

"Toto", Classic Wakefield by Rene Jossien 1952.



I built my "Toto" in 1999 in response to a new class being developed for "Classic" models from the period 1951-60. I was inspired towards this design by Peter Michel who built the first one seen in UK (modern era). It took him six days to build and six minutes to lose in a massive flyaway from Middle Wallop. Hugely disappointed, he had its replacement built within a fortnight and wouldn't you know it, one week after that, the first one came home. Now he had two.

However they don't come out to play so much these days because Peter has gone over to vintage/classic gliders to keep himself amused. The other influence was the designer. Rene Jossien also created the potent "Le Vibrant" Wakefield which gave me so many trials and tribulations since 1993. "Toto" also gives me a duel opportunity, because the model not only qualifies for Classic Wakefield but Classic Rubber also.



It has never been a problem to trim and fly. Having sorted out the CG, it flew right off the board and apart from some early Right/Left, Right/Right experiments I quickly settled on the latter because of the asymmetrical wing (count the ribs in the photos). This allows the model to generate more lift from the starboard wing without resorting to warps to give it something to lean on under power and if allowed to continue the same pattern on the glide, the slight increase in drag on that side induces a natural turn. This was not the only subtlety included in his design.

- Look for instance at the fin, positively located as far back (on the fuselage) as possible, yet angled at the rear allowing the stabilizer to DT at a positive and predetermined position. Not being sited on the stabilizer there is no danger of accidental fin offset if the stabilizer is slightly mislocated.
- Narrowed chord at wing root cleverly maximized wing area under prevailing rules and looked to reduce drag associated with the wing/fuselage boundary.
- The shape of the propeller blade which emulates the side view of the fuselage was not purely aesthetic. Perhaps he was thinking about reducing the forward fin effect which might occur if the blade projects outside the fuselage profile.
- The very cute folding U/C ploy achieved by a stretched length of thin rubber around a grooved circular lever and no wheel on the leg to induce more drag.
- The simple wing retention using a pair hooks and rubber band across the fuselage, controlled from below by a length of cotton under the fuselage.
- Not obvious in the photos, but the wing CG position could be varied fore and aft by means of holes in the fuselage for the wire plug-in wing stubs.
- The neat and functional under fins to provide a stable ROG platform.
- The absolutely clean lines of the fuselage to minimize surface drag.

Considering that his country was occupied until 1945 and that subsequently, France could hardly be thought of a being in the mainstream of model design, it is a

remarkable testament to Jossien and his contemporaries that they were so innovative and effective in the development of this type of model.

Without question this is a pure flying machine. Running a 100 gram motor at 14 strands of 1/4" multiple corded TanII or S/S, I have recently been getting just shy of 1100 turns and literally, it screams silently aloft with a prop fold at about 1 min 40 secs. (Thinks! I wish we still had those Wakefield Mass Launches at O.W. Simple rules! All launch together, highest model after 45 secs wins. "Toto" with 100 grams at 16 strands would be sensational. But then it isn't a Vintage Wake, so forget it.)



Anyway, "Toto" is an insatiable wolf in sheep's clothing. It loves going out on full chat and to my best memory has never swooped or rolled under power, or even stalled (on the glide) but if I under-wind the motor it can power-stall. But then, who wants to fly Vintage/Classic Wakefields on anything less than full power anyway?

It had a bad experience with a 120 foot pine at Woodbury about 2001 when it looked for all the world like a peanut in that damn tree, it was so high. Despite strong overnight winds, it was still there in the morning but Dave Hipperson had a 30 foot ladder and a 50 foot roach pole (or thereabouts) and he somehow tweaked it out of that lonesome pine like picking a winkle from its shell. It did not want to come out, and, Boy was it shredded? Never mind though, because of its simplicity it's a forgiving model to repair too and is still in fine form, putting in three maxes at the 2006 Nationals. Unfortunately I ran out of stamina and missed the flyoff.



You get to see the pure simplicity of design, and the other features mentioned above, in the accompanying photos. Now this model would also give the Open Rubber class a better showing than my other Wakefields if I chose to. It won't win of course, because some of those guys run 600 sq. in. leviathans, but it's a way of competing with beautiful models in a class which is dominated by stereotype.

Finally, and before too long, the thrill of flying this and similar classic models on full chat (as god intended) will shortly be limited by BMFA rule changes in the UK. In all probability the amount of rubber will be limited to 75 grams. I don't know what this is supposed to achieve because this class (and Open Vintage likewise at 100 grams) has a fairly limited following and the number of people out-flying the fields is small compared to the very popular Open Rubber class, which may have its rubber limited to 50 grams, more than enough to make a designed for purpose "lightweight" open rubber model fly forever, and make no difference to the number of people qualifying for the fly-offs. But hey! I can always fly "Toto" for fun. And what fun it is?

Ramon

Website: <http://www.vintagemodelairplane.com>

Blog: <http://uk.blog.360.yahoo.com/ramon9712>