existence.

Anyone who reads, and has worked with Part 103, either as a pilot flying a legal, a fat, or training vehicle, knows that Part 103 has some significant problems, rendering it as an unsafe rule in and of itself. These include:

1. The limitation of carrying 5 gallons of fuel, which ultimately may result in off field landings, potential accidents, injuries, and fatalities.
2. The weight limitation of 254 pounds, wherein safety is attained in the inclusion of parts that add weight, such as gauges, structural airframe improvements, brakes, and higher weight and horsepower engines with dual ignition.

In contrast to the participation in rec pilot, there are over 1,300 current UFI’s, BFI’s, and AFI’s (instructors) operating training vehicles under the training exemptions. Admittedly, much of the participation in these programs is by pilots who desire the less restricted flight standards of Part 103. Many do not train or instruct at all. However, we must note

that the primary reason for participation in such is not because there is fear that these vehicles are unsafe, and not “manufactured, certificated, nor maintained to a standard.” It is because it represents a less regulated flying regime, not requiring the FAA medical. These pilots (and students) know, understand, and willingly accept the “perceived” safety risks involved in non-certificated vehicles that do not meet FAA standards. They also willingly accept and understand the responsibility of maintaining the safety of these vehicles.

Safety Considerations

I often preach how much more safe it is to fly and operate my ultralight trainer in discussing the following aspects:

1. The vehicle receives a very near equivalent of an annual inspection each time it is flown. All parts are accessible and available for direct inspection prior to every flight.
2. The pilot is responsible for the safe operation and maintenance of the aircraft and does not have to trust some airline pilot, or maintenance technician, who may be recovering from an alcoholic binge, is unstable, of poor health, or who knows little or nothing about the workings and intricacies of these little airplanes.
3. The glide ratios are high, providing ample opportunity to find landing options in the event of an engine out scenario when operated correctly.
4. We carry less fuel, which minimizes the potential of ending up as a fireball in the event of an accident
5. Simplicity in design. There are less things to go wrong with a simpler airplane than in the more complex designs not found in the ultralight arena.
6. There is less inertial force due to lower weights, and slower speeds, which makes accidents more survivable.

This is an attempt to demonstrate that regulations, manufacturing, and certification standards, do not necessarily create a safer environment. These mean nothing to the perception of “added safety” to those of us who fly and maintain ultralights. It is a safe activity, and those who fly these vehicles are able to maintain and demonstrate an impressive safety record, as is evidenced by the exemption program.

I would refer to information obtained from the Canadian Transport Authority. It appears that the proposed FAA Sport Pilot rule closely emulates Canada’s rules for what they define as ultralights. During the period from 1987 to 1996, Canada’s ultralight community demonstrated a safety record of 732 aircraft registered per fatal accident per year. Their higher regulated general aviation counterparts experienced a safety record of 450 aircraft registered per fatal accident per year over the same time period. If my math is correct, this represents Canadian ultralights having a 63% more safe record than their general aviation aircraft. One of the principle differences between Canadian general aviation and Canadian ultralight regulations are that pilots and owners of Ultralight Aircraft pilots by regulation are wholly and entirely responsible for the maintenance and airworthiness of their aircraft. This demonstrates that increased regulation does not necessarily increase public safety.

Under alternative 3, it is proposed that the exemptions to Part 103 be eliminated, but that the guidelines and administration of such be incorporated into Part 103. The current exemption limits are to be used as the guidelines for amending the rule. These include operation of single seat ultralights with up to 10 gallons, a maximum stall speed of 35 knots, maximum level flight of 75 knots, and a maximum empty weight of 496 lbs. This is appropriate as the increased safety record of the ultralight community can be demonstrated within the exempted vehicle records.

In addition to the expanded limitations, the rule should also incorporate authorization of qualified ultralight organizations to authorize and license two-seat and training operations. As the NPRM stands, there is no consideration for towing of hang gliders, or for instruction of powered paragliders in tandem instruction. The qualifications of these programs would have to be developed, but would be similar to existing requirements for the BFI ratings. Such organizations would be subject to annual FAA audits, and record keeping requirements.

A revised 103 should incorporate some statement that those desiring to fly vehicles over the current 103 (not the exemption) limitations will be required to train and earn “pilot status” for operation of such vehicles from an ultralight organization. Membership in qualifying ultralight organizations will be required. Audits shall be performed to assure membership fees and dues are reasonable, appropriate records are kept, and that the ultralight organizations remain and qualify for non-profit tax status as defined by the Internal Revenue Service.

