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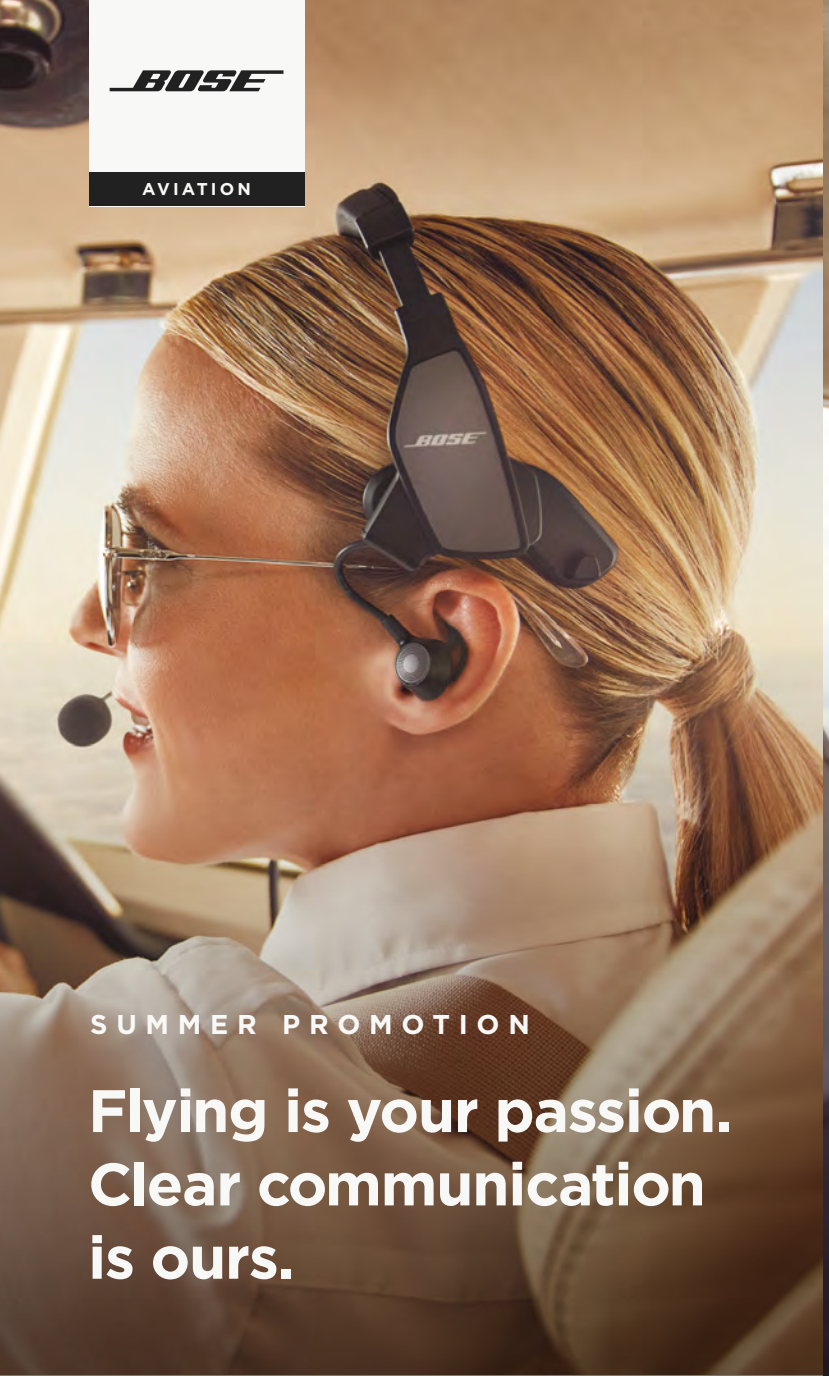

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Editorial

ED HICKS

In praise of airfields…

What makes an airfield or airstrip popular? An interesting location, good facilities, nice café or restaurant, cheap fuel…? There's a whole bunch of factors. Plenty of them are mentioned in our Top 10 UK General Aviation airfields feature on page 26.

Most of these don't happen on their own though. Sure, the location comes with the airfield, so any airfield with stunning views, or access to the beach within a few minutes walk can count itself lucky, but the rest of the factors are all driven by the operators themselves.

Let's start with the runway. Maintaining one takes effort. If it's grass, you're in for regular mowing, plus you'll want to pay attention to drainage and surface condition. A hard runway may not need the mowing, but it's still prone to deterioration and needs regular inspection and care to prevent the surface breaking up.

Facilities can be anything from a small shed to a large steel and brick tower, but if they're well kept, tidy and welcoming, then size doesn't matter.

Because our access to fuel in everyday life for cars is so easy, we tend to forget that it's much more of a challenge for airfields to provide it. Regulations on storage, maintaining a tank or bowser, and the basics of processing sales add to the burden. An airfield that provides it, especially with services like pay-at-pump, and out of hours deserves the trade. I know we love to keep an eye on the pennies, but in reality, don't grumble at the price of your fuel. Just be happy you've got easy access!

Same goes for landing fees. With just the costs of the list above, putting £5 or £10 in a box at a grass strip is a bargain if you want the pleasure of visiting different places. The small operators often need it more – you don't want them to ever be looking at the accounts one day and thinking 'is this really worth it?' – let's not forget, it's all too easy to lose one. It might cost you more at larger airfields but I'm guessing if you're there, it's because you picked it for a good reason, right?

Ultimately though, a great airfield destination is all about the people. Day in and day out, they work hard to make a destination feel great. Without them, our flying world would far poorer. Thanks to you all.

Ed

ed.hicks@seager.aero

Click for video

Mark Mitchell

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August 2021

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SIX Free Landings!

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POOLEY'S FLIGHT EQUIPMENT

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Aviation news from around the world – for the latest visit *www.flyer.co.uk*

Aussie Pipistrel sets electric endurance record

Main Record was set using a 2017 Pipistrel Alpha Electro
Inset Recharging at a remote dirt strip, thanks to ground support crew

An Australian flight school and distributor for Pipistrel Aircraft, Eyre to There Aviation, is claiming a world endurance record for electric aircraft – and plans to setup a production line for the aircraft in Australia.

Flying a Pipistrel Alpha Electro, Eyre to There Aviation managing director Barrie Rogers and his team arrived in Port Augusta after breaking the previous record of 750km on the leg between Shoalwater Point Station and Whyalla. They continued on to Adelaide aiming to achieve 1,350km by the end of the journey.

Along the way, the team has also broken other world records for electric aircraft including:

- Longest over-water flight (30.8km)
- Furthest distance in a 24-hour period (330km)
- Fastest speed between waypoints (177km/h ground speed).

"It's been a mammoth effort by everyone involved to achieve this incredible feat," said Barrie Rogers, pictured centre above.

"The weather hasn't exactly been on our side – we had ice on the wings one morning and were grounded in Port Lincoln due to an intense low pressure system.

"On the plus side, the aircraft and the recharging systems have held up incredibly well. It has gone a long way to proving the endurance and reliability of the Pipistrel Alpha Electro.

"Because we can only fly about 125km before having to recharge, we've been landing in some pretty remote locations, including dirt airstrips at Corunna and Nonning sheep stations on the Eyre Peninsula."

The flight team and support crew included three pilots, five on-the-ground support crew, a second support (petrol-powered) aircraft, and two vehicles carrying recharging equipment for the aircraft.

Rogers added, "This record attempt will further demonstrate the overall viability of this aircraft, with a view to one day setting up an assembly line in Adelaide producing up to 40 aircraft per year."

Eyre to There Aviation

Click for video

France says 'Oui' to British pilots

Permission to fly in France for a significant number of UK pilots and aircraft has been granted by the French national aviation authority, the DGAC.

They include:

■ Amateur-built and certain historic aircraft operating on a Permit to Fly

■ Pilots with a UK national licence such as the NPPL or LAPL when flying a Permit aircraft

■ Pilots using a Pilot Medical Declaration when flying a Permit aircraft

The DGAC ruling follows disruption to previous rules by Brexit and was negotiated by the Light Aircraft Association's Roger Hopkinson, Neil Williams at the UK CAA and Thomas Iaconno at the DGAC.

An LAA statement says:

"In general, pilots may fly amateur build aircraft for private activity, VFR only, for up to 28 consecutive days subject to them having a valid UK certificate of airworthiness (or permit to fly).

"Historic aircraft are permitted on the same basis. In general, this means factory-built former CofA aircraft, whose initial design was established before 1 January 1955, and production has been stopped before 1 January 1975, now operating on an LAA Permit to Fly. (Certain LAA-overseen former military types are also covered within this definition).

"The DGAC require and accept pilots of the above aircraft overflying France provided they hold a current pilot licence and associated medical as required and issued in the state of registration of the aircraft."

This means that as well as ICAO compliant licences and medicals, UK NPPL and UK LAPL licences and Pilot Medical Declarations will be accepted by DGAC.

The principle applied is that if the licence and associated medical is valid to fly such aircraft in the country of registration, it is accepted in France. This may not be the case in all EU states however.

To fly a Part 21(certified) aircraft in EASA states, an ICAO compliant licence and medical are required.

The LAA has also published further information on flights outside the UK in LAA Technical Leaflet TL 2.08.

LAA

Left Bienvenue! French say 'yes' to visiting UK pilots flying Permit aircraft

Royal Aeronautical Society launches green microlight design competition

An electric 600kg microlight – that's the brief for the next Royal Aeronautical Society International Design Competition.

Tony Bishop, a co-founder and CEO of e-Go Aeroplanes whose SSDR was a previous winner of the competition, introduced this year's competition. He said, "It brings together two key changes in aeronautics – the popular new 600kg category and electric power.

"Your aim is to design a piloted electric aircraft that will deliver a passenger or essential supplies in equatorial countries from short soil airstrips. The objective is to provide the best possible combination of productivity and utility."

The competition is the latest in a series of RAeS design competitions aimed at promoting major innovation and new companies in the general aviation aircraft sector.

Entries are open until 31 August 2022 and are invited from under- and post-graduate engineering students, amateur aircraft designers and professionals. You may enter as an individual or a team, and teams of engineering students are particularly encouraged.

The winners will be announced, and awards made, at the Light Aircraft Design Conference in November 2022 at the RAeS HQ in London. The competition is run in association with the Light Aircraft Association (LAA) and the British Microlight Aircraft Association (BMAA).

To register for the competition and see the full competition rules and guidance ***click here***.

Below The e-Go SSDR which won an earlier RAeS design competition

Take-off

Drones to fly across Morecambe Bay

A proposal to fly drones across Morecambe Bay carrying medical samples between three hospitals has popped up on the Airspace Change site.

The application, ACP-2021-022, is for a Temporary Danger Area (TDA), submitted by a company called Electric Aviation, run by engineer and local GA pilot Chris Crockford.

The drones would service Lancaster Royal Infirmary, Furness General and Westmorland General Hospitals, transferring pathology samples and medications.

Morecambe Bay is the local training area for aircraft flying from Blackpool Airport, with some rotary traffic and military fixed-wing. The main route is from Lancaster to Furness, with a secondary flight path following the River Kent up to Kendal.

Chris Crockford told *FLYER*, "We are actively trying to keep the airspace volume that we need to run these trials as small as possible. At 400ft agl and with the corridor width being just 800ft we do not believe that the majority of airspace users will be affected. Also the time of year of our operations (winter) and the Monday to Friday (predominantly) office hours also makes it even less likely that those airspace users who are sub 400ft – model aircraft/paragliders etc, will be trying to operate."

Electric Aviation says it anticipates flying from the end of October 2021, for 90 days. It will operate a twice daily service, serving all three hospitals, between 9am and 5pm Monday to Friday. The drone is equipped with ADS-B and Mode S for Electronic Conspicuity, and will fly at around 40ft and under 400ft at all times.

Above Temporary Danger Area would be over Morecambe Bay **Inset** The planned drone with a 4.4m wingspan

Link: ACP-2021-022

How to avoid infringing RAF Halton

Light aircraft training, microlight and glider flights and even occasional flypasts, RAF Halton is a busier place than most would expect.

RAF Halton's primary role is flight training of both military and civilian staff as the home of RAF's Recruit Training School, but there's also an active flying club.

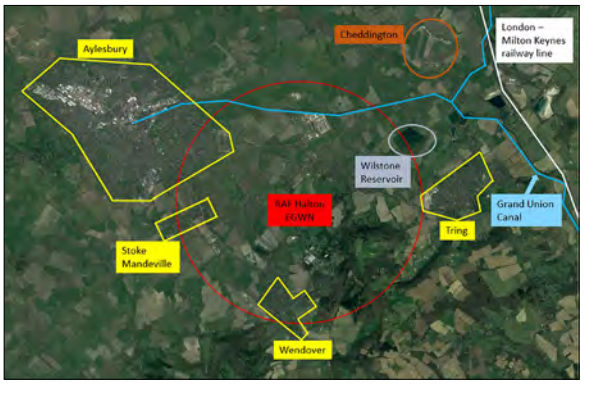
The flypasts are every two weeks as part of the school's graduation ceremonies and could be a fast-jet, multi-engine transport aircraft or a helicopter. Check Yellow AIC Y031/2020 for details.

All that activity means there's an Aerodrome Traffic Zone (ATZ) and there have been a number of infringements, prompting an update on the Airspace Safety Initiative website.

A link to the full narrative is below but among the points made are:

- It's an active ATZ, 2nm radius up to 2,000ft
- The airfield is active from 0900 to 2000 every day of the year except holidays on Christmas Day and New Year's Day

Right Landmarks around RAF Halton



- Call Halton radio on 130.425mHz if you're planning to enter the ATZ
- Halton lies approximately 5nm to the west of the Luton Class D Control Zone (CTR) and under parts of three Control Areas (CTA)
- Use a transponder with Mode C (ALT) set
- Use a moving map
- Plan ahead.

RAF Halton 'Hotspot' Narrative *Link:*

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Take-off

Teams open up on electric aircraft racing

Two of the teams developing electric aircraft to compete in the upcoming Air Race E series are now talking about their projects.

Nordic Air Racing is one of the teams likely to get airborne sooner rather than later. The team's Pierre Dussaux said, "During spring, we realised that we were in a good position to fly sooner than some of the other teams.

"We remain calm about it though, as developing a race plane is a long and painstaking task that is full of unknowns that can incur delay."

His caution was backed up by Marc Umbricht at Team Pie Aeronefs, who said, "My focus has always been to develop the best race plane we could make. As such, being first has not been a top priority. The fact that we might be first is a welcome surprise!"

Nordic is basing its aircraft on a Cassutt 111M. Dussaux said, "When entering the Air Race E adventure, we took the conservative approach of using a pre-existing combustion-engine aircraft and converting it into an electric one."

Dussaux explained that the Nordic team has a long list of ground tests to ensure the new powertrain operates as planned, and that the pilot's safety is guaranteed.

Above Nordic Air Racing modified a Cassutt 111M
Inset above Yes, that's a LOT of space filled by batteries!
Inset below Team Pie Aeronefs UR-1 racer

He said, "Those checks include spinning the propeller at various speeds on battery power, checking that our power electronics behave properly, that our battery and engine cooling systems are nominal, that the battery management system is fully operational, and that all our sensors feed continuous and reliable data to the pilot and to the engineering team."

Pie Aeronefs is rtaking a different approach, designing their UR-1 aircraft from the ground up.

"We initially planned on subcontracting certain components, for example the wing spar," said Umbricht. "Working with outside contractors, however, you need to have the parts ready for production before you pick up the phone, and then you need to be ready to wait weeks or months for them to make the parts for you."

Air Race E ***Link***

Take Flight pair set new UK county record

The irrepressible boss of Take Flight Aviation, Mike Roberts, has been out setting another world record with fellow pilot Nick Rogers.

The pair set a new record for most UK counties visited in 24 hours earlier this month. The record has yet to be confirmed by Guinness World Records.

Mike Roberts said, "Nick, who is a commercial pilot, has had plenty of time on his hands during lockdown so he enjoyed planning the challenge while furloughed. I just showed up for the fun bit!"

The pair also hold the world record for the most countries visited in a day by aircraft, set in 2019 when they landed at 16 European destinations.

This time, they started at Perth Airport, Scotland at 0355 and made their way south. They eventually stopped at Newquay, Cornwall 18 hours later at 2150, making a total of 50 full stop landings in 50 different UK counties.

Poor weather and low cloud in southern Scotland and northern England meant they were forced to drop two airfields and another in Wales was missed due to time.

Nick Rogers said, "Most of the people we contacted were incredibly supportive and it's a shame we couldn't stop and chat for more than a few seconds on the ground. We even had an enthusiastic chap turn out at 4am in the morning to greet us at one of our first landing sites."

Above Mike Roberts and Nick Rogers and the Skyhawk used on their record-setting flight

Many of the airfields waived their normal landing fees and the pair are donating the equivalent amount to air ambulance charities, hoping to raise around £1,000.

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Take-off

Attagirl! Molly inspires PPL scholarship

A new scholarship for flight training to a full Private Pilot's Licence (PPL) comes with a fascinating history.

The Molly Rose Pilot Scholarship is in memory of one of the women pilots in the Air Transport Auxiliary, which delivered aircraft during WWII. Molly Rose delivered 486 aircraft including Spitfires, Hurricanes, Wellingtons and Bostons.

Molly Rose (née Marshall) was the daughter of Sir David Marshall who founded the family firm in Cambridge in 1909, and sister of Sir Arthur Marshall who set up Cambridge Airport and the aviation side of the business in 1930. Molly was an apprentice engineer at the company before becoming a pilot and volunteering for the ATA.

Molly's life story has inspired a book and a new film, *Attagirls*. Paul Olavesen-Stabb, co-writer and producer of the film, said, "With the forthcoming publication of the book, *Attagirls*, I am determined that there should be a legacy. This view was shared by Molly Rose's family business, Marshall of Cambridge.

"We are extremely grateful that Marshall of Cambridge is financially supporting this, the inaugural training scholarship in association with Cambridge Aero Club."

Above ATA pilot Molly Rose who flew and delivered Spitfires, Hurricanes and Bostons during WWII
Above right Clive Jones is training for his PPL with Aerobility

Aerobility's scholarships

Aerobility has reopened applications for its scholarship programme for the first time since Covid hit.

"Our scholarships provide anyone with any disability the opportunity to learn to fly, irrespective of experience," said Aerobility.

"They can take you through the first steps toward a new career and can deliver a unique sense of freedom combined with significant personal development and achievement."

One man who has taken advantage of a previous Aerobility scholarship is Clive Jones. A motorcycle accident at 17 leaving him on crutches put paid to Clive's ambitions to join the RAF.

Clive said, "Learning to fly has been amazing and challenging! Despite a frustrating nine-month break in training for winter and Covid, going solo in October 2020 was undoubtedly one of the best experiences of my life.

"I couldn't do this without the support of Aerobility and once we can fly again, I am keener than ever to continue my training towards hopefully a PPL."

More Info

LINKS
Molly Rose PPL Scholarship
https://www.aetheris.co.uk/mrps
Aerobility Scholarships
https://www.aerobility.com/scholarship-form

Sacha's paramotor circumnavigation

A circumnavigation of the UK mainland is underway by climate campaigner Sacha Dench flying an electric paramotor.

If Sacha, founder of Conservation Without Borders, completes the 3,000+-mile trip it will be the first by electric paramotor, setting a new Guinness World Record. Sacha will be travelling anti-clockwise around Britain, returning to Glasgow in around six weeks.

Her aim is to 'inspire and excite the nation to get involved in tackling the climate crisis' in the run up to the COP26 conference in Glasgow in November.

'Human Swan' Sacha Dench, known for global expeditions with migratory species, turned her focus to climate change for this expedition after losing her family home in the Australian bushfires.

"This is the first time an electric paramotor will ever have been used in a long journey – and it's going to be an exciting challenge," said Sacha.

