

# PROPOSAL: Build an Aerolite 103 Ultralight

## Summarized Benefits to the Chapter

- Quick - Easy - Realistic build, 60-100 hours advertised, in and out in 3-6 months.
- Sell for profit to support our cause and pay our operating costs, in demand by buyers.
- Explore electric propulsion, educational.
- Generate attention and interest in the chapter, new membership.

## Ultralights are Popular

In the eyes of the FAA, they are not airplanes. No pilot's license or medical are required. There is no N number, registration, or airworthiness certificate. No annual inspection. They are simple and fast to build, repair and maintain. Many designs have been around for a long time and are proven. They cost very little money relative to certified aircraft. A typical build can involve as little as 60-300 hours of build time depending on model and amount of work the manufacturer does for you. They can be purchased as a kit or fully assembled. There are carve-outs in the rules for no transponder or ADS-B out, ie no electrical system. Fun flying for about \$10/hour operating cost. On some (not the aerolite), a single person can fold the wings and it can be stored in a trailer. Addition of ballistic parachutes do not penalize max weight.

## Rules governing Ultralights

Far 103 governs ultralights in the United States. It is a simple 2 page document, here are some highlights.

- Single Occupant
- Maximum empty weight 253 lbs. (278 with parachute)
- Maximum fuel 5 gallons
- Maximum speed 55 knots at full power level flight
- Maximum power off stall speed 24 knots
- Daytime VFR operations only
- Same class of airspace visibility and cloud clearance requirements apply

## About the Aerolite 103

- Tricycle Gear, Yoke
- Flaps
- Slip on sailcloth wing surfaces
- Electric start and battery included
- Realistic kit price with auto gas engine, \$18k (sold new ready to fly \$22k by Aerolite)
- Electric engine option this year
- Local delivery or pickup from factory, Deland Florida

- Very few tools required, tool they use to set control surface deflection can be borrowed with \$100 deposit

Conversation with Dennis Carley, owner of Aerolite 103, LLC on May 29<sup>th</sup>

50% deposit at time of order, balance due 30 days prior to ship. \$1700 discount if paid in full at order. 3-4 month lead time. According to Dennis “the resale value on a fairly new aerolite is usually very good, because we are so backlogged on ready to fly aircraft that a lot of people who don't want to wait for us to build one are willing to pay a premium to get one that is already flying and available right away. With regard to Electric, we have a prototype electric propulsion system on an aerolite, have done the thrust test and motor run test, and should be flight testing it probably in two to three weeks. Once the flight test regiment is done, the electric propulsion system will be available as an optional power plant.”

Pictures





Ballistic chute



Tundra wheel option



Tricycle gear with Yoke



Wheel pants option















