

Viking Glide is certified as a "Green event"

The aim of the competition management is to make the competition as environmentally friendly as possible. We want the area to look the same after the competition as before.

As a result of our environmental work, the competition has been entitled to carry the logotype of "Green event" (Grönt arrangemang), issued by the Swedish Sports Confederation.

As a pilot, team member or an accompanying person, you can contribute

to our work by following the guidelines listed here.

Guidelines

Use our recycling station

and the marked trash cans provided for plastic, aluminium cans, glass, paper, batteries etc

Refund glass and plastic bottles and aluminium cans in the stores.

Avoid unnecessary driving on the airfield.

Be reasonable in your consumption of energy and water.



Would you like to be towed by a Volvo to an elevation of 800 m?

How about to let your glider be towed by a Volvo. At Ekeby you have a chance to be towed by a PiVo, a combination of Piper Pawnee and Volvo. The story behind this incredible aircraft is interesting and started long before the Pawnee got a Volvo engine in the front.

Ekeby airfield is located in the vicinity of a medium sized town and with a lot of people living close to the airplanes.

It was in the early 80's that Lars Broberg, towing manager at Viking Glide, wanted to decrease the disturbance from the towing aircrafts.

Lasse had earlier initiated the use of the old crop duster aircraft Piper Pawnee to tow gliders. But the Pawnee was noisy both from the engine and the propeller. Lasse developed a series of silencers for the Pawnee and reduced the noise. By installing a tow line winch he eliminated the drop procedure which reduced the disturbance of low flying aircrafts. It also reduced the need for ground personell. This system is now used all over Europe.

The two blade propeller "barked" a lot and was the main noise source. He let the Hoffman factory make a four-blade-propeller for the Pawnee. This had not the same efficiency as the two-blade, but was much more silent.

During the test of the silencer he was thinking about to use a modern and more efficient engine. A mo-

dern car engine can easily achieve 22–24 % when the Lycoming was just about 16%. In the end of 80's, Lasse and number of old technicians started to investigate the use of a Volvo 3 liter 6 cylinder aluminium engine.

The *elderly-men-day-care*, as they were called, found out that most engine converting projects stranded because they tried to convert the engine to the plane. The group decided to convert the plane to the engine instead. With help of Bosse Eriksson, who had worked professionally with Volvo engines for over 40 years, they started up. First they stripped off unnecessary functions in the motor control unit such as AC, gearbox control etc

Two critical systems are the top dead centre (TDC) indicator and the fuel pump. If any of these units failed, the engine stops. The group doubled them for safety. Any other engine failures would still allow the pilot to make a controlled motor landing. With these modifications and the Volvo engine's original ignition system, the safety was trippled compared to the original engine.

The gearing was made with a drive

belt that is more effective than cogwheels or chains. The propeller was a huge 2,5 meter two-blade running on a speed of 1750 rpm. With a gearing of 3:1 the engine ran at 5250 rpm and gave almost the same power as the Lycoming with less than 35% fuel. And less noise.

The last modification, dated May 11, is with a propeller with less pitch that will give the 185 hp Volvo the same torque as the Lycoming 235 hp. Now the fuel consumption will be slightly higher, but still much lower than the original engine.

Totally, the PiVo has decreased the running cost, reduced the maintenance and minimized the noise. When in Eskilstuna, take a closer look at the PiVo and talk to the men behind it.

This is an extract from an article written by Bo Eriksson. Translated and edited by KG Jonsson-Finne.



Lars Broberg at the PiVo

Photo: Bo Eriksson