

# GLIDING

International



- GAVIN WILLS - PILOT EXTRAORDINAIRE
- NEW SIDE BY SIDE TRAINER
- GLIDING AND THE ICE AGE
- EVALUATION OF ANTARES SAILPLANES
- GLIDERS AND TREES DON'T MIX
- WORLD'S TOP SIXTEEN PILOTS

**THE WILLS DYNASTY**

*We are the best at what we do !*





**weight saving  
improved safety**

**BERINGER OCEANIA**  
Hamilton Airport  
Gary Williams 07 8433 199  
gary.williams@aeromotive.co.nz

**BERINGER AERO**, France +33 492 201 619  
sales@beringer-aero.com

**North America:**  
**BERINGER AERO USA Inc**, 4118 N. Nashville, Chicago. tel +1 708 667 7891

## wheel & brake kit high performance

STC delivered with EASA Form1 for :

- Discus 2A
- Ventus 2A
- ASW20
- Pegase Centrair
- Other types: ask us

Spare parts (brake pads, discs...)

- ▶ reduction of landing distance
- ▶ Tubeless = no leak
- ▶ hydraulic without maintenance
- ▶ pad and disc life: 600 landings



Agreements:  
EASA Part 21G  
APDOA

www.beringer-aero.com

made in France

## Striving for perfection

**G**liding International had not heard of Beringer before they contacted us about advertising. We asked our French correspondent, Francis Humblet, to call on them and he reported back that we were in touch with a real gliding family (sailplane owners) and an obviously well organised engineering concern. Welcome to our world Beringer! Here is the report from Francis.

In 1985, Gilbert and Véronique Beringer started manufacturing motorbike equipment including wheels and brakes. The quality of the products was soon recognised and helped to win several titles in the Endurance World championship.

Beringer Wheels and Brakes was created in 2002, when Gilbert, who was a pilot, aircraft home builder and very much interested in aviation decided to transfer the knowledge gained in braking systems to aviation.

In 2007, Rémi Beringer, Gilbert son and his wife came on board. Rémi, a fully fledged engineer started handling design and certification of their products for Aircraft, Ultra-Light and Gliders. Having sold the automobile and motorbike business during 2009, a new company, Beringer Aero was born and Claire, Rémi's sis-

ter, now also a qualified aero engineer, became a part of the company. Beringer designs, tests and distributes all their products but the manufacturing part is subcontracted.

In 2011, Beringer Aero obtained a parcel of land at Aeropole, adjacent to the airfield at Gap Tallard alongside a taxiway that connects to the busy airfield, an airfield that caters for all sport flying activities including parachuting and gliding. The family glider and ultra-light as well as occasional machines on test are housed in the rear half of the purpose built facility. This wood structure is a Bioclimatic concept which needs very little energy to operate with no heating at all required for the offices. It is a very impressive test facility which includes a dynamic bench, hydraulic press and fatigue equipment.

Having now seen the logistics aspect, how does this relate to our gliders and other aircraft? Why would you pay to change from an existing factory system to a Beringer kit? Rémi had the best answer when he said, "With our brakes and wheels, the stopping distance is halved! A pressure relieve valve also ensures that a wheel lock is not possible when brake pressure reaches 40 bars."

Several glider manufacturers are now installing the Beringer

equipment as standard on their new machines. Jonkers, HPH, Lak, Stemme, Schémpp-Hirth on their Ventus 2, Duo and Arcus. Kits are available and certified for Elfes S4, Nimbus 3&4, ASW 17, 20, 22, Lambada and Test Bonus.

The complete kit consists of wheels, disc and pads, tire and axle, master cylinder, pressure relieve valve, connecting tubes and installation instructions. All tyres are tubeless with tail wheels also available. The company also claims a weight reduction compared to the original equipment.

They have produced a well presented catalogue which describes the many parts available. The company continues to add many older gliders to its approved product range. I was impressed and would certainly like to see a retrofit of the Beringer braking kit for my Lambada motor glider!

I am reminded of the many aeronautical accidents and incidents due to faulty brakes which would fill many pages. If a few were funny afterward most were horrible in consequences to pilots and airframes.

History shows that many devices have been tried in order to reduce the landing run. Tail parachutes were in for the first generation of glass ships to assist weak wheel brakes, initially cable operated. Soon hydraulics brakes were fitted or retrofitted on many gliders in order to increase the pad's pressure on weak drum brakes. War time gliders also had the same problems and many attempts were made to reduce the ground run by using a plough or similar concept like barbwire around the skid.

And so I could go on and on. Beringer has a lot to offer for old and new. The Beringer Wheels and Brakes systems are designed specifically for aircraft up to 5500 kilos.



**Francis Humblet**  
Gliding International's  
French correspondent



A section of the elaborate product testing department at Beringer's French factory.