Right Sacha Dench

"I want to capture the imaginations of the young and old, rural and urban, and focus on answers to the climate crisis – not problems – and encourage everyone to get involved."

www.climatechallenge.live
www.conservation-without-borders.org

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Converting foreign licences to the UK

Confused about upcoming changes to third-country licences? **Ed Bellamy** explains what you'll need to do if you're affected

An announcement by the CAA and Department for Transport towards the end of May confirmed that American FAA licence holders resident in the UK have been given until 21 December this year to obtain an equivalent UK Part-FCL licence, if they wish to continue flying in the UK.

This extends the previous deadline of 21 June and applies regardless of the state of registration of the aircraft being flown. The notes on the exemption document suggest further extensions to this deadline are unlikely and will only happen if the conditions of article 71(1) of the UK Basic Regulation apply. Article 71(1) is essentially the old EASA 'urgent operational need' provision as retained in UK law and is the mechanism by which the CAA has published the current extension document (ORS4 1490), using the Covid pandemic as the reason the deadline has been extended.

It is hard to know how many people this affects – ending the use of foreign licences by pilots living in Europe has been on the cards for a long time, and I suspect over the years many have already complied, while the UK was still in the EU. Non-FAA ICAO licence holders (for example South African or Canadian) living in the UK have already had to comply some time ago.

However, there probably are a few people who still need to, and now that we are now out of the EU, UK residents holding EASA licences issued after 31 December 2020 are also dragged into the requirement since they are now considered 'third country' by the UK. So let us review the requirements for obtaining a UK Part-FCL PPL while holding a foreign one.

Conversion requirements

The requirements are now in Commission Delegated Regulation (EU) 2020/723, as retained in UK law. This replaced Annex III to the EASA Aircrew Regulation in March 2020. The version in force in the UK can be found along with other retained law at ***CAA Aircrew regulations***.

The regulation makes a distinction between 'validation', which is normally limited to a year, and 'conversion', which is permanent and results in the issue of a full equivalent UK Part-FCL licence. 'Conversion' is perhaps a misnomer since you do not have to surrender the foreign licence, indeed you legally still need it if the aircraft being flown is still registered in the state that issued the foreign licence – you essentially need to be dual qualified.

I will focus on conversion. For permanent UK residents, 'validation' is probably not worthwhile and the requirements for conversion are only slightly greater.

It is much more straightforward if you have 100 hours flight time – so if you do not, I would obtain this somehow before converting, otherwise you do not really have any alleviation from the full UK Part-FCL training requirements.

Assuming you have 100 hours, you need to:

- Have your licence verified to the CAA by the issuing state
- Pass the written exams in Air Law and Human Performance
- Pass the UK PPL Skills Test
- Demonstrate English language proficiency, which can normally be done at the same time as the Skills Test
- Obtain a UK Medical.

In practice I would approach a suitable flying school to guide you through the process. The UK PPL Skills Test is similar to any other ICAO one, but every state has its own local flavour.

Foreign Instrument Ratings

For obtaining the UK Part-FCL Instrument Rating, you can use the 2014 conversion process for pilots with a third country IR and 50 or more hours PIC under IFR in aeroplanes (note that is IFR time, not necessarily time in IMC). You must do the UK Skills Test, during which you will be examined orally on UK air law, operational procedures, meteorology, flight planning and performance. There is no requirement for written exams or training prior to the test, but in practice I would suggest you need a flying school that provides IR training to prepare you for the UK test. Like the experience requirement for converting at PPL level, if you do not have 50 hours PIC under IFR, I would find a way to get it, as otherwise the above option is not available.

EASA licence holders

Holders of EASA licences issued by other EASA member states issued prior to 31 December 2020 are essentially excused all of the above until 31 December 2022 since they can fly G-reg under the provisions of the European Withdrawal Act 2018 and the CAA's general validation (CAP2017). There is also now a process since April for former UK EASA licence holders (who changed state of licence issue before 31 December 2020) to obtain a UK licence as a paperwork exercise.

A similar process may also be available to holders of EASA licences issued prior to 31 December 2020 who have never had a UK issued licence, which may involve a Skills Test but not much else – this will become more relevant once we are closer to the December 2022 expiry of CAP2017.

For EASA licences issued from 2021 onwards, to obtain a UK licence you need to follow the requirements of Regulation 2020/773, as described earlier, since these are now considered third country licences, along with the FAA and others.

More info:

CAA - ORS 4 (look for document 1490)
CAA - CAP2017
CAA - UK-EU Transition
CAA - UK Aircrew Regulations
CAA - Third country licensing

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In Brief

Leading Edge Aviation has shown off its new student halls ahead of its official opening. Students will share two room apartments with en suite bathrooms and modern interiors including fitted kitchens and living areas. Every apartment has its own laundry facilities and the building also has spacious roof terraces.

ATP Flight School is opening a new airline training centre in Irving, Texas to boost capacity and deliver the new Airline Transport Pilot Certification Training Programme (ATP CTP), which is roughly the same as Europe's APS MCC.

The first four trainee pilots have arrived at Skyborne's new fairweather base in Vero Beach, Florida. The four are on Skyborne's Integrated Airline Transport Pilot Licence (ATPL) course at Gloucestershire Airport in the UK. They are: Ashley Reeves, Billy Payne, Georgianna Kloos and Bradley Gibbs.

United Airlines is going supersonic! The US airline has ordered 15 supersonic airliners being developed by aerospace company Boom Supersonic with an option for 35 more. Boom's 'Overture' airliner is scheduled to roll out in 2025, fly in 2026 and expected to carry passengers by 2029.

Eurocontrol has identified changes in the mix of aircraft in airline fleets, commenting that low-cost carriers are consolidating to one aircraft type. For example, Ryanair stopped flying the Laudamotion A321 while Wizz Air and Pegasus introduced the more fuel-efficient A321neo. "Network airlines have also made changes by introducing more fuel-efficient aircraft types for long-haul operations, e.g. A350 and B787," said Eurocontrol.

New Flybe airline to start recruiting soon

Flybe is back from the dead and the new airline is recruiting – but has yet to say what jobs will be on offer.

The sale of the old Flybe's assets and business was completed earlier this year to a new company affiliated with investment adviser Cyrus Capital. The new company previously known as Thyme Opco Limited, will now be renamed 'Flybe Limited'.

Simon Edel, joint administrator handling the sale, said, "Completion of the sale of Flybe is positive news for local communities previously served by Flybe.

"The launch of a new Flybe will enhance regional connectivity across the UK and create new job opportunities within the airline industry. Flybe stands to make an important contribution to local economies as they rebuild after the pandemic and as restrictions ease to allow an increase in air travel."

A Flybe Limited spokesperson added, "We are extremely excited to announce the conclusion of almost six months of dedicated hard work by the great team at Flybe, the UK Civil Aviation Authority, the European Commission, and many others.

"Subject to further success with vaccinations and relaxation of travel restrictions, we plan to launch a new and much improved Flybe sometime this summer on many of our former routes. While our company will initially be smaller than before, we intend to grow, create valuable jobs, and make significant contributions to essential regional connectivity in the UK and EU."

Flybe: Link

Resilient Pilot launches Crew Room and Resource Hub for all air crew

Resilient Pilot, the not-for-profit organisation created by industry professional Karen Bath to help keep pilots and cabin crew supported, current and connected, has launched the Resilient Crew Room and Resource Hub with free and paid membership options.

Membership will give access to free mentoring, coaching and virtual events, as well as new resources created by the volunteer team of pilot, cabin crew and specialist mentors.

The Resilient Pilot Resource Hub provides interactive, web-based access to a range of useful tools to help aviation professionals refresh and expand their understanding and confidence in core competencies.

Resilient Pilot ***link***.

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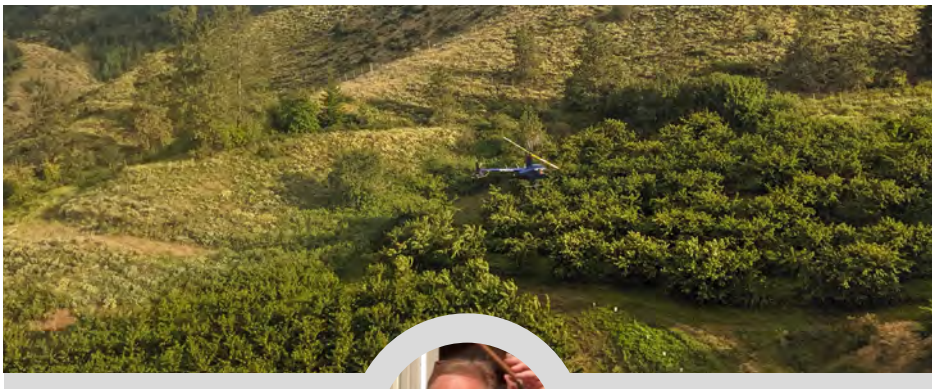
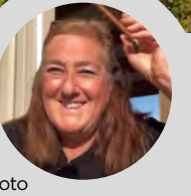
I Get Paid for This...

Maria Langer

Flying her R44 at 5-10kt, the skids within 5ft off the treetops, Maria Langer uses a helicopter to dry cherries. Interview by **Yayeri van Baarsen**





Flying CV

Owner/operator of helicopter charter company Flying M Air LLC Maria Langer offers Part 135 charter flights, rides and tours, aerial photo and survey services, and ag services.
Started current job 2008
Now flying Robinson R44 Raven II
Favourite aircraft Robinson R44 Raven II. "Flying my own helicopter is like driving my car. I know exactly how it'll react and what it'll do."
Hours at job start Approx. 2,500
Hours now Approx. 4,000

"You have to be able to hover to perfection"

How did you get into flying?
When I was seven years old and on vacation in Maine, we saw a helicopter parked beside the road, with a sign saying 'Rides $5'. I went up with my dad and thought: 'If I ever learn to fly, I'll fly a helicopter!'. Many years later, that's what I did.

Tell us about your job?
I'm the owner/operator of Flying M Air. Based in Wenatchee, Washington, we offer charters, tours, aerial photo, survey and agricultural services. From late May to early August, I have three to five pilots working with me, flying R44s to dry cherries. We fly at 5-10kt, the skids within 5ft off the treetops. The downwash from the rotor blades moves the branches, which shakes the water off. You're flying back and forth between the trees until you've covered the orchard. This can be tedious – when it's not windy, I listen to music.

Since we only fly after it's rained, this isn't an hour-building job. We're on standby, keeping the heli pre-flighted and fuelled, and always watching the weather forecast. When we get called out, we're airborne within minutes. Using a heli to dry cherries might seem excessive, but we easily dry 30 acres/hour. With 10-12 tons of cherries per acre, it's a cost-effective way of protecting the fruit. The R44 moves the most air for the least money.

If I'm honest, the best thing about my job is probably the money, as it allows me to own and operate a helicopter. However, I genuinely like the agricultural sector and get satisfaction from doing a great job. To do this work, you have to be able to hover to perfection. Situational awareness is also essential, not just being aware of obstacles, like wires, but also of the dimensions of your rotor disk and tail. Flying low and slow in confined areas means cherry drying isn't without risk. Every year there are accidents. I always tell my pilots 'It's just cherries. Yes, we'll do the best job possible, but we won't put our lives at risk.'

What training did you have?
I obtained my CPL-H in 2001 and bought an R22 for tours and photo work. After that, I bought an R44 and got the Part 135 Certificate. Some of my past flying experience includes herding horses and chasing race cars in the desert. I've also flown Long Rangers at the Grand Canyon.

In 2008, with an hour of training from an experienced pilot, I started cherry drying. After exploring the orchards on foot, the flying part of training new pilots doesn't take long.

We fly about 20 minutes in their own helicopter, doing a couple of rows together while I say 'Slower, slower! Lower, lower!' until they've got it right.

What's been your favourite flight?
A gorgeous quiet trip from Wenatchee to Hillsboro, Oregon, in 2012, with perfect views over the Cascade Mountains. It was early morning, the sun casting long shadows over the fog-filled valleys as I flew right past Mount St Helens. This was also the first flight for Penny, my little black dog. She's passed away now, but she loved flying and would jump around the helicopter until I'd lift her in.

And your favourite airfield?
Airfields and helicopters don't really mix. Even in the middle of cherry season, with at least 30 helicopters in the area, not one of them is parked at the airport. That said, I like Sedona Airport because it's in a pretty place and has a good restaurant.

Do you get to fly much outside of work?
I used to. Currently, my R44 is coming close to overhaul so I save my flying time for the cherries.

What's your most valuable career advice?
Something I was told after my checkride: fly the aircraft. New pilots sometimes feel like the heli is a monster they have to control. It's not – it's waiting for your commands. Also, admit your mistakes, learn from them and if a more experienced pilot gives you advice, listen. It might save your life one day.

Check out Maria in action on YouTube channel: *FlyingMAir.*

Logan Walters

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Unusual Attitude

Dave Hirschman

What's wrong with Roger?

If brevity is the soul of wit, then the aviation term 'roger' is pure genius. The one-word reply means a radio transmission – even a complicated one – has been received and understood. Roger isn't the answer to a question in the way that 'affirmative' and 'negative' are. And pilots who say 'roger' aren't tying themselves to any particular course of action. If a controller says there's turbulence ahead, or to expect a climb or descent, or that surface winds have shifted and take-offs and landings will be made on different runways, a thoughtful and considerate pilot will acknowledge such timely new information with a succinct 'roger'.

But the word is much more than that.

An enthusiastic 'Roger that!' exclamation means, 'Yes! I fully agree with you!' A half-hearted 'Rodge' signals disappointment or reluctance. 'I got your message, and it's not exactly what I was hoping to hear'.

When delivered in a low growl, roger is synonymous with 'shut up'. Or, 'I heard you the first time, and you really ought to stop talking now'.

But lately, roger seems to have fallen from favour. Perhaps the word is too formal, too stodgy, or too colourless for today's highly individualistic and expressive flight crews. I've heard the following roger substitutes and they're appalling.

Awesome. Got it. Gotcha. Bueno. Perfecto. Right on… 'Right on'? Are you joking? Have we time travelled back to the hippie times?

'Bueno' and 'perfecto'? After all the trouble our forebears went to in making English the international aviation standard, you actually want to sprinkle your radio communications with a few worldly sounding expressions from a language you don't really speak? I so wish a bilingual controller had responded with a complicated, rapid-fire clearance delivered fully in Spanish, but they just let the matter drop.

'Awesome'? The word is so overused as to have become devoid of all practical meaning. If the word awesome was suddenly stricken from the lexicon, young high school pupils would lose half their vocabulary and fully resort to grunts and hand gestures. And the time required for corporate Zoom meetings would be 30 minutes instead of an hour.

'Got it' and 'gotcha'? These are precisely the kinds of imprecise terms that roger was meant to banish.

Do any of these 'roger' replacements offer real improvements?

Of course not. They're too cute, too trendy, and too inflexible to be useful over the long term. Those who dabble in them now will surely be embarrassed next month or next year when such fashionable words of the moment fall out of favour. It's the verbal equivalent of wearing disco clothes in the 1970s. It might have seemed like the right thing to do at the time, but now the photos are cringeworthy blackmail fodder.

The aviation origins of roger are murky, but it's generally believed to have been born from an acronym: 'received order given, expect results'. Fair enough.

Standard phraseology doesn't inhibit pilots and controllers from lightening up and sharing some laughs on the frequency. I recently heard a Washington Centre controller embarrass his teenage daughter by asking the crew of an airliner on which she was travelling, to wish Isabella a happy birthday via the aeroplane's public address system. Another controller near Charlotte, North Carolina, with a distinctive voice and lilting Southern accent, was recognised on frequency by a pilot he went to school with more than a decade prior. The banter was genuinely warm, friendly, surprising, and funny.

These exchanges are the polar opposite of the painful inanity that undisciplined knuckleheads habitually and spasmodically broadcast on the emergency frequency of 121.5. That situation appears to have improved over the last year with fewer regrettable transgressions.

> "Clear, timely communication helps avoid mistakes"

Air traffic controllers, to their everlasting credit, seem to have stuck with standard phraseology no matter what – and doing so enhances their inherent clever mischievousness.

On a Boston Approach frequency one night, a caustic controller tongue lashed a Delta Air Lines crew for missing repeated radio calls. "Listen up, Delta," the controller snapped. "I'm only going to say this once."

Everyone on the frequency perked up, and the usual bored sloppiness of airline crews nearing the end of a tiring trip was replaced by crisp and attentive radio calls. it turned out the Delta flight was entirely fictional, made it up so that the controller could make an example of someone. A diabolical, but effective trick.

Punctuality is said to be the 'courtesy of kings'.

To me, standard phraseology provides that kind of tonic for aviation. Clear and timely communication helps avoid mistakes and makes the entire system operate more smoothly. If that cramps your style or inhibits your self-expression, you're not trying hard enough.

RV-4 pilot, ATP/CFII, specialising in tailwheel and aerobatic instruction
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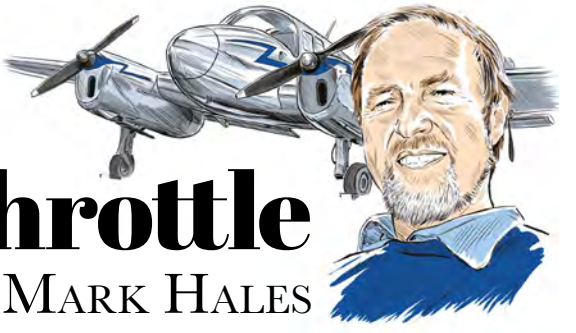
Mark Mitchell



Full Throttle

MARK HALES

When two just won't do…

In the glory days of the 1930s when anything in aviation seemed possible, light twins were relatively commonplace. In 1932, General Aircraft of Croydon offered its Monospar, a low-winged cabin monoplane powered by a pair of 90hp Pobjoy seven-cylinder radials. About 45 were built. A year later, Short Brothers of Belfast introduced the Scion, a high-winged six-seater, similarly powered by a pair of Pobjoys. It was offered in both land and seaplane versions – and it was also reasonably successful – although all but two of the 22 built featured wheels. There was also de Havilland's Dragonfly cabin biplane, powered by two Gipsy Majors, which proved the most successful of the lot with 67 built between 1936 and 1938. It was intended, like all of them, to be an executive transport, and if four narrow-chord tapered wings look so elegantly vintage now, it was probably more traditional then. The Dragonfly was expensive at the time, and apparently difficult to handle on the ground, which it probably still is… The Miles Gemini, which came immediately post-war, was probably the last of a breed, a four-seat wooden cabin monoplane powered by a pair of 100hp Blackburn Cirrus Minors, and owed more to the Monospar and Scion than the Dragonfly, but it was quite successful despite its vintage construction and features. One hundred and seventy were sold between 1946 and 1947 and Miles would certainly have sold more had the company stayed in business.

The pre-war Dragonfly's success as an air taxi had already prompted Short Brothers to create a larger four-engined Senior version of the Scion, powered by a quartet of 90hp Pobjoy Niagara radials, and it seemed like a logical thing to do. Distribute more lightweight power units about the airframe rather than try and accommodate a single larger and heavier one. The Pobjoy was an ideal option because it was compact and extremely light (130lb/59kg, or about the same as a Rotax 912), displacing only 2.5 litres but spinning at 3,200rpm and driving the propeller via a reduction gearbox rather like you'll find on a current Rotax. It gave the installation an odd look because the propeller thrust line was higher than the ring of cylinders, but Shorts was hoping the security offered to the Senior's nine occupants by four of them would offer an advantage over de Havilland's Dragon Rapide – the larger version of the Dragonfly. The Scion Senior didn't find favour here though, instead selling in small numbers as a floatplane in remote parts of the world, presumably where the extra engines might be an attractive feature.

