FAA Ultralight management staff,

Ladies and gentlemen,

Though I want to support, in general, the petition submitted by Richard Carrier with support from ASC, USUA and NAPPF, I have a few concerns I'd ask you to address as you take action on his proposal.

First, the 255-350 lb. ultralight "vehicles" have shown a good safety record in an unregulated, part 103-like environment. In addition, these single place aircraft have flown for 20+ years with zero (or nearly zero) impact on the safety of those on the ground.

Over this time, the average age of ultralight pilots has increased as the safety factor of the aircraft increased due to the inclusion of improved safety features.

1. Early engines were so small that they often had to be run continuously at 100% or near 100% power to keep in the air and climb. As engine size increased, the service demands on the engines was reduced so no ultralight aircraft engines may cruise in the 50%-75% range common to general aviation. The larger of the engines that came into use now include dual ignition and four-stroke engines. The percentage of flights with loss of power has dramatically reduced.

2. Aircraft instrumentation has been added, similar to general aviation aircraft. These are not to make the aircraft part of the general aviation fleet, but the pilot/owners desired the increased safety of flight and engine monitoring instruments. These have contributed to safety.

3. Landing gears have improved to the improvement of safety. Early ultralight landing gear (feet) were replaced by wheels on stiff struts, but those have given way to gear designed to absorb increased rate of descent and cross-wind conditions and accidents that the early gear could not.

4. Brakes are now included on the majority of landing gears of the "fat ultralight" aircraft to the great increase in take-off and particularly landing and ground-handling safety.

5. Self-starting systems provide a great deal of safety improvement over hand-propping aircraft engines. Ranging from impulse starters to electric start and battery systems, these allow the engine to be started without threat (literally) to life and limb.

All these items have increased the weight of the ultralight aircraft without making any degradation of safety – in fact, they've improved safety dramatically. The increase in safety has brought older, more mature pilots into ultralight flying – many of us who could not foot launch an early ultralight and who would not feel safe without basic flight instruments and the ability to monitor our engines. We, the large crowd of older pilots also weigh more than the young people who were the ultralight pilots when part 103 was created.

The increase in the average weight of the pilots combined with the natural increase in weight of adding the safety equipment listed above drove most ultralight aircraft into the realm of "fat ultralight" weights. And this was done without losing the purpose or value of ultralight aviation. Ultralights have created a breeding ground of new design innovation and pilots.

Because of these considerations, I'd strongly support an increase in the weight allowed for single place ultralights that makes special allowance for aircraft with 1. larger engines, 2. improved instruments, 3. improved aircraft and landing gear structure 4. brakes and 5. self-starter systems. Rather than trying to itemize the various combinations of these safety improvements, I'd ask that AC 107.3 be modified to give blanket 96 lb. weight and power exemption (up to 60 hp) for single-place ultralight aircraft so these increases are not included in computing the table computations used to determine compliance.

I do think you should just increase the weight, stall speed and fuel allowance in part 103, without a comment period, since it simply increases the safety of ultralight aviation – if you can't do it, then we'll take any improvement we can get. If you can't simply approve this request, I'd support the organization's request for an exemption to perform a study.

Finally, Mr. Metzler suggests a period of full discussion. I would assert there is some need for prompt action. Currently, there area few thousand "fat ultralight" single place aircraft which would be eligible for regulatory relief from the adoption of my suggestion or Mr. Carrier's petition. Should this process be drawn out, many of these will be forced into an expensive $800-$2000 ELSA registration process, some including multi-thousand dollar taxation that would only be required if these vehicles change to be registered N-numbered aircraft. If these part 103 improvements are made after that money is spent, an incredible loss of good-will and worse may accrue.

Therefore, I'd ask for immediate regulatory relief, preferably for a simple change to part 103 or a change to AC 103.7 or, if necessary, acceptance of this petition with the inclusion of wording to allow relief from AC 103.7's stall speed and maximum speed calculations.

To these ends, here are my proposals:

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1. Brakes, improved landing gear structure, flight and engine monitoring instruments, engine self-starting systems and larger engines (that don't have to be run at continuous 100% power and which have dual ignition) make a safety increase that justifies AC 103.7 modification to allow these safety items without them being counted on the charts used in AC 103.7 for computing empty weight, stall and maximum speed.

2. Because some additional structure is required to safely support the weight of this safety equipment, it would be advisable to grant a blanket 96 lb. allowance for safety equipment that would not be counted when using the tables (i.e. stall speed, maximum speed) in AC 103.7.

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Due to these evolutionary improvements in the ultralight aircraft and the weight increase of the American pilot, I'd request that these changes be made, eventually in part 103 to allow up to 350 lb. ultralight single place vehicles. Until that change can be made or if that change is not practical, this modification to the calculations in AC 103.7 would improve safety of ultralight aircraft and pilots.

Casual survey has shown that a safety equipment allowance for these items of 96 lb. would include virtually all of the "fat ultralight" vehicles which have already flown incorporating the safety items listed above. Most of the few

ultralight vehicles above this weight could have some safety equipment removed to qualify within this change to the Advisory Circular. As the continued use of these vehicles under part 103 would provide no significant risk to those on the ground and as these changes improve flight safety, I'd ask that these changes be made immediately and without the need of any "study" or NPRM.

Administrative cost to users is approximately zero and $800 - $2,000 less per aircraft than alternative regulatory means, i.e. Sport Pilot / Light Sport Aircraft. Administrative cost to the government is guessed to be tens or hundreds of thousands of dollars less than alternative regulatory means