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*Clive Davidson tests a special
Jodel DR1051 (Modified)*



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**FLYING
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**PROJECT
NEWS**
THRILLED
WITH MY
NEW BRISTELL



**HAHNWEIDE
EPIC JOURNEY
TO CELEBRATE
PIETENPOL
ANNIVERSARY**

G-MLSY (LAA 385-I5584) Bristell NG5 Speed Wing

By Trevor Mills

Having moved from Buckinghamshire to Whitstable in Kent five years ago, I found that I was still travelling around the M25 to the London Gliding Club (LGC) to carry out my Glider Instructor and Tug duties. I also had a Grob 109b and an ASW20L glider there. Sometimes, on a good day, the journey took under two hours but mostly it was considerably more than that, so for any flying I did, there was always a long journey to and fro.

After a particularly delayed journey, my fiancée Karen suggested that I buy an aircraft and base it closer to where we lived, thus cutting out the journey completely. Well, I couldn't argue with her, could I?

In March 2018, I visited my local airfield and talked to the owner about basing an aircraft there. He said that he only accepted single-owner aircraft at the field because of limited movements. So, for me to own an aeroplane and keep it there, it would have to be affordable. I decided to set myself some criteria that I could base my future purchase upon. Having been flying for around 18 years, owning several different aircraft and looking at the total cost of ownership of an EASA aircraft, I decided that a 'permit' aircraft was the way to go.

I looked long and hard at the aircraft on the market at the time. There were lots that looked really good but one of the ones that caught my eye was the SportCruiser. Having looked at a couple of its siblings, the Piper Sport, that were on an 'EASA permit' and therefore subject to normal maintenance costs, I thought I'd visit Air Expo to see what was on offer there.

I visited Bristell UK and had a look at their demonstrator. It had similar lines as the SportCruiser (I later learned that was not surprising because it was the

SportCruiser designer, Milan Bristela's follow on model), and they offered it in an advanced kit form. As I had just retired, I thought this would be an interesting project to keep me busy and after looking at prices and options, I walked away with the thought of possibly ordering one.

However, a kit build posed more than a few problems for me:

- I'd never done anything like this before and wouldn't know where to start.
- I didn't have anywhere to build it.
- I didn't have any tools!

Having already joined the LAA, I decided to search for an LAA inspector in the local area who could give me some advice, and that's when I came across Ian Daniels. Luckily for me, not only was he local, but he had a workshop at Maypole Airfield, so I arranged to meet him. He was extremely knowledgeable, very helpful and explained the process of building an aircraft and some of the challenges. I mentioned that I didn't have a place to build it but he told me to place the order and we could find a place to build it before it arrived.

On 4 July, I had a test flight in the demonstrator Bristell. It flew very well, had a spacious cabin and it felt very comfortable. I also asked that Karen was given a flight as I wanted to make sure she would be happy to fly in it, so we could use it for some of our trips away.

She came back happy, having noted that it could hold a few bottles of wine in the wing lockers. Obviously, she was sold on it, so I placed the order.

My Bristell kit 382 was delivered to Tony Palmer's airfield in Sussex on 1 November and Tony showed me around it. The first thing I was told I had to do was fill all the pop rivet heads before the aircraft was painted. Tony was very kind and said that I could use his hanger

Below Trevor Mills firing up the panel for the first time. It features mainly Dynon avionics with a Garmin G5 backup. **Photo: Trevor Mills**





to do this before it went for painting. Karen said she was happy to give me a hand, so we spent four very chilly days filling every rivet and sanding them down ready for painting, which was no mean feat! On the 25 November Tony transported it to Farry's Sayyah's workshop for spraying, and I re-took delivery of it at Maypole on the 17 January 2019.

In the meantime, I booked myself on a couple of LAA courses, which covered basic wiring and general operation and maintenance of Rotax 912 engines, and attended the Garmin day in Southampton. I also researched what tools and materials I needed in advance, and Ian came up trumps finding me a workshop, which used to be a feed store on Maypole airfield. A chat with Maypole's owner, Andy Haigh, confirmed that I could use it for my build, so now I was all set to begin construction.