General Aircraft and Airspeed of York, both built long-range patrol prototypes in 1939/40 each powered by four Pobjoys but neither aircraft was successful, while Saunders-Roe built the Shrimp in 1939, which was effectively a half-sized Sunderland, powered by four of the ever-popular Pobjoy Niagaras. It survived as a test bed until 1949, but remained the only one built.

Now, I'm sure someone will correct me but the only other aircraft I can find powered by four 100hp-ish engines was the Monsted-Vincent MV-1 Starflight, a comparatively large (48ft span) all-metal high-wing monoplane built in Louisiana in1946. It was powered initially by four Continental C-85 engine flat fours (familiar to most of us) mounted on the wing's trailing edge, swinging two-position Sensenich metal propellers. It sounds wacky but former WWII aviators, The Colonels H Farley Vincent and Robert M Monsted whose brainchild it was, had given considerable thought to the layout and the role for which it was intended. The high-wing allowed short, rearwards-retractable landing gear, the weight distribution of the pusher engines moved the cabin forward of the wing to reduce noise, the huge fin meant there was no Vmc, and it could fly on two engines – even if they were on one wing – each of them equipped with a shaft-driven fan to eliminate overheating while taxying, and fuel injection to rule out carburettor icing.

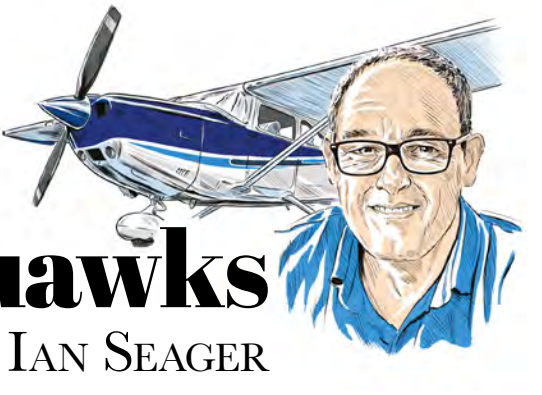
> "…powered initially by four Continental C-85 engine flat fours"

The C-85s were soon replaced by 100hp O-200s which are yet more familiar (not to mention largely unchanged 75 years on) and which gave the MV-1 a cruise of 150mph and a stall at 57. This, plus a range of eight hours (there was a potty in case that was utilised…), and a payload of 1,800lb. It looked good and offered a lot of features which weren't available at the time and despite its lack of convention, it didn't appear to have any nasty handling quirks. Sadly – and not for the first time – the prototype was damaged in a landing accident which made the investors nervous while at the same time, sales efforts were skewered by the sudden availability of war surplus aircraft like the Beech 18 light twin. Not quite the same thing but would do a similar job albeit with a higher fuel burn and was probably less than half the price to buy.

The small multi-engine theme didn't really develop in the years that followed – not until rows of electric motors began to appear on the wings of electric prototypes. That might have to do with the subsequent proven reliability of 200-plus hp engines which meant that two would do for most roles. There's also the cost of overhauling four common or garden O-200s which, done in modern times, currently stands close to an eye-watering £100,000. So, it's also to do with economics. Again…

Working vintage aircraft and cars make Mark particularly happy
mark.hales@seager.aero

Mark Mitchell



Squawks

Ian Seager

Embarrassment of riches…

You don't have to spend too long online before you find someone, usually a relatively new pilot, asking who they should be talking to when flying in a particular area. After someone's (smugly) made the point that it's Bernoulli and Newton rather than Marconi who keep you flying, a bunch of more helpful pilots usually chime in with a variety of more practical answers.

I had a similar question recently, although this time it was asked face to face by someone who is based overseas and usually flies in mainland Europe. This experienced pilot told me that the more he researched the subject, the more confusing it became. I reassured him that it was all very simple really, and I'd explain…

I kicked off with the new (self) service frequency (130.490), which is being trialled over the next year. It's intended (I think), to help military and low-flying civilian aircraft avoid each other when low level. Call it hear and avoid if you like. I told my friend that it could be used below 2,000ft in the UK low-flying system.

He asked me where that was, and embarrassingly I didn't know. A quick google revealed that it's all of the open airspace (class G) in the UK below 2,000ft. Blimey.

> "…uniquely useless numbers from a bygone age that help unfamiliar pilots infringe vertically"

We then moved on to SafetyCom, another self-service frequency (135.480), usually used by pilots when arriving and departing strips. Given that there are thousands of strips, and that every single one of them is below 2,000ft agl, there's potential for confusion and conflict with the new trial. He asked which was the most useful. By mumbling and moving on I think I swerved that particular question without him noticing.

Then I moved on to the big Flight Information sectors, you know London and Scottish. I explained that the people on the other end of the RT would give you a squawk, but that because they weren't ATCOs they couldn't provide a radar service, and that you would have to settle for a Basic Service. In fact, even if they had a screen to glance at, he shouldn't expect the kind of service he might be used to in France (and Germany, Holland, and Belgium etc.) where the controller providing a Flight Information Service would warn of traffic, keep you out of the way of things like, restricted areas and controlled airspace as well as handing you off to the next frequency. I explained that the UK term Basic Service was a pretty accurate, if at times exaggerated, description. I also mentioned that the WASPs (wide area service providers) would be handing out what we call regional pressure settings – uniquely useless numbers from a bygone age that help encourage pilots unfamiliar with the concept to infringe vertically. He looked puzzled. Foreigners, eh? They just don't seem to get our world-beating uniqueness.

Thinking I'd finished with my explanation, he told me he understood why people were confused when there were three different options to choose from. I mumbled something about not quite having finished yet and moved onto the subject of listening squawks, explaining that although these wouldn't involve him in any talking, they would involve him in some listening. I told him that some (but not all) radar units had a designated squawk along with a frequency that you could monitor, and that if it looked like you might stray into their controlled airspace they might make a call to warn you. I had to explain that while this might happen he definitely couldn't count on it, nor could he count on the unit pointing out any traffic, or handing him over to anyone else. I suggested that this could be thought of as a NEBS (not even a basic service), and as anyone participating would not be transmitting, they would not be generating any information useful to the hear and avoid concept of situational awareness either.

He looked at me as if I was mad, asking if listening squawks provided any reliable benefit to GA pilots at all.

Finally I talked him through the different (real) services that were sometimes on offer from radar units. I told him he could request either a Basic Service or a Traffic Service, deciding not to confuse him further with Deconfliction or Procedural Services. I pointed out that the most useful – a traffic service – may or may not be provided by the controller depending on workload, and that the busier it was, the less likely you got what you needed.

After a few minutes, my friend said, "So you have a trial frequency that should be used at the same time as a sort of strip Unicom, a non-radar service that gives out squawk codes and useless pressure settings, a one way radar service that helps controllers but reduces situational awareness for pilots, and a proper radar service that has a different name to anywhere else in the world, and that becomes less available the more you need it. All of that with some of the most complicated low level airspace in the world?" Yup, I replied with a feeling of national pride swelling in my chest, we do things properly here. Embarrassment of riches, or just an embarrassment?

Publisher, pre C-19 often found flying something new and interesting
ics@seager.aero

Mark Mitchell

Top 10 UK GA Airfields...

According to SkyDemon user data...

Special Feature

We all have our favourite airfield, but where do you think are the most popular GA destinations in the UK? Flight planning app SkyDemon have a new feature that can help with that…

The team at VFR flight-planning app SkyDemon are no strangers to continuously tweaking to add new features, but one of the latest updates introduces a new feature which ranks airfields simply by the number of unique fly-in visitors in the last two years.

SkyDemon's Tim Dawson explains how the figures were calculated, "Anybody who has taken off or landed at the airfield counts for one point, whether they've used it 100 times or just once. Therefore this isn't an indication of the amount of traffic at the airfield, just how many unique visitors they've had which we think is synonymous with popularity and the amount of things to see/do there."

So, we asked SkyDemon for a snapshot of its data in early July and present the top 10 airfields that popped up. Some you could probably guess, some might be a surprise. Read on, and we hope you'll be inspired to plan a trip…

1 Isle of Wight/Sandown

There was no surprise among the *FLYER* team when we heard that Sandown Airfield was the number one destination for UK GA pilots.

Thanks to its location on the Isle of Wight, the flight to this airfield feels that little bit special because of the small bit of over-water flying you need to do to get there. Unless you really like riding on a ferry, there's no better way to visit the island. The airfield also hosts the famous Spamfield microlight fly-in.

The biggest factor in it's popularity is most likely down to the big – actually let's make that **HUGE** efforts – by the airfield's owner, Dan Subhani. It's safe to say that Dan never stops thinking of ways to make Sandown an excellent place to visit. This has always been his way, and under his ownership he's been busy improving the airfield and adding extras you wouldn't normally expect at an airfield, like 'glamping' facilities.

Dan also likes to make sure there's always easy access to food for fly-in visitors. The Island Bistro is open 1100 to 1700 Monday to Friday, and 1100 to 1730 on the weekends, with a very popular menu of BBQ food, wood-fired pizzas and daily specials always on offer. Fuel is also easily available thanks to a self-serve facility with card payment.

In 2020 after easing of the first Covid-lockdown. Dan was at the forefront of airfield social distancing measures, making sure pilots could have an enjoyable, but safe visit. Just another reason why Sandown is number one!

2 Turweston

You can tell a lot about a place from the feedback that people leave – take a look in the Pilot's Notes section for each airfield on SkyDemon to find out more about a place. One comment in particular really underlined the general feelings of pilots we talked to about Turweston, and that was, "This place is what the aviation 'family' is all about."

We're sure there are lots of reasons that Turweston is a very popular choice with General Aviation pilots, but visiting pilots consistently talk about the great facilities the airfield has, as well as the extremely friendly welcome they all receive.

The hub for activity at Turweston is the fabulous Turweston Tower building, home to Turweston Flight Centre and the superb Flight Deck Cafe, which is open all year round. Thanks to the café's location on the first floor, visitors can expect great views of all the flying activity going on, and if it's warm enough, there's a outdoor seating terrace.

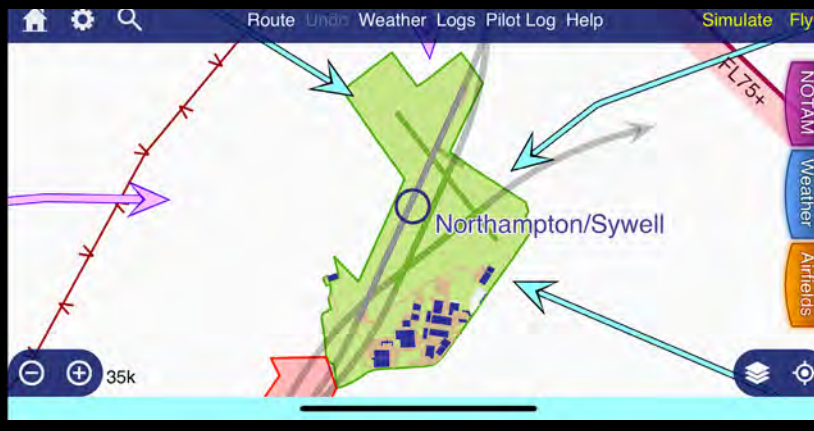
As if that wasn't enough, if you need fuel, the fuel bowser will come to you, meaning less start and stop, or pushing of aeroplanes to park up.

One final gold star, Turweston is also highly praised for the support its facilities provides to disabled pilot visitors.

3 Sywell Aerodrome

As the location of the Light Aircraft Association's annual Rally, Sywell is the place where hundreds of pilots head to at the end of summer. You can choose between hard or grass runways, plus there's the excellent Pilot's Mess café, the Sywell Aviation Museum and the wonderful art-deco-styled Aviator Hotel right next door.

If you like warbirds, you can even buy a flight from Ultimate Warbird Flights, which operate from the airfield.



4 Gloucestershire

Back in 2016 Gloucestershire Airport clocked up more than 80,000 movements for the year, challenging some of the bigger commercial airports for sheer activity. A flight into Gloucester can see you mixing with business jets and sometimes the RAF, which use the airfield for approach training. A popular fuel-stop, there's also the Aviator Inn, if you or your passengers need tea, cake or something more substantial!

5 Cotswold Airport

If you're on a flying visit to Costwold Airport (Kemble) you'll find it hard to miss, thanks to the large number of airliners parked around the airfield. The airfield is the final destination for many retired airliners, prior to them being recycled.

The one-time base of the Royal Air Force Red Arrows, Kemble's hard and grass runways see lots of varied traffic, there's handy self-service fuel and if you need 'refuelling', there's the excellent AV8 restaurant.

6 Duxford

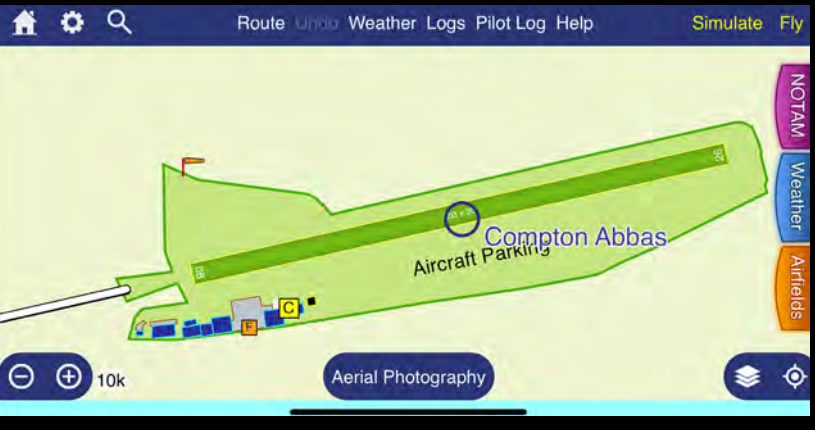
If you haven't been to Duxford yet, and you're thinking of making a trip, first make sure you will be able to spend the whole day there. Duxford is one of the locations of the Imperial War Museum, and you'll find a huge amount of aviation history to explore at the airfield. The airfield is also the home to the active warbird collections of The Fighter Collection, The Old Flying Machine Company, and The Aircraft Restoration Company, so you can usually count on there being some out of the ordinary machines to watch in action.

7 Solent Airport

There aren't many airports where the seafront is just a short walk from where you park your aeroplane, but Solent Airport is one of them.

If you're landing on 05 – there's a choice of grass or hard – then your approach is made a little more scenic by base leg and final being over the water.

Cafe@05 operates seven days a week, and ATC are renowned for being friendly.



8 Compton Abbas

Probably one of the most beautiful airfield locations in the UK, Compton Abbas sits high on the top of a hill with stunning views over the surrounding countryside.

Easy to spot in the air when approaching from the north, it can be more difficult from the south! The grass runway is long and 30m wide – just watch out for a few bumps in places.

The café is very popular, but if you're flying in you can order food and drinks when you are paying the landing fee to save waiting. Then just sit and admire that view…

9 Shobdon

A bustling hub for General Aviation and home to the Herefordshire Aero Club, Shobdon sits in lovely clear airspace and is renowned for friendly, helpful ATC.

If you're hungry, Meg's @ The Hotspur Cafe is where you'll find food and drink – the home-made pies are always good! If you need to top up your tank, there's pay-at-pump fuel too.

10 Bembridge

We're guessing that the fun aspect of a little water crossing to visit the Isle of Wight makes Bembridge the second airfield on the island to make this list.

Bembridge offers both hard and grass runways, and the final for Runway 30 gives you a picturesque over the water arrival.

A taxi ride into Bembridge and a walk along the coastal path makes for a great day out, according to visitors. If you want to eat while you're there, a short walk will get you to the The Propeller Inn, which is always highly rated.

Water way to fly...

Technical

With their own floatplane nearly ready to fly, **Nigel Smith** and his son Aaron decided to get their Seaplane ratings…

My first job was working in Labrador with a Turbo Beaver Air Ambulance on floats, and ever since then I wanted to own my own seaplane one day. As the years went by it became obvious the only way I could manage to do that was to either steal one or build one myself. So back in 2003 I purchased a Murphy Elite kit from Vancouver and a float kit to go with it. By this stage my son Aaron, who flies 737s for Jet2, was also hooked on the idea, which finally rolled out last November to start the approval process through the LAA for a UK Permit.

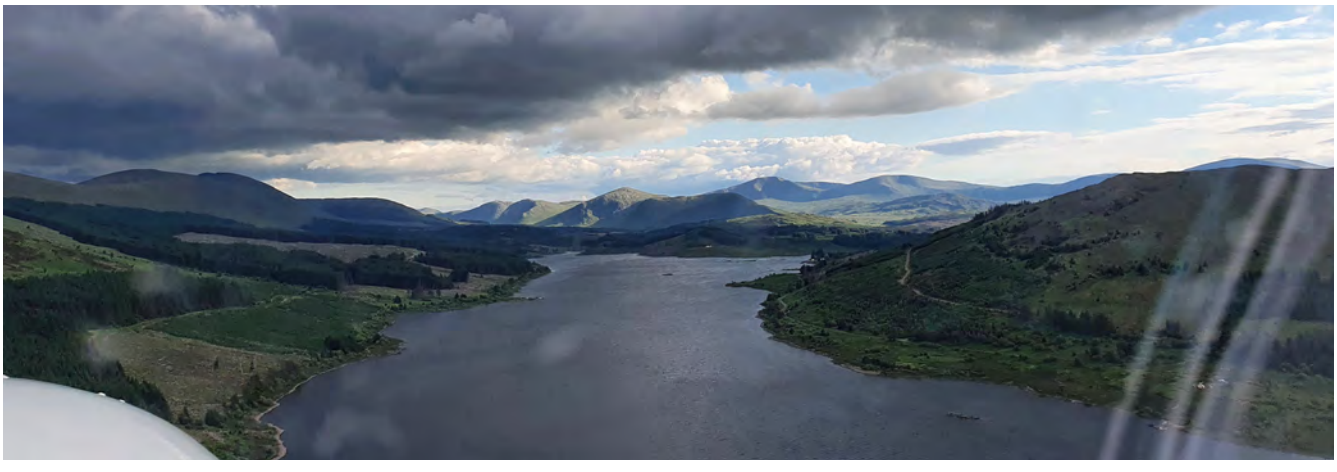
A couple of months ago it was time to look at doing SEP (Sea) ratings and, as we both live in Scotland, it was an easy choice to select Scotia Seaplanes (DTO) for the task. Based at Prestwick Airport, and flying among the Galloway Hills, the 210hp FR172F Reims Rocket amphibian (G-DRAM) had enough capacity to enable us both to benefit by sitting in the back for each other's lessons.

Above Aaron Smith on the left, his dad Nigel Smith on the right. And Bill the micro-duck in the middle. A case of, 'Tweedle Doon and Tweedle Dee'...?

It was a fairly intense course, eight hours for each of us followed by a skill test, but luckily we'd both sat the pre-requisite written seamanship exams in Aberdeen several weeks earlier – so that was already sorted. You can do the 30 question technical paper onsite with Scotia – self-study is required, and a pass is necessary before sitting the skill test.

Day 1 was spent religiously going through the amphibian basics. The first vital lesson is to get a sense of 'mode-switching' into your head – you are either in the 'land' environment, or the

Left Four 'blues', and visually checked, the gear is UP for water landing on Loch Doon
Below Looking south down a dark and mysterious Loch Doon with Castle Island in the distance



'water' environment – verbalise that 'U' in your 'BUMFITCHH' gear checks, loudly and often, visually checking their position and corroborate with the four blue/green gear lights in the cockpit. If you get this wrong and have gear down in the water, or up on the land, your day will not end well.

Next are the verbal checklists (WOODS and FPARTS), reading the water, learning float and marine terminology ('lines', not ropes – 'charts', not maps) and generally getting the feel of *Wee Dram*. Weight and balance requires careful consideration, with two crew on board we can load more fuel, but with a forward C of G, we need some aft ballast (10 litres of water in a rear float compartment) – with three on board we can pump out the ballast but are restricted to two-and-a-half hours fuel.

