



Rattlesden GC's K-21, refinished and ready for the test flight at Lesce-Bled airfield

# K-21 IS BACK AS GOOD AS NEW

With Rattlesden's K-21 in need of some TLC, Gary Western researches a refinish, which involved a trip to Slovenia to collect



Robert and Ksenija Novak kept Rattlesden informed throughout

**I**N 2017, Rattlesden Gliding Club's ageing K-21 was in need of a make-over. It had done sterling work for the club since it was purchased around 20 years ago and was now starting to look a little tired. A few months earlier we had some new seat cushions made locally, which were very smart, and over the winter of 2017/18 we replaced the instrument panels and did a panel refit with some lovely new LX Aviation instruments.

In January 2018 Kevin, the RGC chairman, asked me to get some prices on having the K-21 refinished, with the aim of having this done in 2019, or even 2020. He had heard it could take up to two years to get a slot as there are so few companies doing this. Alex, our CFI, expressed a preference for a polyurethane paint finish as opposed to a re-gel.

Having never been involved in anything like this in the past I elected to get some help from Uncle Google; he is normally pretty good at this sort of thing! I also put an advert on Glider Pilot Network for recommendations.

After a search I had found seven or eight possibilities and contacted them, either using

the form on their website, or via their email address. One of these was GliderService Novak (GSN) in Slovenia.

After a few days I had received replies from only five companies, one being GSN; the other two or three I am still waiting almost a year later for a reply, despite chasing a couple of times in the early days. The prices varied and so did the timescales; one could do it immediately and was quite cheap, which was a bit worrying, while another one was very expensive and was quoting at least two years before they could make a start. GliderService Novak came back to me very quickly with a detailed quote (the best reply I received) at the sort of price I was expecting and a time frame of late 2018, early 2019.

In between all of this I was getting recommendations through from Glider Pilot Network. One name was starting to stand out with nothing but glowing reports, not only on the standard of work, but that they were very nice people to deal with as well. GSN have been refinishing gliders since 1988 and have nearly completed refinishing 2,000 gliders, so that in itself is not a bad testimony.

I presented my findings to the committee in April and it was unanimously agreed to go with GliderService Novak. I contacted GSN to place our firm booking, which after

previous conversations with them looked like being for late 2018, early 2019. Ksenija Novak very quickly replied and said that they could actually make a start the second week of September 2018, with a completion date of end of October.

The only downside to us using a company in Slovenia was the road trip to trailer the glider there and to bring it back. From Rattlesden, Lesce in Slovenia is 1,015 miles, with about 30 miles knocked off for the ferry crossing, so this is not just a trip down the road. We put out a call to the members to see if anyone fancied an all-expenses-paid road trip to Slovenia, but after several attempts this request fell on stony ground, no takers.

I would have been happy to do the trip, but had work commitments in early September. Kevin, our chairman, stepped into the breach and said he would do it, so all was sorted – or so we thought! Kevin's Passat estate developed a problem just a few days before the trip was planned and was not going to be fixed in time. He made enquiries and found a company which would take the glider for us at a price. It wasn't cheap, as you can imagine, but needs must; we were a bit up the creek without a paddle at this point. The glider was de-rigged on Saturday 8 September, collected on Sunday and safely delivered to GSN on Tuesday 11 September. I had a very nice email from Ksenija to say that "the glider had landed".

Now the fun begins. I did say that our K-21 was poorly – airworthiness-wise it was fine, but the gelcoat was crazed and there were a few dents and depressions on the wings where the foam had been compressed. The canopy frame had been stressed at some point so the canopies did not close and seal as they once did, plus a few other cosmetic details. We had also elected to have GSN do the ARC for us whilst they had the glider, as this fell due in May each year and was always a troublesome time of year falling when there is some of the best soaring to be had. By having them do the ARC in the autumn this moved it to the quieter time of the year, which will not be so disruptive to our flying in 2019 onwards.

The email I was half expecting arrived about a week later from Robert Novak to say there was extra work required if we wanted a better, longer-lasting finish. A lot of the crazing was just surface stuff, but MANY of the cracks went deeper into the glass skin. He recommended that the whole glider should be covered in a thin layer of glass cloth otherwise the cracks will reappear in the new finish very quickly. GSN would also not



Top: Showing poor canopy fit and gaps  
Left: Serious gaps around front canopy  
Right: Cracks and scratches in the glass skin  
(All photographs courtesy of GliderService Novak)



Dents and depressions in one of the wings



Damage on the TE of the tailplane

## **EVERYTHING WAS NOW PROGRESSING SMOOTHLY AND WE WERE GETTING REGULAR UPDATES AND PICTURES TO SHOW US THE WORK BEING DONE ON OUR GLIDER**



Fuselage before work started

Below left: Removing the original gelcoat

Below centre: Fuselage being worked on in the rotatable holder

Below right: Fuselage in primer



✎ guarantee the paint finish if this was not done, which is understandable.

