

# PREMATURE WEAR ON THE BRAKE LINES?

Our contributor Lucian Haas, who loves ground handling in strong winds, has discovered premature wear due to keeper rings on a wing...

**M**ore and more wings from numerous manufacturers now have keeper rings replacing the pulleys which guide the brake lines. It's a good invention: This type of pulley doesn't make any noise, the friction is generally small, it never jams and the rings are very light. Better still, they are cheaper than pulleys.

Nonetheless, they could potentially create problems if the person using them puts a strain on them in an unconventional way. By regularly ground handling in strong winds at take off, Lucian is used to pulling directly on the brake lines above the pulleys, whilst the brake handles remain attached to the risers.

This technique has several advantages: The pilot benefits from having a more direct contact with the wing and, above all, by moving his hands laterally, he can use different zones along the trailing edge, for example using mainly the outer / stabilo area (greater effect when turning) or mainly the middle part of the wing (increases the lift).

Apparently, whilst doing exactly this, these new 'pulleys' can, in certain cases, wear the brake line more than anticipated exactly at the point where the brake line goes through the ring when the brake handles are still clipped on. On the wing tested, an Ion 3, the kern of the brake line can be seen on one side, on the other, there are clear signs of wear.

If spotted in time it isn't a disaster, but it is something to watch out for. It's a reminder that, as with the arrival of any new technology, surprises shouldn't be ruled out. It is also a reminder that there is no such thing as a universal wing – a light weight wing isn't designed to be used for day to day ground handling in strong wind. ■