By **Day 2** we were looking for crosswinds, rough and glassy water and learning the local terrain. By **Day 3** we were getting more familiar with everything, and as we relaxed the fun really began to creep in – we tried beaching, buoying and even ramping out onto dry land. Step-taxying at 45mias like a speedboat with wings, sailing backwards without power, and sailing forwards with power – EFATOs with a 1,000fpm descent rate (get that nose down quickly), restricted area or 'curved' take-offs within a 500m circle, single float operations, balancing like a fine ballerina on aileron and rudder controls – we tried it all.

Day 4 culminated in a round-trip to Loch Eck then Loch Awe and some mirror-like glassy water. It could have involved a pub lunch on a beach, but time was pressing and Hamish, our instructor, had to get back for his day-job, for his afternoon shift ▶

running Scottish Airways in the ATC Centre.

Day 5 was the test itself. I went first and Aaron second. Operating from water has many elements akin to taildragger technique – when transitioning on take-off from nose-high plough-taxying, to hydroplaning 'on the step', all the forces (prop-wash, P-factor, torque and gyroscopic effect) are pulling you to the left, so positive rudder control is essential.

In crosswinds, and when settled on the water, aileron positioning and wind awareness is vital. 'Reading the water' with the 'WOODS' check is one of the first things you learn as you approach a water surface – (W)ind direction and speed, (O)bstacles in the water (swimmers, logs, deer), (O)bstructions out of the water (trees, masts, mountains), (D)epth (are there rocks or shallows?) and (S)ize – it may be long enough to land, but what if the wind changes or drops – will you be spending a cold night on a remote lochside, or leaving your passenger to walk home? This deliberation starts to become second nature, and soon you are estimating wind speed, spotting gust fronts, and anticipating left and right crosswinds from keenly observing the loch surface and surrounding terrain.

Water and ground pre-take-off and landing checks are covered by FPARTS – or PFARTS if you are flying with blokes of a certain age – (F)laps (set), (P)ropeller (fully fine), (A)rea (clear and checked by 'WOODS'), (R)udders (water rudders are 'UP' for take-off and landing), (T)rim set and (S)tick (fully aft on the water).

Our instructors Hamish (Mitchell) and Stewart Houston, were very patient with us both, and by the time the test came around we were really enjoying the scenery and freedom that float flying brings, all the while learning from the 20 years of combined float experience that Hamish and Stewart have between them. We can thoroughly recommend Scotia Seaplanes, and training as a pair provides an excellent opportunity to double-up and learn from the back seat. We are both now looking forward to being able to try out our newly learned skills on our own aircraft.

Joining the clan

After successfully passing our tests, Hamish welcomed Aaron and me into the Seaplane Clan.

Scotia has trained, revalidated and flown many pilots over the last 10 years, but this is its first 'double whammy' – 20 hours flying, two skill tests, and 80 water landings in five days.

It is also a first for Stewart, its new examiner, and this has transformed its ability to help anyone gain, renew or revalidate their seaplane qualifications.

Later in the week their was another successful pass – Royal Navy test pilot, Lt Cdr Chris Gotke, who has also been selected to fly the Supermarine S5 replica that is currently being planned by *The Supermarine Project*.

Scotia conducts most of its training around the Galloway Hills to the south of Prestwick – indeed Loch Doon was a seaplane training base during WWI – and it can claim to have successfully trained more pilots there than the Royal Flying Corps! In fact, at very low water the 100-year old ramp and hangar foundations can appear, ghost-like, out of the water and to ramp on this is quite a rare and haunting experience.

Loch Doon, takes its name from the 'Dun' or castle that sits on an island and dates from the 13th century. Built by Robert the Bruce's uncle, this whole area is where, in 1307, 'The Bruce' started his guerrilla campaign against Edward the First (let's not pull at that thread…) – leading ultimately to the 'home win' at Bannockburn.

Right Aaron positions to land on glassy Loch Awe using Kilchurn Castle as his visual reference

Loch Doon becomes the River Doon, passing under the Brig O'Doon at Alloway, where Robert Burns was born and where he was inspired to write the horror tale of *Tam O'Shanter*, as well as the more romantic *Banks and Braes O' Bonnie Doon*.

In our more advanced lessons we also use the dramatic lochs around Loch Trool and Loch Dee – some are up to 1,700ft asl, which makes for some interesting density altitude calculations – particularly in the height of summer!

Further afield Scotia also offer two or three day 'seaplane safaris', heading north from Prestwick into the mountains, and staying at various locations, Oban, Glenforsa or Plockton. This is an ideal way for two pilots, or a pilot and partner, to experience Alaska-style bush-flying closer to home. You gain dual time and learn mountain flying techniques and skills. Lochs, mountains, beaches, hotels, whirlpools, picnics, eagles, distilleries and castles can all be woven into a mini-adventure.

The flexibility and versatility of amphibian operations means Scotia can slip the surly bonds of hard runways, and enter a landscape with more than 100 potential landing sites. With three normal-sized adults on board, it is restricted to two-and-a-half hour sorties, so avgas availability then becomes a vital part of the planning. The recently reopened facilities at Oban Airport are a godsend, which now enables the company to base itself at Oban or Mull, from where it can access and experience the entire west coast of Scotland.

Primarily based at Prestwick Airport (open 24/7) and operating from Prestwick Flight Centre, the surrounding area is well served with amenities and alternatives to flying should either the weather or family feel uncooperative. The base is also less than an hour by train from Glasgow, and within the Prestwick/Ayr area there are golf courses, museums (that chap Burns again), and 'plenty big hooses' to see – Culzean Castle and Dumfries House to name but two.

As Robert Burns appropriately predicted in his poem *The Cotter's Saturday Night*: *From scenes like these, old Scotia's grandeur springs*… He could quite easily have been writing about his local seaplane base.

Click here For more info

Above left Two newly broken-in seaplane pilots. For his day job, Nigel flies for Scottish Air Ambulance out of Aberdeen, and Aaron as a FO for Jet2. They also operate Banff (Boyndie) airstrip, which was a Strike Wing Mosquito base during WWII
Above Nigel and Aaron's Murphy Elite started life as a taildragger, but new adventures await on floats with their new seaplane ratings
Left The smallest Bill of the week...
Below inset Scotia think that if Burns had been a pilot, he would have flown seaplanes...

My First Solo

Paul Stone

He signed up because it seemed like a nice freebie. But as soon as he stepped into the aircraft, Paul Stone was completely captivated with flying. Interview by **Yayeri van Baarsen**

Shuttleworth Collection

Solo stats

Solo stats: Ex-Royal Navy, military and civilian qualified test pilot and Chief Pilot for the Shuttleworth Collection, Paul Stone has flown more than 200 aircraft types.
When: 20 August 1983
Where: Stapleford Tawney airfield
Aircraft: Cessna 152
Hours at solo: 7h, 10min
Hours now: Approx. 4,700

How did you get into aviation?
At 16, I wanted to become a chemical engineer as I thought they could 'blow up things'. However, the Royal Navy flying scholarship sounded like a great freebie with 30 flying hours. I didn't have any aviation experience or expectation of the course, but from the moment I stepped into the aircraft, I was absolutely captivated. Within only a few hours of flying, I was convinced aviation would be my career.

How did your flight training go?
It was exciting. I was 17 and away from home for a month. CFI Fred Wells ran the place and was into King's Cup Air Racing.

This was 1983, and most of our instructors were quite eccentric old-school aviators. They'd grown up in the 1960s aviation environment, which meant we got a slice of that amazing era. I liked being with a group of cadets, all living and breathing aviation. Since I'm a very competitive person, I set myself the goal of soloing sooner than the rest.

What do you remember from your first solo?
I remember the runway, 21, that it was a left-hand circuit and that, after climbing away, I did the classic thing of looking across at the right-hand seat. The flight itself wasn't very eventful, but I also recall that it wasn't my best landing. There was at least one bounce on the runway and I walked away feeling not very proud…

The RN scholarship was a light bulb moment. Afterwards I aimed for the most exciting and challenging flying job possible, which back then was flying Sea Harriers off an aircraft carrier. I ended up surviving 475 deck landings and commanding both 800 and 801 Naval Air Squadrons. During my time in the Royal Navy I learned that no matter how badly you cock up, it's the recovery that counts, and you absolutely never stop learning.

Old Warden is regarded as an top display venue for visitors, but do you enjoy it as a pilot too?
Certainly! Flying the Shuttleworth Collection is a massive privilege. Every day I pinch myself, realising that I'm given this exclusive look into history.

It's a full multi-sensory experience – sight, smell, sounds, feel and even taste. Putting yourself in the cockpit seat, you get a glimpse of the brave pilots who flew the really early designs, or flew these aircraft in combat or air races.

I joined the Collection in 1996 and spent a year polishing the aircraft before being selected to fly them. You start with the Tiger Moth, work your way towards WWII aircraft, then back to the Edwardians.

In the past 25 years, I've been lucky enough to fly nearly the entire collection.

> "Within only a few hours of flying, I was convinced aviation would become my career"

What's the Collection's most challenging aircraft?
The DH88 Comet. It's a 1930s air racer – this one actually won the 1934 Mildenhall to Melbourne MacRobertson Air Race – and is a handful to fly – the visibility over the nose is non-existent. Also challenging are the WWI rotary engine aircraft, where the whole engine rotates. Instead of traditional throttle and mixture controls they have what's called a 'fine adjustment lever', which controls the fuel and is anything but finely adjustable! If you move the lever half an inch in the wrong direction, the engine will stop. Their huge gyroscopic effects make these aircraft hard to control.

What's been your favourite of the Collection aircraft you've flown?
I have three: the DH88 Comet, as it's the most challenging and beautiful. The Sea Hurricane, because it's a Royal Naval aircraft and one-of-a-kind. And the Avro Tutor. It's a poor trainer as it's too easy to fly. It's got great handling qualities. It's so flattering, it'll improve any bad landing.

What do you love about flying most?
The variety. I really like to experience the different challenges that the different aspects of aviation bring. I've flown more than 200 aircraft types, from the latest RAF Typhoon combat aircraft to the 1910 Deperdussin, obtained my seaplane licence and recently owned a gyrocopter. There's always something new to discover.

■ Shuttleworth offers family-friendly Great British picnic-style airshows where you can get up close with the vintage aircraft. Visit *shuttleworth.org*.

Life in Lithuania

Having spent plenty of time flying in the UK, **Artyom Liss** found himself in Lithuania on a work contract, and in need of an aeroplane to fly. Enter the Auster Arrow, which has certainly made its point…

Opposite Left base for Runway 29 at Utena airfield
Above Vintage aeroplanes generally spend quite a lot of time in bits. The Auster is not an exception
Far left The Auster is never not in need of spannering
Left Artyom discovered the joys of flying vintage aeroplanes in the Tiger Club

We run the weirdest syndicate arrangement possible. Our Ikea-coloured Auster Arrow, which was born in Lincolnshire in 1946 and now lives in Lithuania, has three co-owners, but I'm the only one who's ever seen it in the flesh, let alone flown it. Covid has kept the other two co-owners abroad. For a year now, they've only been getting photos of the aeroplane – and invoices for their share of the fees – on our chat group.

And yet, they are perfectly happy, because such is the magic of vintage aircraft ownership. The moment you take control of an aeroplane that's older than the Spruce Goose, you realise that you're now doing a vital job: not merely bimbling, but keeping history alive.

In early 2020, just before Covid struck, I moved to Lithuania for a work contract. Together with two friends – one Brit and one Russian, who both have very close ties to the Baltics – we hatched a plan. We'd buy something quirky and keep it in Lithuania. I'd look after it, and the others would jump on a budget airline whenever they felt like flying it. This was pre-Covid, so we all thought, 'how hard can it be?' After all, it only costs a tenner to get from London to Vilnius, and the flight takes under two hours. Much less hassle than driving from central London to, say, Popham.

And so there I was, new to Vilnius and immediately on the lookout for an aeroplane we could share. Lithuania has an unexpectedly vibrant GA scene. It's a tiny nation (population: a third of London's, land area: three times the size of Wales), but it boasts something like 50 aerodromes.

At one of them, a friend of a friend of a friend said: "I hear you're a member of the UK's famous Tiger Club and like historic aeroplanes? Well, there's something like a Cub for sale at the Utena airfield, it should be right up your street."

The 'something like a Cub' turned out to be an Auster Arrow, one of only six airworthy Arrows in the world. It had spent most of its life in Germany before moving to the Danish equivalent of Old Warden. The guy who was selling the aircraft – a retired factory director – swapped a pristine pre-war motorbike for it.

He got the Auster dismantled and shipped to

Above Lithuania's lakes are among the prettiest Artyom has seen
Right LY-XNY has been flying since 1946
Below right Summer in the Baltics is gorgeous. Sadly, it doesn't last very long
Opposite page In Lithuania, most navigational features are blue in colour!

"The Auster's 75hp Continental put-put-putted like a wannabe Harley"

Lithuania, and then tasked local mechanics to rebuild it, replacing all the wood, and the metal, and the wiring, and, above all, the fabric. When I turned up to look at it, I thought it looked resplendent in yellow and blue. And it was also impossibly cute. I think all vintage aeroplanes are – as they sit on their tailwheels, they look like puppies begging for a biscuit.

The Auster was just what I wanted. Its 75hp Continental put-put-putted like a wannabe Harley. Its cabin had period features, such as two altimeters, one in metres, the other, in kilometres. It flew straight and true, and, above all, the seller clearly loved it to bits – he knew every single nut and bolt he'd put into it.

Some of these nuts and bolts did look a bit tired – but everything seemed functional, and the price was very reasonable.

And so, we went for it, two UK pilots and one Russian, now members of the Lithuanian GA community. The real learning was about to begin.

Box ticking

First, the country's CAA. Naturally, I ticked the wrong boxes on its paperwork. With the UK CAA, we all know what such mistakes mean, don't we? Well, here it's different. Its deputy head of registrations called me – on my UK mobile, no less! – and talked me through the changes she wanted. And then delivered my new registration certificate by hand.

Then, hangarage. The Auster's home field, Utena, is a bit out of the way, a 90-minute drive from the capital Vilnius. But it only charges €100 a year. That's right, *a hundred euros* a year. This decision, at least, was easy.

And finally, the spannering. I'm mechanically hopeless – I don't even know how to fit a spark plug. So when the aeroplane threw a magneto in late October, its previous owner recommended we hire a local mechanic. He turned out to be a retired British-trained chap who'd moved to Lithuania and picked up odd jobs whenever he felt bored.

In theory, replacing a magneto should have been simple enough. But Covid and the Baltic winter both got in the way. Between lockdowns and waist-high snowdrifts, the aircraft remained grounded for six months.

Remember all the chat on UK social media about how we all desperately needed to run our engines through lockdown? Well, here nobody bats an eyelid. The country's GA all goes into hibernation in November. Hangars get locked and forgotten,

Top For many Lithuanians, the lakes around Ignalina are a favourite holiday spot
Above At Ignalina Aerodrome, the Auster's first landaway in our ownership
Right This old radio is purely ornamental and has now been replaced with an 8.33 Trig. The trimmer does work

and the idea of going to an airfield just to turn over a Lycoming is seen as fanciful and, probably, a bit mad. But when spring finally comes, Lithuanian aviators wake up in a way we don't. They have a tradition here called 'talka'.

People voluntarily get together for a spring clean of everything in sight. At our airfield, we all swept, washed and painted. We cut the grass. We re-covered the runway markers with new tin stripes. We got rid of old paperwork, magazines and dead batteries. We threw away tea and coffee which had gone off over the winter. We gave a proper burial to a mummified mouse we found in the shed. With the airfield 'talka-ed' and the Auster fixed, I was all set to go flying again.

For somebody whose experience comes entirely from British clubs, it's a weird feeling, to just walk up to the hangar after a winter lay-off, pull the aeroplane out and go. No checkflight, no 28-day rule, no friendly instructor to tell you that you probably won't crash.

It's all far more laid back here.

The whole country only has four bits of controlled airspace. If you want to land at the capital's international airport, you simply submit a flight plan and go. Touch-and-goes are free, and a landing costs less than €10.

'Right-hand orbits at present position, please, you will be cleared for the approach after the Wizzair Airbus on short final' is something that my UK friends would plaster all over Facebook. Here, it's a routine occurrence.

Vilnius is Europe's only capital you can overfly in a hot air balloon – complete with a zone transit overhead its international airport. Ryanairs will hold for you, because, remember, powered aircraft must give way.

Away from the capital, the south-east where our Auster is based, is Lithuania's answer to the Lake District. You take off, turn south and immediately find yourself cruising over a glacial landscape, with miles of blue lined by pine forests. The only thing missing are the fells – Lithuania is a very flat country.

And if you turn north, you'll trundle along for a few hours – especially at Auster's 60kt cruise speed – but eventually you'll hit the Curonian Spit, a thin finger of land which juts out into the Baltic Sea. Half of it belongs to Lithuania, the other half to Russia. Right at the border sits Nida Airfield, which is made up of 500m of tarmac, with a challenging approach

Top A brief list of things which didn't work when this selfie was taken includes: fuel gauge, radio, oil temp gauge, and that weird cable which used to feed an old-fashioned Garmin.
Left LY-XNY is one of just a handful of Auster Arrows still flying
Bottom The seat feels like something from an old American saloon car, soft and with zero lumbar support

Flying in Lithuania

Navigation – SkyDemon works just fine. You can also get paper charts, I think.
Fuel – Avgas is available at the larger GA fields (call first to check), but in the permit to fly world almost everybody uses mogas.
PPR – Does not exist, apart from private airfields (which aren't on SkyDemon anyway)
Landing fees – Do not exist, apart from international aerodromes and private airfields (which aren't on SkyDemon anyway)
Controlled airspace – You won't be allowed in without a transponder and a flight plan. But with these two things, you'll never have a problem. There is one exception, the military airfield at Siauliai where NATO keeps some fairly sensitive kit. Infringements are not encouraged, of course, but the local CAA won't take you outside and shoot you if you stray into a CTR without clearance.
Brexit – Don't get me started (or, if you're really keen, ask Ed Bellamy). A visiting UK pilot in a G-reg aeroplane should be OK. Hiring a local Cessna on your UK licence may be tricky, though.
Traffic – Busy, especially on a good-weather day. Electronic conspicuity isn't really a thing here yet, so keep a good look out, especially for gliders.
Radiotelephony – Happens in a mix of Lithuanian and English. Lithuanian is Europe's oldest language, closely related to Sanskrit and all but impenetrable. This makes for some fun times trying to figure out what that pilot meant when he said, 'takas trideshimt sheshi'. That's 'Runway 36', by the way...
Gotchas – There is a four-mile exclusion zone along the border with Russia and Belarus. It's clearly marked on SkyDemon. Avoid, unless you want an armed escort back to the nearest airfield. If you must enter, seek permission from the military.
Insects – Mosquitoes and other biting insects are the size of donkeys and really know their job. Luckily, they only appear for a few weeks each year.
Places to visit – Vilnius and Kaunas are both really lovely. Palanga is a busy seaside resort, Nida is also by the sea, but much more chilled. The town of Ignalina is a bit bland, but the lakes around it are among the prettiest I've seen.
Food – Lithuania has such a rich aviation tradition that its national dish is called Ceppelinai, because it looks like a Zeppelin airship. It's basically mashed-up and deep-fried potatoes stuffed with meat. In the summer, everybody lives off saltibarsciai, cold beetroot soup which offers fantastic refreshment on a hot day.

over the rotor factory that is a seaside pine forest. From landing, it's a €10 taxi ride to the beach.

And then, there's Druskininkai, a bumpy strip in the spa town where half of Eastern Europe 'takes the waters'. Druskininkai sits close to Belarus, and as you tune into Flight Information, you share the frequency with Belarusian MIG pilots on their training sorties.