We were also asked at this stage if we wanted the interior refinished and given two options on the sealing of the control surfaces. We decided that, yes, we would like the interior done – we had nice new cushions and a new instrument panel so it would be a shame to scrimp on not having the interior done as well.

The options for the control surface sealing were 1) Sealing with Tesa textile tape, no extra cost, or 2) Sealing with Mylar tapes, which requires milling into the surfaces for a flush fit sealing. We elected to go for the Mylar tapes as this would end up a better job and the extra cost was quite reasonable.

After agreeing to the extra work I received another email a few days later concerning free play in the left and righthand aileron rod end bearings so these had to be changed. We also agreed around this time to have the old K-21 stripe/logo on the sides changed to the later style. So everything was now

progressing smoothly and we were getting regular updates and pictures to show us the work being done on our glider.

Around mid-October we were informed that the work was almost completed, except for the ARC, and at the same time received the dreaded invoice. I had to have a couple of whiskeys to get over the shock! No, seriously, it was about what I expected with all the extra work; GSN was always very transparent with the prices. I have purposely not mentioned any pricing in this article as every case will be different, but I am quite happy to discuss this with anyone who is contemplating a refinish (please contact me via the S&G editor).

The aim was to have the glider test flown the second or third week of October, then we could collect. However, during the ARC it was found that the Tost hooks were very close to their number of operations before overhaul,

so we had this done. This delayed things a bit as the hooks were sent away to Tost. After a couple of weeks, they were returned and the glider was now ready for test flying. This was delayed for a few days due to bad weather, but eventually a window opened up and the test flight went without a hitch on the nearby airfield of Lesce-Bled.

Once we had the notification that the glider was ready for collection, I booked the ferry from Dover to Dunkirk for the following Saturday, 10 November. Dave, a mate of mine, came with me for company, to help with navigation and in case we had any problems. We travelled down to Dover on the Saturday morning to board the 10am ferry to Dunkirk; around about Ashford it started to rain. Checked in OK, boarded and the ferry left on time. It was still raining. The trip across was reasonably smooth, bit of a swell this side, but once we got close to France that disappeared. We reached Dunkirk with no drama and disembarked. Still raining.

Setting the sat nav to our destination showed just 850 miles to go, so just down the road! The sat nav chose a route around Brussels, Holland, then Germany and so on. Pete Harrison, one of our members, warned us that there had been big holdups on the Brussel's ring road due to roadworks so we elected to divert (via Dave's excellent map reading skills) to go via Lille and Luxemborg. This route kept us to the south of Brussels and worked really well. We eventually picked up the original sat nav route at Liege. After about 350 miles we decided to look for somewhere to stop the night, as by now it was somewhere around 6pm and still pouring with rain.

We stopped in one of the rest areas by the side of the Autobahn and used the sat nav to find hotels near us. It said we were only a couple of miles from Neunkirchen, where there were several hotels. The first one we tried was very expensive and looked like it was run by the Mafia, so we exited that one quickly. The next one was closed despite the lights being on, the next was full (so they said!) and the last one we tried was the





Hotel am Zoo. Yes, it was attached to a zoo (by the way, it was still raining). The hotel was very reasonable, rooms were very nice but the restaurant and bar were closed. Not a problem as just down the road we found a very nice bar/restaurant where we had a traditional Wiener schnitzel and some local beer. Good job we took the umbrella as it was still raining.

Sunday morning dawned clear and bright, at last the rain had stopped. We got back on the road by 9am and the sat nav said 515 miles to go with an arrival time of around 6pm. The drive, now in sunny, dry conditions, was much more pleasant and we were making good time. We had already been through quite a few sections of roadworks and quite a lot more were to come, but never the hold-ups we get in the UK. You are not dropped down to silly, low speeds and there are no speed cameras, but everyone more or less obeys the restricted speed limit. Not once throughout the whole journey in Europe did we get stuck in a traffic jam.

After about 100 miles, the Autobahn was closed and we had quite a lengthy detour, which took us up into some hills round some very twisty bends, through the narrow streets of a village at the top then a twisty drive back down to the Autobahn. Once past Stuttgart and heading to Munich we were on, for most of the time, a four-lane Autobahn. I set the cruise control for 100mph and hardly touched it for the next 100 miles.

Around Munich it was not long before we started to see the mountain ranges of Austria on the right as we headed towards

Salzburg. Once into Austria we came across our first toll. I think this was mainly due to the tunnels. I've forgotten how many we went through, but it was a lot as we crossed Austria; quite a few were over seven km long. The last one, the Karawanks Tunnel, sees you entering it in Austria and exiting in Slovenia.

Once out of the tunnel it was only a few miles to our destination, the small town of Lesce, Slovenia. On the outskirts of the town we saw what looked like a very nice hotel. It was and it had rooms at a very reasonable cost, plus the bar was open, so done deal. Our final destination of GliderService Novak was only about 1.5 miles away from the hotel on a small industrial estate and looked straightforward enough to find.