Aircraft that do not meet the limitations of the expanded 103 shall be allowed a grace period of 36 months to become registered as experimental aircraft and pilots who operate such will have 36 months to obtain the enhanced rec pilot rating.

Ultralight vehicles that are fat, fast, or otherwise do not meet the limitations of the current 103 shall be allowed a grace period of up to 24 months to become registered in and enrolled in an authorized ultralight organization.

Ramp checks and enforcement of these enhanced regulations by the FAA will meet much further acceptance. FAA enforcement of the enhanced rules will be key to the success of any new rule.

Benefits of Alternative 3.

I have read and am sympathetic to many of the comments that have been submitted so far in regards to the proposed NPRM from pilots who desire inclusion of aircraft that do not meet the limitations of light sport aircraft. The fact is, that no matter where the lines are drawn on weight, speed, consensus standards, etc, there will always be those pilots and aircraft that will be left out because of the rule. Perhaps the most striking benefit of Alternative 3 is that no aircraft will be left out.

The benefits of Alternative 3 include, but are not limited to:

1. Safety will be at least the same if not greater than the status quo, which has been demonstrated, and is acceptable.
2. Alternative 3 is a no-cost or low-cost alternative. FAA expense and effort in these regards would be enforcement and annual auditing of ultralight organizations.
3. Ultralights, whether fat, legal, or trainers can continue to be defined and operate as such.
4. Aircraft that do not meet the limitations of an expanded 103 can be registered and flown as experimental aircraft.
5. Widespread acceptance throughout the general aviation and ultralight communities. Alternative 3 provides an acceptable niche for all aircraft and all pilots.
6. An alternative for certification of pilots who desire to fly faster heavier aircraft outside of expanded 103 limitations is provided in the revised rec pilot certification, and is readily attainable. Such aircraft do not fit the definition of ultralight, nor ultralight trainers. They do not fit the limitations of such, and therefore should be required to obtain certification.
7. Opportunities will exist for 103 pilots to fly safer vehicles as well as adding requirements for those who fly heavier ultralights to enroll in training programs that will promote and enhance safety.
8. Enhanced safety at airports over other alternatives. Powered Parachute operators really have not desire to fly into class B, C, and D, airport environments, and rarely operate from airfields. Inclusion of such aircraft into traffic patterns at airports could have safety ramifications. It appears the only reason these vehicles were included into the proposed NPRM is because they cannot meet the current weight requirement limitations of Part 103.
9. Participation in rec pilot will increase dramatically.
10. FAA enforcement of the limitations is encouraged and will receive greater acceptance.
11. There will be no need for creation of new categories and training of neither light sport airmen nor light sport aircraft. No need for implementation of the complexities contained in the NPRM. Much of what is proposed in the NPRM appears to assume that training courses for airmen and maintenance will be voluntary, where this may actually not be the case, creating another non-participation rule.
12. Requires less administration by the FAA and is an opportunity for private, non-profit administration.
13. Ultralights remain as ultralights. General aviation and experimental aircraft also remain as such.
14. Alternative 3 is superior to alternatives 1 and 2 as presented in the NPRM.

In summary, allow me to draw the following analogy. When building a bridge across a ravine, it is always more effective to build out from each embankment wherein a firm foundation can be fastened. From there the bridge is built out to meet and join somewhere in the middle. Alternative 3 as presented herein does just that, building rec pilot from the general aviation foundation, as well as the expansion of 103 from the ultralight abutment, so that they meet fairly and equitably in the middle. The proposed

NPRM for sport pilot fits this analogy as a plank, loosely dropped into place that spans the gorge. It forces many to cross who are otherwise unwilling. It provides a path for those who are desirous to get to the other side, but even these may not be sure of the capability of the board to provide adequate support.

Other alternatives such as continuing the exemption programs by incorporation into the 103 rule, but tightening the requirements for such, as well as enactment of sport pilot as proposed could also be sufficient. However, I do not put as much credence in such an alternative to meet acceptance as well as Alternative 3.

The FAA's consideration of this alternative is justified, and warrants attention. Please give it careful consideration. The FAA may find as I have that this is a preferred alternative and is in the best interest of the general public.

Sincerely:

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