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*Benvenuto, Zigolo!  
Welcome to America*

- Part 103
- Kit or Almost Ready to Fly
- Gas or Electric

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# Benvenuto, Zigolo!

## Welcome to America.

Report by Michael Bradford



Pronounce it like “jigolo” but with a Z. The word’s Italian and translates to English as “bunting”, like the little bird. We’ve been watching the Zigolo as it evolved from San Diegan Mike Sandlin’s open source Goat glider plans into a “motorfloater” in the hands of Italy’s Aviad (designer Francesco Di Martino).

Prototyped and flown in early 2013, the MG12 (for MotorGlider 12) Zigolo has already sold 14 kits world-wide, and the first of those kits to be completed and flown took flight in Qatar (where Maurizio Persinotto built his inside his hotel apartment) and Florida (built by Chip Erwin at South Lakeland Airport (known to you auld guys as Circle X). It seems an emerging tradition that the first MG12s are truly *home builds*, often being built in and around the pilot’s home. In Japan, builder Kenichiro Kumagai also followed this path.

Zigolo’s U.S. importer is well known in the ultralight and light sport aircraft industries. Chip Erwin first appeared in this magazine in the early 80s and his Midwest Microlites was the builder of the Tomcat ultralight. More recently, Erwin was involved with the design and manufacture of the Sportcruiser LSA, through his Czech Aircraft Works. That plane was briefly sold by Piper as the Piper Sport and many are still in service as trainers and sport LSA.

Erwin is now building a sequel to the Sportcruiser known as SC3D in Zhuhai, China. His company Aeromarine LLC is based at South Lakeland Airport and offers the Mermaid amphibian, in addition to the MG + and upcoming SC3D. Find more info at [aeromarine-lsa.com](http://aeromarine-lsa.com).

On a promising-to-be-flyable Sunday in early February we traveled to South Lakeland Airport to meet with Chip and get a firsthand tour and touch session and to hear about his experiences building and flying the Aviad MG12 kit.

### Nom de Plus

Aeromarine LSA on their website labels their Zigolo the MG +, and the first thing we noted in our time with Chip is the meaning of that suffix. The first batch of kits made by Aviad and delivered to builders could probably be most accurately described as *construction*, rather than *assembly* kits. As he talks about the kit, his experience building it and his plan to adapt it to electric power, we begin to get a view of Erwin’s MG + as a work in progress.

The original Goat plans called for very simple junctures, easy to manufacture with a minimum of tools and tooling, Aviad redesigned the structure, and many of the components to facilitate prefabrication. Erwin could not resist further upgrading and tweaking the design choices of the kitmaker.

Meanwhile, Aviad has contracted out the manufacture of the next series of kits, choosing to concentrate on further engineering and new projects. This means the next series of kits from Italy could see various changes as well. One imagines MG12 variants may emerge from unpredicted sources, and that Erwin’s

—PHOTO BY JAMES LAWRENCE



influence on the genre could continue to grow over time. He talks freely of almost-ready-to-fly quickbuild kits, manufactured in China and concurrently targeting a Chinese pilot market as well as the U.S..

Erwin's also very focused on developing a plug-in electric power solution to provide a more silent, smoother option to the existing Mosler 185 paramotor package manufactured by Vitorazzi. He's working to bring that prototype electric version to Sun 'n Fun in April.

Whatzit Like?

Chip was not finished with his test flight series at the time of our visit, and while we hope to fly the MG12 at a later date, prudence and experience quelled the zeal and we were happy to observe and get Chip's commentary on his experience so far.

The first thing we noticed is the sprung tail-wheel without caster or swivel. That means a fair amount of throttle, elevator and rudder are required to change course abruptly during taxi, a nuanced method which obviously is "fond of experience." Chip says Francesco is working on a swiveling version. Meanwhile, the plane when stationary can be turned easily by hand and moved on the ground by one person unassisted.

At under 225 pounds, with 25 horsepower and a pilot of only moderate weight, Zigolo came off the ground quickly and seemed to fly well in the steady breeze that had replaced the morning's thick fog.

Chip's report on his flying experience was of course quite positive. While we were speaking following his flights, he lowered the front of the horizontal stabilizer to retrim, and hopefully correct a slight forward stick displacement in level flight.

Atop that stick was one item he lightly criticized, the gun-trigger throttle which came with the Vitorazzi engine. Rather than a simple friction-lock to set a steady engine speed, it had a single locking detent at an arbitrary cruise setting—perhaps a vestigial feature of the engine's paramotor pedigree. The pilot has to develop a feel and finger coordination to maintain a desired thrust setting. An obvious area for future improvement.