Stages of building

I started work in earnest on the 22 January. I had set up a project plan, with the build stages detailing what I needed to buy, and when. I also set up a blog so I could record the stages of the build and perhaps help others should they also be considering building a Bristell.

I decided to be very disciplined in the amount of time I spent on the build, treating it more like a job. I worked roughly 9am-5pm every weekday and a couple of evenings here and there. Every evening I reviewed what I had done that day, wrote up the blog, updated the project plan, ordered what I needed in the coming days and prepared a schedule of work for the next day. Amazon and eBay became my new best friends and I got to know my neighbour Sue very well, as she very kindly took in countless deliveries!

It didn't always work to plan of course, and I must admit there were a few frustrations during the build, as items were missing from the kit, which required calls to the agents and some deliveries were delayed (especially the prop, which was delayed by six weeks).

But I enjoyed every single minute I worked on the project. Each day brought new challenges to overcome but after doing some research, I was able to complete the job in hand.

Before I placed the order, I had looked at several Bristell examples. I was particularly interested in colour schemes, external lighting, avionics, panel makeup and the ergonomics of layouts. So when I finally placed the order I knew what I wanted in all those areas and how they would work. I had decided not to use the Fiti prop that Bristell UK normally supply. I had chosen to use the Rotax 912ULS but wanted to get the best performance



Top All finished and awaiting first test flight. **Photo: Trevor Mills**

Above Early days. Tony Palmer kindly allowed us to fill the rivets aircraft in his workshop. Here Karen and I enjoy a well-earned cuppa to warm us up. **Photo: Trevor Mills**

Right Karen filling rivets with filler via a small syringe – I did say it's not all glamour! **Photo: Trevor Mills**



from it, so after carrying out a lot of research I settled on an Airmaster constant speed prop. Although it was more expensive, I must admit I'm delighted with it. It allows me to achieve the maximum performance from the engine while being extremely easy to operate during all stages of flight.

After 112 days, on 16 August (which was coincidentally, the 17th anniversary of me gaining my PPL), G-MLSY was finished. Graham Smith carried out the final inspection before first flight and Ian Daniels completed all the remaining paperwork for the test flight application, which was sent to the LAA the next day.

On 9 September, Jon Viner wrote to me with some minor queries that we resolved over the next couple of days and I received the test flight certificate on 14 September, scheduling the first flight with Robin May on

Project News

17 September. Robin flew down in his RV-7, some technical issues were resolved and Karen, along with some of my family members, gathered to witness the first flight. It was quite an emotional moment and I was thrilled to see it take to the air.

Two flights were undertaken on that first day with Robin, and another two flights the following day with me onboard as an observer and to record figures for the flight test. It flew lovely and had a solid feel to it. Climb rate at MTOW was very good and cruise was as expected. Overall, I was very happy with the performance that we obtained but it's early days yet and might improve further once I fit the wheel spats and things bed in a bit.

We didn't get to finish all the test flights in the two days so agreed to carry them out when the weather improves, which it still hasn't as I write this on 17 October. Hopefully we'll complete them soon.

And finally...

When you start a project like this it's invaluable to have the support of people around you and I can't thank Karen enough for her encouragement and support.

She's been absolutely fantastic before, during and after the build. Ian Daniels has been a star with advice, guidance and more than a few laughs throughout. And of course, he signed-off most of the 27 build stages including all the paperwork for the test flight application (I think he needs a new pen!) Graham Smith, who stepped in at the last minute, despite being very busy, to do the final inspection before first flight. Alan Radford who I conversed with over email on a number of occasions and who gave me some sound advice before and during the build. Tony Palmer who allowed me to start on my project before I had a workshop and gave me advice when I needed it. LAA's Andy Draper for some very pragmatic advice and guidance during the build. Jon Viner for checking my application for test

flight permit and talking through the minor queries to resolution. My neighbour, Sue Pryor who took in virtually every delivery for me. And last but certainly not least, my very good friend Robin May, who offered to carry out the flight testing for me. I couldn't have picked a better, more experienced pilot to entrust my pride and joy to on its first flight.