On air, it's all a bit crazy and, in a mix of English and Russian, goes like this:

- Kaunas Information, LY-XNY, request flight information service.
- Lined up for the bomb run, 028!
- 028, cleared for the bomb run!
- LY-XNY, hello.

I've often wondered if it was one of those MIG pilots who forced the Ryanair Boeing to divert to the Belarusian capital Minsk, just so that the arrest could be carried out on one of its passengers, the independent journalist Roman Protasevich?

Right in the middle of the country sits Kaunas, another medieval town, with winding narrow streets, great food, and talented buskers. It has two airfields: Kaunas International (landing fee: €3) and Kaunas Darius and Girenas, a GA field with more than 1,000m of tarmac.

This airfield is named after Steponas Darius and Stasys Girėnas, two pilots from the 1930s who sit right at the top of Lithuania's national pantheon. Their portraits, along with a picture of their aeroplane, adorned the national currency before Lithuania switched to the euro. Darius and Girėnas attempted the country's first transatlantic flight in 1933, but crashed just 400 miles short of Kaunas (the country's capital at the time).

And then, there is all the gliding. At the vast field in Pociunai, the Lithuanians produce some of Europe's best soaring machines. The sport is so popular that, as you drive on the country's A1 motorway, you pass an advertising billboard which has a complete Blanik attached to it.

Visiting any of these fields in an Auster, with its unhurried cruise and two-and-a-half-hour endurance, is 'proper' adventure. To me, that's what makes aviating worthwhile.

Getting from A to B, with autopilot on and IFR filed, is great, but that's what airlines are for. Low and slow, above beautiful landscapes and with the ever-niggling thought of, 'will I get there, or will the 1946 engine quit on me?' is much more fun.

As a group, we're still deciding what to do with the Auster longer-term. We may bring it home to Britain – but, with Brexit and our newly found freedom from the shackles of EASA (ahem!), that may prove prohibitively expensive.

But keeping it in Lithuania forever is not really an option, either. My contract here will eventually end. And as for my co-owners, I'm not sure that the pre-Covid freedom of movement will ever return to the degree when they'll be able to just jump on a cheap flight and to go play in the Baltics. We'll see. For now, the task remains, to properly explore this part of Europe. This 1946 aeroplane is not done adventuring yet…

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Safety Accident Analysis
Always time to lookout

Let's face it, most of our aircraft have appalling blindspots, designers seemingly having considered the need for lookout as a bit of an afterthought. **Steve Ayres** asks, what can we do about it?

There is nothing like another aircraft calling 'deadside' to sharpen up your lookout when midway through your own deadside descent. Unfortunately, it often takes this sort of trigger to awaken us from our torpor and remind us that we are not alone in our 'sky-space'. Other things get our eyes scanning outside the cockpit, of course – 'traffic' calls from an ATCRU or an alert through the likes of SkyDemon, FLARM or TIS/TCAS. Or perhaps just a flicker of something in our peripheral vision.

These accidents remind us just how vital it is to practise effective and regular lookout but also highlight where lookout has significant limitations.

Accident 1

The accident flight, in a Cessna 152, was recorded on the club signing-out sheet by the instructor as Exercise 7.1 (best rate of climb) and Exercise 8.1 (glide descent). Following take off, the aircraft climbed steadily up to an altitude of 2,000ft before turning on course to the local training area north-west of the aerodrome. Four minutes later the crew confirmed with Wycombe Tower that they had left the circuit area. There were no further radio comms. Having reached 4,000ft, the aircraft turned left onto a steady north-westerly course and then began a sustained descent which continued until the point of collision 14 minutes after take-off.

The instructor of a Guimbal Cabri G2 helicopter was on his second detail, a repeat navigation exercise with a different student. The Cabri left shortly after the Cessna, climbing initially to the south-west, before turning north and then north-west. The instructor advised Wycombe Tower they were leaving the circuit to the north. There was no further radio communication from the helicopter which climbed to, and kept, an altitude of around 1,500ft amsl until the point of the collision.

Fixed-wing aircraft with forward-mounted engines have a restricted view ahead and below the flightpath. In the absence of a turn, the Cessna pilot would need to have pitched the aircraft at least 24° nose-down to have had any chance of observing the helicopter. Additionally, the conspicuity of a small helicopter against an unreflective background such as open fields and trees, is very low.

Accident 2

Eight aircraft were participating in an annual charity event at White Waltham Airfield, Berkshire. The airfield is situated in congested airspace, 11nm west of Heathrow Airport, on the edge of the London controlled airspace. The route to be flown was predominantly under controlled airspace with a base of 2,500ft amsl.

Prior to the aircraft departing the pilots attended a briefing. As the deputy airfield / safety manager was not available due to sickness, another pilot was asked to conduct the brief. This was because he had flown at this event previously, but no guidance was offered.

In the brief he instructed the pilots to fly a counterclockwise route from White Waltham via reporting points. They were reminded to keep a good lookout, given the number of aircraft involved, and communicate clearly when approaching the airfield. They were also told that should any passenger feel unwell they were to return to the airfield immediately. The briefing did not include a discussion of how all the participating aircraft would be deconflicted or how they would communicate.

The pilot of a Fuji Aero Subaru, a low-wing aircraft, stated that he took off at about 0940 with one disabled child and his carer. He believes he changed frequency from White Waltham's A/G radio frequency to listen on a Lower Airspace Radar Service. When the aircraft was about three nm south-east of reporting point November, he felt a 'bump' beneath the aircraft that he believed was an air pocket. He continued with the route and landed uneventfully at about 1015. He did not hear an Airprox being filed.

The pilot of a Cessna 172R high-wing aircraft stated he was allocated two disabled children and one adult carer for his first flight. Prior to engine start, one of the children became verbally and physically unsettled, but was reassured by his carer. They took off at 0952, turned right downwind and departed the circuit on a north-westerly heading towards point November, remaining on White Waltham's A/G radio frequency.

Once airborne the previously unsettled child became vocal. Fearing he may become physically disturbed again, the pilot decided to shorten the route. Shortly after leaving the Aerodrome Traffic Zone, while straight and level, the pilot noticed a bright red aircraft above, in his 8 o'clock position, converging on his aircraft. He then lost sight of it above and behind his aircraft's high-wing, becoming visual again when it was in his 1 to 2 o'clock position. It then was seen to descend before disappearing from his sight. He didn't have time to take avoiding action but filed an Airprox on White Waltham's A/G radio frequency. He continued the flight, landing at 1009.

Both pilots then flew another flight without incident. After landing from that flight, the Cessna pilot noticed

"The pilot would need to have pitched at least 24° nose-down to have seen the helicopter"

Mark Mitchell

damage to the aircraft's right wingtip and informed the Fuji pilot that they must have collided in flight. Further analysis showed the tyre of the Fuji contacted the wing, just inboard of the tip and moved outwards leaving a mark.

Accident 3

The model glider pilot reported that he and others were flying remotely piloted gliders from their club's field at Fish Meadow, Upton-upon-Severn, Worcs. The 1.8kg glider had an electrically powered propeller to assist with launching, a wingspan of 3.8 metres and was fitted with a height limiter that automatically removed the power to the motor at a predetermined height above the launch site or after 30 seconds, whichever occurred first.

The glider was hand launched and climbed, under the power of its motor, to 100 m when the motor automatically cut, which was confirmed by the on-board telemetry. After about 10 mins, as the glider was flying slowly in a thermal, the model gliders' pilot heard the sound of a powered aircraft to his right flying from north to south. As the aircraft entered his peripheral vision he determined it was flying a course approximately along the River Severn 'at a low level and travelling quite quickly'. He was unable to take avoiding action before the glider and the powered aircraft collided while over the river. The glider's telemetry, just before the collision, was 190m agl (630ft agl).

The pilot of a Pioneer 300 reported that he was on a local flight from Gloucestershire Airport. As he approached Upton-upon-Severn, the pilot and his passenger noticed two model aircraft flying from a field to the east of the river, 'well below them', as they flew round the perimeter of the field. The pilot then headed away from the area. A shortly afterwards there was a 'loud thud' as the aircraft struck what the pilot believed was a seagull, seeing a slim grey / white object pass over the left wing.

After checking that the aircraft handled normally the pilot contacted Gloucester Approach and informed them that he was returning as his aircraft had suffered a substantial bird strike. The aircraft subsequently landed safely. The aircraft pilot commented that he was aware of the presence of the model aircraft flying site and had seen activity there on previous occasions. However, before this accident he did not realise how big the models were or how high they were flown.

"The tyre of the Fuji contacted the Cessna's wing just inboard of the tip leaving a mark"

Accident 4

A Beech Travel Air D95A aircraft departed Tyabb Airport, Victoria for an Instrument Flight Rules training flight. On board were an instructor and student. Some 15 minutes later, the pilot of a Piper PA44-180 Seminole, advised Air Traffic that they were taxying for departure from Mangalore Airport. On board was an authorised testing officer, who was testing the pilot for an instrument flight rating.

The Beech tracked as per the flight plan and, six minutes after the Piper became airborne, began a descent from 6,000ft amsl for airwork at Mangalore. Radio communication indicated the airwork was to occur between 4,000ft and ground level. Shortly after, Mangalore ATC informed the Beech of the Piper's departure and subsequently passed traffic information about the Beech to the Piper aircraft. Some five minutes later both aircraft collided and all four pilots were fatally injured.

At the time of the accident, the automatic weather station 8km north of the collision location, recorded two cloud layers: one scattered at 3,500ft amsl and a second broken layer at 4,200ft amsl, about the collision altitude. Mangalore Airport is non-controlled, and utilised a 'Common Traffic Advisory Frequency' (CTAF). Surrounding the Mangalore CTAF was Class G non-controlled airspace. In Class G airspace, air traffic controllers provide traffic information to IFR aircraft about other conflicting IFR and observed VFR flights.

Ayres' Analysis

The Investigation into the Australian accident is still ongoing but instructional flying carries its own risks of distraction, and when undertaken close to cloud and in the vicinity of other airspace users, the probability of a midair creeps inexorably higher. Similarly, teaching or simply just carrying out any form of descent involves its own elevated risks, particularly where high-wing aircraft and helicopters are involved, as no amount of eye scanning will get past the overhead wing centre section or rotor gearbox.

In these circumstances only a regular weave will suffice. An excellent NTSB animation of a recently concluded investigation into a midair between a Beaver and an Otter over George Inlet in Alaska on 13 May 2019, **[click here]** illustrates the practical difficulties all of us would encounter detecting another aircraft in similar circumstances. It also goes on to highlight the limitations of electronic conspicuity (EC) systems when they are not fully functional. In this case and despite both aircraft detecting each other, no aural alerts were generated and the impending collision was not brought to the attention of either pilot.

Even when we go out of our way to mitigate for elevated risk things can go wrong. The charity flying event discussed here resulted in a midair between participants. Yet another example of where big sky theory fails us because the sky can become not quite big enough! All the aircraft were planned around the same route but little allowance was made for things not going to plan. There will inevitably be those who get lost, weather that falls below an individual's limits, speeds that vary or emergencies that occur. All these possibilities need to be factored in and allowance made.

So what can we do about reducing the risk of having a midair? Fit EC and make sure it links up properly and provides aural alerts would be a good place to start. Get a Traffic Service if at all possible, especially if you're preoccupied in-cockpit for extended periods, perhaps instructing. And be doubly cautious if you are flying in known areas of gliders or model aircraft as they are rarely visible to anyone, including ATCRUs.

Better still, avoid areas of known intense activity altogether. After all, history is perfectly clear, we all need to practice the best lookout scan possible but also understand its limits and mitigate the higher risk areas wherever we can!

Safety Accident Reports
Uncontrolled flight

Steve Ayres summarises and comments on accident reports from around the world and looks at Fusion, the latest version of the PowerFLARM electronic conspicuity system

Unconstrained rotate

Mooney M20S
N602TF
Olathe, Kansas
Injuries: Two fatal

The pilot and a passenger were departing from the airport to return to their home-based airport. A witness reported that nothing was out of the ordinary on the aeroplane's initial take-off roll.

However, the aeroplane rotated at a much slower speed than would be expected and immediately started to climb at a very high pitch attitude.

The witness reported that as the aeroplane gained altitude, it appeared to fly slower to the point that the left wing stalled, causing the aeroplane to nose over and continue its trajectory straight into the ground just east of the runway. The witness stated that the engine power was 'on' throughout the entire flight.

Videos recorded near the accident site and the accident aeroplane's engine monitor data were consistent with the witness description of the accident flight. The pilot had purchased the aeroplane about one month before the accident and, according to his flight instructor, had accumulated 6.8 hours of instructional flight time. Review of photographs of an exemplar trim jack screw and the accident aeroplane's jack screw revealed that the aeroplane's trim system components exhibited a setting consistent with a full nose-up trim.

The before take-off checklist for the aeroplane make and model includes the step, 'Elevator Trim… TAKE-OFF SETTING'. Given the available information, it is likely that the pilot departed with the elevator trim set to a full nose-up setting as opposed to the take-off setting, which resulted in the aeroplane pitching up steeply after lift-off and the subsequent aerodynamic stall.

Comment The pilot was relatively low hours but a 'quick learner' and of excellent ability according to the instructor. Given the likelihood of a mis-set pitch trim being the cause, maintaining the correct take-off attitude would have been hard work at unstick but not impossible (in most aircraft, at least). That said, the pitch trim mechanism on a Mooney is unconventional and works by repitching the whole tailplane. That may make it more powerful than most in certain circumstances.

Go-around delay

Cirrus SR22
N8163P
Cotswold (Kemble) Airport, Gloucestershire
Injuries: None

While downwind for Runway 08 at Cotswold (Kemble) Airport the pilot was informed that he was number two in the circuit with one landing ahead. He was visual with the landing aircraft and planned his touchdown assuming the aircraft ahead would vacate the runway at the intersection approximately 2/3 along the runway.

On calling 'final to land', the Flight Information Service Officer (FISO) advised that the runway was occupied by an aircraft that was vacating. However, the aircraft carried on taxying until it reached the end of the runway before vacating.

The pilot reported that he had to hold off the landing until he was given permission to 'land at his discretion' as he crossed the threshold. N8163P was still airborne when it reached the first touchdown zone markings.

The left wing was then seen to drop and contact the runway. The aircraft touched down on the grass and travelled along the ground at an angle of approximately 45° to the left of the runway heading, until it reached the North Apron where it collided with a parked Piper PA-30 aircraft. The pilot reported that he assumed the aircraft abruptly veered to the left and departed the runway due to a gust of wind. He did not recall hearing the stall warner operate.

He reported that he attempted a go-around while he was on the grass but thought the high air temperature meant he did not get the lift he was expecting. He added that his actions in attempting a go-around following the loss of control were instinctive. The collision with the unoccupied parked aircraft occurred at high speed and caused substantial damage to both aircraft.

Comment An earlier go-around would have been the right decision, of course. Having not done so and then losing control of the aircraft such that a wing tip strikes the runway really negates such an option. To then press on with doing so from the adjoining grass, pointing towards a parking area, hangar and fuel facility, was not a good move. We will never really know why this course of action was adopted and I suspect the pilot never will, either.

We do strange things when 'startled', but in this case leaving high power set almost turned a survivable accident into a disaster.

"The pilot departed with the elevator trim set to a full nose-up setting"

Easily misled

Robin DR400
F-BVCK
Pau-Pyrénées, France
Injuries: None

The pilot, accompanied by a passenger, was on a flight to Pau-Pyrénées. The expected flight time was

Safety Accident Reports

2.5 hours, where the pilot planned to refuel. After landing he requested taxi to the refuelling station. Once clear of the runway and the apron the controller indicated to the pilot that the fuel pump was in front of him. The pilot confirmed that he had it in sight.

A service vehicle preceded him and an agent was waiting. The pilot indicated that he saw a service road ahead with a yellow line, which he understood to be the taxiway. The presence of a 'STOP' sign to the side of the tarmac was a surprise, but he thought the left wing would pass over it. Unfortunately, as it did so the sign became embedded in the under surface of the left wing.

Once the aircraft was shut down and with the passenger's help, they disengaged the wing from the sign and pushed the aircraft to the parking. The route to follow to reach the refuelling station from the apron was not clear and the more obvious yellow line leading to the service road could easily mislead.
Comment What should have been a nice day out turned into a bit of a nightmare. I suspect the pilot was initially misled by being conditioned to follow the route taken by the service vehicle but the ground markings were confusing too. Ultimately, though, it was by assuming that the wing would pass clear of an obstacle that was his real undoing. The sign said it all: 'STOP' – and check!

Caught short

Piper PA28
N98146
Mokuleia, Hawaii
Injuries: Three minor

The flight instructor reported that, before the flight, he requested that the aeroplane be refuelled, and his subsequent pre-flight inspection revealed that the aeroplane had been fuelled to the specified level. While conducting touch-and-go take-offs and landings during the instructional flight, the engine lost power about 300ft agl, and the instructor performed a forced landing to an open field adjacent to the runway. The aeroplane impacted a fence and came to rest upright.

Post-accident examination revealed that the right-wing fuel tank contained about seven to eight gallons of fuel, with a slow fuel leak, and the left-wing fuel tank was void of fuel and undamaged. The fuel selector was positioned to the left-wing tank. Interviews with the staff of the fixed-base operator, from which the instructor ordered fuel, revealed that a fuel order was received for the accident aeroplane. However, the aeroplane was not refuelled before the accident flight.
Comment The narrative doesn't quite add up but as was discussed last month it is simply not good enough to assume some things. Assuming someone else has filled up your aeroplane is one of them!

> "A fuel order was received but the aeroplane was not refuelled before the accident flight"

Free-flight

Van's RV-6
N628JB
Milton, Delaware
Injuries: Two minor

The purpose of the flight was for the pilots to calibrate newly installed avionic equipment. The owner was occupying the right-hand seat and the pilot-in-command (PIC), the left. After take-off, the PIC handed over the controls to the owner requesting he perform two 360° turns while the PIC calibrated the equipment.

After the turns, the owner let go of the flight controls and the PIC manipulated the controls to demonstrate the functioning of the g-meter. The PIC and owner believed the other was flying the aeroplane following this demonstration.

Having decided to return to the departure airport, the aeroplane flew low and almost impacted the ground twice. On both occasions, the PIC pulled up, then once again let go of the controls believing that the owner was flying the aeroplane. Both expressed discomfort with how the other was flying the aeroplane, but neither communicated their concerns to the other in a way that was understood, nor did either confirm who was flying the aeroplane.

The third time the aeroplane neared terrain, the owner called for the PIC to pull up just as the PIC was about to take control. The aeroplane then impacted a field, flipped over, and came to rest inverted.
Comment Yes, this really happened! If I'd made it up as a piece of fiction, no one would have believed such a sequence of events possible. It has left me speechless…

Safety kit

PowerFLARM Fusion

Price Free £1,740 incl VAT | **From** LX Avionics

For many years FLARM has been gaining traction within the GA community having been in widespread use by the gliding community as an anti-collision aid.

In PowerFLARM the FLARM signals work alongside the integrated ADS-B receiver to provide visual and aural track and collision alerts to many fixed EFIS systems and electronic flight bag-type apps such as SkyDemon, in addition to its own FLARM approved displays.

The team have now launched the Fusion which, like its predecessor the Core, is a fixed unit compatible with existing Core wiring. It adds integral WiFi and Bluetooth connectivity (for up to 2 portable devices), works worldwide and can be configured via a web app. It now also includes all the licences that previously had to be bought as add-ons. FLARM is appearing increasingly in UAVs and helicopters as well as in the RAF's Tutor fleet.

The new Fusion also has EASA Minor Change Approval.

Nomad on the move...