The Vitorazzi Mosler 185 is a well known paramotor pusher, with parts and expertise readily available from around the world. With the advertised goal of motorglider (or as Chip admits, more aptly "motorfloater") one notices the direct belt drive. The belt drive is simpler, lighter and more easily serviced than a mechanical transmission, but it lacks the centrifugal clutch which could allow the prop to stop spinning at engine idle speed. Instead, pilots may opt for an idle setting resulting in neutral thrust.

Chip's experience in thermal conditions at ultralight wing loadings being limited, he couldn't



**Above:** A sparse cockpit array in ultralight tradition, putting the air in airplane. **Below:** the Hall airspeed indicator maps the MG12's typically motorfloater speed range.






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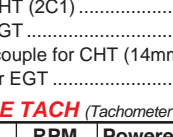
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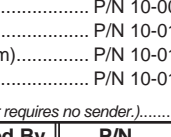
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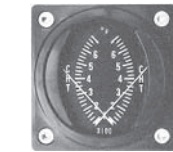
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**Above:** Chip Erwin pull starting the MG12's Vitorazzi Master 185. **Below:** Sunday morning shadowcruising on the runway at South Lakeland Airport.



comment on the handling or suitability of Zigolo for the motorfloater mission, in mid-day conditions, when things go bumpy in the air.

My goal, if I get a chance at Zigolo in future would be to power aloft before the morning heating begins, venture into thermal conditions as they arise, limit or stop the fuel consumption altogether and endeavor to fly all day on 3 gallons of fuel, earning the motorfloater merit badge, so to speak.

**What if Atilla the Hun had a Motorfloater?**

Or, more relevant, what if I had a Zigolo in 1975? For all of its meandering course, the river of ultralight aircraft technology is forever bending, looping and creating islands where evolution is pitted against scarce resources. Zigolo reminds me of the exploration of humans' ability to fly more, with less aircraft, is still just beginning.

It also reminds me that evolution is hard to detect, unless you are able to look in a lot of places. Leaps and bounds are hard to come by, but persistent force can yield creatures that are good at what they do.

Electric power, easier breakdown and transportation, finer joins and hardware along with an investment of intelligent manufacturing will likely evolve the current Zigolo.

But as it is, in its first generation, it excels in one very important respect: I can pick up a kit for a reasonable sum, clear out the furniture I'm not allowed to sit in, from that room I wasn't allowed to use unless the Queen Mother came to call and build an airplane, while the neighbors whisper. (*What's he doing in there?*)

The 1st generatoin Zigolo's U.S. kit price point of \$14,500 includes engine, parachute, drawings and build advice/assistance from the designer. The claim of less than 100 hours for assembly seems optimistic to me, but that likely says more about my confidence as a builder than the simplicity of the kit to build.

If building is not your passion, Erwin plans to offer an almost-ready-to-fly version with a current price of \$16,000, secured by a nonrefundable deposit of \$10. That seems a fair deal, with odds of your future happiness being somewhere between the extremes of Lotto, and a bird in the hand. As a market survey, it's demonstrably a cautious idea, born of valuable experience.

As I prepared to drive home, and Chip returned to his tinkering and tinkering on the electric drive package, my general impression of the Zigolo began to form. Then the inevitable doomed plot to get one for myself began to hatch. I remember thinking

*“I can pick up a kit for a reasonable sum, clear out the furniture I’m not allowed to sit in, from that room I wasn’t allowed to use unless the Queen Mother came to call and build an airplane, while the neighbors whisper. (What’s he doing in there?)”*

the paramotor component could be used to power a Zigolo, as well as a trike for my hang glider, and provide an excuse to buy a paraglider as well. And, that I could possibly just be running a slight flight fever. Time will tell.



**Aviad Zigolo MG12 Specifications**

Seating	1
Empty weight	225 pounds
Gross Weight	485 pounds
Wingspan	36 feet 4 inches
Wing area	170 sq ft
Wing loading @ 385 lb	2.23 lbs per sq ft
Length	18 feet
Height	NA
Fuel capacity	3 gal.
Certification	Part 103
Standard engine	Vitorazzi Master 185
Power	25 hp
Power loading	15.4 lbs per hp
Cruise speed @75%	42 mph
Never exceed speed	48 mph
Rate of clim @ 385 lb	394 fpm
Takeoff distance	131 feet
Landing distance	NA

More info:  
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**Above:** The pneumatic Commelli recovery parachute is included in the kit price and empty weight of the Zigolo MG12. Upgrade to a BRS unit is an available option. **Below:** The Vitorazzi Master 185 powerplant. It's 25 horsepower, belt driven and free-air cooled. —PHOTO BY JAMES LAWRENCE

