

# FLYING HAND-LUGGAGE



22-Lightfex-kilograms: walk-over on the ground as well as in the air

In the age of mobility, the short-pack gliders from Finsterwalder remain firm favourites. They almost qualify as hand-luggage when traveling. As regards packing volume and transport philosophy, they come closer to paragliders than hanggliders. Lightfex-clients are light weight to middle weight beginner pilots

While in the past it was primarily mountain-eers who chose the short-pack gliders, meanwhile many others have come to value the advantages, especially when the glider has to be transported in a cable-car or is to be taken on holiday in an aeroplane. There is even room for such a handy package in a smallish car, where the glider is protected from theft and bad weather.

Short pack in the case of

Finsterwalder does not mean four metres - the Lightfex frame can be taken apart to a length of 1,85 metres.

Due to several newly developed fittings, the additional work time required to rig the glider, amounts to approx. ten minutes, even though the sail has to be removed each time.

Damage to the frame can be immediately inspected. To put the puzzle together amounts to child's play. The tubes are clearly marked and are simply pushed into one another.

The light-weight, thin walled, yet high strength perunal tubing has been mechanically polished. This method is more expensive than anodising, however, recognising faults in the material becomes easier.

Finsterwalder took a pioneering role in the use of perunal (relatively expensive in comparison to other alloys) - in the meantime pe-

runal is also used by other manufacturers.

The sail is pulled onto the frame over the nose plate, it is noticeable how much care and attention has been given to detail especially regarding the hardware. There are no sharp edges or corners that could damage the dacron cloth. Even the heads of the stainless-steel screws have rounded edges.

The rigging wires should be rolled up particularly when rigging the glider down short - this avoids any confusion when re-rigging. The rigging wires can be mounted one-handed and without the use of tools (as with all other connections) thanks to the new detent buttons.

The king-post hang in must be mounted, and the sail attached at the nose and at the ends of both leading edge tubes.

All of the steps mentioned up to this point are unnecessary if the glider has

been stored „long“ (5,3 metres). Rigging down to a length of 3,5 metres follows by separating the leading edge tubes and is just as simple as with any other single surface glider.

The Lightfex' crossbar swims freely over a roller and is secured in addition with a steel cable. The buckle on the strap that holds the top sail the correct distance from the keel tube gives the impression of being stronger than necessary.

The longest of the perunal sail battens are telescopic - these would otherwise be too long to fit in the 1,85 metres short glider cover. To mount the last sprung loaded batten onto the burl of the leading edge tube, it is best to reach into the sail pocket. The two other sail battens on each side are supported by the free standing wash-out rods. The nose cone gives this single surface glider a professional appearance.

### Launch

The Aerosafe A-frame is a pleasant size even for smaller pilots.

The 22 kilograms sit comfortably and well balanced on the upper arms - this and the tight-lower-rigging wires mean that the wind on the glider surface is felt directly.

Angle of attack correct, run, launch: the Lightfex leaves the ground the way a beginner's glider should.

### Flight characteristics

Right from the word go, I had a remarkably good feeling, that the Lightfex would do exactly what I wanted, the steering characteristics are direct and smooth, however, it must be said that my hang-in weight was at the top end of certified range.

The handling for lighter pilots is certainly a little more sluggish, and therefore should not overtax novices. The Lightfex guarantees pleasant thermaling due to good roll stability, the wing displays no tendency to side slip.

When shallow turning or flying near stall speed, it is easy to feel the glider wanting to straighten up.

The result is that the Lightfex has very little tendency to yaw below a speed of 55 km/h, and when stalled, will only slip to one side when provoked to do so by the pilot.

The stall which occurs at approx. 23 km/h demands barely any roll control. When thermalling at low speed ranges, the performance is very respectable, however, it soon becomes clear at speeds of over 50 km/h that the Lightfex is no high performance glider.

The sink rate increases dramatically yet yaw is still minimal.

Bar pressure is very progres-



The cross-bar fixation consists of two connecting elements and a redirectional roller: the Lightfex crossbar floats on a flexible cord ensuring flexibility when turning.

Due to the positioning of the A-frame apex fairly far back on the keel tube, the glider rests neutrally on the shoulders; besides, the pilot has plenty of leverage when flaring (above). Main pitch line with compensating roller at the toe of the king-post (middle). The sail is attached to the leading edge tubes by the use of pegs: this connection remains rotatable, favourable for handling.

Loops for the fingers ease insertion (below left). 1,85 m short-pack dimensions facilitate independence. Rigging up is child's play thanks to the special fittings.

sive up to the maximum speed of 73 km/h.

### Landing

With decreased speed, tracking becomes very good, imparting safety when landing.

Apart from the typical features for this class of glider, such as minimum ground effect and a wide flare window, it is also noticeable that the top of the A-frame is fairly far back on the keel, providing for plenty of leverage when flaring, which is especially helpful for smaller pilots with shorter arms.

### Summary

The Lightfex is a forgiving glider suitable for novice pilots weighing 70 kg and less.

This short-pack glider offers satisfying performance for pleasure pilots with handling that inspires confidence.

The Lightfex costs 2690,- Euro which makes it one of the more expensive gliders for this class.

Given the high quality raw materials, the many elaborate fittings, the additional short-pack measurement of 1,85 metres and top finishing, the price is certainly commensurate.

**Martin Jung**