Thomas Leaver recalls a few of the ups and downs of ferrying his Piper Aztec twin on floats from Alaska to Florida, as 2002 came to a close…

Having had a casual conversation with Jon Brown of Brown's Seaplane Base about using the Nomad for MES ATPL (figure that one out!) training, I found myself in Anchorage in early October 2002 on the edge of a dream about to unfold, which was to fly my 1969 Aztec on straight floats (aka Nomad) from Lake Hood, Alaska (LHD) to Winter Haven, Florida (F57) via Seattle. That is a distance of 3,657nm, and was to take place over 10 days.

Accompanying me was Jonathon Whaley, a great and patient friend who shares my love of flying, and who also has a broad and varied experience.

To put this journey and this portion of the trip into perspective, I need to start by saying that I had about 900 hours total time from 1968 to 2002, with a 15-year gap in the middle! Of that total, I had approximately 50 hours of MES time, 17 to get my MEL & S in a Twin-Bee in 1995, and more or less the rest in 1996 ferrying the Nomad from Muskoka, Ontario to Anchorage, Alaska after I first acquired the aeroplane, and a touch of AirCam on floats thrown in. To help me get up to speed prior to leaving Alaska, my business partner in Kenai Fjords Outfitters, Inc., Billy R Smith, undertook to give me a 'grilling, gruelling and intensive recurrency 'bush' course' totalling 4.7 hours to make me 'safe and comfortable' again with the aeroplane.

And so we begin this saga on a cold, clear and windy day heading East into distant snow storms from the beautiful Coeur D'Alene, Idaho having started the day from Kenmore Air Harbour, Seattle, Washington.

This is how our 2002 journey unfolded…

Friday, October 11

The wind at Coeur D'Alene is easing off a bit and we decide to push on to Fort Peck keeping Fort Benton, both in Montana, as an option, as the weather could be closing in at Fort Peck by the time we get there.

Jonathon takes the left seat this time and we are off the water just after half-past two, winds still about 15kt, but the lake is still very rough from the morning. Because of the cloud base we take the pass route via Thompson Falls, Plains, St Ignatius, Lindey's West / Seeley Lake, Lincoln and Rogers Pass before we are out of the Rockies and on to the plains of Montana. Our GS drops to 117kt, the winds are not favouring us anymore (so far we had been averaging 135kt) and the weather is looking less friendly towards Fort Peck than it is in Fort Benton.

So, Fort Benton it is, and we follow the Missouri River to our destination. Jonathon circles the town twice as I relate what was explained to me about the standard procedure for landing at the town and what to look out for – the new and old bridges, land downstream after the old bridge and keep to the right-hand side of the river, island on the left.

I see the roundabout where the boat ramp is supposed to be located but it is so small that I can barely make it out, a seaplane base for one, perhaps? We can see snow flurries approaching from the south and we are within an hour of sunset.

We agree on the approach over the town and over the old bridge as briefed, although we will have about a five-knot tailwind landing this way. However, there is enough water and floatplanes decelerate pretty quickly on the water. We are a bit fast at 90mph over the trees on final to the river but Jonathon does a textbook landing, with the island on our left and the bank of the river to our right.

However, at two thirds of the run out we see shallows ahead and Jonathon does the only thing he can by going left to avoid them, as there is no room to turn right with an eight-foot vertical riverbank in that direction.

Next, a rather sudden, very loud, grating noise and progressively rapid deceleration that sounds and feels and is… the bottom. And we end up in about 12 inches of water on a gravel bar in the middle of the Missouri River! I can't imagine a worse sound… similar to fingernails on a

Opposite Aztec arriving in Winter Haven, Florida

Above Jonathon with tools of the trade, repairing exhaust leak at Lake Berkeley, Kentucky boat marina
Right Lake Berkeley, Kentucky. Home for a day of repairs
Below Tom cleaning injectors

chalkboard but louder! Not pleasant!

Jonathon shuts everything down, and we have a quiet moment as we absorb what we think happened to the float bottoms… then we get out and put on our waders to survey the situation in the declining light and to assess any damage we can.

Several things are going through my mind not having been in a situation like this, but I take a pragmatic (if brief) view of the universe and try to put the situation into context, whatever that may be. It is now too dark to see any visible damage and the water is extremely cold, so much so that our hands quickly become numb feeling the hulls of the floats for torn and shredded aluminium. It's definitely beginning to look like it's 'beer o'clock', as snow begins to fall and the lights from the local school playing fields cast an opaque dome of light in the distance.

Now the fun really begins. Where is everyone? Surely, I think to myself, it's not every day you get a seaplane in October flying a low approach over your town with the distinctive sound of two engines that someone must have heard, even if they have not seen us… An hour of whistling, shouting, turning on the strobes and the rotating beacon produce nothing. It seems we just can't compete with the Friday night school football game.

To top it off our mobile phones don't work – and then it really starts to snow. Jonathon then hits on the idea of using the satellite phone (why didn't I think of that) and I pull it out, turn it on and call the local seaplane base alternate number (you can't ever have enough phone numbers for situations such as this). Kevin, understandably suspicious to be getting a call from a stranger in a floatplane in the middle of the Missouri River at night, assures me he will contact the appropriate people and get them to come out to us. About the same time someone hails us from the shore to ask if we need help, whereupon we give an emphatic: "YES!"

We are now not only mid-river in heavily falling snow, but it is very dark and very cold. About two hours after our landing, Chris and Dave of the Fort Benton SAR crew, make their way downstream in a metal boat with a very large Mercury outboard on the back (bass fishing, anyone?), asking us if we are all right.

By this time a large whiskey and a warm fire would suffice, that is if our first option of turning the clock back three hours wasn't granted! It must be -15°C and dropping!

After determining that the aeroplane is not going anywhere tonight, there is nothing further to be done, so we get out our toilet article kits, shoes, and with our waders on, get into the SAR boat to head back to land… or so we thought. Question: How long does it take to get to shore? *Answer: How ever long it takes…* What then transpires is a two-hour comedy of trying to get there. I thought we were the

rescuees with our aeroplane stuck on a gravel bar, ready to soak my misfortune over a tall scotch around a warm fire, but how naïve of me! We now find ourselves pushing, pulling, stumbling, slipping, sliding and otherwise clinging on to the mechanically stricken motor boat, as Chris and Dave make several repair attempts to the impeller, which is stuffed with river weed/kelp, repeatedly getting in when we thought we had fixed it, only to get back in the water when it broke down again.

All the while the radio traffic to and from the base station became increasingly creative and comical, as Chris did not want it to get around town that they got stuck on a rescue mission!

"Rescue 1, this is Base, over." *Silence.*

"Rescue 1, how do you read, over?" *More silence.*

"Ahh, Rescue 1, Chris, are you alright?"

Clearing throat, "Base, this is Rescue 1, we are on our way." *Big Lie.*

"Roger Rescue 1, it just seems you guys have been gone a long time and the boss says make sure not to wreck that boat!" *Pained expressions all around with a few smirks, too.*

This radio traffic occurs with an increasing frequency of urgency over the hours until Chris admits the impeller is jammed and the motor mount is broken. Chuckles all round back in the radio room!

My feet, hands and face are now frozen standing in the river, wader deep, clinging onto the metal boat in a 10kt current, falling snow, and pitch black except for our flashlights, and slipping and sliding on all this river weed! We finally manhandle it to shore, through thigh-deep water, and tie it to a stake hammered into the ground to secure it for the night, delighted that the fiasco is over!

A very worn out, but very welcome, Chevrolet Suburban with faded 'SAR' painted on the side, trundles through the fresh snow and overgrowth to collect us by the river bank. The driver, his girlfriend, a chocolate bar and a great heater are very much appreciated! We drive and bounce through a pretty empty town, the football game is over and everyone must be huddled away at post-football parties. We are given choices for hotels and opt for the up-market Grand Union, feeling it may be our last. We also learn in passing conversation from Chris that there has been a five-year drought in this part of Montana and that five floatplanes came to grief here in the past year. That would have been worth knowing from the seaplane base people on our briefing prior to departing Coeur D'Alene…

We check in, change out of our boots, clean up, and proceed to dinner. We are famished but well on the way to thawing. The chef kindly agrees to stay open for two more orders. We had been in the river for more than four hours… Chris and Dave agree to meet us in the morning sometime after 0900, despite our attempts to lure them in for a drink in appreciation of our rescue. My guess is they have some explanations of their own to make about the boat to whoever it was on the other end of the radio, and they take their leave.

Above The morning after, high and dry on the Missouri River, Fort Benton, Montana

Jonathon and I settle into a sumptuous dinner and venting anxiety through great conversation with the locals and guests. I feel we both need to release tension and try to get our minds off what has happened today. What is done is done. The measure of us will come in the morning.

Saturday, October 12

I awake to crystal clear blue skies, bright sunshine, and a white carpet of fresh snow, and go down for coffee and check out of the hotel, awaiting the SAR team. Jonathon is already up and has been outside to walk the river, and he relieves my anxieties by assuring me the aeroplane is still there. I did have fears of fluctuations in the river level before we left her last night but was assured by Chris that she would be safe and still on the bar.

I need some fresh air and so I walk south-west along the snow-covered riverbank, past the two bridges and beyond until I see shoals and boulders in the river. I pace from here to the new bridge, then pace off the distance between the new and old bridge. Thereafter, I estimate the distance to the island in the middle of the river, below which the Nomad sits in the pristine morning sunlight covered in snow.

Taking into account the following current and the positive impact of the cold on density altitude, it is more than likely the Nomad could make it out loaded as she is. However, I am not feeling particularly brave this morning, and so we plan off load the Nomad, make as thorough an inspection of the floats and airframe as we can, and if all is well, have Jonathon drive to Fort Peck with our gear and

"The lightened Nomad, is ready to lift off shortly after the first bridge but not enough to climb out over the second and bridge, so I hold her just off the water…"

Above Missouri River, Montana
Right Airborne approaching second bridge
Bottom Hauling out for float compartment repair, Fort Peck, Montana
Bottom right Tom inspecting suspect compartment

internal fuel containers where I will meet him, after having flown there on my own.

I check the local hardware store for enough rope, as I imagine securing the aeroplane to the island and pulling her off with a truck from the shore once we have lightened her of her cargo.

Chris and Dave arrive at the hotel and drive us down to the boat ramp with the sheriff's (other and favourite) bass boat on a trailer behind us with orders to be very careful with this one (the boat from last night is still tied to the shore where we left it). Jonathon has gone into town to collect a pickup truck, which the hotel kindly arranged for us to use.

Chris, Dave and I head out to the aeroplane in the sheriff's boat and promptly run aground (*déjà vu*). This is some river! We get out and walk the boat in and tie her to the starboard float of the Nomad.

The aircraft looks OK in terms of struts and floats which can be seen or felt by hand. The river bottom is composed of smooth and elliptical stones no larger in diameter than a cricket ball, mixed with smaller pebbles. Copious quantities of very slippery and slimy river weed is everywhere, which was the problem last night with the first SAR boat's impeller sucking it up and jamming, but was our saviour when it came to helping the floats get moving. We off load everything into the boat, I pump the floats and there is only a little water in the number five port compartment, but as she is sitting high, who knows what will happen when her weight is fully supported in free water? The guys leave with our stuff and I stay to pace off around the aeroplane, where the shoals are both shallow and deep, to map out in my mind where the channel is in order to determine the best exit route – and any other contingencies I can think of.

The guys come back with Jonathon and after some discussion and more pacing, we decide that pulling her off could be worse than simply powering her off, as there might even be more risk as she

slipstreams in the current when tied to the shore.

Jonathon reviews the fuel left on board and suggests the management of the same to Fort Peck, for which I am grateful as I am becoming increasingly focused on the bridges. I review the route to Fort Peck and at 171 miles, it will take one hour and 20 minutes and I have two hours and 15 minutes on board. We also compare notes on the best route to taxi out and up river, as well as my wish to minimise time on the water in case there is something more serious with the floats until we can pull her out and have a proper look in Fort Peck.

Engines started, I only need 1,200rpm to move her off the shoal and into free float within five yards! I turn up river, into the deeper current and proceed cautiously holding enough power to make a modest headway against the stronger portions of the current. Once back in the main flow of the river, the current eases off and I taxi up under the two bridges, noting that they look lower than they are and keeping an eye out for any other surprises (all the while thinking to myself that really I've had enough at this point in time). I do the run-ups between the bridges, everything checks and set flaps. I continue on up the river to where I saw other shoals from my walk that morning and turning well short of them, lift the rudders, fuel pumps on and make for the centre of the river at full throttle. The Nomad, so light, is ready to lift off shortly after the first bridge but not enough to climb out over the second and older bridge, so I hold her just off the water, until clearing the second, older bridge and then climb out in a right turn to avoid and stay well clear of the island.

What a tremendous sensation of relief, what elation. And how strange to be alone. My first solo in Nomad… I pass over the town and boat ramp before heading east for 5,500ft and Fort Peck. I did not feel anything odd on departure and hoping against hope all was normal, I began to relax a bit and feel rather good about myself and how lucky I am to be here. However, I remind myself that the landing at Fort Peck must also be expeditious until we see what the floats really look like.

One hour and 18 minutes later, I land at Fort Peck after circling overhead assessing the approach to land and the entrance to the marina. It looks very small contrasting with this huge body of water, and with only 10-15kt of wind the waves are even less as I am landing in the lee of the land. By the time I get into the marina the winds are very light and I have no problem securing the aeroplane to starboard unassisted (I really am impressed with myself…). I look at the position of the aeroplane in the water and she looks OK, but I will check again as I will have all afternoon in the Fort Peck marina chatting, as it happens, with its proprietress, a woman of formidable attitude, a strong opinion and short temper, before Jonathon arrives from his first and probably last drive across the plains of Montana.

Top Fort Peck Lake, Monatana
Above Waiting for refueller, Eufala, Alabama
Left Old-school GPSIII Pilot from Garmin was high-tech at the time, though we did have two other GPS's and an intermittent mobile phone app!

Sunday, October 13

We are up at 0700, pack up, and check out of the Fort Peck Hotel. The hotel was the administration centre for the camps set up during the depression to

Above Pumping floats, Eufala, Alabama
Right Nomad's destination, Jack Brown's Seaplane Base, Winter Haven, Florida
Below Photo opportunity, Lake Juliana, Florida

house workers who built the Fort Peck Dam under President Roosevelt's New Deal. We felt we had gone back to that time, as it has not changed at all in the 65 years since.

We drove to the boat ramp and noticed the aircraft listing to port by a couple of inches. This is not encouraging and we proceed to pump each compartment to see what we have.

There are no problems until we get to port number 4, which requires a great deal of pumping and takes what feels like forever to clear. We set out to find a way to pull her up the ramp and have a look at the floats. We contact John, the owner of the Fort Peck hotel, to ask for help with what we need. John's brother comes to our aid (on a Sunday during a three day national holiday and the opening of hunting season, no less…), since he works at the local hardware shop and loans us the use of his truck, bringing along four sheets of 8 x 4 plywood. These we set under the keel of each float, quadruple our long line around the forward struts and tie this to a three-inch diameter mooring line he has from a Navy salvage yard.

Amid much curiosity (we are competing with the man-made salmon ladder on the far side of the ramp) and with hip waders on, Jonathon and I guide the aeroplane up the first set of boards before inserting the second set until the keel at the step is well out of the water and only the last eight inches of the floats are left in.

We remove the suspect hatch cover and pump out most of the remaining water, and dry off the outer hull to locate the leak. We find a needle-width stream of water coming from the keel where an old patch meets the keel. Inspection of both hulls reveals nothing unusual and no visible damage.

Frankly, we were both pleasantly surprised and very much relieved at what we saw. We conclude that the aeroplane's slow speed, depth of water, the roundness, consistency and size of the river stones and the slimy riverweed saved the floats from damage.

With the added help of a borrowed generator from Dave and his truck, together with a halogen lamp and a heat gun, we dry out the inside of the compartment in preparation for repairing the compartment. I buy a can of Gluvit from the marina's shop and we proceed to apply to the area liberally. We leave the unused portion of the epoxy in the can with the halogen light on and place the hatch cover over the float compartment. With temperatures well below freezing at night we use the lamp to keep the heat as close to 72°F (22°C) enabling the epoxy to set properly.

With our borrowed truck from Dave, we head back to the hotel for another night in a delightful time warp.

Monday, October 14: Columbus Day

We are on our way by 07:30 and after a farewell from John and his mother, we are anxious to see our handy work. Indeed, we are very pleased to see the Gluvit has cured very nicely and the compartment even warmer than we thought it would be. I decide that I will leave the hatch off (and the 54 screws to secure it!) until we are certain that the repair is water tight and will hold when the aircraft refloated.

Having pulled 4,600lb of aeroplane out of the water with a pick-up, we conclude that a gentle nudge of the same pick-up on the float bows should get her back in the water… Wrong. Our borrowed pick-up from Dave is too small for the task and John's brother is out goose hunting with his, so we have a quiet word with the marina's mechanic who has a very big pick-up. He gladly offers to assist, doing the driving under our direction.

Jonathon and I hold up 2x4s to cushion the float bows as the truck backs onto each float in turn and gently 'walk' the aeroplane down the ramp until once again she is floating. I'm really beginning to enjoy this and we thank all involved, including those who helped us the day before, who were just now returning from their morning hunt with a truck bed full of geese. A team photo, load up, check that the compartment is still dry (thankfully it is!) and 54 screws later, the hatch is back on. I taxi out into a 15kt wind from the north-west and line up for a departure and right turn over the marina and 'downtown' Fort Peck, on our way to our next stop – Bismarck, North Dakota and, as it was to turn out, more unforeseen challenges before we reach Florida.

Postscript…

This episode represents four out of the 10-day adventure I was so fortunate to have experienced. I know many pilots have flown this similar route with little or no incidences and perhaps a lot more serious. But for all of us who have done it, I think it is a fantastic and tremendously rewarding experience and all the more special because it was the first time for me.

I am extremely grateful to the people who helped me on this portion of the trip, namely:

Billy, who gave me the most intensive two days of instruction I have ever received; Chris Davis and his team at the Fort Benton SAR unit, without whom we would still be under six inches of snow, if not more, in the middle of the Missouri River; the Grand Union Hotel for keeping the kitchen going and arranging for the rental pick-up; John, owner of the Fort Peck Hotel, his brother and Dave for the loan of their trucks, generator, heat gun, halogen lamp and moral support. And, of course, to Jonathon, for lending his can-do attitude, experience and engineering skills throughout!

Left Landing Sitka, Alaska, first stop
Below Final preparations at Lake Hood, Alaska

Route Map

1 Lake Hood, Alaska **2** Seattle **3** Winter Haven, Florida

Top Gear

The latest aviation kit, impartially tested and evaluated

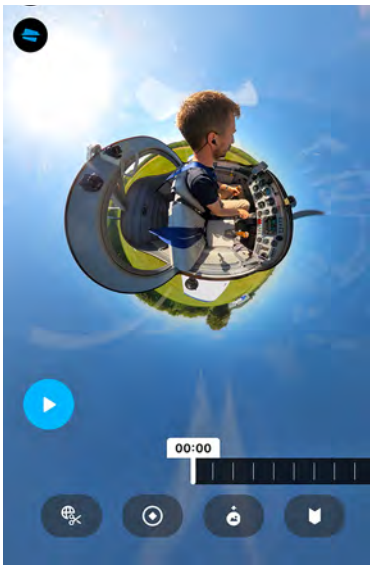
GoPro MAX

★★★★½ **£379.98** to **£479.99** | ***www.gopro.com***

The world of action cameras has been getting wider and wider over the last few years, both in terms of product range and field of view. The latest trend is 360° cameras that give some unique, and often nauseating, views of the world.

