

## Assembly/Disassembly

Apart from the weight of the wings and the large electrical connector between each wing and the fuselage, assembly and disassembly are normal. For assembly, a dolly, similar to a one-man rigging dolly, is placed by the fuselage and receives the wing at its center of gravity. The wing is then wheeled around, rotated, inserted in the fuselage and supported by a regular wing stand. The dolly has a gas spring, engineered to balance the weight of the wing, so turning the wing from vertical to horizontal and vice versa requires little effort. Also, when the wing root is in the fuselage, a lock on the dolly axle may be disengaged so the wing may be moved a small distance fore and aft for precise alignment.

In the Cobra trailer, the wing is supported by a dolly at the root, followed by a 10 foot long support contoured to the shape of the wing, and by a conventional padded support nearer the tip.

The horizontal stabilizer snaps into place without any tools. A tool is screwed into the top and pulled upwards to unlock it for removal.

## Specifications

The standard configuration is 20-meters, but the wing breaks just short of 18-meter to allow the optional 18-meter tips. In fact, except for instrumentation, this is about the only option. The special mid-wing dolly, tail dolly, upper and lower surface gap seals are standard.

The empty weight of the prototype in the 20-meter configuration is 920 lbs giving a wing loading range of 7.8 to 9.7 lbs/sq. ft for the 20-meter ship and 8.2 to 10.2 for the 18-meter one. Other specifications are available on the web site [www.lange-flugzeugbau.com](http://www.lange-flugzeugbau.com).



## Badges Unlimited/ Aero Lite

### Lambada 15-meter Motorglider

Rotax 912 full feathering prop. Tricycle or Tailwheel.

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## Contest Considerations

The 20-meter configuration, for which the Antares has been optimized, qualifies only for Sports and Open Class contests. Its theoretical polar is impressive at high speeds and it may surprise the larger gliders on strong days. In the 18-meter configuration the Antares can compete against gliders of the same size. Its performance is still unknown but in the areas of comfort, handling, and ease of operation, it will be hard to beat.

A major consideration at contests is how to charge the batteries. At some contest sites there may be tie-down spots within reach of an extension cord. If this is not the case, the only other option that I see is to use a portable generator. Honda and Yamaha each make very quiet generators of appropriate output. Fully charged batteries are good for a climb of 10,000 ft, after which it takes 9 hours to fully recharge them. So, after a typical climb of 2500 ft, it would take 2 hours 15 minutes to top them off. This does not seem too onerous. After the recent blackout in the northeast, I was thinking of getting one of these generators anyhow.

## Delivery

I have serial number 30 with a projected delivery of December 2004. The factory reports it has orders for 60. So it will not be long before these self launchers are seen (but not heard) at contests.



*About the author:* Roger Buchanan, a retired software engineer, has 1800 glider hours, has owned four pure sailplanes and four self-launchers, and is looking to return to contest flying after a long hiatus. He flies out of Winter Haven, Florida.