We left the hotel at about 8.45am and very quickly found GiderService Novak, where we were warmly welcomed by Ksenija, who I had been dealing with most of the time during the K-21 refinish. She very efficiently went through the necessary paperwork and then we were joined by Robert Novak, who gave us a very detailed step-by-step report of the pictures taken during the process and the work they had done. He then took us to see the glider. Wow! It was amazing and looked absolutely perfect, as if it had just come out of Schleicher's new. It wasn't until we were back on the road with the trailer that I realised I did not take any pictures, which annoyed me.

Once hitched up, I set the sat nav for home. By the time we got onto the road it was around 10.30am on the Monday morning. Just after lunchtime, we were

Above left: Looking resplendent with new logo

Above right: Interior after the make-over

Below: inset Mylar sealing strip



Below, left: Top of fin showing elevator control rod and Mylar sealing strip

Below centre: Glass clothing the starboard wing

Below right: Sanding the starboard wing after glass clothing





Above left: Final polishing

Above right: Rigged in workshop for checking prior to the final finishing touches



Below: Back home at Rattlesden!



■ [www.gliderservice-novak.si](http://www.gliderservice-novak.si)



Gary Western started gliding in 1972 at Essex & Suffolk Gliding Club. He soloed in a K-2 after 21 aerotows and quickly converted to the club's K-6. Within a year, Gary had his Bronze C. After a break from gliding, Gary joined Rattlesden in 2013 and quickly re-soloed. He bought a Slingsby Swallow, followed by a K-8. A BI and tug pilot, Gary is working towards his 100km diploma and possibly a 300km task - all of which must be done in the K-8!

making good time so I punched the Hotel am Zoo into the sat nav. It said we would be there by 7.30pm. This would have meant we would have done 515 miles, with about only 350 miles left to do on the Tuesday to the ferry. Unfortunately, it was fully booked so that scuppered our plans. Dave looked for hotels en route and we kept drawing blanks: too expensive, full, or nowhere to park a trailer.

By about 6.30pm I was ready to stop as I was the only one driving. It was now dark and the road was wall to wall with lorries. Eventually we were approaching an Autobahn service area and this was one of the few that had a picture of a bed, as well as fuel and food. The hotel was on the other side of the Autobahn so we had to follow the signs up and over the flyover and back down to the services the other side. That was the easy bit. Once into the service area, the signs for the hotel pointed left through the large lorry park, against the flow of traffic. With a 30ft trailer on the back, narrow lanes between parked lorries and everything coming towards you - mainly large lorries - it was a nightmare. Eventually we did get to the hotel and found a room. The lorry park was full and very tight to manoeuvre in, but we did find a place to park the trailer. We didn't know how safe it was going to be, but we didn't have a lot of choice.

Tuesday morning greeted us with pouring rain. However, after about an hour we drove out of this into sunny dry weather and made good time. The sat nav said we would reach the ferry by 4pm. I had booked a flexi ticket and, while my actual booking was for 8am on Wednesday, you can catch any ferry (if there is room) 72 hours either side. On the way back we decided to follow the sat nav route, which was via the Brussels ring road. This took us out of Germany, through Holland then on to Belgium and Brussels. We cruised into Dunkirk ferry port at 4.05pm and were

booked onto the 6pm ferry, which would get us to Dover at 7pm UK time.

We decided we could not face another three hours driving, so, while sailing across to Dover, we checked into the Premier Inn on the A2 a couple of miles outside the town. I have stayed there before and you can park a trailer in the pub car park next door. We were pulling into the car park when some jobsworth said we could not park there. We explained (politely) that we had parked glider trailers here before with the full cooperation of the pub and Premier Inn. Eventually he walked off in a huff. We parked very sensibly where we were not in anyone's way and checked in.

Then we ventured to the pub for a meal and a pint. On the way we were met by the jobsworth, who was full of apologies and said where we had parked was perfectly OK and to enjoy our stay, so no idea what the original outburst was all about.

Next morning we were on the road by 9am on a sunny morning. The trip up the A2 and M2 was uneventful until we got to the slip road that took us on to the M25 towards the Dartford tunnel. Here we met our very first traffic hold-up of the whole journey, welcome back to England!

The rest of the journey went smoothly; the A12 was surprisingly quiet and we arrived at Rattlesden by 12.30pm.

We have flown our K-21 many times since its return, it looks absolutely beautiful and a glider the club is proud to own. It is also definitely quieter now as well, due to the canopies fitting so much better. All members love flying it. Looked after, I am sure it will stay looking good for many years to come.

To summarise, GliderService Novak were extremely professional to deal with, but also very polite and friendly. The whole experience of having the glider refinished by them was excellent and they kept us well informed throughout the whole process. As mentioned before, I have purposely not mentioned any prices, but am happy to discuss with anyone.