The basis of a 360° camera is two lenses on opposite sides of a body, with a bit of clever software (there's probably an algorithm or two involved), which can make the view almost uninterrupted around the sphere of view. This sounds great, or maybe too much, so what's the point? Well, if you're flying is relatively dynamic then you can get some great footage, with horizon-levelling that makes the aircraft rotate around the camera's seemingly fixed point of view. It's also handy for shooting normal cockpit video and shifting the view around, giving the impression of more than one camera, for the price of just one. If you're flying with a friend and having a conversation, you can quickly and easily swap views between each person – or you've got the option to go wide and fit both in. However, stabilisation technology is really designed for tumbling, spinning, looping and other gyrations. Just look at the GoPro promotional video to see skiers, bikers and surfers flying around rock-steady horizons.

If you have a virtual reality headset you can rewatch your videos in 'VR' mode on platforms like YouTube for extra immersion – just make sure you're sitting down!



Above The GoPro MAX offers very 'immersive'-feeling video making. This is a still from some video
Far left The GoPro MAX 360º view of the world
Left Starting an editing sequence, note the time line at the bottom where you add keyframes

What are the specs?

The camera will shoot in spherical mode at 5.6K and 30 frames per second. You might think that 5.6K sounds an awful lot, but remember that figure is shared around a full sphere – apparently it's called equirectangular projection. It actually records in 6K but because of how power-hungry the rendering is, the camera actually processes two postbox-shaped channels and then stitches them together. You can also shoot in standard rectangular modes at 1440p (4:3) or 1080p (16:9) at upto 60fps, so it can act as a traditional GoPro with narrow, wide and superwide fields of view.

That 60fps is almost becoming the new 30fps, so if you're wanting to slow your videos down then you might want to try the GoPro Hero 9. Generally speaking, though, in-cockpit videos don't require slowing down, so there's not much likelihood of you wanting anything more than 60.

It also comes packing a total of six microphones, one of which acts as a shotgun mic, ideal for selfie-style vlogging, although we haven't tested the effectiveness of this yet. The screen on the back will display one half of the 360 view, so if you do want to frame your shots you can.

Editing

Video editing can be time consuming as it is, so having a full sphere of video seems quite daunting, at first. You can actually edit 360 footage straight from the GoPro Quik app on your phone, or use the desktop software. If you're a serious video editor you can import the files into the likes of Adobe's Premiere Pro, but if you're just after a few quick cuts then the app works wonders. As long as you understand the theory of keyframes to position where you want the 'view' to be looking, it takes only a few moments to start a sequence of panning, tilting and flipping the video how

Above The MAX has a neat, square form factor

you want it to. Keyframing is simple – just pinch and squeeze on the screen to set the shot – hit the keyframe button to log that and then move onto the next. The software will transition from one to the next in a nice smooth flow. You can export video and screenshots in a number of different aspect ratios from portrait to square and wide angle, all at the relative touch of a button (and squeeze of a screen).

Overall this is a neat package, compared to some of the rivals that look ungainly, and one with very little setup required.

If you're interested in trying 360 video it's a good bet. Rather confusingly the standalone price is £479.99 new or £379.98 if you buy it with a year's GoPro subscription, which includes no fuss camera replacement if it gets damaged, discounts and cloud storage. **JS**

Verdict

We like

The funky new views you can get
Very impressive stabilisation
Relatively quick edit and export

We don't like

Touchscreen user interface can be fiddly

Clean Wing $32.95 | *www.sportys.com*

★★½

This time of year it seems that the biggest and juiciest insects hurl themselves at my leading edges and struts with the resultant carnage to clean up after even the shortest flight, so when I saw Sporty's was selling something specifically to deal with that problem I thought I'd give it a go.

The Clean Wing package consists of two microfibre cloths, two pads that are similar in appearance to Scotch brite pads (but yet are much softer than the usual maroon or green grades), and a rubber holder in the shape of a leading edge that has a couple of velcro pads inside so that you can attach either the pad or one of the microfibres.

There's also a very short set of instructions that emphasises, several times, the need to keep the pads and microfibre cloths scrupulously clean. Dirty gritty cloths damage paint easily, and the Clean Wing holder will make damaging your leading edge paint surface much easier!

The pads feel pretty soft, and I guess they've been specified to make the removal of baked on insects easy without damaging the paint, but for me the risk was still too high, so I began by folding the microfibre in two and then letting it drop into the cup where it was held by the Clean Wing holder. With some suitable spray on the leading edge and some more on the microfibre itself I began wiping.

The rubber material is flexible, so conforms well to the shape of the Cessna's landing edge or its strut, you have to make sure the Clean Wing holder is entirely covered by the cloth or it rubs against the paint, and while that doesn't result in any damage, it does produce an irritating noise to go alongside with the weird feeling you get when handling the microfibres or pads.

My insects were baked on, so it took a couple of passes to get rid of the majority of their remains. I still wasn't brave enough to finish the job by swapping a microfibre for one of the pads, but I did try very gently rubbing the wing with a pad, but without the help of the Clean Wing holder. Without wishing to sound like an advert for dishwasher tablets, they're a bloody marvel, which effortlessly produced clean insect body-free leading edges with only the very lightest of pressure. A final quick wipe down with a clean microfibre and I need my sunglasses to protect me from the gleaming paint…

Ultimately, I am not completely convinced that the Clean Wing holder offers that much help. It does keep your hands more or less free of whatever liquid cleaner you're using, it does conform to the shape of whatever you are cleaning, but I just don't think it makes cleaning the insects off any easier. **IS**

Verdict

We like

Flexible holder conforms to different leading edges
That blue pad is magic (use gently)

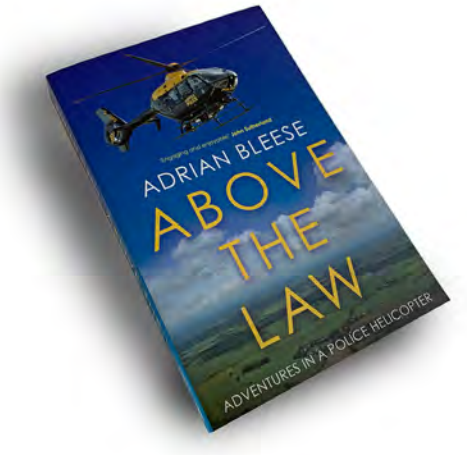
We don't like

The price for not keeping cloths and holder scrupulously clean is high!

Above the Law £9.99 | *www.eye-books.com*

Adrian Bleese (also known as JAFO on the *FLYER* Forums) spent 12 years flying as a civilian observer on a police helicopter in and around Norfolk and Suffolk. This is his account of everything from searching for missing children to chasing cars and a whole bunch of other strange stuff that he encountered during his 3,000 sorties. An entertaining insight into a different world, it's people and sometimes its politics.

FLYER Club members get 30% off if you order before July 18 (see the club website for details). **IS**



By Association

Looking after General Aviation The UK's flying associations at work

AOPA Carbon net zero

The government's GA road map includes a focus towards decarbonisation and cleaner fuels with new technology to support an environmentally sustainable sector.

Bringing forward new engine technology, i.e. electric and developing replacement fuels, may be possible when developing new engines and airframes, but retrofitting is usually difficult and expensive.

Efforts are being made to remove tetraethyl lead (TEL protects the soft metal in valve seats) used in avgas because it is harmful to humans and the environment. In the US there has been the development of UL82/UL87, which has been approved for use in some engines where manufacturers have approved its use. Not all engines can use this fuel, particularly high-performance engines. How about diesel? It is claimed that diesel engines provide a 30% better economy over avgas types and with the lower tax applied to Jet A1 it might be possible for owners to make a business case when considering the replacement of an engine(s). There is no confirmed date for avgas withdrawal, but there can be little doubt that leaded avgas will eventually be withdrawn.

GA will need at least a 20-year investment cycle if we are going to be asked to change engines that meet new environmental targets like carbon net zero. But if the aim is to save the planet from overheating, which is a good thing, then the UK cannot do it alone – the clue to the solution is in the phrase 'Global' warming. **Martin Robinson**

Aircraft Owners and Pilots Association
www.aopa.co.uk

BMAA Airspace change... and drones

Quite a bit of the last month has been taken up with matters pertaining to airspace.

As the CAA develops what appears to be many iterations of the future airspace policy, the airspace classification review and the airspace modernisation strategy, there seems to be no end of acronyms scattered within the documents. It certainly makes reading the glossary of terms an essential part of taking an interest in all things airspace. For example, I recently attended a meeting of ACOG during which the AMS, related ACPs, FASI north and FASI south were a significant part of the subject material. All very well if you are in the game, so to speak, but go on holiday for a week and you need a refresher course…

A significant time consumer at the moment is TDAs, that's Temporary Danger Areas, which are sought by a seemingly endless number of companies wishing to trial a UAS, RPAS, or dare I say 'drone' doing something that it seems will save the country from CO2, disease and white vans in one fell swoop, or at least multiple annoying buzzing sounds. Sadly many of the TDA applications are presented by non-aviators who don't seem to recognise that the sky has people in it who in the least have a right to be there and certainly have a right to expect fast food delivery services to be delivered to their front door, not potentially through the cockpit or rotor blades. Bring back lads on grocers' bikes and save the sky. **Geoff Weighell**

British Microlight Aircraft Association
www.bmaa.org

Light Aircraft Association Green light for 600kg

By the end of this month the CAA will, we hope, be in a position to issue a green light for the future use of factory-built aircraft up to 600kg, classed within a new microlight definition. The changes will be incorporated in the latest iteration of the Air Navigation Order, the statutory instrument by which all aviation is governed, and this is set to go through Parliament at the end of August.

The new sub-600kg category is a great example of how inter-agency collaboration can work. It is the result of the efforts over the best part of three years by a working group made up of the CAA, BMAA, LAA and representatives of UK aircraft builders, such as Flylight and TLAC.

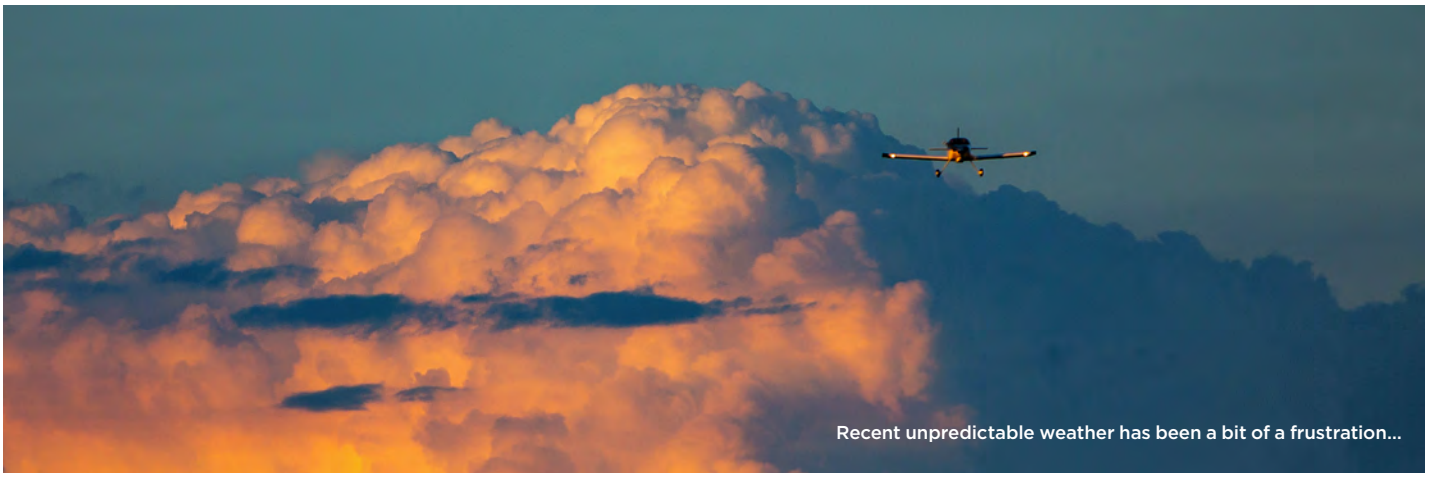
The new rules mean that manufacturers making microlight aircraft currently certified up to 450kg would, under future national regulation, be able to sell new 600kg machines without having to switch over to more onerous regulations. This streamlining should enhance the aeroplane market and the benefits include modernising, refreshing and enlarging the UK light aeroplane fleet for pilots, operators and businesses alike.

One of the big questions is 'why are they called microlights?'. The answer is that we all agreed that an expansion of the microlight definition will allow more pilots to easily convert their licences to fly the new aircraft, than if a new Light Sport Aircraft category was to be created. It matters little to the LAA what these aircraft are called. We already oversee more than 300 microlight aircraft through our Permit to Fly system, and classing these aircraft as microlights means minimum conversion requirements, focused on differences in training, can be applied to pilots of all licence types. Allowing more people to fly more interesting aircraft is what we are all about! **Steve Slater**

Light Aircraft Association
www.lightaircraftassociation.co.uk

Aviation associations Got something to say? You're welcome to contribute to this page, email editor@seager.aero

THE FLYER CLUB



Recent unpredictable weather has been a bit of a frustration...

Summertime and the weather is...

... Not quite what we'd hoped for! But, the days are longer, so there is still oodles of time to plan those long-distance touring trips

Flaming June didn't quite live up to what is expected of it! Mind you, we had a good run of weather throughout late spring which saw a whole lot of aviation happening all around the country as people got back into the groove. In fact, at long last I managed to complete my LAPL to PPL skills test with the great Phil Mathews at Cotswold Aero Club, which had been scuppered by weather, permit renewal, and lockdowns since the start of the year. We've a sweepstake going on how long it takes for my new licence to arrive...

The build up to the test was a good reminder of how enjoyable it is to refresh your dead reckoning skills, and give your own flying a confidence boost. To plan a navigation exercise, locate yourself with bearing from VORs, and divert somewhere without the use of SkyDemon did feel unnerving at first, and I'll admit to one moment in darkest Shropshire where I had a twinge of hesitancy about my exact position. However, if you check, double check and trust the numbers it all works out.

However, that good run of weather I mentioned didn't last and scuppered the first *FLYER* Club fly-in, which has now been rescheduled for Saturday 31 July. These things happen, though, and thanks to everyone who PPR'd, and of course to Bruce Buglass at Sleap for being so accommodating. We're looking forward to making it happen on the new date and keen to meet lots of Club members.

It's still a difficult time for airfields, as there is a definite lag between restrictions lifting and the businesses realising the benefits of landing fees, fuel sales and new tenants slowly filling empty units. Hopefully the airfields feature on page 26 will give you some new destination ideas. We've also got more FREE landing vouchers for you (p66-67), so grab the opportunity to visit them and show them some love!

Jonny

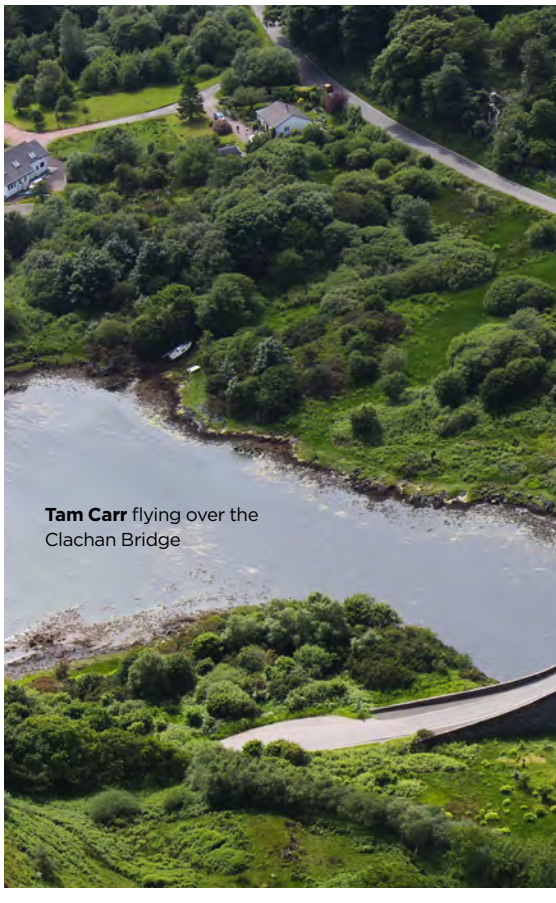
jonny.salmon@seager.aero

THE FLYER CLUB

Out & About

So we're back to flying! You've all been quick to send us photos of the fun you've been having with some of the recent good weather! Thank you… and keep them coming!

Tom Bootyman RV-7 in the last of the late evening sunshine.



Tam Carr flying over the Clachan Bridge

Chris and Theo Cheetham 'Flamping' in the RV-8 at Sandown... Brilliant!

David Eades Stearman at Easter

Stuart Roux departing Lee-on-Solent

Gary Styles Daughter Jess having a go in an AS350 helicopter

Steph meets a Lightning on her QXC... great weather for it!

Matt Covey in his RV-7

Andy Reohorn at Barton – finally!

Steph Murchison Luscombe-ing

Simon Wilson Conner and Oli at Breighton

Jason Rosewell flying around Ontario

Kate Irvine Culbin Sand spit along the Moray coast

Keir Williams Just soloed our RV-6

John Power visiting Charlton Park

Paul Atkin Fox Moth at the VAC Fly-In at Breighton

Chris Roberts landing at Barton

In association with POOLEY'S FLIGHT EQUIPMENT

Free Landings

If you're a member of **The *FLYER* Club**, **click here** for your personalised vouchers and save over **£64** by claiming one **FREE** landing at each of these airfields valid for August 2021, although not at an aircraft's home field. No jets. Please contact the airfield before setting off.

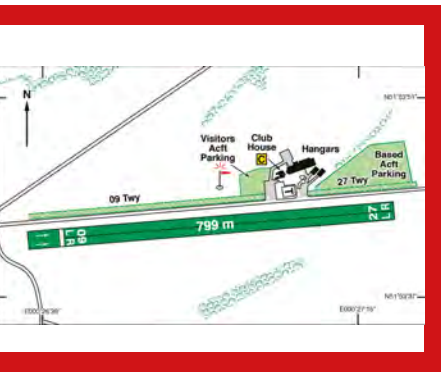
If you're not currently a member of the *FLYER* Club, but would like to receive six new free landing fees every four weeks plus other Club member benefits, then *click here to join!*

Andrewsfield

01371 856744 | **EGSL** | *www.andrewsfield.com*

Andrewsfield Airfield is home to Andrewsfield Aviation, a friendly, professional flying school offering a selection of training options. The airfield has a 799m grass strip and is located just to the east of the Stansted CTR. The club café is open but with limited refreshments available and limits on numbers due to Covid-19 safety. Avgas available. The airfield is strictly PPR. Strictly telephone PPR only. Further information can be found on the website.

Nearby attractions include the market town of Great Dunmow, Blake House Craft Centre and Freeport Braintree factory outlet.
PPR 01371 856744
Radio 130.555

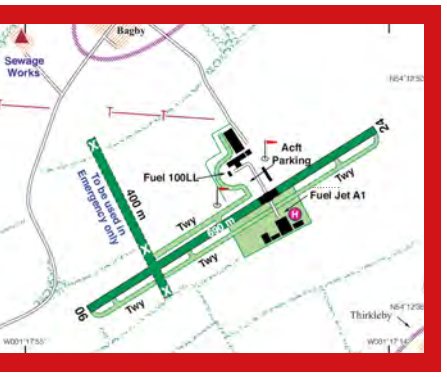


Bagby

01845 597385 | **EGNG** | *www.bagbyairfield.com*

Bagby Airfield has a well-maintained grass runway (06/24). Jet A1 and avgas are available, plus facilities for tea and hot and cold meals. A selection of aircraft are available for training and hire, including microlights. Runway lighting is available with PPR. The airfield operates an air-ground radio. PPR required for non-radio aircraft. Avoid overflying the neighbouring villages of Bagby and Thirkleby. All visiting aircraft strictly PPR. Avgas 100LL is available.