I have learned much from this project and offer it to those considering a similar journey:

- Research as much as you can before attempting anything like this.
- Talk to lots of people before deciding on options, especially the LAA and those that operate similar aircraft to the one you're going to build.
- Decide on a realistic budget and add a 10% contingency so you're not shocked at the overall cost.
- Keep a record of the costs as you go, and don't forget to include tools, insurance, hire of workshop, transport, travel and administrative costs.
- Set up a project plan and work as best as possible to it.
- Be realistic on how much time you can spend on it. Balance the imperative to get it done against the needs of others, like family members.
- Be resilient and don't lose track of the end goal.
- When placing an order, agree exactly what you are buying and demand an inventory.
- When you take delivery, check all items against the agreed inventory and if anything is missing, agree a date when you'll receive it or a refund, should you have to purchase it yourself.
- Ensure you get a fully up to date Build, Maintenance and POH manual for the aircraft and read it cover to cover several times.
- Finally have faith in your own abilities and enjoy every moment of the build – it's great fun.

You can read Trevor's very interesting blog at <https://g-mlsy.home.blog> ■

New Projects

If your aircraft has been featured in the New Projects list, please let *Project News* know of your progress at: projectnews@laa-archive.org.uk

■ E.A.A. Acrosport 2 (LAA 072A-15667) 28/10/2019

Mr A Burns, Mill Farm, Middleton on Leven, Near Yarm, Cleveland, TS15 0JX

■ Pletenpol Air Camper (LAA 047-15665) 22/10/2019

Mr A Gerrish, 50 Ham Lane, Ferndown, Dorset, BH22 9DP

■ Eurofox 912IS (LAA 376-15663)

16/10/2019

Mr G Brown, The Old Mint House, 21 Park Street, Towcester, Northamptonshire, NN12 6DQ

■ Sling 2 (LAA 399-15661) 10/10/2019

Mr B Davies, Wedges Farmhouse, Bashurst Hill, Horsham, West Sussex, RH13 0PE

■ KFA Explorer (LAA 417-15662)

10/10/2019

Mr P Marsden, 7 Primrose Road, Hersham, Surrey, KT12 5JD

■ Van's RV-8 (LAA 303-15658) 04/10/2019

Mr L Brehm, 86 Eastfield Road, Waltham Cross, Hertfordshire, EN8 7EX

■ Van's RV-8 (LAA 303-15659) 04/10/2019

Mr M Sturgess, 12 Abbots Meade, Yeovil, Somerset, BA21 3PJ

■ Van's RV-8 (LAA 303-15660) 04/10/2019

Mr R Sherriff, Dormers, Uplands Road, Denmead, Hampshire, PO7 6HE

■ KFA Safari (LAA 402-15657) 03/10/2019

Mr G Smith, Inglenook Farm, Maydensole, Sutton, Kent, CT15 5HP

■ Van's RV-8 (LAA 303-15666) 24/10/2019

Name & Address held by LAA Engineering

■ Zenair CH 750 (LAA 381-15664)

21/10/2019

Name & Address held by LAA Engineering

Cleared To Fly

If your aircraft has featured recently in the magazine and has subsequently completed its maiden flight, *Project News* would love to hear from you at: projectnews@laa-archive.org.uk

■ G-CKTD Colomban MC-30 Luciole (LAA 371-15021) 28/10/2019

Mr David Lawry, Low Water Lane, Palgrave, Diss, IP22 1SW

■ G-UIPZ Bristell NG5 Speed Wing (LAA 385-15414) 07/10/2019

Kevin & Carrol Faint, 7 Posthorses, Ashington, Pulborough, RH20 3QF

■ G-AIEK Miles M38 Messenger 2A s/n 6339 02/10/2019

Name & Address held by LAA Engineering

■ G-ALBD DH82A Tiger Moth (s/n 84130)

22/10/2019

Name & Address held by LAA Engineering

■ G-DBSB TL2000UK Sting Carbon S4 (LAA 347A-15628) 07/10/2019

Name & Address held by LAA Engineering

■ G-JIMM Europa XS (PFA 247-14071) 07/10/2019

Name & Address held by LAA Engineering