Nearby attractions include the town of Thirsk, which provides a gateway to the stunning Yorkshire Dales.
PPR 01845 597385 / 07917 727385
Radio 123.255



Radio
Accepts non-radio light aircraft, but PPR

PPR
Prior permission is required

Refreshments
Including restaurants and cafes etc

Microlights
are welcome

Fuel
Aviation fuel available **A** avgas, **UL** UL91, **M** mogas

While you're there

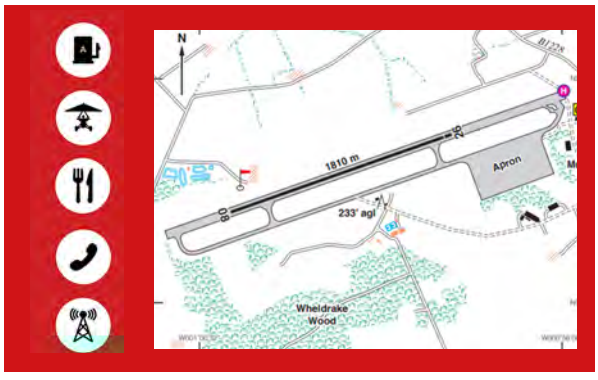
When you visit these six airfields, why not show your support by enjoying a meal in the cafe or filling up with fuel? It's good to support GA in the UK.

Elvington

01759 305851 | *www.elvingtonairfield.co.uk*

Elvington is four miles South East of York and is a former Royal Air Force station with over 3 kilometres of runway, although just over 1,800 metres is officially available. 100LL and JetA1 are available by prior arrangement and parking is available for £10 per night. PPR is required. The onsite museum has facilities for eating and drinking, as well as being an accessible place for taxis if you wish to explore further afield.

Nearby attractions Yorkshire Air Museum is onsite, with a wide range of aircraft on display and plenty of facilities. York is a short taxi journey away.
PPR 01759 305851
Radio 119.630

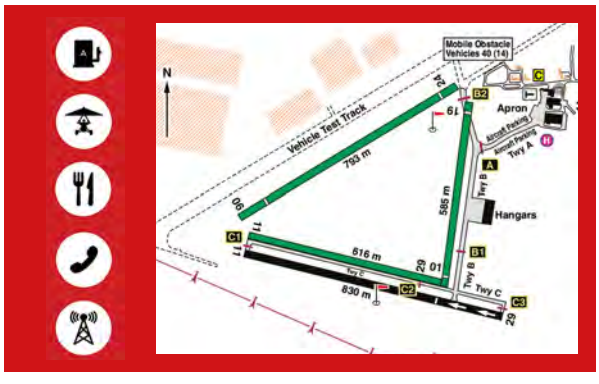


Sherburn-in-Elmet

01977 682674 | **EGCJ** | *www.sherburnaeroclub.com*

Sherburn Aero Club is open all year for visiting pilots. PPR isn't required but check the circuit diagrams before your first visit. The cafe/bar is open daily, serving breakfasts, hot and cold snacks, and three-course meals. Avgas 100LL, UL91 and Jet A1 available. Overnight parking available (bring your own tie-downs) for visitors who want to experience North Yorks scenery and history. Visitors are welcome to our summer events, see the website for details.

Nearby attractions The Yorkshire Dales and moors, York and Leeds, castles and abbeys, historic houses
PPR 01977 682674 (non-radio only)
Radio 122.610

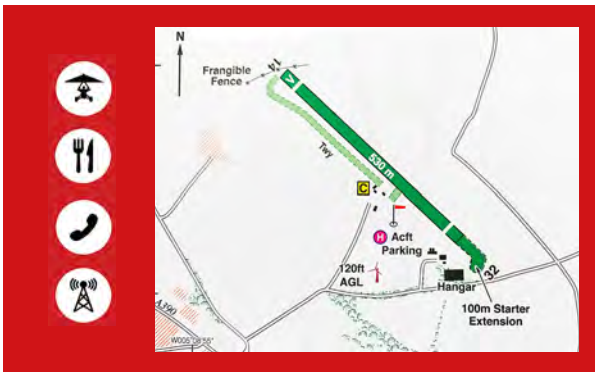


Truro | EGHY

01872 560488 |

Truro Airfield is situated just three miles from Truro city and has good access to both the north and south coasts of Cornwall. There is plenty to see and do in the local area. It is owned and run by Graham Barral and has a 530 metre grass runway with a slight upslope on runway 32. PPR is required for all visitors. Be aware of intense activity at Perranporth just to the North of the airfield.

Nearby attractions The cathedral city of Truro, the Eden Project, The Lost Gardens of Heligan, as well as plenty of good local beaches
Radio 135.480

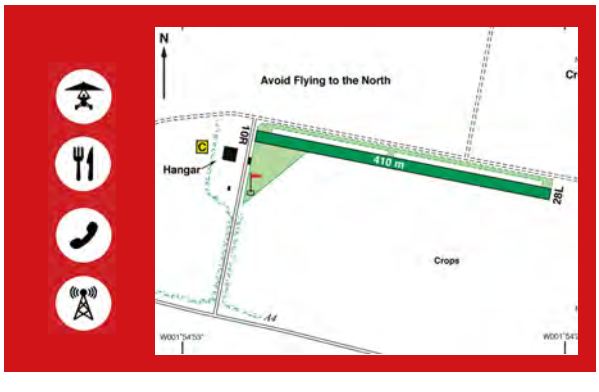


Yatesbury

07836 554554 | *www.wiltsmicrolights.com*

Yatesbury Airfield is home to the Wiltshire Microlight Centre, a BMAA-registered school run by qualified professional instructors who ensure flight training is safe, progressive and fun. Training takes place above the stunning North Wessex Downs and Vale of Pewsey. Visiting pilots should approach from the south, circuits at 600ft. Visit the website for pilot information. Blind calls on Safetycom 135.475 MHz. Please call PPR before setting off. Microlights only.

Nearby attractions The countryside around the strip is truly spectacular.
PPR 07836 554554 / 01249 811000



Win! A print or digital *Pooleys UK Flight Guide*

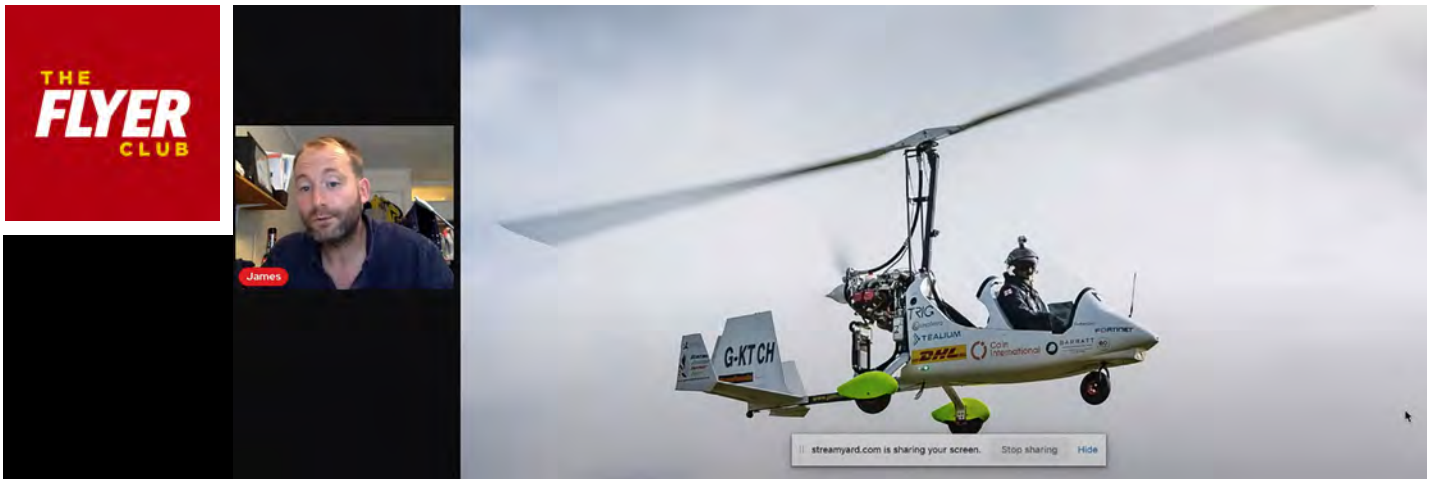
QUESTION: What is the distance between Bagby and Truro in nautical miles?

To enter, post your answer, name, address and email details to
Pooleys August Competition, *FLYER magazine*, PO Box 4261, Melksham, SN12 9BN or send an email to *competitions@seager.aero*
The closing date is 9 September 2021.

The winner's name and address will be passed to Pooleys, then deleted from Seager's database. Pooleys will send the winner their prize and, in order to do so, also offer to supply them with further information about the company's products and services.

The winner for July 2021 is:
Paul Wheal, Calne.

1 Andrewsfield
2 Bagby
3 Elvington
4 Sherburn
5 Truro
6 Yatesbury



Adventurer shares amazing 'around the world' story

Club members recently got an exclusive live web session with pilot and adventurer James Ketchell, who revealed all about his RTW trip in his autogyro...

On Monday 5 July James joined over 100 *FLYER* Club members to talk all about his fascinating around the world journey in an autogyro. In 2014 James became the first person to complete the triathlon of rowing across the Atlantic Ocean, summiting Mount Everest and cycling around the world. This was followed in 2019 by his around the world flight, which we can safely say sounded like an incredible journey. Club members who missed this talk can still watch it on catch-up by logging into the Club website – or just click the link in any of the emails you received about James' talk.

These exclusive presentations and interviews will keep coming for members as we broaden the content that we deliver to you – unique to *FLYER* Club members.

Coming Soon

Patty Wagstaff interview – exclusive to Club members. We'll be putting your questions to aerobatic legend Patty, who is based in Florida, and is famous for flying the Extra 300 in competitions and airshows.

An upset prevention and recovery training day special package for Club members provided by **Ultimate High** – just £299. More details to follow – keep an eye on your inboxes! Places will be limited so do NOT miss it!

Don't Miss Out

Adrian Bleese, author of *Above the Law*, a book about his experiences as a police helicopter observer, has kindly offered a 30% discount to *FLYER* Club members for pre-orders made before midnight on 18 July. Log in to the *FLYER*

Join the Club – it makes sense

If you're not a member of The *FLYER* Club and you're thinking, 'How do I join? Right now. This instant...!'

Well, good news, it's easy. Just **follow this link**, complete the simple form, decide how you want to pay and start enjoying the **benefits** instantly.

Current member benefits

- Extensive *FLYER* back issue library
- Save 5% whenever you shop at Pooleys (excludes Bose headsets)
- £10 off when you spend £40 at Transair (excludes Bose headsets)
- Free copy of *A View from the Hover*
- An initial conversation with Dr Frank Voeten, FAA & EASA AME
- Get your club membership paid by Stein Pilot Insurance
- Twice-weekly General Aviation weather briefings
- FREE Landing vouchers, available through the **FLYER website**
- Video briefings for your FREE landing vouchers. Get all the key information before you go.
- Mini weather webinar. Catch-up if you missed it.
- Exclusive written content from our archives – first pieces now published.
- Interviews with experts on a number of key topics.
- Our first members' Fly-in will be now be at Sleap on 31 July (see p63). We'll be announcing the details, plus more events, in 2021!

Coming soon

- Back issues – there's another FIVE years on the way with more to follow.

Escapade 912 Tailwheel for sale

Escapade 912 Tailwheel - G-CCYB.
170 flight hours, electric pitch trim, flarm 8.33 radio + headsets. Classed as an extremely well-built aircraft during validation process.
Contact Barry:
barry.renehan@mail.com or call 01420 86281

Rare share in 'affordable cruiser' Grob 109D

G-LREE is a 1984 Grob 109B kept at Denham (West London M25/M40). Recently refurbished. Looking to add 1-2 pilots with a retirement. £12k for a quarter, £16k for a third. Annual costs are approx £2k+ per year (one-third basis), plus fuel.
For full details please email Tim at
jtm1969@outlook.com or call 07970 474 536

Airfields

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NEXT MONTH'S ISSUE

Available from

3 August.

QSY

For the funny, the weird, the wonderful and the just plane strange...

Sonka: 'Because I was inverted...'

So here's an aerobatic aircraft flying inverted above a Formula One car with mountains in the background. No, it's not a mock-up, it's a real stunt and not at slow speed either.

The pilot is Czech champion Martin Sonka and the driver is former F1 star David Coulthard.

It's just one scene in a road trip across the Czech Republic and Slovakia called *From Castle to Castle* highlighting the many picturesque castles of those two countries – formerly the old Czechoslovakia, of course.

Yes, it's meant to be a road trip in the Red Bull F1 car, which clearly it isn't, but they did shoot in some fantastic locations, including around the capital cities and over iconic bridges.

The photography is stunning, including much drone footage, expertly shot, and the sound of the F1 car reverberating around city walls is worth a listen.

Watch the full video ***here***.

The sequence with Martin Sonka is at 3:55, including an interview with the 2018 winner of the Red Bull Air Race Championship.

Above Yes, that Red Bull champ flying a couple of metres above a F1 car in the Czech Republic - it's all part of a Red Bull video

Aviation art online

The 2021 annual exhibition of the Guild of Aviation Artists is being held online for the first time because of Covid.

Nearly 300 original works of art from 94 different artists will be displayed in a virtual gallery which opens at 10am on 19 July.

Martin Perman of the Guild said, "This is the premier event, the largest of its kind in the world, for wholly original works of aviation art, each the result of meticulous observation or careful research of aircraft, events, personalities and historical achievements blended with artistic skills in land, sea and skyscapes.

"All eras of aviation will be represented, from the earliest hot air balloons through to current airliners, combat aircraft from the world's air forces, and the odd spacecraft!"

View ***here***

Flying car or Russian roulette?

The Cyclocar is a project from the Siberian Branch of the Russian Academy of Sciences which said, "Cyclocar is an aircraft that is held and moved in the air by cyclical propellers. Among the main advantages of such propellers are fast control of the thrust vector through 360°, low noise level, and compactness. At the same time, the cyclical propeller is one of the most complex aerodynamic devices."

Just don't use hand signals, Ivan.

Heroes & Villains

HERO Shinji Maeda, the one-eyed pilot, has completed his round the world flight. Shinji lost sight in one eye when 18 years old and by law he could not pursue his dream of being a pilot in Japan. However, he moved to the USA and made it happen as a flying instructor. Video ***here***

VILLAIN A Russian helicopter pilot is under investigation after a stunt was filmed where a man was duct-taped to the underside of a Robinson R44, then flown over a Moscow airfield. Ex-military pilot Alexander Nazarov, 31, has had his licence suspended for the 'reckless flight'.

You can watch the video ***here***.

HERO Mark Scotland, winch paramedic with the Lydd Coastguard helicopter, has won an award following his heroic actions off the coast of Kent last year. During a routine training flight the helicopter was redirected to the sea off Dymchurch Beach, where a 12-year-old girl was struggling and sinking. Mark fully immersed himself in the water, allowing him to lift her upper body clear of the sea, where she was able to breathe and, after treatment, was OK.

NUTTER... not really a villain. CopterPack is an Australian electric backpack which flies one person using a pair of ducted fans. It's a bit like jetpacks but without the noise, which sounds alright until you consider what'll happen when the battery runs out... Watch the video ***here***.

Send your QSY submissions to QSY, PO Box 4261, Melksham, SN12 9BN or to qsy@seager.aero

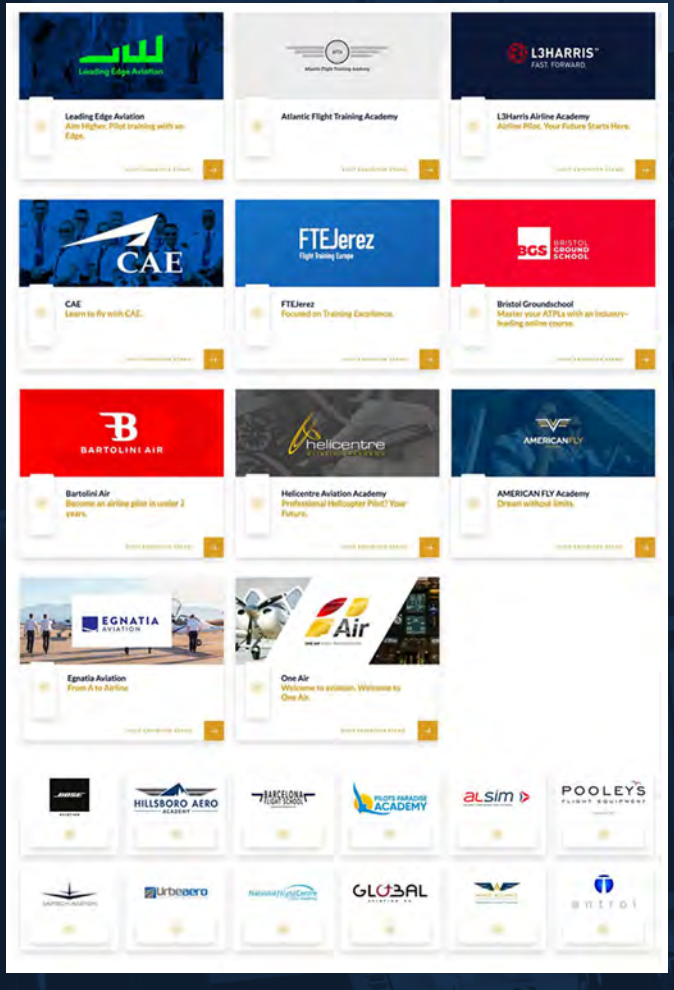
PILOT CAREERS LIVE Virtual

You can still check out PCLV!

You can still visit the website and enjoy all the contents.

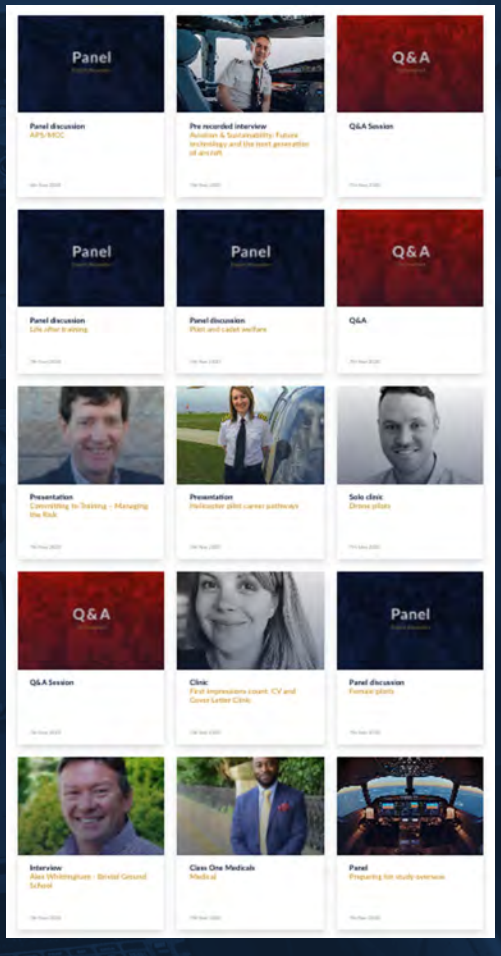
Visit the virtual stands

The best way to connect with the leading ATOs.



Watch the seminars

Over 14 hours of seminars, interviews, panel discussions and Q&A sessions.



WHAT DO ATTENDEES HAVE TO SAY ABOUT PCLV?

> Again, really really well organised with fantastic speakers, amazing job, well done. BRAVO!

> Thank you very much for the event over the last 2 days. Incredibly informative and helpful!

> It was amazing...! Cannot wait for a non virtual seminar! I don't think it could have been better.

@PilotCareerNews @PilotCareerLive @PilotCareerNews